

Master Bibliography 2008
A-Z

International Society for Environmental Ethics

See the README file that accompanies this bibliography.

This bibliography contains ISEE Newsletter entries, vols. 1-19, 1990-2008, but not 2009 Newsletter entries. They will be merged into this document spring 2010. They can meanwhile be searched in the separate quarterly newsletters at the ISEE website.

1991-92 Green Index: A State-by-State Guide to the Nation's Environmental Health. Covelo, CA: Island Press, 1991. 168 pages. \$ 29.95 cloth, \$ 18.95 paper. A report card on all fifty states, using 200 indicators to rank each state. (v2,#3)

1992 Plant Conservation Directory. Center for Plant Conservation, Missouri Botanical Garden, P. O. Box 299, St. Louis, MO 63166. 100 pages. Over 500 professionals and offices involved in conserving U. S. native plants. Rare plant laws by state. Sources for obtaining state lists of rare and endangered plants. (v3,#2)

Aagesen, D., "Crisis and conservation at the end of the world: sheep ranching in Argentine Patagonia," Environmental Conservation 27(no.2, JUN 01 2000):208- . (EE v.12,#1)

Aaltola, Elisa, Review of: Ingram, David, Green Screen: Environmentalism and Hollywood Cinema. Exeter: University Exeter Press, 2004. Environmental Values 14(2005):539-543.

Aaltola, Elisa, "Other Animal Ethics and the Demand for Difference," Environmental Values 11(2002):193-209. Traditionally animal ethics has criticized the anthropocentric worldview according to which humans differ categorically from the rest of the nature in some morally relevant way. It has claimed that even though there are differences, there are also crucial similarities between humans and animals that make it impossible to draw a categorical distinction between humans who are morally valuable and animals which are not. This argument, according to which animals and humans share common characteristics that lead to moral value, is at the heart of animal ethics. Lately the emphasis on similarity has been under attack. It has been claimed that the search for similarity is itself part of anthropocentric morality, since only those like us are valuable. It also has been claimed that true respect for animals comes from recognizing their difference and "otherness", not from seeing similarities. This paper analyses the new "other animal ethics" by critically examining its basis and consequences. The conclusion is that despite the fact that other animal ethics is right in demanding respect also for difference, it remains both vague and contradictory in its theoretical basis, and leads to undesirable consequences from the perspective of animal welfare. (EV)

Aaltola, Elisa. Review of Steve Baker, The Postmodern Animal, London: Reaktion Books, 2000, Environmental Values 10(2001):417. (EV)

Aaltola, Elisa. "Personhood and Animals." Environmental Ethics 30(2008):175-193. A common Western assumption is that animals cannot be persons. Even in animal ethics, the concept of personhood is often avoided. At the same time, many in cognitive ethology argue that animals do have minds, and that animal ethics presents convincing arguments supporting the individual value of animals. Although "animal personhood" may seem to be an absurd notion, more attention needs to be placed on the reasons why animals can or cannot be included in the category of persons. Of three different approaches to personhood—the perfectionist approach, the humanistic approach, and the interactive approach—the third approach is the

strongest. Personhood defined via interaction opens new doors for animal ethics. (EE)

Aaltola, Eliza, "Animal Ethics and Interest Conflicts," Ethics and the Environment 10(no. 1, 2005):19-48. Animal ethics has presented convincing arguments for the individual value of animals. Animals are not only valuable instrumentally or indirectly, but in themselves. Less has been written about interest conflicts between humans and other animals, and the use of animals in practice. The motive of this paper is to analyze different approaches to interest conflicts. It concentrates on six models, which are the rights model, the interest model, the mental complexity model, the special relations model, the multi-criteria model, and the contextual model. Of these, the contextual model is the strongest, and carries clear consequences for the practical use of animals. Aaltola is a researcher in philosophy, Turku University, Finland. (Eth&Env)

Aatola, Elisa, Review of Stephen Spotte, *Zoos in Postmodernism*, *Environmental Values* 16(2007):536-539.

Abaidoo, Samuel, Human-Nature Interaction and the Modern Agricultural Regime: Agricultural Practices and Environmental Ethics, 1997, University of Saskatchewan (Canada), Ph.D. thesis in sociology. 305 pages. The relationship between farming practices and two predominant ontological assumptions: (1) the "externality" assumption: humans interact with nature but are only externally related to nature; and (2) the "internality" assumption: humans are internally related to nature. The theoretical orientation is Habermas' neo-modernity thesis, which argues that changes in social normative structures and actions can, and do develop, without changes in ontological assumptions about human-nature relationship. The Habermasian approach rejects the reenchantment thesis espoused by constructive postmodernists. One aspect of the study involved archival research of Canadian agricultural policy; another was a survey of farm families living in the south western Saskatchewan section of the Palliser Triangle. There is a moderate to strong relationship between the "internality" assumption and alternative farming practices. The "externality" assumption was more predominant among conventional farmers. Nevertheless there is only partial support for the Habermasian thesis. A significant minority of alternative farmers espouse environmentalist ethics and also an "externality" ontological assumption. The advisor was H. Dickinson. (v.10,#1)

Abakerli, Stefania, "A Critique of Development and Conservation Policies in Environmentally Sensitive Regions in Brazil," Geoforum (Pergamon): 32(2001):551-565. The current model of protected areas originated in the capitalist U.S., with development on most of the landscape but some protected areas. This has been unsuitably exported to Brazil as a "politically viable rationale." Such protected areas have been implemented by a top-down authority, with no serious attention to the ways in which local peoples' livelihoods were connected with the designated reserves. In English, but the English needs considerable copy-editing. Abakerli lives in Rotterdam, Netherlands. (v.13,#2)

Abbasi, S.A., Krishnakumari, P., Khan, F.I. Hot Topics: Everyday Environmental Concerns. New York, Oxford University Press, 1999. 224 pp. \$14. Questions concerning the ozone hole at the Antarctic, radioactive waste treatment and transportation, and the basic components of a hazard control system. (v.10,#3)

Abbey, Edward. "Earth First! and The Monkey Wrench Gang." Environmental Ethics 5(1983):94-95. (EE)

Abbey, Ruth, "Rawlsian Resources for Animal Ethics," *Ethics and the Environment* 12(no. 1, 2007):1-22. This article considers what contribution the work of John Rawls can make to questions about animal ethics. It argues that there are more normative resources in A Theory of Justice for a concern with animal welfare than some of Rawls's critics acknowledge. However, the move from *A Theory of Justice* to

Political Liberalism sees a depletion of normative resources in Rawlsian thought for addressing animal ethics. The article concludes by endorsing the implication of *A Theory of Justice* that we look for ways other than rights discourse to respect and protect the well-being of animals. Abbey is at the University of Notre Dame.

Abbot, Ian, "Improving The Conservation Of Threatened And Rare Mammal Species Through Translocation to Islands: Case Study Western Australia," Biological Conservation 93 (No. 2, 2000): 195- . (v.11,#2)

AbdelMagid (Abdel-Magid), Isam Mohammed, Mohammed, Abdel-Wahid Hago, Rowe, Donald R. Modeling Methods for Environmental Engineers. Boca Raton, FL: St. Lucie Press, 1997. 544 pp. \$79.95. (v8,#3)

Abdo, Geneive, "Cairo Conference Shifts Focus of Population Effort," The Christian Science Monitor 86 (15 September 1994): 1, 4. (v5,#3)

Abel, Donald C. Discourses. Customized environmental ethics anthology, under construction. McGraw-Hill has developed an electronic database publication system, called Primis, that enables instructors to create customized anthologies for their courses. Instructors can construct their text and order a free sample copy over the Internet, using the Primis web page: <http://mhhe.com/primis>. The philosophy section is called Discourses, currently with 127 readings. A further set is under construction on environmental ethics. See web page: <http://mhhe.com/primis/phil>. For further information also contact: Donald C. Abel, Philosophy Department, St. Norbert College, 100 Grant St., De Pere, WI 54115. E-mail: abeldc@mail.snc.edu. Phone: 920/403-3086. Fax: 920/403-4086. (v10,#4)

Abel, TD, "Review of: Myers, Norman, and Jennifer Kent, Perverse Subsidies: How Tax Dollars Can Undercut the Environment and the Economy", Society and Natural Resources 15(no.4, 2003):363-364. Abelson, Raziell and Marie-Louise Friquegnon, Ethics for Modern Life, 4th edition. New York: St. Martin's Press, 1991. Chapter 7 is "Environmental Ethics." Readings are Ruth Macklin, "Can Future Generations Correctly be Said To Have Rights?"; Joel Feinberg, "The Rights of Animals and Unborn Generations." (v2,#4)

Abelson, Raziell, and Friquegnon, Marie-Louise, eds., Ethics for Modern Life, 6th edition. Boston: Bedford/St. Martin's, 2003. Contains, on environmental ethics:
-Gore, Al, "The Need for Environmental Protection,"
-Kaufman, Wallace, "The Excesses of Environmentalism,"
and, on animal rights:
-Regan, Tom, "Animals Have Rights,"
-Cigman, Ruth, "Animals Do Not Have Rights,"
-Hof, Christina, "Immoral and Moral Uses of Animals."

Abelson, Raziell and Marie-Louise Friquegnon, eds. Ethics for Modern Life, 5th edition. New York: St. Martin's Press, 1995. 496 pages. Chapter 8 is Environmental Ethics, with two articles: Jan Narveson, "Moral Problems of Population," and Derek Parfit, "On Doing the Best for our Children." Rather strange choices, if there are to be only two articles representing environmental ethics. The editors do not seem to be able to distinguish between environmental ethics and intergenerational ethics. The two 5th edition articles replace Ruth Macklin, "Can Future Generations Correctly be Said to Have Rights?" and Joel Feinberg, "The Rights of Animals and Unborn Generations" in the 4th edition (newsletter v2, #4). Chapter 11 is on animal rights: Peter Singer, "Animal Liberation," and Ruth Cigman, "No Need for Liberation." The suggested reading list is quite inadequate for environmental ethics, mentioning not a single one of the systematic works in the field, and but two of some sixteen anthologies. Abelson is at

New York University; Friquegnon at William Patterson College. (v5,#4)

Aber, J; Neilson, RP; McNulty, S; Lenihan, JM, Bachelet, D; Drapek, RJ, "Forest Processes and Global Environmental Change: Predicting the Effects of Individual and Multiple Stressors," Bioscience 51(no, 9, 2001):735-752. (v.13,#1)

Abernethy, Virginia Deane. "Allowing Fertility Decline: 200 Years After Malthus's Essay on Population," Environmental Law 27(no.4, 1997):1097- . (v9,#2)

Abouchar, Juli A. "A Foot in the Door," Alternatives 23 (no.2, 1997): 28. Transnational corporations have always had access to international levers of power. Environmental groups are just now gaining some legal recognition and access. (v8,#2)

Aboud, Abdillahi, Sofranko, Andrew J., Ndiaye, Serigne. "The Effect of Gender on Adoption of Conservation Practices by Heads of Farm Households in Kenya", Society & Natural Resources 9(no.5, 1996):447. (v7,#4)

Abram, David, "The Ecology of Magic," Orion Nature Quarterly, summer 1991. "The traditional shaman ... is in many ways the 'ecologist' of a tribal society. He or she acts as intermediary between the human community and the larger ecological field, regulating the flow of nourishment, not just from the landscape to the human inhabitants, but from the human community back to the local earth. By his or her constant rituals, trances, ecstasies, and 'journeys' the shaman ensures that the relation between human society and the larger society of beings is balanced and reciprocal, and that the village never takes more from the living land than it returns." "Sadly, our society's relation to the living biosphere can in no way be considered a reciprocal or balanced one. ... From an animistic perspective, the clearest source of all this distress, both physical and psychological, lies in the ... violence perpetrated by our civilization; only by alleviating the latter will we be able to heal the former. ... We are human only in contact and conviviality with what is not human. Only in reciprocity with what is Other will we begin to heal ourselves." (v2,#4)

Abram, David, The Spell of the Sensuous: Perception and Language in a More than Human World. Reviewed by James Hatley. Environmental Ethics 19(1997):109-112. (EE)

Abram, David, "Merleau-Ponty and the Voice of the Earth," Environmental Ethics 10(1988):101-120. An important analysis of Merleau-Ponty, showing his relevance to environmental ethics and deep ecology. "[T]he hidden thrust of the phenomenological movement is the reflective rediscovery of our inherence in the body of the Earth" (p. 106). Thus his "work suggests a rigorous way to approach and to speak of the myriad ecosystems without positing our immediate selves outside of them" (p. 119). (Katz, Bibl # 2)

Abram, David. "Nature at Arm's Length." Research in Philosophy and Technology 15 (1995): 177. (v7, #3)

Abram, David. "Merleau-Ponty and the Voice of the Earth." Environmental Ethics 10(1988):101-20. Ecologists and environmental theorists have paid little attention to our direct, sensory experience of the enveloping world. In this paper I discuss the importance of such experience for ecological philosophy. Merleau-Ponty's careful phenomenology of perceptual experience shows perception to be an inherently creative, participatory activity--a sort of conversation, carried on underneath our spoken discourse, between the living body and its world. His later work discloses the character of language itself as a medium born of the body's participation with a world experienced as alive. That living world is none other than the Earth. Abram is in the department of philosophy, State University of New York at Stony Brook, Stony Brook, NY. (EE)

Abram, David. The Spell of the Sensuous: Perception and Language in a More-than-Human World. New York: Pantheon Books, 1996. 333 pages. \$25.00 cloth. "Nobody writes about the ecological depths of the human and more-than-human world with more love and lyrical sensitivity than David Abram" (Theodore Roszak). A sleight-of-hand magician as well as a philosopher, Abram has lived and traded magic with indigenous magicians on several continents. Starting from the intimate relation between these practitioners and the animals, plants, and natural elements, his book draws the reader into investigations regarding the fluid, participatory nature of perception, and the reciprocity between our senses and the sensuous earth. This unfolds into an exploration of language, and the power words have to enhance or to stifle the spontaneous life of the senses. Our most cherished human attributes--from the gift of language, to the awareness of past and future, to the rational intellect itself--all emerge in interaction with the animate natural world, and remain wholly dependent upon that living world for their coherence.

"I know of no work more valuable for shifting our thinking and feeling about the place of humans in the world. Your children and their children will be grateful to him; the planet itself must be glad"--James Hillman, psychologist). "Scholars will doubtless recognize its brilliance, but they may overlook the most important part of Abram's achievement: he has written the best instruction manual yet for becoming fully human. I walked outside when I was done and the world was a different place" (Bill McKibben). "A masterpiece--combining poetic passion with intellectual rigor and daring. Electric with energy, it offers us a new model of scholarly inquiry: as a fully embodied human animal. It opens pathways and vistas that will be fruitfully explored for years, indeed for generations, to come" (Joanna Macy, deep ecology activist). Abram is an ecologist and philosopher, with a PhD from SUNY, Stony Brook. (v6,#4)

Abram, David. "Between the Body and the Breathing Earth: A Reply to Ted Toadvine." Environmental Ethics 27 (2005):171-190. I take issue with several themes in Ted Toadvine's lively paper, "Limits of the Flesh," suggesting that he has significantly misread many of the arguments in The Spell of the Sensuous. I first engage his contention that I disparage reflection and denigrate the written word. Then I take up the assertion that I exclude the symbolic dimension of experience from my account, and indeed that I seek to eliminate the symbolic from our interactions with others. Finally, I refute his claim that my ecophenomenological stance leaves no room for resistance, contradiction, and alterity—elements that are, in fact, central to my understanding of ethics. My reply leads directly into a discussion of one of the crucial concerns of my work: the manner in which the very style of our discourse—our way of wielding words—tacitly works to either enhance, or to stifle, the solidarity between the human community and the more-than-human earth. (EE)

Abram, David. "A Reply to 'Phenomenology versus Pragmatism.'" Environmental Ethics 23(2001):335-336. (EE)

Abram, David. "Returning to our Animal Senses," Wild Earth 7 (no.1, 1997): 7. (v8,#2)

Abram, David; Light, Andrew; and Wenz, Peter. "Discussion of David Rothenberg's Hand's End." Research in Philosophy and Technology 15 (1995): 199. (v7, #3)

Abramovitz, J. N., Unnatural Disasters. Worldwatch Institute: Worldwatch Paper 158. 2001.

Abrams, Paula. "Population Control and Sustainability: It's the Same Old Song but With a Different Meaning," Environmental Law 27(no.4, 1997):1111- . (v9,#2)

AbuAsab, MS; Peterson, PM; Shetler, SG; Orli, SS, "Earlier plant flowering in spring as a response to global warming in the Washington, DC, area," Biodiversity and Conservation 10(no.4, 2001):597-612. (v.12,#4)

Acampora, Ralph, "Representation Cubed: Reviewing Reflections on Animal Imagery," Society &

Animals 9(no. 3, 2001):299-307. Animals as portrayed in film, zoos, cartoons, comic strips, with some attention to realism versus social construction. A review of four books dealing with animal representation. Acampora is in philosophy, Hofstra University, Hempstead, NY.

Acampora, Ralph R. Review of Electric Animal: Toward a Rhetoric of Wildlife. By Akira Mizuta Lippit. Environmental Ethics 24(2002):219-220. (EE)

Acampora, Ralph R., "Using and Abusing Nietzsche for Environmental Ethics." Environmental Ethics 16(1994):187-194. Max Hallman has put forward an interpretation of Nietzsche's philosophy according to which Nietzsche is a prototypical deep ecologist. In reply, I dispute Hallman's main interpretive claim as well as its ethical and exegetical corollaries. I hold that Nietzsche is not a "biospheric egalitarian," but rather an aristocratically individualistic "high humanist." A consistently naturalistic transcendentalist, Nietzsche does submit a critique of modernity's Christian-inflected anthropocentrism (pace Hallman), and yet—in his later work—he endorses exploitation in the quest for nobility (contra Hallman). I conclude that ecophilosophers need to exercise hermeneutical caution in any attempt to appropriate Nietzsche for environmentally ethical designs, lest they illegitimately ventriloquize their own moral voices into an authoritative but alien mouthpiece. Acampora is in philosophy, Emory University, Atlanta. (EE)

Acampora, Ralph R. *Corporal Compassion: Animal Ethics and Philosophy of Body*. Pittsburgh: University of Pittsburgh Press, 2006. Acampora critiques analytic approaches to animal rights and animal liberation and uses deconstruction, existentialism, hermeneutics, and phenomenology to develop an interspecies ethos and an animal ethic based on a philosophy of body that emphasizes the phenomenal and somatic commonality of living beings. He discusses practical applications such as animal experimentation and zoological exhibition and challenges animal practitioners to go beyond reform ethics, exploitation, and total noninterference toward a posthumanist culture of caring in a participatory manner.

Acevedo, Mariana T., "The Intersection of Human Rights and Environmental Protection in the European Court of Human Rights," New York University Environmental Law Journal 8 (No. 2, 2000): 347- . (v.11,#4)

Acharya, Krishna, "Linking Trees on Farms with Biodiversity Conservation in Subsistence Farming Systems in Nepal," Biodiversity and Conservation 15 (no.2, February 2006): 631-646 (16).

Achtenmeier, Elizabeth, Nature, God, and Pulpit. Grand Rapids, MI: Eerdmans, 1992. 206 pages. \$ 17. A biblically based study of preaching about nature and God. With sample sermons. "Few doctrines are so neglected as the doctrine of creation and yet none is more important to the gospel in the twentieth century." Achtenmeier is adjunct professor of homiletics at Union Theological Seminary in Richmond, VA. (v3,#4)

Achterberg, Wouter, ed. Natuur: Uitbuiting of respect? Natuurwaarden in discussie (Nature: Exploitation or Respect? Natural Values in Discussion) (in Dutch) Kampen (Netherlands): Kok Agora, 1989. ISBN 90-242-7651-9 Section I. The limits of the "making" of things. ("Make-ability," "construct-ability," "fabrication"; cf. Greek techne, the modes in which nature can be remade by humans. Koo van der Wal, "The 'making' of things"; Maarten Coolen, "Some philosophical-anthropological notions of 'making'"; Wim Zweers, "Intrinsic value as a norm for 'making'"; Section II. The Social Context. Wouter Achterberg, "Future generations: intuitive and contra-intuitive"; Wibren van der Burg, "The environment in political philosophy: toward an alternative vision of the state"; Hans Achterhuis, "Nature: desire and scarcity"; Section III. The image of nature. Henk Verhoog, "Reading the book of nature"; Nico van der Perk, "Social criticism based on an image of nature"; Victor Westhoff, "The image of nature in non-literate societies in the higher-developed Eastern worldviews." Achterberg teaches philosophy at the

University of Amsterdam. (v6,#3)

Achterberg, Wouter, Samenleving, Natuur en Duurzaamheid: Een Inleiding in de Milieufilosofie (Society, Nature and Sustainability: An Introduction to Environmental Philosophy). Assen, Netherlands: Van Gorcum, 1994. Achterberg provides a philosophical analysis of the environmental problematique from a social philosophical and ethical perspective. The book is primarily intended for use by students in environmental philosophy at universities and colleges, but can be of help to anyone interested in the environmental issues. Leading questions are 1) why our society seems to be inherently unable to utilize the environment in a sustainable way and 2) what structural changes can and should be made to change the current unsustainable utilization of the environment. Chapters include: 1) What is environmental philosophy? 2) Sustainability. History and analysis of the idea; 3) Whose environment? Tragedies and dilemmas? 4) Market economy, capitalism and the pressure to grow; 5) State and environmental crisis; 6) Environmental crisis and technology; 7) Attitudes towards nature, 8) Environmental Ethics: Respect for nature and intrinsic worth; 9) Environmental Ethics: Future generations. The book is comprehensive, provides an in-depth analysis of central concepts, positions and theoretical perspectives and offers valuable suggestions for structural change. It is recommended for anyone with a good command of the Dutch language. Achterberg teaches philosophy at the University of Amsterdam and is the ISEE contact for Europe.

Achterberg, Wouter, Review of Robert E. Goodin, Green Political Theory, Environmental Values 3(1994):79-80. (EV)

Achterberg, Wouter, Review of Goodin, Robert, Green Political Theory. Environmental Values 3(1994):79-80.

Achterberg, Wouter. Samenleving, natuur en duurzaamheid: Een inleiding in de milieu-filosofie [In Dutch: Society, nature and sustainability: An introduction in environmental philosophy], Assen: Van Gorcum 1994. Achterberg is professor in ethics at the University of Amsterdam. (v.11,#1)

Achterberg, Wouter. Samenleving natuur en durzaamheid: Een Inleiding in de Milieufilosofie (Society, Nature, and Sustainability: An Introduction to Environmental Philosophy) (in Dutch). Assen, Netherlands: Van Gorcum and Comp, 1994. ISBN 90-232-2865-0. Chapters: 1. What is environmental philosophy? 2. Sustainability: History and analysis of an idea. Part I. Environment and industrial society: Will we ever get it right? 3. Whose environment? Tragedies and dilemmas. 4. Market economics, capitalism, and the forces of growth. 5. The state and the environmental crisis. 6. The environmental crisis and technology. Part II. What is the value of nature for us? 7. Attitudes toward nature. 8. Environmental ethics: Respect for nature and intrinsic value. 9. Environmental ethics: Future generations. Achterberg teaches philosophy at the University of Amsterdam and is the European contact person for the International Society of Environmental Ethics. (v6,#3)

Achterhuis, Hans. ed., American Philosophy of Technology. Bloomington: Indiana University Press, 2001. Offers thumbnail sketches of the work of six American philosophers of technology: Albert Borgmann, Hubert Dreyfus, Andrew Feenberg, Donna Haraway, Don Ihde and Langdon Winner. (v.13,#4)

Ackerman, Bruce. Private Property and the Constitution. Reviewed in Environmental Ethics 1(1979):89-96.

Ackerman, D., "Earth-Healing in South Africa: Challenges to the Church," Ecotheology, No. 2, January, 1998, p. 48- . (v9,#2)

Ackerman, Denise, "Earth-Healing in South Africa: Challenges to the Church," Ecotheology No 2(1997):48-58.

Ackerman, Diane, The Rarest of the Rare: Vanishing Animals, Timeless Worlds. New York: Random House, 1995. \$ 23.00 Rare species such as the Brazilian golden lion tamarin, monk seals in the Pacific, the short-tailed albatross on an island off the coast of Japan, and the migrations of the monarch butterfly. (v6,#4)

Ackerman, Diane. A Slender Thread. New York: Random House, 1997. A meditation on the interconnection of the human and natural worlds. The form is a quasi-journal that blends her observations on nature, as seen through Ackerman's garden windows, with her observations on human nature, as seen through her volunteer work at a local crisis center. Ackerman is also the author of The Rarest of the Rare, a look at endangered species, and A Natural History of the Senses, an effort to catch emotion and sensory beauty in words. (v8,#1)

Ackerman, Frank. Why Do We Recycle? Markets, Values, and Public Policy. Washington, D.C.: Island Press, 1997. 180pp. \$29.95 cloth, \$16.95 paper. A blend of the economic and environmental arguments for recycling and waste reduction. (v8,#1)

Ackerman, Frank. Why Do We Recycle?: Markets, Values, and Public Policy. Washington, D.C.: Island Press, 1996. 180 pages. \$29.95 cloth, \$16.95 paper. The arguments for and against recycling, focusing on the debate surrounding the use of economic mechanisms to determine the value of recycling. Ackerman presents an alternative view of the theory of market incentives, challenging the notion that setting appropriate prices and allowing unfettered competition will result in the most efficient level of recycling. (v7, #3)

Ackland, Len, Making a Real Killing: Rocky Flats and the Nuclear West. Albuquerque: University of New Mexico Press, 1999. 308 pages. Rocky Flats, just outside Denver, Colorado, was a manufacturing site for hockey-puck sized cores, made of plutonium, that detonate nuclear weapons. The plant was built and operated before we knew how to handle nuclear wastes and the managers were under intense pressure to produce at break-neck speed to keep up with what it was presumed the Russians were doing, all under a veil of secrecy, which put the public at great risks they knew nothing about. Now these mistakes leave as legacy one of the worst pollution problems in the U.S., costing tens of millions of dollars each year, and difficult if not impossible to clean up. (v.12,#2)

Ackrill, Rob, Review of: Batabyal, Amitrajeet A., and Beladi, Hamid, eds., The Economics of International Trade and Environment. Boca Raton: Lewis, 2001. Environmental Values 12(2003):537-539. (EV)

Acutt, Melinda and Pamela Mason, eds. Environmental Valuation, Economic Policy and Sustainability: Recent Advances in Environmental Economics. Cheltenham: Edward Elgar, 211pp. Reviewed by Colin Green. Environmental Values 9(2000):537.

Adam, Barbara. "Food for Thought: Timescapes of Risk." Environmental Values 8(1999):219-238. ABSTRACT: This paper explores the temporal dimension of risks associated with the production, trade and consumption of food. The paper operates at many levels of substantive and theoretical analysis: it focuses on problems for understanding and action that arise from the invisibility of the hazards, explores the effects of those hazards on consumers and sets out the differences in risks that are faced by farmers, processors, traders and consumers. With its emphasis on that which tends to be disattended in conventional social science analysis - the temporal and the invisible - the paper has implications for social theory at the level of ontology and epistemology. It concludes with reflections on the role of social theory

in such contemporary timescapes of risk. KEYWORDS: Timescape, risk, innovative technology, food, invisible hazards. Barbara Adam, School of Social Science Cardiff University 50 Park Place, Cardiff CF1 3AT, UK (EV)

Adam, John A., Mathematics in Nature: Modelling Patterns in the Natural World. Princeton, NJ: Princeton University Press, 2003. Math in nature, leading to a deeper appreciation of such natural phenomena as cloud formation, tree heights, leaf patterns, butterfly wings, and even puddles and mud cracks. Adam is in math, Old Dominion University, Norfolk, VA. (v. 15, # 3)

Adams, A., ed., Proceedings of the First World Conference on National Parks. Washington, DC: National Park Service, U. S. Department of Interior, 1962.

Adams, Alexis, interviews Bill McKibben, "Dream a Little Dream," The Sun, October 2006, pp. 4-13. "We've been building this [environmental] movement for the last 150 years, and it has accomplished marvelous things: the conservation of wilderness; the reduction of pollution in the air and the water. But the movement isn't nearly big enough and strong enough to handle global warming, because climate change arises from the use of fossil fuels, which are at the heart of pretty much every part of modern life. A problem of this size can be tackled only with enormous changes in technology, in the economy, in our behavior, and in our very idea of who we are." "We know now that in terms of human rights, environmental damage, and almost any measure you can name, the endless-growth model has turned out to be a lousy idea." McKibben wants to replace "sustainability" with "durability."

Adams, Ann. The Creation Was Open to Me: An Anthology of Friends' Writings on That of God in All Creation. Wimslow: Quaker Green Concern, 1996. 95 p. (v.11,#1)

Adams, Ansel, The American Wilderness. Boston: Little, Brown, and Co., 1991. 146 pages. 107 black and white duotones. Hardcover \$ 100. The first book of this type since the 1970's and probably the last for a long time. Majestic photographs of landscapes, with selections from Adams' letters that form a powerful statement on the imperative of wilderness conservation. (v2,#4)

Adams, Bill, Review of Oates, David, Earth Rising. Environmental Values Vol.1 No.4(1992):370.

Adams Carol J., "Viewpoint: Pity the Poor Mad Cow," Ecotheology No 3(1997):117-119.

Adams, Carol J., The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory. New York: Crossroad/Continuum, 1990 paper, \$ 12.95. Reviewed in Environmental Ethics 14(1992):365-69.

Adams, Carol J., and Josephine Donovan, eds., Animals and Women. Durham, NC: Duke University Press, 1995. \$ 16.95 paper. 360 pages. (v6,#4)

Adams Carol J., "Feasting on Life," Ecotheology No 9 (July 2000):38-48.

Adams, Carol J., ed., Ecofeminism and the Sacred. Maryknoll, NY: Orbis Books, 1992. 250 pages. \$ 16.95 paper. \$ 39.95 cloth. Part I: Sallie McFague on an earthly theological agenda, Carol Lee Sanchez on the sacred connection between animal, vegetable, and mineral, Delores Williams on the womanist tradition on sin, defilement, and the environment, Judith Plaskow on feminist Judaism and repairing the world, Lena Gupta on Hinduism and ecofeminism. Part II: on animal consciousness, ecological politics, Goddess mythology, and others. Catherine Keller, Marjorie Procter-Smith, Jane Caputi, Rebecca Johnson, Andy Smith, Janet Biehl, Chellis Glendinning, Marti Keel, Teal Willoughby. [Editor's note: This book was in press but cancelled owing to a dispute over a pro-choice article. It was later published by Continuum, see that entry, in v5, #1.] (v3,#3)

Adams, Carol J., ed., Ecofeminism and the Sacred. New York: Continuum, 1993. 352 pages. \$ 18.95. In patriarchal religions, the earthly female body has been profaned, while the transcendent male spirit has been sacralized. Women, animals, and nature in general have suffered systematic degradation and oppression. Twenty essayists wonder what might happen if the physical, sensuous world were seen as sacred. Feminist and womanist analyses of traditional religions; emergent ecofeminist spiritualities, and the way they might work in practice. This book was previously announced as an Orbis book (see Newsletter 3, 3, and more detail there), but, in last minute developments, Orbis refused to publish the book unless a pro-choice article was removed, which Adams refused to do, thereafter seeking another publisher. Orbis is under the jurisdiction of the Maryknoll Order, over which Cardinal O'Connor has canonical authority. See book review by Carol S. Robb in CTNS (Center for Theology and the Natural Sciences) Bulletin, Spring 1993. (v5,#1)

Adams, Carol J., "Robert Morris and a Lost 18th Century Vegetarian Book: An Introduction to Morris's A Reasonable Plea for the Animal Creation," Organization and Environment 18 (no. 4, Dec 2005).

Adams, Carol. Neither Man Nor Beast: Feminism and the Defense of Animals. New York: Continuum Press, 1994. (v7, #3)

Adams, Cass, ed. The Soul Unearthed: Celebrating Wildness and Personal Renewal Through Nature. New York: Jeremy P. Tarcher and G. P. Putnam's Sons, 1996. ISBN 0-87477-838-7. 288 pages, paperback, \$14.95. A collection of stories, essays and poetry by well-known writers about the transformative power of wilderness experience. Included are selections from: Robert Bly, Delores LaChapelle, James Swan, Terry Tempest Williams, Joan Halifax, Roderick Nash, Michael Roads, John Stokes, Jim Nollman, Deena Metzger, John Seed, John Daniel, Brenda Peterson, Matthew Fox, Michael J. Cohen, Joseph Bruchac, Steven Foster, Maxine Kumin, and others. Tarcher/Putnam, 200 Madison Ave., 18th Floor, New York, NY 10016, 212-951-8581. (v7, #3)

Adams, David A., Renewable Resource Policy: The Legal-Institutional Foundations. Washington: Island Press, 1993. 580 pages. \$ 75.00 hardcover. The history, laws, and important national policies affecting renewable resource management. (v4,#3)

Adams, J. M., Piovesan, G., Strauss, S., and Brown, S., "The Case for Genetic Engineering of Native and Landscape Trees against Introduced Pests and Diseases," Conservation Biology 16(no.4, 2002): 874-79. (v.13,#4)

Adams, Jane, "Class: an Essential Aspect of Watershed Planning," Journal of Agricultural and Environmental Ethics 18(2005):533-556. A study of a watershed planning process in the Cache River Watershed in southern Illinois revealed that class divisions, based on property ownership, underlay key conflicts over land use and decision-making relevant to resource use. A class analysis of the region indicates that the planning process served to endorse and solidify the locally-dominant theory that landownership confers the right to govern. This obscured the class differences between large full-time farmers and small-holders whose livelihood depends on non-farm labor. These two groups generally opposed one another regarding wetland drainage. Their common identity as property owner consolidated the power wielded locally by large farmers. It also provided an instrument - the planning document - for state and federal government agencies to enhance their power and to bring resources to the region. Keywords Cache River - class - deliberative democracy - Southern Illinois - watershed planning Adams is in history, Southern Illinois University, Carbondale. (JAEE)

Adams, John, "The Emperor's Old Clothes: The Curious Comeback of Cost-benefit Analysis." Environmental Values Vol.2 No.3(1993) 247-260. ABSTRACT: Cost-benefit analysis is enjoying a

resurgence. Despite its well documented failures in the past to cope with the environmental damage caused by major transport projects, and despite lack of progress in resolving the causes of these failures, Britain's Department of the Environment now proposes to apply it not just to projects, but to the formulation of policy. Curious. KEYWORDS: Cost-benefit analysis, valuation, willingness to pay, willingness to accept. Department of Geography, University College, London, 26 Bedford Way, London WC1H 0AP, UK.

Adams, John, Risk. Reviewed by John Proops. Environmental Values 5(1996):181-182. (EV)

Adams, John, Review of Douthwaite, Richard, The Growth Illusion. Environmental Values Vol.2 No.1(1993):79.

Adams, John. "Cost Benefit Analysis: The Problem, Not the Solution." The Ecologist 26, no.1 (1996): 2. (v7, #3)

Adams, Jonathan M., et al, "The Case for Genetic Engineering of Native and Landscape Trees against Introduced Pests and Diseases," Conservation Biology 16(no. 4, August 2002):874-879. Important native forest trees and familiar landscape trees have been ravaged by introduced pests and diseases. Without human intervention many of these trees will become extinct. The problem is likely to get worse. Cautious transfer of resistance genes might be a desirable conservation strategy, gradually replacing the present trees with the transgenics. Adams is in natural resource science, University of Rhode Island. (v.13, #3)

Adams, Jonathan S., Mcshane, Thomas O. The Myth of Wild Africa: Conservation without Illusion. San Francisco: University of California Press, 1996. \$14.95 paper. Seeks to redress the lack of understanding of the vital position of Africans in effective conservation. (v.7,#4)

Adams, Jonathan S., and McShane, Thomas O., The Myth of Wild Africa: Conservation without Illusion. "Europeans invented a mythical Africa, which soon claimed a place of privilege in the Western imagination" (p. xii). "Success lies ... in understanding that conservation and development, long at loggerheads, are two parts of a single process. Conservation cannot ignore the needs of human beings, while development that runs roughshod over the environment is doomed" (p. xix). (v 14, #3)

Adams, Jonathan S., and Thomas O. McShane, The Myth of Wild Africa: Conservation without Illusion. New York: W. W. Norton, 1992. Also, in a paper edition, Berkeley, CA: University of California Press, 1996. \$ 14.95.

Adams, Jonathan, *The Future of the Wild: Radical Conservation for a Crowded World*. Boston: Beacon Press, 2005. Parks and protected areas are the cornerstone of conservation in a crowded world, but increasingly we have to worry about borders. Park and wilderness boundaries are artificial, drawn for political and social convenience rather than for ecosystemic reasons, illusory to all but humans. Conservation needs to be integrated across the landscape. Adams is a Nature Conservancy biologist. Adams, Jonathan. *The Future of the Wild: Radical Conservation for a Crowded World*. Boston: Beacon Press, 2006. Adams, with the Nature Conservancy, argues that most conservation needs to be on private lands, since the government-preserved areas are but a fraction of the landscape. He advocates creating a world where farmers, ranchers, loggers, and other intensive users of the landscape participate in a civil community conversation about resources, where the continent's surviving megaflora are allowed to return and roam unmolested among the corridors on private land that connect core conservation areas. One of his examples is Arizona rancher Warner Glenn, a lion hunter, who put down his gun and took the first photograph of a jaguar in the United States, and is now a lion hunter and jaguar (and lion) conservationist.

Adams, Lowell W. Urban Wildlife Habitats: A Landscape Perspective. Minneapolis: University of Minnesota Press, 1994. 160 pages. \$34.95; \$16.95 paper. (v5,#2)

Adams, Michael S., Kausch, Hartmut, Kruger, Karl-Ernst. "The Effect of the Reunification of Germany on the Water Chemistry and Ecology of Selected Rivers," Environmental Conservation 23(no.4 1996):289. (v8,#3)

Adams, Michael, and Angelo Carfanga. *Coming of Age in a Globalized World: The Next Generation*. Bloomfield, CT: Kumarian Press, 2006. The authors discuss globalization and the case for world citizenship through global education, while reconciling the contrast between national bonds and global interests.

Adams, Noah, Far Appalachia: Following the New River North. New York: Random House, 2001. In search of Appalachian roots, Noah Adams took time off from hosting NPR's All Things Considered to follow the New River out of western North Carolina through Virginia and into West Virginia. He drove, hiked, and paddled, exploring the ecology, and became deeply appreciative of one of America's most beautiful regions. Listeners to ATC are still waiting for this to translate into good environmental reporting. (v.12,#4)

Adams, Paul W., and Hairston, Anne B. "Calling All Experts: Using Science to Direct Policy." Journal of Forestry 94, no.4 (1996): 27. (v7, #3)

Adams, Rod D., Liberal Education and the Environment: An Analysis of David Orr's Green Proposal for Higher Education. M.A. thesis, Colorado State University, Fall 2003. Liberal education, David Orr argues, has been equipping students with industrial minds and proposes educating for ecologically literate minds instead. I examine his proposal in the light of the history of liberal education, which has two competing traditions, the rhetorical and the philosophical. Universities tend to emphasize one or the other at various times; a better education would enable students to make their own choices here. Orr requires ideals from both traditions, as well as elements from ancient, modern, and postmodern philosophy. (v.14, #4)

Adams, W. M., Wasting the Rain: Rivers, People, and Planning in Africa. Minneapolis: University of Minnesota Press, 1993. Co-published with Earthscan in the United Kingdom. 240 pages. \$ 17.95, paper. For much of Africa, drought seems to be a permanent feature. Many attempts have been made to develop water resources through dams and irrigation schemes, but these have almost invariably failed. The best hope of appropriate development lies in working with local people using local knowledge. Adams wants to use the strength and diversity of indigenous water development in the difficult and often variable climate of Africa. The record of the modern, large-scale developments, particularly dams and irrigation schemes, has been poor and ineffective in conservation. (v4,#2)

Adams, W. T.; Hobbs, Stephen; Johnson, Norm, "Intensively Managed Forest Plantations in the Pacific Northwest: Introduction," Journal of Forestry 103(no.2, March 2005):59-60(2).

Adams, W. M. *Future Nature: A Vision for Conservation*, 2nd ed. London: Earthscan Publications, 2003. British conservation policy has been too faint-hearted, fixated on small preserved sites, ignoring the wider countryside, and reluctant to release natural processes to work without constraint on the English landscape.

Adams, W.M., Future Nature: A Vision for Conservation. Reviewed by John Francis. Environmental Values 5(1996):369-371. (EV)

Adams, W.M. Review of Joseph Hanlon, Peace Without Profit: How the IMF Blocks Rebuilding in Mozambique. Environmental Values 8(1999):113. (EV)

Adams, William Mark, Green Development: Environment and Sustainability in the Third World. London and New York: Routledge, 1990, 1992. 257 pages. An analysis of the concept of sustainable development, with particular reference to the gulf between environment and development studies. The "greenness" of development is not to be found in a simple concern for the environment, but in a new understanding of the politics of the development process and the power of the poor to control and determine the future of their own environment. Adams is a lecturer in geography at the University of Cambridge. (v6,#3)

Adams, William M., Brockington, Dan, Dyson, Jane, and Vira, Bhaskar, "Managing Tragedies: Understanding Conflict over Common Pool Resources," Science 302(12 December 2003):1915-1916. "Conflicts over the management of common pool resources are not simply material. They also depend on the perceptions of the protagonists. Policy to improve management often assumes that problems are self-evident, but in fact careful and transparent consideration of the ways different stakeholders understand management problems is essential to effective dialogue." "Religious beliefs and moral convictions can be important in structuring understanding, both among local people and scientists." "To some extent, policy will always involve 'tragic' choices that contradict the deeply held values and beliefs of some stakeholders." Adams and Vira are in geography, Cambridge University. Brockington is in geography, Oxford University.

Adams, William M., "Biodiversity Conservation and the Eradication of Poverty," Science 306(12 November 2004):1146-1149. It is widely accepted that biodiversity loss and poverty are linked problems and that conservation and poverty reduction should be tackled together. However, success with integrated strategies is elusive and hard to find. There is sharp debate and the social impacts of conservation programs and the success of community-based approaches to conservation. The links between poverty alleviation and biodiversity conservation are here analyzed. (v.14, #4)

Adamson, Kerry-Ann. Review of Chris Hables Gray, "Cyborg Citizen: Politics in the Posthuman Age", Organization and Environment 14 (No. 4, December 2001) pp. 472-4. Adamson is a Marie Curie Fellow with the Technical University of Berlin, researching socio-political issues in relation to the future of the fuel cell market. (v.13,#2)

Adamson, Tim, "Measure for Measure: The Reliance of Human Knowledge on the Things of the World," Ethics and the Environment 10(no. 2, 2005):175-194. The notion that all knowledge is a form of measurement can be traced back to the Socratic insight that knowledge requires the presence of some standard against which things are measured. If experience and knowledge rely on some capacity for measurement, what is measurement and what does it entail. The most common contemporary answer to this question can be found in the notion that our experience and knowledge are "constructed" by distinctly human, that is, cultural factors. This raises the question of the place and role of nature in our experience. My aim is to articulate a view of the measurement involved in human experience and knowledge, one which helps us to overcome the privileging of culture over nature that still plagues contemporary thought. My account is inspired by Merleau-Ponty's philosophy of the body, particularly his notion that the human body serves as a "measurant of things." Adamson is in philosophy at Iowa Wesleyan College and Adjunct Professor of Religion at the University of Iowa. (Eth&Env)

Addis, Getachew; Urga, Kelbessa; Dikasso, Dawit, "Ethnobotanical Study of Edible Wild Plants in Some Selected Districts of Ethiopia," Human Ecology 33(no.1, February 2005):83-118(36).

Addison, Alonzo. *Disappearing World: 101 of the Earth's Most Extraordinary and Endangered Places*.

New York: Collins, 2008. Addison identifies and discusses 101 of the UNESCO World Heritage sites, those most at risk.

Adede, Andronico O., "The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)," Pace Environmental Law Review 13 (no. 1, 1995):33-48. A "new breed" of treaty began to appear in this period, which tries to incorporate new concepts and concerns aimed at bringing about sustainable development. These include inter-generational equity, common but differentiated responsibility, caution against allowing a lack of scientific evidence to serve as a pretext for inaction, the polluter-pays principle, duties of co-operation and exchange of scientific information, trade and the environment, sovereignty and the environment, and the role of non-governmental organizations and local communities in the negotiation and implementation of environmental treaties. Above all, the "new breed" of treaties address, in greater detail, arrangements for both the transfer of funds to combat environmental problems and the transfer of environmentally sound technologies. Furthermore, they take into account the interest of developing countries to ensure their participation in both the negotiation and governance of such treaties. Adede is with the Office of Legal Affairs, United Nations, New York. (v8,#2)

Adelaja, Adesoji & Derr, Donn, & Rose-Tank, Karen, "Economic and Equity Implications of Land-Use Zoning in Suburban Agriculture", Journal of Agricultural Ethics 2(1989):97-112. A cash-flow viability model is used to evaluate the impacts of land-use zoning on farm households in New Jersey. Findings suggest that zoning results in increased production expenses, lower efficiency and profitability and the devaluation of land assets. The results suggest that the use of land-use zoning statutes to guarantee the existence of agriculture may not be equitable unless transferable development rights or other methods of compensating farmers for their losses are simultaneously implemented. Adelaja, Derr, Rose-Tank are in agricultural economics and marketing at Rutgers State University, New Jersey.

Adelaja, Adesoji O. and Brumfield, Robin, "Research Note on Equity and Ethics in State-Promotion of Agricultural Products", Journal of Agricultural and Environmental Ethics 4(1991):82-88. Many state governments in the United States promote locally-produced farm products. This paper discusses issues related to the ethics and equity of such promotional programs. The paper argues that generic promotion is generally easier to justify in terms of ethics and equity than brand promotion. It also argues that informative and factual brand promotions are easier to justify than deceptive and persuasive brand promotions. Additional equity issues arising when taxpayers finance state-promotional programs are also discussed.

Adeloa, Francis O. "Cross-National Environmental Injustice and Human Rights Issues: A Review of Evidence in the Developing World," American Behavioral Scientist 43(No.4, 2000). (v.11,#1)

Adeola, Francis, "Environmentalism and Risk Perception: Empirical Analysis of Black and White Differentials and Convergence", Society and Natural Resources 17(no.10, Nov-Dec 2004):911-939(29).

Adeola, Francis O., "Endangered Community, Enduring People: Toxic Contamination, Health, and Adaptive Responses in a Local Context," Environment and Behavior 32 (No. 2, 2000, March 01): 209- . (v.11,#2)

Adeola, Francis O. "Environmental Contamination, Public Hygiene, and Human Health Concerns in the Third World: The Case of Nigerian Environmentalism." Environment and Behavior 28, no.5 (1996): 614. (v7, #3)

Adger, Neil and Katrina Brown, Land Use and the Causes of Global Warming. New York: John Wiley, 1995. 271 pages. \$ 54.95. £ 37.50. The scientific and policy debate concerning the roles of agriculture, forestry and other activities. How land use produces the greenhouse effect; emissions rates; uncertainties

in estimating both the fluxes and the scale of land use change. All land use policies are multi-objective but the reduction of greenhouse gas emissions must be a key element in forestry and agriculture policy on a global basis. The authors are at the University of East Anglia. (v6,#4)

Adger, W. Neil, et al., "Social-Ecological Resilience to Coastal Disasters," Science 309(12 August):1036-1039. Almost as if prescient, Science devoted a theme issue in mid-August to "Dealing with Disasters." Half a dozen articles similar to the above. Predictably, many of the sorts of preparations for response recommended here were missing when Katrina hit two weeks later. A frequent theme is social networking, distributed infrastructure that absorbs hits in one region by resilience in another. Another theme is that disasters will inevitably come, storms, fires, droughts are part of the natural order. These will have increasing impact with larger populations, concentrating nearer coastlines and with global warming. The best management strategy is not the command and control of nature, not rebuilding nature, but a social structure that can roll with the punches, absorbing fire, flood, earthquakes.

Adger, W. Neil, Jouni Paavola, Seleemul Huq, and M. J. Mace, eds. *Fairness in Adaptation to Climate Change*. Cambridge, MA: The MIT Press, 2006. All countries will be endangered by climate change risks from flood, drought, and other extreme weather events, but developing countries are more dependent on climate-sensitive livelihoods such as farming and fishing and hence are more vulnerable. Despite this, the concerns of developing countries are marginalized in climate policy decisions.

Adger, W.N., Brown, K., Land Use and the Causes of Global Warming. (Chichester: John Wiley and Sons, 1994). Reviewed by Paola Gatto. Environmental Values 6(1997):366-367. (EV)

Adler, Jonathan H., "Banning 'Biofoods': Precaution Can Be a Dangerous Tool," PERC Reports (Bozeman, MT) 17 (no. 4, September):8-9. Genetically engineered foods hold great promise, and it is more risky to ban them. In general the precautionary principle is being misused. "The idea behind the precautionary principle is that it is always better to be safe than sorry. In fact, however, adopting the precautionary principle is likely to make us more sorry than safe." Adler is a Senior Fellow at the Competitive Enterprise Institute in Washington, DC. (v.10,#3)

Adler, Jonathan H., "Wetlands, Waterfowl, and the Menace of Mr. Wilson: Commerce Clause Jurisprudence and the Limits of Federal Wetland Regulation." Environmental Law 29(no. 1, 1999):1- . This article examines the impact the Commerce Clause doctrine in *United States v. Lopez* will have on the federal government's ability to regulate wetlands. The author concludes that limiting federal regulation of wetlands may improve environmental protection efforts. (v.11,#1)

Adler, Matthew, "Incommensurability and Cost-Benefit Analysis," University of Pennsylvania Law Review 146(1998):1371-1418. "Cost-benefit analysis is a flourishing practice, desperately in need of a justification" (p. 1371). This is a theme issue on incommensurability and law. Adler teaches at the University of Pennsylvania Law School. (v.13,#2)

Adler, Matthew D., "Cost-Benefit Analysis, Static Efficiency, and the Goals of Environmental Law," Boston College Environmental Affairs Law Review 32(2004).

Adler, Matthew D., and Posner, Eric A., "Rethinking Cost-Benefit Analysis," The Yale Law Journal 109(1999):165-247. A book-length article. CBA is a useful decision procedure and it should be routinely used by agencies. CBA is superior to rival methodologies. It allows agencies to take into account all relevant influences on overall well-being, unlike simpler decision procedures such as risk-risk; and it enables agencies to weigh the advantages and disadvantages of projects in a clear and systematic way, unlike more complex decision procedures.

However, CBA serves these useful purposes only under certain conditions. First, CBA must give

way to important nonwelfarist concerns, such as deontological rights. Second, CBA must give way when the endowments of affected people vary a great deal. Third, CBA may need to be adjusted to account for uninformed or distorted preferences. Interestingly, agencies already seem to depart from textbook CBA in order to respond to these concerns. Adler is in law, University of Pennsylvania. Posner is in law, University of Chicago.

Adler, Robert W., "Addressing Barriers to Watershed Protection", Environmental Law, 25(No.4, 1995):973- . A comprehensive review of the history of watershed programs in the United States and discusses the underlying issues preventing those programs from succeeding. Recognizing the need for comprehensive watershed-based protections, Adler concludes with a thorough analysis of recommendations for future watershed programs. (v7,#1)

Adler, Robert and Jessica Landman, The Clean Water Act Twenty Years Later. Washington, DC: Island Press, 1993. 350 pages. \$ 29.95 paper. The Clean Water Act intended to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." A detailed examination of the health of the nation's waters, which turns out to be a complex and subtle question to address. With recommendations for reauthorization of the Act. The authors are attorneys at the National Resources Defense Council, Washington. (v4,#2)

Adriance, Madeline Cousineau, Base Christian Communities and the Struggle for the Amazon. Albany, NY: State University of New York Press, 1995. Six case studies in how religious groups (the comunidades de base) are involved in land reform, advocacy for human rights, and conservation. These political movements are motivated by a deep religious commitment. Adriance is in sociology at Mount Ida College. (v6,#4)

Afeissa, Hicham-Stéphane, ed. and trans. *Éthique de l'environnement: Nature, valeur, respect*. Paris: Librairie Philosophique J. Vrin, 2007. This anthology in French contains many of the major classical sources originally in English, including Thomas Birch, J. Baird Callicott, Kenneth Goodpaster, Eric Katz, Arne Naess, Bryan Norton, Holmes Rolston III, Richard Routley, Christopher Stone, and Paul Taylor. This is a welcome addition to the literature of environmental ethics in French.

Africa - Environment and Wildlife is the best single source of reflective articles, raising the ethical and philosophical issues in conservation for a literate audience. This is a magazine, not a journal, issued six times a year and is a relative newcomer on the African scene. Several examples are summarized in the bibliography below. (v6,#3)

Africa. A bibliography of environmental ethics and conservation in Africa is in the ISEE Newsletter, vol. 6, no. 3. Fall 1995.

African Journal of Ecology. The, a scientific journal, is also published by the East African Wildlife Society through Blackwells. (Africa) (v6,#3)

African National Congress, Mayibuye iAfrika--An Introduction to ANC Environmental Policy. Johannesburg, African National Congress, 1991. (v6,#3)

African Panorama, a general magazine, issued a Special Environmental Edition, 1995. Twenty authors have brief articles on values and issues in conversation. Ian Player discusses the importance of the environment to the psyche of humankind. Dawie de Villiers presents the position of the new government on environmental strategies, David Varty examines ecotourism, Carrie Curzon the illegal wildlife trade, George Hughes reports on the eighth CITES conference and South Africa's position there, Nolly Zaloumis outlines threats to wetlands, Tony Pooley examines South Coast degradation, Gerhard Verdoom

describes the battle to save raptors, Basie Maartens explains how hunting can conserve wildlife, Clive Walker explains the importance of creating awareness in children, Raymond Byrne looks at waste facilities, Kader Asmal describes the water supply limitations, Kraai van Niekerk looks at the uneasy relation between farming and conservation, Jeunesse Searll shows how poverty is depleting Africa's natural forests, John Hanks presents opportunities for private sector ecotourism, and more. (v6,#3)

African Wildlife is the official organ of the Wildlife Society, a conservationist organization with general membership. Articles can be good, though not as explicitly probing as those in Africa - Environment and Wildlife. (v6,#3)

Agar, Nicholas, "Biocentrism and the Concept of Life," Ethics 108(1997):147-168. "I have sought to show that our entrenched apparently anthropocentric moral views can take us some distance into nature. The representational account of life (developed in this article) acts as a bridge between living things and value-anchoring psychological notions (such as suffering pains and pleasures). It enables value to be spread very broadly throughout nature. Individual things are not all to be valued equally, however. The amount of value we assign to an individual depends on the range and complexity of goals that an organism is capable of. Why does this type of complexity matter? As organisms have more varied and numerous goals they tend to become more folk psychological. Folk psychological notions in turn have the closest association with relevant normative notions. Thus the life-representational ethic both acknowledges the preeminent place of humans on this planet and spreads value broadly enough to provide firm foundations for an environmental ethic." "Consciousness does not occupy such an important place in the life representational ethic. Many nonconscious organisms will be morally valuable. However, ... consciousness will open up novel varieties of goal to an organism" (p. 168). Agar is in philosophy, Victoria University of Wellington, New Zealand. (v9,#1)

Agar, Nicholas, Life's Intrinsic Value: Science, Ethics, and Nature. New York: Columbia University Press, 2001. Anything living is intrinsically valuable, from the bacteriophage T4 to humans. A biocentric ethic forms the platform for an ethic of the environment. Just as physical science once dislodged humans from the center of the universe, biological science challenges the received wisdom that only humans are valuable in themselves. Analysis of historic and contemporary views from Aristotle and Kant to E. O. Wilson, Peter Singer, Holmes Rolston III, Michael Ruse, and J. Baird Callicott.

Some chapter titles and themes: The psychological view of intrinsic value. Defining intrinsic value. Why are humans morally special? Scientific facts and values. The limits of ethical extensionism and beyond. Two types of natural kinds overlap. Combining the overlap of descriptive and metaphysical kind to unearth environmental value. Recent defenses of biocentrism. A morally specialized account of life. Commonsense and customized accounts of life. A biofunctional explanation of self-movement. Why the representationally alive are morally important. The teleological account of contents in biopreferences. The threat of genic selectionism. Sentience and goals. The shortcomings of individualism. Environmental value holism. Individualistic ethics of species and ecosystems. An impossible ethic? Does life value leave room for human lives? A call for a scientifically informed appreciation of nature. Agar is in philosophy, Victoria University, Wellington, New Zealand. (v.12,#2)

Agar, Nicholas. "Valuing Species and Valuing Individuals." Environmental Ethics 17(1995):397-415. My goal in this paper is to account for the value of species in terms of the value of individual organisms that make them up. Many authors have pointed to an apparent conflict between a species preservationist ethic and moral theories that place value on individuals. I argue for an account of the worth of individual organisms grounded in the representational goals of those organisms. I claim that this account leads to an acceptably extensive species preservationist ethic. Agar is in the department of philosophy, Victoria University of Wellington, New Zealand. (EE)

Agar, Nicholas. Life's Intrinsic Value. Reviewed in Environmental Ethics 25(2003):413-416. (EE)

Agarwal, Anil, Narain, Sunita. "Dying Wisdom: The Decline and Revival of Traditional Water Harvesting System in India," The Ecologist (1979) 27(no.3 1997):112. Over the centuries, villagers in India have developed a wide range of techniques to collect rainwater, groundwater, stream water, river water, and flood water. Since the colonial era, however, such water harvesting systems have been declining. Reviving them offers a realistic alternative to the large dams and water development projects promoted by the state authorities as a "solution:" to India's water crisis. (v8,#3)

Agee, James K., Fire Ecology of Pacific Northwest Forests. Washington: Island Press, 1993. 490 pages. \$ 50.00 hardcover. (v4,#3)

Agee, James K., and Johnson, Daryl R., eds., Ecosystem Management for Parks and Wilderness. Seattle: University of Washington Press, 1988.

Agenda 21 and the Rio Summit are the topics of all the articles in the Colorado Journal of International Environmental Law and Policy, Volume 4, no. 1 (Winter 1993). In addition to analyzing and interpreting the documents and such key concepts as "biodiversity" and "sustainable development," the articles explain the diplomatic process behind the documents and the status of the documents as "soft-law" treaties. \$15.00 for the single issue. University Press of Colorado, P. O. Box 849, Niwot, CO 80544.

Agenda 21: Earth's Action Plan. Edited by Nicholas A. Robinson. Dobbs Ferry, NY: Oceana Publications, 1993. 683 pages. \$30 paper. Full text, with annotations tracing its evolution. (v5,#2)

Agenda 21, produced at the Rio Earth Summit, is a long and rather unwieldy document (700-900 pages, depending on the printing format), 40 chapters. The whole thing is has been about \$ 75.00, but a version has now been released for \$ 25.00, if sold in developed countries (free copies are available in developing countries). There is both an English and a French text. Various introductions and short versions are appearing. It is also available, rather inexpensively or even free, on computer disk (if you supply your own disk). Also, various videos. United Nations Publications, Sales Section, Room DC2-853, United Nations, NY 10017. Phone 212/963-8300. 800/253-9646. (v4,#1)

Agenda 21 and the UNCED Proceedings. 6 volumes. Edited by Nicholas A. Robinson et al. Dobbs Ferry, NY: Oceana Publications, 1992-93. \$450 hardbound; \$75 per volume. (v5,#2)

Agius, Emmanuel and Salvino Busuttill, eds. Future Generations & International Law. London: Earthscan, 1998. Reviewed by Simon Sneddon, Environmental Values 10(2001):127. (EV)

Agnew, John, "From The Political Economy Of Regions To Regional Political Economy," Progress In Human Geography 24 (No. 1, 2000): 101- . (v.11,#2)

Agnew, John A.; Sheppard, Eric; Smith, Susan J., "Geography past, geography future," Progress in Human Geography 30 (no.1, February 2006): 115-127 (13).

Agosta, Salvatore J., "Conservation biology: a mediator between Neo-Darwinism and alternative views on the origin and history of life," Biodiversity and Conservation 10(no.5, 2001):833-836. Conservationists and creationists may not agree about the origin of life, long ago. But they can and ought to agree about biodiversity in jeopardy here and now and in the future. Agosta is in biology, Frostburg State University, MD. (v.12,#4)

Agosta, William, Thieves, Deceivers, and Killers: Tales of Chemistry in Nature. Princeton, NJ: Princeton University Press, 2000. The venom that spiders use to kill their prey, the alarm pheromones that

earthworms use to warn other earthworms of danger, and lots of organic chemistry used to deceive, kill, and steal in nature--also with big doses of anthropomorphic moralizing. (v.12,#4)

Agrawal, Arun, "Environmentality: Community, Intimate Government, and the Making of Environmental Subjects in Kumaon, India," Current Anthropology 46(no. 2, April 2005):161 -). How rural Indian residents come to care about the environment. How regulatory strategies resulting from community decision-making help transform those who participate in government. Agrawal is in natural resources and environment at the University of Michigan, Ann Arbor.

Agrawal, Arun. "The Community vs. the Market and the State: Forest Use in Uttarakhand in the Indian Himalayas", Journal of Agricultural and Environmental Ethics 9(1996):1-15. Most writers on resource management presume that local populations, if they act in their self-interest, seldom conserve or protect natural resources without external intervention or privatization. Using the example of forest management by villagers in the Indian Himalayas, this paper argues that rural populations can often use resources sustainably and successfully, even under assumptions of self-interested rationality. Under a set of specified social and environmental conditions, conditions that prevail in large areas of the Himalayas and may also exist in other mountain regions, community institutions are more efficient in managing resources than either private individuals or the central government. In advancing this argument, the paper undermines the often dogmatic belief in the universal superiority of private forms of ownership and management. Keywords: common property, resource management, forests, Himalayas, Uttarakhand, collective action, institutions, new institutionalism. Agrawal teaches political science at the University of Florida. (JAEE)

Agren, Goran I., Bosatta, Ernesto. Theoretical Ecosystem Ecology: Understanding Nutrient Cycles. New York: Cambridge University Press, 1997. 250pp. \$49.95. A mathematical framework to illustrate how nutrient cycles operate and interact in plants and soils, forming the foundations of a new ecosystem theory. (v8,#3)

Agriculture and Spirituality: Inter(agri)cultural Dialogue. Essays from the Crossroads Conference at Wageningen Agricultural University. Utrecht: International Books, 1995. 141 pp. ISBN 90-6224-980-9. Chapters (papers), including author and title, are: Gerrit Huizer, Indigenous Knowledge and Popular Spirituality, A Challenge to Developmentalists; Vandana Shiva, Nature, Creativity and the Arrogance of Patenting Life-forms; Henk Verhoog, The Oppressed Tradition of Caring Objectivity in Western Culture; Rob Witte, Spirituality and Agriculture, What Difference Would it Make?; Frans Verkleij. Spirituality and Ecological Agriculture; Wim Zweers, Ecological Spirituality as Point of Departure for an Intercultural Dialogue; Appendix 1: Petran Kockelkoren, Ethical Aspects of Plant Biotechnology (Report for the Dutch Government Commission on Ethical Aspects of Biotechnology in Plants); Appendix 2: Wim Zweers, Literature on Environmental Philosophy and Some Related Subjects. (v6,#4)

Aguera-Cabo (Agüera-Cabo), Mercè, "Gender, Values and Power in Local Environmental Conflicts: The Case of Grassroots Organisations in North Catalonia," Environmental Values 15(2006): 479-504. Not much attention has been paid to gender in environmental management and decision-making. This article explores how a gender dimension can contribute to the environmental debate by means of a comparative study of three environmental grassroots organisations in the North of Catalonia (Spain). The study shows that gender is significant for distinguishing different priorities between women and men in local conflicts and in environmental interests in general. The analysis of unequal power relations between genders in grassroots organisations leads us to discuss how women have fewer opportunities to influence the environmental debate and to advance their ideas. The concluding thoughts stress the need for developing a gender dimension in environmental management and decision-making, considering the opportunities that are presented by emerging governance practices, and particularly by participatory processes. (EV)

Aguiar, John. "Evanescence Diversity--The Palms of Madagascar," Bioscience 48(no.7, Jul. 1998):499- . The case of the triangle palm exemplifies issues facing threatened palms worldwide. (v9,#2)

Aguirre, A. Alonso, Richard S. Ostfeld, Gary M. Tabor, Carol House, and Mary C. Pearl, *Conservation Medicine: Ecological Health in Practice*. Oxford: Oxford University Press, 2002. Human health is linked with wildlife and ecosystem health. Medicine and conservation are more related than earlier realized, now becoming evident in the threat of pandemic diseases, where stresses on wildlife populations or deforestation trigger upsets that cause pathogens, previously contained in the wild, to jump to humans. Aguirre is a wildlife biologist with Wildlife Trust, New York.

Agyeman, J, "Constructing Environmental (in)Justice: Transatlantic Tales," Environmental Politics 11(no.3, 2002): 31-53.

Ahmed, Miyan and Rukunaddin Laarman, Jan G., "Gender Equity in Social Forestry Programs in Bangladesh," Human Ecology 28(no.3, SEP 01 2000):433- . (EE v.12,#1)

Ahrens, W. Ashley, Sharma, Vijaya R. "Trends in Natural Resource Commodity Prices: Deterministic or Stochastic,"Journal of Environmental Economics and Management 33(no.1, 1997):59. (v8,#2)

Aiken, William and Lott, Charlotte, Review of An End to Hunger? The Social Origins of Food Strategies, by Solon L. Barraclough, Journal of Agricultural and Environmental Ethics 7(1994):241-244.

Aiken, William, "The Goals of Agriculture and Weed Science," Weed Science 46(1998):640-641. Five goals for agriculture are: profitable production, sustainable production, environmentally safe production, satisfaction of human needs, and compatibility with a just social order. Four ways to view the origin of potentially conflicting value expressed in the five goals follow. In view of the five goals and differing value positions, the most pressing question for weed science is to what extent current methods of weed control are compatible with a more sustainable and environmentally sensitive agriculture. Aiken is in philosophy at Chatham College, Pittsburgh. (v.10,#3)

Aiken, William and Hugh LaFollette, World Hunger and Morality. 2nd ed. Upper Saddle River, NJ: Prentice-Hall, 1996. The first edition was twenty years ago in 1976. Sixteen essays, many new in this edition: lifeboat ethics, responsibility to aid, rights to aid, solidarity among strangers, global justice, development issues. The essay bearing most directly on environmental issues is Holmes Rolston, III, "Feeding People versus Saving Nature?" Another relevant essay is William Aiken, "The 'Carrying Capacity' Equivocation'." Aiken teaches philosophy at Chatham College, LaFollette at East Tennessee State University. (v6,#4)

Aiken, William, "Human Rights in an Ecological Era." Environmental Values Vol.2 No.3(1992):191-204. ABSTRACT: After presenting a brief history of the idea of a human right to an adequate environment as it has evolved in the United Nations documents, I assess this approach to our moral responsibility with regard to the environment. I argue that although this rights approach has some substantial weaknesses, these are outweighed by such clear advantages as its action-guiding nature and its political potency. KEYWORDS: Ecological era, environmental rights, human rights, politics and the environment. Philosophy Dept., Chatham College, Pittsburgh, PA 15232, USA.

Aiken, William. Review of Food First: Beyond the Myth of Scarcity. By Frances Moore Lappé and Joseph Collins. Environmental Ethics 1(1979):279-82.

Aiken, William. Review of Naked Emperors. By Garrett Hardin. Environmental Ethics 7(1985):75-79.

Aikin, Scott F., "The Dogma of Environmental Revelation," *Ethics and the Environment* 13(no. 2,

2008):23-34. Environmental revelationism is the view that there are preferred means of knowing the value and structure of nature, and these means are characterized by experiences of awe or ceremonial feelings of reverence. This paper outlines the dogmatic consequences of this view. Scott F. Aikin is a Lecturer in Philosophy at Western Kentucky University

Aiking, Joop de Boer, and Johan Vereijken, eds., *Sustainable Protein Production and Consumption*. Reviewed by Emyr Vaughan Thomas, *Environmental Values* 16(2007):539-542.

Ainsworth, Jonathan N., The Ecological Holism of New Science, Master's Thesis, Department of Philosophy, Lancaster University, September 1991.

Ainsworth, Jonathan N., The Ecological Holism of New Science, Master's Thesis, Department of Philosophy, Lancaster University, September 1991. (v7,#1)

Airaksinen, Timo, Review of Oelschlaeger, Max, The Idea of Wilderness. Environmental Values Vol.1 No.1(1992):77.

Airaksinen, Timo, "Original Populations and Environmental Rights." Journal of Applied Philosophy 5 (1988): 37-47. Do indigenous populations have the right to maintain destructive environmental practices? The argument here suggests that original populations are part of natural environmental equilibria, and that if nature has intrinsic value, then the original population acquires strong rights to continue its way of life. Implying the necessity for compensation and the sharing of political power, this strong right to use the environment contrasts with policies of preservation. (Katz, Bibl # 2)

Aitken, Gill, "Conservation and Individual Worth," Environmental Values 6(1997):439-454.

ABSTRACT: It is commonly supposed that individual animals are of little relevance to conservation which is concerned, instead, with groups of things or wholes such as species, habitats, and the like. It is further contended by some that by prioritising individuals, two of those values that are held dear by conservation--namely natural selection and fitness--are compromised. Taking wildlife rehabilitation as a paradigm case of concern for the individual, it is argued that the latter claim is based upon mistaken assumptions. Then, using red deer culling as a case study, the discord between conservation's holistic values and a concern for individual worth is explored. It emerges that the conservation value of red deer culling is more apparent than real and thus that there is more room for conservationists acceptance of individual worth than usually supposed. Philosophy Department, University of Lancaster, Lancaster LA1 4YG, UK (EV)

Aitken, Gill, A New Approach to Conservation: The Importance of the Individual through Wildlife Rehabilitation. Aldershot: Ashgate, 2004. Reviewed by Helena Siipi in Environmental Values 14(2005):527-529.

Aitken, Gill, "Animal Suffering: An Evolutionary Approach," *Environmental Values* 17(2008): 165-180. Though much is written about animal suffering, little is said about the nature of suffering itself. Without any clarity about its conceptual nature, discussions concerning detection, prevention and reduction of suffering are seriously hampered. This paper considers - and rejects - some of the more usual understandings of suffering (such as that suffering is synonymous with either pain or negative emotions). Instead, an alternative understanding of suffering is proposed, namely that suffering is the experiencing of one's life as going badly. This notion is tied to the loss of individuals' central life projects. It is suggested that non-human animals' central projects are their evolved survival skills. This alternative view of suffering has major implications for animal welfare.

Ajatus 49, Suomen Filosofisen Yhdistyksen vuosikirja (Annual, Finnish Philosophical Society) is a

special issue, Luonto (Nature), Matti Häyry, Ilkka Niiniluoto and Thomas Wallgren, editors. Helsinki, 1993. ISSN 0355-1725. ISBN 951-9264-17-5. 222 pages. Twenty articles by Finnish philosophers and scientists. Sample articles are Thomas Wallgren, "Ekologisk kris? (Ecological Crisis?)" ; Simo Knuuttila, "Luonto aristoteelisessa luonnontieteessä (Nature in Aristotelian Science)" ; Juha Kajander, "Renessanssin luontokäsitys (Nature in the Renaissance)" ; Leena Vilkkä, "Luonnon itseisarvoista (Intrinsic Values in Nature)" ; Markku Oksanen, "Taylorin teoria luonnon kunnioituksesta (Taylor's Theory of Respect for Nature)." (Finland)

Akama, John S., Lant, Christopher L., and Burnett, G. Wesley. "Conflicting Attitudes Toward State Wildlife Conservation Programs in Kenya," Society and Natural Resources 8(no.2, Mar.1995):133- . (v6,#4)

Akama, John S., Lant, Christopher L., Burnett, G. Wesley. "A Political-Ecology Approach to Wildlife Conservation in Kenya," Environmental Values 5(1996):335-347. Kenya has one of the highest remaining concentrations of tropical savanna wildlife in the world. It has been recognized by the state and international community as a unique world heritage which should be preserved for posterity. However, the wildlife conservation efforts of the Kenya government confront complex and often persistent social and ecological problems, including land-use conflicts between the local people and wildlife, local peoples' suspicions and hostilities toward state policies of wildlife conservation, and accelerated destruction of wildlife habitats. This essay uses a political-ecological framework in the analysis of the social factors of wildlife conservation in Kenya. It postulates that the overriding socioeconomic issue impacting wildlife conservation in Kenya is underdevelopment. The problem of underdevelopment is manifested in forms of increasing levels of poverty, famine and malnutrition. The long term survival of Kenya's wildlife depends on social and ecological solutions to the problems of underdevelopment. KEYWORDS: Political-ecology, wildlife, underdevelopment, national park, conservation. (EV)

Akerman, Maria, "What Does 'Natural Capital' Do? The Role of Metaphor in Economic Understanding of the Environment," Environmental Values 12(2003): 431-448. At the time of its introduction in the end of the 1980s, the concept of natural capital represented new, more ecologically aware thinking in economics. As a symbol of novel thinking, the metaphor of natural capital stimulated a debate between different disciplinary traditions on the definitions of the concept and research priorities and methods. The concept became a means to control the discourse of sustainable development. In this paper, I focus on the power/knowledge implications of the use of the concept, and I follow the career of the concept of natural capital in ecological economic publications between the years 1988 and 2000. The main interests are (1) in the use of the concept to affect the rules according to which claims concerning sustainable development can be made and (2) in the constitution of objects of environmental knowledge. (EV)

Akerman, Nordal, ed., Maintaining a Satisfactory Environment: At What Price? Six European specialists discuss an agenda for international environmental policy. Published in cooperation with the Swedish Institute for International Affairs. 100 pages, \$ 16.50. Boulder, CO: Westview Press, 1990. (v1,#2)

Akimoto, Hajime, "Global Air Quality and Pollution," Science 302(5 December 2003):1716-1719. Intercontinental transport and hemispheric air pollution by ozone jeopardize agricultural and natural ecosystems worldwide and have a strong effect on climate. Aerosols are spread globally but have a strong regional imbalance. In the 1990's nitrogen oxide emissions from Asia surpassed those from North America and Europe and should continue to exceed them for decades. International initiatives to mitigate global air pollution require participation from both developed and developing countries. Akimoto is a global change researcher, Yokohama, Japan.

Akkerman, Abraham, "Urban planning in the founding of Cartesian thought," Philosophy and Geography 4 (No. 2, 2001): 141-167. It is a matter of tacit consensus that rationalist adeptness in urban planning

traces its foundations to the philosophy of the Renaissance thinker and mathematician René Descartes. This study suggests, in turn, that the planned urban environment of the Renaissance may have also led Descartes, and his intellectual peers, to tenets that became the foundations of modern philosophy and science. The geometric street pattern of the late middle ages and the Renaissance, the planned townscapes, street views and the formal garden design, appeared as parables for the perfection of the universe and the supremacy of critical reason. It is within this urban metaphor that Descartes' account betrays perceptual and conceptual impact from the contrast between convoluted medieval townscapes and the emerging harmonious street patterns where defined vistas and predictable clarity of street views were paramount. The geometrically delineated street views of the Renaissance new town became the spark that lit the philosopher's sagacity in reflecting upon the concept of 'clear and distinct ideas'. Past suggestions that Descartes was led to his philosophical breakthroughs through his discovery of co-ordinate geometry reinforce further the stance that Renaissance planning predisposed rationalist thought. Akkerman is Professor of Geography and Director, Regional and Urban Development Program, University of Saskatchewan. (P&G)

Al-Kahem, Hmoud F., "Wildlife Conservation in Saudi Arabia," in Wildlife Conservation and Development in Saudi Arabia, Proceedings of the First Symposium, Riyadh, February 1987, edited by Abdulaziz H. Abu-Zinada, Paul D. Goriup, and Iyad A. Nader, National Commission for Wildlife Conservation and Development, Publication No. 3, Riyadh, 1989. Most people underestimate the merits of wildlife preservation. Often, threats to wildlife are not treated sufficiently seriously. Human encroachment on wildlife habitat can lead to extinction. Threats to Arabian fauna are discussed. Arguments for native species protection are presented. Recommendations for Arabian wildlife preservation are proposed. In English. Al-Kahem is in the Zoology Department, College of Science, King Saud University, P. O. Box 2455, Riyadh 11451, Saudi Arabia. (v1,#4)

Alagona, Peter S, "The Ghosts of Endangered Species Past: Recent Lessons at the Intersection of History and Biology", BioScience 54(no.11, November 2004):984-985(2).

Alagona, PS, "Review of: Christian C. Young. In the Absence of Predators: Conservation and Controversy on the Kaibab Plateau". Environmental History 9 (no.1, 2004): 140.

Alaimo, Stacy. "Cyborg and Ecofeminist Interventions: Challenges for an Environmental Feminism." Feminist Studies 20, no.1 1994:133-52. (v7, #3)

Alam, Mohammed K.; Mirza, Muhammad R.; and Maughan, O. Eugene. "Constraints and Opportunities in Planning for the Wise Use of Natural Resources in Developing Countries: Example of a Hydropower Project." Environmental Conservation 22, no.4 (1995): 352. (v7, #3)

Albanese, Catherine L., Nature Religion in America: From the Algonkian Indians to the New Age. University of Chicago Press, 1990. 267 pages, \$ 24.95. Five chapters examine nature as symbolic religious center in the views of the aboriginal Americans and the first Europeans; in the "organic" compact of the Founders; in the Transcendentalists; in the "sectarian healers" of the late 19th century; and finally in several contemporary manifestations. The Amerindians' sense of themselves as a part of nature contrasts with the Puritan's fears of wilderness. These themes were subsumed, to a degree, by the Freemasons of the early republicans. But when Emerson, Thoreau and John Muir attempted to reconcile these disparate legacies, they only succeeded in transforming them into another conundrum: an Aristotelian belief in nature as "really real" versus a Platonic concept of nature as "ideal" or "illusory." In the course of her survey, Albanese examines several kinds of late 19th century mind cures; herbalists, homeopaths, chiropractors and others preached a kind of Christian physiology teaching that harmony with natural forces was a means to ordering and using those forces for one's own good and the good of society. Einstein and Planck upset the belief in such an order, but the new, fluid science of the 20th century has

produced today "recapitulated pieties" of the nation's beginnings, as in the writings of Annie Dillard. At issue in this ethereal debate was the tangible question of whether human beings were to harmonize with nature or to have mastery over it. Really a set of far-ranging essays more than a narrative account of nature religion in America. Albanese is professor of religious studies at the University of California at Santa Barbara. (v1,#4)

Alberini, A; Boyle, K; Welsh, M, "Analysis of contingent valuation data with multiple bids and response options allowing respondents to express uncertainty", Journal of Environmental Economics and Management 45(no.1, 2003):40-62.

Albers, Heidi J., Amy W. Ando, and Daniel Kaffine, "Land Trusts in the United States: Analyzing Abundance," Resources (Resources for the Future), Spring 2004, Issue No. 153, pp. 9-13. There are now 1,200 trusts conserving 6 million acres, and trusts are protecting an average of 500,000 additional acres each year. Surprisingly, states where federal, state, and local agencies protect vast areas often have a high concentration of land trusts as well. (v. 15, # 3)

Alberti, Mariana. *Advances in Urban Ecology: Integrating Humans and Ecological Processes in Urban Ecosystems*. New York: Springer, 2008. Alberti develops a unified framework to synthesize urban and ecological dynamics to advance ecological research and help managers and planners solve urban environmental issues.

Albrecht, Glenn, "Thinking Like an Ecosystem: The Ethics of the Relocation, Rehabilitation and Release of Wildlife," Animal Issues (University of Sydney, Australia) 2, no. 1, 1998. (v.10,#1)

Albrecht, Stan L. "Equity and Justice in Environment Decision Making: A Proposed Research Agenda." Society and Natural Resources 8 (no. 1, 1995): 67- . (v6,#1)

Albrecht, Virginia S. "District Court Rules that Clean Water Act Does Not Regulate Draining, Landclearing, and Excavation in Wetlands," Journal of Environmental Law & Practice 4(no.6, 197):55. (v8,#3)

Albright, KM, "The Extension of Legal Rights to Animals under a Caring Ethic: An Ecofeminist Exploration of Steven Wise's Rattling the Cage", Natural Resources Journal 42(no.4, 2002):915-938.

Albritton, Eric M. "The Endangered Species Act: The Fountain Darter Teaches What The Snail Darter Failed To Teach." Ecology Law Quarterly 21 (no. 4, 1994): 1007-- .

Alcock, F, "Bargaining, Uncertainty, and Property Rights in Fisheries," World Politics 54(no.4, 2002): 437-461.

Alcock, John, The Masked Bobwhite Rides Again. Tucson: University of Arizona Press, 1993. An invitation to urbanites in the U. S. Southwest to venture forth and learn more about the Sonoran desert, a dynamic landscape on which the human population has exploded. (v4,#3)

Alden, Dave M., Review of McNeely, Jeffrey A., Economics and Biological Diversity. Environmental Values Vol.1 No.2(1992):180.

Alden, David. Review of Kenneth E. Boulding. Towards A New Economics: Critical Essays on Ecology, Distribution and Other Themes: (Aldershot: Edward Elgar, 1992). (EV)

Alder, J; Ward, T, "Australia's Oceans Policy: Sink or Swim?" Journal of Environment and Development, 10(no. 3, 2001):266-289. (v.13,#1)

Aldred, Jonathan, "Existence Value, Welfare and Altruism." Environmental Values 3(1994):381-402. Existence Value has become an increasingly important concept as the use of cost benefit analysis has spread from traditional applications to attempts to place monetary value on, for instance, a rare wetland habitat. Environmental economists have generally accepted the tensions arising in existence value concept from the range of recent applications, but it is argued here that their various attempts to resolve the difficulties have largely failed. Critics from outside economics, on the other hand, typically claim that the very notion of existence value as understood in economics is flawed, and urge its abandonment altogether. This paper suggests, instead, a fundamental redefinition of existence value, which, it is argued, (i)explains a number of diverse problems posed by the usual meaning of the term in economics; (ii)does not strain the intentions of respondents to 'willingness-to-pay' surveys; (iii)is consistent with a more realistic model of rational choice in environmental decision-making; and (iv)is sensitive to criticisms from environmental ethics. KEYWORDS: Existence value, contingent valuation method, welfare, commitment, altruism, incommensurable choices. Aldred is at Sidney Sussex College, Cambridge, U.K. (EV)

Aldred, Jonathan, "Cost-Benefit Analysis, Incommensurability and Rough Equality," Environmental Values 11(2002):27-47. A recurring question about cost-benefit analysis (CBA) concerns its scope. CBA is a decision-making method frequently employed in environmental policy-making, in which things which have no market price are treated as if they were commodities. They are given a monetary value, a form of price. But it is widely held that some things cannot be meaningfully priced, thus substantially limiting the scope of CBA. The aim of this paper is to test some aspects of this broad claim, focusing on problems of incomparability and incommensurability. In particular, the role of rough equality as a putative form of comparison is investigated. I argue that while an assessment of the full significance of rough equality for practical decision-making awaits resolution of a number of important technical questions, it does not provide a strong enough form of comparison to support CBA. (EV)

Alexander, Anthony Edward. Review of Fikret Berkes, "Sacred Ecology: Traditional Ecological Knowledge and Resource Management", Organization and Environment 14 (No. 3, September 2001) pp.377-80. Alexander holds an MA in communication studies from Leeds University, England, and is currently a freelance working on the communication of ecological ideas through television and the Internet. (v.13,#2)

Alexander, Anthony Edward. Review of Alex Begg, "Empowering the Earth: Strategies for Social Change", Organization and Environment, 15, (No. 2, 2002): 217-20. Alexander holds an MA in communication studies from Leeds University, England, and is currently a freelance working on the communication of ecological ideas through television and the Internet. (v.13, #3)

Alexander, Charles P., "For the Birds," Time 157 (no. 2, June 4, 2001):66-67. Bird watching is hotter than ever, though 15% of 800 species that reside in or migrate through the U.S. are in serious decline. Main trouble: sprawl. Can fifty million birdwatchers turned conservationists save the environment? David Allen Sibley's The Sibley Guide to Birds has sold half a million copies in the first six months, the fastest selling bird book in history. (v. 12, #3)

Alexander, David E., and Fairbridge, Rhodes W., eds., Encyclopedia of Environmental Science. Hingham, MA: Kluwer Academic Publishers, 1999. 768 pages. \$ 480. Contains:
--Lemons, John, "Environmental Ethics." Lemons is in the Department of Life Sciences, University of New England.
--Perkins, Nathan H., and Brown, Robert D., "Environmental Aesthetics." Perkins and Brown are in Landscape Architecture, University of Guelph, Canada. (v.10,#3)

Alexander, Donald, "Planning as Learning: Sustainability and the Education of Citizen Activists," Environments 27 (No. 2, 1999): 79- . (v.11,#2)

Alexander, Donald, "Bioregionalism: Science or Sensibility," Environmental Ethics 12(1990):161-173. A criticism of the bioregional movement in environmental philosophy for its unclear and incorrect philosophical and scientific concepts: e.g., definition of bioregion, boundaries of bioregion, and reverence for natural law. Bioregionalism should not be a scientific concept but a cultural sensibility, a social value. Region is a dialectical concept integrating both human and natural parameters. (Katz, Bibl # 2)

Alexander, Donald. "Bioregionalism: Science or Sensibility?" Environmental Ethics 12(1990):161-73. The current interest in bioregionalism, stimulated in part by Kirkpatrick Sale's Dwellers in the Land, shows that people are looking for a form of political praxis which addresses the importance of region. In this paper, I argue that much of the bioregional literature written to date mystifies the concept of region, discounting the role of subjectivity and culture in shaping regional boundaries and veers toward a simplistic view of "nature knows best." Bioregionalism can be rehabilitated, provided we treat it not as a "revealed wisdom" for the reconstruction of human society, but as a sensibility and environmental ethic that can infuse our work even as we make use of the functional regionalisms that increasingly shape people's consciousness. I conclude by citing Lewis Mumford's concept of a region as capturing the dialectical interplay of natural and cultural elements. Alexander is at the School of Urban and Regional Planning, University of Waterloo, Ontario. (EE)

Alexander, Stephanie. "Air Power." Alternatives 25(No.3, Summer 1999):6- . Despite government inaction, more Canadians are turning to green energy from windmills. (v10,#4)

Alexander, T. G., "Review of: Norris Hundley, Jr., The Great Thirst: Californians and Water: A History, Revised Edition," Environmental History 7(no.3, 2002): 515. (v.13,#4)

Alexander, William M., "A Sustainable Human Ecology: Kerala." Kerala, a state in India, is a sustainable human ecology. Paper presented at the Conference on Human Responsibility and Global Change, Gothenberg, Sweden, June 9-14, 1991. Copies available from the author, 30 El Mirador Ct., San Luis Obispo, CA 93401. (v2,#2)

Alexandre, J; Dinizfilho, F, "Phylogenetic Diversity and Conservation Priorities under Distinct Models of Phenotypic Evolution," Conservation Biology 18(no.3, 2004):698-704. (v. 15, # 3)

Alexiades, M. N., Sheldon, J. Wood, eds. Selected Guidelines for Ethnobotanical Research: A Field Manual. Bronx, NY: The New York Botanical Garden, 1996. 306 pp. \$22.95. A guide addressing the biological, ecological, and anthropological aspects of ethnobotanical research. Includes sections on development and implementation of ethnobotanical research, the collection of plant specimens and the methodologies for observing and recording interaction between people and plants, and examples of quantitative methods in ethnobotanical fieldwork. (v.7,#4)

Alford, C. Fred. Science and the Revenge of Nature. Reviewed in Environmental Ethics 9(1987):185-87.

Ali, Saleem H., ed. *Peace Parks: Conservation and Conflict Resolution*. Cambridge, MA: The MIT Press, 2007. Contents include: (1) "Introduction: A Natural Connection between Ecology and Peace?" by Saleem H. Ali, (2) "Measuring Peace Park Performance: Definitions and Experiences" by Anne Hammill and Charles Besançon, (3) "Peace Games: Theorizing about Transboundary Conservation" by Raul Lejano, (4) "Peace Parks and Global Politics: The Paradoxes and Challenges of Global Governance" by Rosaleen Duffy, (5) "Scaling Peace and Peacemakers in Transboundary Parks: Understanding Glocalization" by Maano Ramutsindela, (6) "Peace Parks as Social Ecological Systems: Testing

Environmental Resilience in Southern Africa” by Anna Spenceley and Michael Schoon, (7) “Connecting the World’s Largest Elephant Ranges: The Selous-Niassa Corridor” by Rolf D. Baldus, Rudolf Hahn, Christina Ellis, and Sarah Dickinson DeLeon, (8) “The ‘W’ International Peace Park: Transforming Conservation and Conflict in West Africa” by Aissetou Dramé-Yayé, Diallo Daouda Boubacar, and Juliette Koudénoukpo Biao, (9) “The Emerald Triangle Protected Forests Complex: An Opportunity for Regional Collaboration on Transboundary Biodiversity Conservation in Indochina” by Yongyut Trisurat, (10) “Conflict Avoidance and Environmental Protection: The Antarctic Paradigm” by Michele Zebich-Knos, (11) “The Waterton-Glacier International Peace Park: Conservation amid Border Security” by Randy Tanner, Wayne Freimund, Brace Hayden, and Bill Dolan, (12) “Bridging Conservation across *La Frontera*: An Unfinished Agenda for Peace Parks along the US-Mexico Divide” by Belinda Sifford and Charles Chester, (13) “Liberia: Securing the Peace through Parks” by Arthur G. Blundell and Tyler Christie, (14) “Preserving Korea’s Demilitarized Corridor for Conservation: A Green Approach to Conflict Resolution” by Ke Chung Kim, (15) “Nesting Cranes: Envisioning a Russo-Japanese Peace Park in the Kuril Islands” by Jason Lambacher, (16) “The Siachen Peace Park Proposal: Reconfiguring the Kashmir Conflict?” by Kent Biringer and Air Marshall K.C. (Nanda) Cariappa, (17) “Linking Afghanistan with its Neighbors through Peace Parks: Challenges and Prospects” by Stephan Fuller, (18) “Iraq and Iran in Ecological Perspective: The Mesopotamian Marshes and the Hawizeh-Azim Peace Park” by Michelle L. Stevens, and (19) “Conclusion: Implementing the Vision of Peace Parks” by Saleem H. Ali.

Alig, Ralph J; Plantinga, Andrew J, "Future Forestland Area: Impacts from Population Growth and Other Factors that Affect Land Values", Journal of Forestry 102(no.8, December 2004):19-24(6).

Alive Now!, January/February 1991, is a special issue, "The Earth." 64 pages. This is an inspirational guide for high school youth published by the Methodist Church. Various short quotations from Robinson Jeffers, Joseph Meeker, Holmes Rolston, Jay McDaniel, Thomas Berry, Gary Snyder, Wendell Berry, native Americans, African, Australian and other indigenous peoples, Jewish liturgies, as well as from the Bible. Some of the materials are composed by youth. Contact: The Upper Room, 1908 Grand Avenue, P. O. Box 189, Nashville, TN 37202-0189. (v1,#4)

Alkon, Alison Hope, "Place, Stories and Consequences: Heritage Narratives and the Control of Erosion on Lake County, California Vineyards", Organization and Environment 17 (no. 2, June 2004).

Alkorta, I; Albizu, I; Garbisu, C, "Biodiversity and agroecosystems," Biodiversity and Conservation 12(no.12, 2003):2521-2522. (v.14, #4)

All Party Parliamentary Group on Population Development and Reproductive Health. *Return of the Population Growth Factor: Its Impact on the Millennium Development Goals*. London: HMSO (Her Majesty’s Stationary Office), 2007. This report was commissioned by the British Parliament. For the report and oral and written evidence, see <www.appg-popdevrh.org.uk/>.

Allaby, Michael. Basics of Environmental Science. London and New York: Routledge, 1996. 297 pp. Hard cover, \$65.00 U.S. Soft cover, \$17.95 U.S.
Reviewed by Peter Kervan, Journal of Agricultural and Environmental Ethics 10(1997/1998):199-200.

Allan, D.G., Harrison, J.A., Thompson, M.W. "The Impact of Commercial Afforestation on Bird Populations in Mpumalanga Province, South Africa--Insights from Bird-Atlas Data," Biological Conservation 79(no.2/3 1997):173.

Allan, JD, et al., "Overfishing of Inland Waters," BioScience 55 (no. 12, December 2005): 1041-1051. Inland waters have received slight consideration in recent discussions of the global fisheries crisis, though

they provide much needed protein, jobs, and income, especially in rural communities of developing countries. Systematic overfishing of fresh waters is largely unrecognized because of weak reporting and because fishery declines take place within a complex of other pressures. Moreover, the ecosystem consequences are poorly understood. These complexities underlie the paradox that overexploitation of a fishery may *not* be marked by declines in total yield, even when individual species and long term sustainability are highly threatened. Indeed, one symptom of intense fishing in inland waters is collapse of particular stocks even as overall fish production rises—a biodiversity crisis more than a fisheries crisis.

Allan, Tony and Andrew Warren, eds., Deserts: The Encroaching Wilderness. New York: Oxford University Press, 1993. 200 pages. 180 photos, 30 maps. \$ 35.00. Both are companion volumes to Mark Collins, The Last Rainforests: A World Conservation Atlas, issued in 1990. (v4,#4)

Allen, Antonio, Review of Goodman, David and Michael Redclift, eds., Environment and Development in Latin America. Environmental Values Vol.1 No.4(1992):367.

Allen, Bryon P., and John B. Loomis, "Deriving values for the ecological support function of wildlife: An indirect valuation approach," Ecological Economics 56 (no. 1, 2006): 49 57.

Allen, C. 1997. Species of Mind: The Philosophy and Biology of Cognitive Ethology. Cambridge, MA: MIT Press. (v9,#2)

Allen, Colin and Marc D. Hauser, "Concept Attribution in Nonhuman Animals: Theoretical and Methodological Problems in Ascribing Complex Mental Processes," Philosophy of Science 58(1991):221-240. The demise of behaviorism has made ethologists more willing to ascribe mental states to animals. However, a methodology that can avoid the charge of excessive anthropomorphism is needed. Allen and Hauser describe a series of experiments that could help determine whether the behavior of nonhuman animals towards dead conspecifics is concept mediated. The behavior of some animals is clearly guided by complex mental processes. The techniques developed by comparative psychologists and behavioral ecologists are able to provide us with the tools critically to evaluate hypotheses concerning the continuity between human minds and animal minds. Allen is in the Department of Philosophy at Texas A& M University. Hauser is in the Department of Zoology at the University of California, Davis. (v2,#2)

Allen, Colin, "The Discovery of Animal Consciousness: An Optimistic Assessment," Journal of Agricultural and Environmental Ethics 10(1997/1998):217-225.

Allen, Colin, and Bekoff, Marc, Species of Mind: The Philosophy and Biology of Cognitive Ethology. Cambridge, MA: The MIT Press, 1997. 209 pages. (v.8,#4)

Allen, Colin; Bekoff, Marc; and Lauder, George, eds. Nature's Purposes: Analyses of Function and Design in Biology. Cambridge, MA: MIT Press, 1998. 603 pages. 22 papers, mostly from philosophy journals. The dogma is that teleology is unscientific, and in some contexts it is, but in other contexts biologists can avoid it only with implausible circumlocution. Long hair on dogs has the purpose (function) of keeping them warm; it does not have the purpose of harboring fleas, though it does both these things well. Some scientists consider teleology a shorthand for phenomena that could be expressed more accurately eliminating it, but others find it the best way to express what they need to say about what is going on in the world. The editors are a philosopher, a student of animal behavior, and a functional morphologist. (v.9,#3)

Allen, John L., ed., Environment 93/94. 12th ed. Guilford, CT: Dushkin Publishing Co., 1993. 243 pages. 32 articles, all drawn from the popular press, debating environmental issues. I. The Global

Environment. II. Population and Hunger. III. Energy. IV. Pollution. V. Resources: Land, Water, and Air. VI. Biosphere: Endangered Species. Articles are easy and short, suitable for freshmen and high school use, but raise issues that are right at the center of the debate. Allen is in geography at the University of Connecticut. (v4,#1)

Allen, John, ed., Environment 90/91. Guilford, CT: Dushkin Publishing Group, 1990. In the annual editions series. Thirty-one reprints of recent magazine feature articles on the environment, for example Time's "What on Earth Are We Doing?" (cover story of their "Planet of the Year" issue), Environment's "The Intertwining of Environmental Problems and Poverty," National Wildlife's "21st Environmental Quality Index: The Planet Strikes Back," Science News', "Where Acids Reign," and "Lessons from the Flames" (Yellowstone fires). Sections on people and hunger; energy; pollution; land, water, and air; and endangered species. Journal articles make easier reading for lower level students in environmental ethics, and they give upper level students opportunity to analyze media coverage of issues. Articles are chosen to be timely, relevant, and provocative. (v1,#2)

Allen, Scott Stetson, Crux Reality: A Climber's Guide to Philosophy. Boulder, CO: Climbing Arts Council, 1992 (875 Alpine Ave., Apt. 22, Boulder, CO 80304-3241). 91 pages. Paper. \$ 5.00. Short introductions to various philosophers--Heidegger, Marcuse, Foucault, Sartre, Marcel, Unamuno, Orta y Gasset--mixed with some thoughts on rock climbing, why, the mind of a climber, and the ethics of climbing. "Heroic modern thinkers and ideas that can provide enlightenment for even the most ridiculous of vertical pursuits." A sample: Nietzsche: "Philosophy, as I have hitherto understood and lived it, is a voluntary living in ice and high mountains--a seeking after everything strange and questionable in existence" (p. 4). Allen has a degree in philosophy from Colorado College, and is now a public schoolteacher. (v4,#4)

Allen, TFH; Tainter, JA; Pres, JC; Hoekstra, TW, "Dragnet Ecology-'Just the Facts, Ma'am': The Privilege of Science in a Postmodern World," Bioscience 51(no. 6, 2001):459-468. (v.13,#1)

Allen, Timothy F. H. and Thomas W. Hoekstra, Toward a Unified Ecology. New York: Columbia University Press, 1992. An attempt to bring basic ecology to bear on ecological management, with particular attention to differences of scale. Allen is professor botany, University of Wisconsin, Madison. Hoekstra is at the Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado. (v4,#2)

Allen, William, Green Phoenix: Restoring the Tropical Forests of Guanacaste, Costa Rica. New York: Oxford University Press, 2001. A narrative account of the development of Costa Rica's small, under-resourced Santa Rosa National Park into the impressively expanded and managed Guanacaste Conservation Area. Biology is only one piece of the action; the most is political, social, and economic elements--all the way from local farmers to powerful big landowners with vested interests to U.S. involvement and interests in Nicaragua. A key example of where researchers have become involved in these other aspects of conservation with great effectiveness. (v.12,#2)

Allen, William H. "Traveling Across the Treetops," Bioscience 46(no.11, 1996):796. A crane's-eye-view of Panama's forest canopy yields biological surprises. (v8,#1)

Allen, William H. "The Varied Bats of Barro Colorado Island", Bioscience 46(no.9, 1996):639. What roles do tropical bats play in forest regeneration?

Allen, William, "Restoring Hawaii's Dry Forests," Bioscience 50(no.12, 2000 Dec 01): 1037-. (v.12,#3)

Allenby, Braden R., and Deanna J. Richards, eds., The Greening of Industrial Systems. Washington: National Academy Press, 1994. 259 pages. 18 contributors. Promising approaches to environmentally

conscious design and manufacturing. The need for greater recognition of environmental dimensions in formulating technology policies and management strategies. A project of the National Academy of Engineering. (v7,#1)

Allendorf, Fred W., Bayles, David, Williams, Thomas H. "Prioritizing Pacific Salmon Stocks for Conservation," Conservation Biology 11(no.1, 1997):140. (v8,#2)

Allmendinger, P, "National-level Planning in Democratic Countries: an International Comparison of City and Regional Policy Making," Land Use Policy 19(no.3, 2002): 269.

Alm, Leslie R. "Scientists and the Acid Rain Policy in Canada and the United States," Science, Technology, & Human Values 22(no.3 1997):349. (v8,#3)

Almeida, Michael J., Bernstein, Mark H., "Opportunistic Carnivorism," Journal of Applied Philosophy 17(no. 2, 2000):205- . (v.12,#2)

Almond, Brenda, "Environmental Values," in her Moral Concerns (Atlantic Highlands, NJ: Humanities Press International, 1987). "A language of values may meet environmentalist needs better than a language of narrowly defined morality and, specifically, of duties." But Almond is not sure that we can "formulate the notion of objects of value outside the experience of human beings," although when humans do experience natural things they can value them for what they are in themselves. Almond is reader in philosophy and education, University of Hull. (v1,#4)

Almond, Brenda and Donald Hill, eds., Applied Philosophy: Morals and Metaphysics in Contemporary Debate. London and New York: Routledge, 1991. Part I is on "The Environment." Contains R. M. Hare (Philosophy, University of Florida), "Moral Reasoning about the Environment," and response by Donald Hill, Polytechnic University of North London; Timo Airaksinen (Philosophy, University of Helsinki), "Original Populations and Environmental Rights"; T. L. S. Sprigge (Philosophy, University of Edinburgh), "Are There Intrinsic Values in Nature?"; William Grey (Philosophy, University of New England, Armidale, Australia), "A Critique of Deep Ecology," and response by Alan R. Drengson (Philosophy, University of Victoria). (v4,#3)

Almond, Brenda, Hill, Donald, eds. Applied Philosophy: Morals and Metaphysics in Contemporary Debate. London: Routledge, 1991. 334pp. The following are included in Part I The Environment:
--Hare, R.M., "Moral Reasoning About the Environment," pp.9-20.
--Hill, Donald, "On Reasoning Morally About the Environment--Response to R.M. Hare," pp. 21-25.
--Airaksinen, Timo, "Original Populations and Environmental Rights," pp. 26-36.
--Sprigge, T.L.S., "Are There Intrinsic Values in Nature?," pp. 37-44.
--Grey, William, "A Critique of Deep Ecology," pp. 45-50.
--Drengson, Alan R., "A Critique of Deep Ecology? Response to William Grey," pp. 51-55.

Alodos, C. L., Pueyo, Y., Barrantes, O., Escos, J., Giner, L. and Robles, A. B., "Variations in Landscape Patterns and Vegetation Cover between 1957 and 1994 in a Semiarid Mediterranean Ecosystem," Landscape Ecology 19(no. 5, 2004): 545-561(17). (v.14, #4)

Alodos, CL; Pueyo, Y; Barrantes, O; Escos, J; Giner, L; Robles, AB, "Variations in landscape patterns and vegetation cover between 1957 and 1994 in a semiarid Mediterranean ecosystem", Landscape Ecology 19(no.5, 2004):545-561(17).

Alperovitz, Gar. "Squeezed Out: The Plight of the Middle Class." *Christian Century* Vol. 124, no. 1 (2007): 26-9. This is a critical review of Norton Garfinkle's *The American Dream vs. the Gospel of*

Wealth: The Fight for a Productive Middle-Class Economy (New Haven: Yale University Press, 2006) and Thom Harrington's *Screwed: The Undeclared War Against the Middle Class* (San Francisco: Berrett-Koehler, 2006). Alperovitz himself is the author of *America Beyond Capitalism: Reclaiming our Wealth, Our Liberty and Our Democracy* (Hoboken, NJ: J. Wiley, 2005). "Long-term trends toward relative and absolute inequality have not been, and are unlikely to be, reversed until major changes in the political context occur. Long-term trends of environmental decay also have not been, and are unlikely to be, reversed." Capitalists are equally enthusiastic about exploiting both labor and nature. A major factor is "the enormous economic problems caused by globalization or rather, caused by the way in which corporate and other political elites have dealt with globalization." "The U.S. remains the wealthiest nation in the history of the world," yet "the U.S. is by far the most unequal of all the advanced nations." For wealth ownership: "[A] mere 1 percent owns just under half of all corporate and other productive business wealth. A mere 5 percent owns 70 percent of such wealth." Alperovitz teaches political economy at the University of Maryland.

Alpert, Peter, "Stewardship, Concept Of," Encyclopedia of Biodiversity 5: 481-494. Stewardship is taking care of something for someone else. Originally, a steward was a person who managed household affairs for a landowner. In natural resource management, stewardship often refers to voluntary actions taken by private landowners to promote ecological goals on their own lands. Stewardship may have an instrumental rationale, such as the human need for natural resources; or an intrinsic rationale, such as the moral rights of species to exist. (v.11,#4)

Alpert, Peter. "Integrated Conservation and Development Projects," Bioscience 46(no.11, 1996):845. Examples from Africa. (v8,#1)

Alpert, Peter. "The Boulder and the Sphere: Subjectivity and Implicit Values in Biology." Environmental Values 4(1995):3-15. Science is inherently subjective. The experience of dissertation research in ecology showed how intuitively derived hypotheses and assumptions define the questions one asks and the variables one measures, and how idealised forms and generalised types facilitate analysis but distort interpretation. Because these conceptual tools are indispensable to science, subjectivity is ineluctable. This has moral implications. Scientists are responsible for the particular abstractions they select and must therefore accept some moral responsibility for the way their results are used. Those who use scientific results have an equal responsibility to acknowledge the significance of the methods and not just of the conclusions. In biology, subjectivity may also have a positive side. A wide consensus of ecological biologists accept, on the apparently neutral grounds of accumulated study, a set of generalisations that society at large treats more as philosophical beliefs. This category of implicit values in biology holds much promise for improving our relations with nature and each other. KEYWORDS: biology, values, subjectivity Alpert is in the department of biology, University of Massachusetts. (EV)

Alrøe, Hugo Fjelsted and Erik Steen Kristensen. "Toward a Systemic Ethic: In Search of an Ethical Basis for Sustainability and Precaution." Environmental Ethics 25(2003):59-78. There are many different meanings of sustainability and precaution and no evident connection between the new normative concepts and the traditional moral theories. We seek an ethical basis for sustainability and precaution—a common framework that can serve as a means of resolving the conceptual ambiguities of the new normative concepts and the conflicts between new and traditional moral concepts and theories. We employ a systemic approach to analyze the past and possible future extension of ethics and establish an inclusive framework of ethical extension. This framework forms the basis for what we call a systemic ethic.(EE)

Alroje, Hugo Fjelsted, Mette Vaarst, and Erik Steen Kristensen. "Does Organic Farming Face Distinctive Livestock Welfare Issues? - A Conceptual Analysis." Journal of Agricultural and Environmental Ethics 10(2001): 275-299. The recent development and growth of organic livestock farming and the related development of

national and international regulations has fueled discussions among scientists and philosophers concerning the proper conceptualization of animal welfare. These discussions on livestock welfare in organic farming draw on the conventional discussions and disputes on animal welfare that involve issues such as different definitions of welfare (clinical health, absence of suffering, sum of positive and negative experiences, etc.), the possibility for objective measures of animal welfare, and the acceptable level of welfare. It seems clear that livestock welfare is a value-laden concept and that animal welfare science cannot be made independent of questions of values and ethics. The question investigated here is whether those values that underpin organic farming, in particular, also affect the interpretation of livestock welfare, and, if so, how. While some of the issues raised in connection with organic farming are relatively uncontroversial, others are not. The introduction of organic farming values seems to introduce new criteria for what counts as good animal welfare, as well as a different ethical basis for making moral decisions on welfare. Organic farming embodies distinctive systemic or communitarian ethical ideas and the organic values are connected to a systemic conception of nature, of agriculture, of the farm, and of the animal. The new criteria of welfare are related to concepts such as naturalness, harmony, integrity, and care. While the organic values overlap with those involved in the conventional discussion of animal welfare, some of them suggest a need to set new priorities and to re-conceptualize animal welfare - for example, with respect to "naturalness," in relation to the possibilities for expression of natural behavior and in relation to animal integrity as a concept for organismic harmony. The organic perspective also seems to suggest a wider range of solutions to welfare problems than changes in farm routines or operations on the animals. The systemic solutions include the choice and reproduction of suitable breeds, changes in the farm structure, and changes in the larger production and consumption system - including consumer perceptions and preferences. But the organic values may also call for sacrifices of individual welfare in a conventional sense in order to advance welfare from the perspective of organic farming. Whether this is good or bad cannot be decided without entering into an inquiry and discussion of the values and ethics involved. Keywords: animal welfare, integrity, naturalness, organic farming, systemic perspective. The authors are at the Danish Research Centre for Organic Farming, Foulum, Tjele. (JAEE)

Alston, Lee J., Libecap, Gary D. and Mueller, Bernardo, "Land Reform Policies, the Sources of Violent Conflict, and Implications for Deforestation in the Brazilian Amazon," Journal Of Environmental Economics And Management 39 (No. 2, Mar 01 2000): 162-. (v.11,#2)

Altherr, Thomas L., and John F. Reiger, "Academic Historians and Hunting: A Call for More and Better Scholarship," Environmental History Review 19(1995):39-56. A call to academic historians to explore the potential hunting history holds for the field, to leave ideological baggage behind, and to study hunters in their own words and in the context of their own time. Areas for research in hunting history are abundant. Altherr is at Metropolitan State University, St. Paul, MN. Reiger is at Ohio University, Chillicothe. (v6,#4)

Altner, G., Mettler-Meibom, B., Simonis, U.E. and Weizsäcker, E.U. v, eds. Jahrbuch Okologie. Reviewed by Ingolfer Blüdhorn. Environmental Values 5(1996):90-91. (EV)

Altner, Günter, Naturevergessenheit: Grundlagen einer umfassenden Bioethik (Nature Forgotten: Towards a Comprehensive Bioethic). Darmstadt: Wissenschaftliche Buchgesellschaft, 1991. 319 pages. Hardbound. ISBN 3-534-80043-5. DM 29,80. Altner argues that the prevailing attitude towards nature is disastrously inadequate, resulting in the destruction of nature. We need an all-embracing reverence for life. Altner works through Cartesian subject-object dualism, the bioethics of Singer, Birnbacher, and Schweitzer, bioethics and creation theology, bioethics and evolutionary science, bioethics and technology, and then presents his own comprehensive bioethics. Some of the issues he confronts include domestic animals, meat-eating, animal experimentation, landscapes, energy policy, climate change, gene technology, population control. One touchstone for a bioethic is "the obligation of solidarity with the unborn, the handicapped, and the dying. Whoever is unwilling to protect life of this sort will also be so in

areas more remote from humanity. But a bioethic would be falsely and inadequately fulfilled if the all-embracing respect for life did not reach through humans to their deepest level of obligation. How could non-human nature have a value for us, if we are not aware of it in and through our own human selves" (from the Introduction). Altner holds doctorates in both theology and biology and is professor of theology at the University of Koblenz-Landau and a board member of the Ecological Institute of Freiburg. (v5,#2)

Alvard, Michael S., Robinson, John G., Kaplan, Hilliard. "The Sustainability of Subsistence Hunting in the Neotropics," Conservation Biology 11(no.4, 1997):977. (v8,#3)

Alverson, W. S., and Waller, D. M., "Is It Un-Biocentric to Manage?" Wild Earth 2 (no.4, 1992): 9-10. (v.9,#3)

Alverson, William S., Donald M. Waller, and Walter Kuhlmann, Wild Forests. Washington, DC: Island Press, 1994. 320 pages. \$29.95. A review of the scientific and policy issues surrounding biological diversity in contemporary forest management, evaluating specific approaches proposed to ameliorate diversity losses. One such model is the Dominant Use Zoning Model with an integrated network of Diversity Maintenance Areas, which the authors have urged on the U.S. Forest Service in Wisconsin. The authors argue that wild or unengineered conditions are those that are most likely to foster a return to the species richness that we once enjoyed. Alverson and Waller are at the University of Wisconsin-Madison; Kuhlmann is an environmental lawyer in Wisconsin. (v5,#1)

Alverson, William, Kuhlmann, Walter, and Waller, Donald, Wild Forests: Conservation Biology and Public Policy. Washington, DC: Island Press, 1994. (v.9,#3)

Alward, Peter. "The Naive Argument Against Moral Vegetarianism." Environmental Values 9(2000):81-89. ABSTRACT: The naive argument against moral vegetarianism claims that if it is wrong for us to eat meat then it is wrong for lions and tigers to do so as well. I argue that the fact that such carnivores lack higher order mental states and need meat to survive do suffice to undermine the naive argument. KEYWORDS: Ethics, applied ethics, vegetarianism, animal welfare, naive argument. Peter Alward is in the Department of Philosophy College of Charleston, Charleston, SC, 29424-0001.

Alyanak, Leyla. "Restoring an African Park--One Elephant at Time." The Christian Science Monitor, vol. 89, 9 Jan. 1997, p. 7.

Ambio: A Journal of the Human Environment is published by the Royal Swedish Academy of Sciences, with an international focus. Articles in English. Contact: Royal Swedish Academy of Sciences, Box 50005, S-104 05 Stockholm, Sweden. (v2,#3)

Ambler, Rex, Global Theology: The Meaning of Faith in the Present World Crisis (Philadelphia: Trinity, 1990). 90 pp. paper. Pollution, depletion of natural resources, and the continuing threat of nuclear war illustrate the fragility of our planet. They also fuel a spiritual crisis. Ambler points the way toward a responsible faith that does not take tragedy as the last word. (v1,#3)

American Behavioral Scientist 43(No. 4, 2000) is a theme issue on environmental justice. Entries have been separately listed. (v.11,#1)

American Forests. Vol 101, nos. 7 and 8. July/August 1995. Theme issue on wildlife, prescribed fire. (v6,#4)

American Journal of Theology and Philosophy Vol. 18, no. 1 (January 1997). A special issue on Eco-justice and the Environment. Jerome A. Stone, guest editor. Articles include: "Ecojustice and the Environment" by Jerome A. Stone; "The Post-World War II Eco-justice Movement in Christian Theology" by J. Ronald Engel; "Ecology, Justice and Christian Faith" by Joan Gibb Engel; "Ecofeminism: First and Third World Women" by Rosemary Radford Ruether; "Sense of Place: What Does it Mean to be Human?" by Yi-fu Tuan; "Ecological Spirituality" by Holmes Rolston III; "The Challenge of a World Environmental Ethic" by J. Baird Callicott; and "Baird Callicott's Ethical Vision: Response to Baird Callicott" by Cristina L. H. Traina. Copies are available for \$15.00 from Tyron Inbody, Editor, UTS, 1810 Harvard Blvd., Dayton, OH 45406. (v8,#1)

American News Service. "Farmers and Their Neighbors Link Up to Save Small Farms." The Christian Science Monitor, vol. 88, 4 Oct. 1996, p. 15.

American Plastics Council. The American Plastics Council is promoting their policy of community-based decision-making; namely, "there is no nationwide, 'one-size-fits-all' solution" to solid waste and recycling. Two articles are being distributed: Poore, Patricia. "Is Garbage an Environmental Problem?" From Garbage magazine, December 1993. Challenges the view that there is a garbage crisis. (v5,#2) Boemer, Christopher and Kenneth Chilton. "False Economy: The Folly of Demand-Side Recycling." From Environment, January/February 1994. Examines the economics of recycling and what makes good public policy. (v5,#2) For copies of the articles, which are available free while quantities last, contact: American Plastics Council; 1275 K Street NW, Suite 400; Washington, DC 20005; FAX 202-371-5679. (v5,#2)

Ames, Roger T. "Taoism and the Nature of Nature." Environmental Ethics 8(1986):317-50. The problems of environmental ethics are so basic that the exploration of an alternative metaphysics or attendant ethical theory is not a sufficiently radical solution. In fact, the assumptions entailed in a definition of systematic philosophy that gives us a tradition of metaphysics might themselves be the source of the current crisis. We might need to revision the responsibilities of the philosopher and think in terms of the artist rather than the "scientific of first principles." Taoism proceeds from art rather than science, and produces an ars contextualis: generalizations drawn from human experience in the most basic processes of making a person, making a community and making a world. This idea of an "aesthetic cosmology" is one basis for redefining the nature of the relatedness that obtains between particular and world--between tao and te. Ames is in the department of philosophy, University of Hawaii at Manoa, Honolulu, HI. (EE)

Amilien, Caroline. "Conflicting International Policies in Tropical Timber Trade." Environmental Conservation 23, no.1 (1996): 29. (v7, #3)

Amilien, Caroline. "Are Countries Liable for Their Forestry Practices?" Journal of Forestry 95(no.2, 1997):6. (v8,#1)

Amos, Bruce. "The International Context for Heritage Conservation in Canada", Environments 24(no. 1, 1996):13.

Amphibian and Reptile Conservation is a new journal. Contact Craig Hassapakis, 2255 North University Parkway, Suite 15, Provo, UT 84604-7506. Email: ARC@byu.edu (v8,#1)

Anand, Paul. "Decisions vs. Willingness-to-Pay in Social Choice." Environmental Values 9(2000):419-430. Abstract: The paper compares use of willingness to pay values with multi-attribute utility as ways of modelling social choice problems in the environment. A number of reasons for moving away from willingness to pay are reviewed. The view proposed is that social choice is

about the integration of competing claim types (utilities, rights, social contracts and beliefs about due process). However, willingness to pay is only indirectly related to the first of these and assumes an Arrovian approach, namely one in which social choice is regarded as the aggregation of people's preferences. Keywords: Willingness to pay, applied social choice, multi-attribute utility theory, environmental decision making, capability rights. Paul Anand is at The Open University, Milton Keynes, MK7 6AA, UK. (EV)

Anastas, P. T., and Warner, J. C., Green Chemistry. Oxford: Oxford University Press, 1998.

Anazagasty Rodriguez, J., "A Review of: Zimmerer, Karl S. and Thomas J. Basset. Political Ecology: An Integrative Approach to Geography and Environment Development Studies," Society and Natural Resources 18(no. 7, August 2005): 674-675.

Andelman, SJ; Bowles, CM; Willig, MR; Waide, RB, "Understanding Environmental Complexity through a Distributed Knowledge Network", BioScience 54 (no.3, 2004): 240-246(7). Understanding environmental complexity and other dimensions of ecological systems necessitates a holistic approach that can be achieved only by identifying, retrieving, and synthesizing diverse data from distributed sources; by collaborating with other scientists from a broad range of disciplines; and by investigating many different systems. Knowledge Network for Biocomplexity (KNB) is developing new software tools to advance ecological understanding through discovery, access, retrieval, and management of distributed and heterogeneous ecological and environmental data. To address the need for cultural change in ecologists and other environmental scientists and to promote collaborative and synthetic approaches, KNB and the National Center for Ecological Analysis and Synthesis are training a cadre of young investigators in techniques for the management and analysis of ecological data, with emphasis on multiscale integration and synthesis.

Anderberg, Thomas. Den Mänskliga Naturen: En Essä om Miljö och Moral (The Humane Nature: An Essay on Environment and Morals). Stockholm: Norstedts Forlag, 1994. 308 pages. ISBN 91-1-932031-0. Chapter themes: Overpopulation, depletion and environmental degradation--biological impoverishment, economic flourishing, common morality: a sketch. Nature as complementary or as fundamental? The two directions in environmental ethics--anthropocentrism and non-anthropocentrism. The widening circle, a global ethics--nature and culture. A model of moral politics. The tamed animal--human nature in a biological perspective. Environment, gene technology and the problem of democracy--the struggle of the majority and the faceless collectives. The nature of morality and the moral of nature--collective guilt and the responsibility of the individual: a compass direction. Anderberg is at the University of Lund, Sweden.

Andersen, Carl Christian, Okofilosofisk Perspektiv på skjønnlitteraturen (An Ecophilosophical Perspective on Literature). M.A. thesis in the Department of the History of Ideas, University of Oslo. Examines some representative selections from literature, West and East, for their ecological view of the world, for example Ernest Hemingway's Old Man and the Sea, and some Japanese haiku. Andersen is now teaching at Nansenskolen in Lillehammer, Norway, a humanistic academy of higher education. (Norway)

Andersen, Mikael Skou. Review of Lowe, Ward, eds., British Environmental Policy and Europe: Politics and Policy in Transition. Environmental Values 9(2000):258.

Andersen, Mikael Skou. "Assessing the Effectiveness of Denmark's Waste Tax," Environment 40(no. 4, May 1998):10- . The waste tax that Denmark introduced in 1987 has contributed to an increase in the country's recycling rate, but further changes will be needed for it to realize its full potential. (v9,#2)

Andersen, Milael Skou. "The Impact of New Member States on EU Environmental Policy", Environmental Politics 5(no.2, 1996):339. (v7,#4)

Andersen, Svend, "Global Ethics and Salvation," in Brümmer, Vincent and Marcel Sarot, eds., A Dialogue of Social Science and Religion (Kampen, The Netherlands: Kok Pharos Publishing House), pp. 133-143. "It is not legitimate to make direct links between the global problems and Biblical concepts like salvation" (p. 138). "The concept of salvation is not a part of global ethics: salvation is not a state on this earth which human beings can bring about. But the language of salvation is connected with Christian ethics and accordingly can have bearings on the efforts of solving the global problems. ... It is part of Christian ethics that all human beings should be treated as equals, so that justice is a universal idea. ... It is part of Christian ethics that we are responsible for nonhuman nature which is delivered into our hands" (pp. 142-143). Andersen teaches in the theology faculty at the University of Aarhus, Denmark. (v7,#2)

Anderson, A.B., and C.N. Jenkins. *Applying Nature's Design: Corridors as a Strategy for Biodiversity Conservation*. New York: Columbia University Press, 2006.

Anderson, Anthony B., Peter H. May, and Michael J. Balick, The Subsidy from Nature: Palm Forests, Peasantry, and Development on an Amazon Frontier. Columbia University Press, 1991. 256 pages. \$ 35.00. The natural history, management, and economics of the babassu palm in frontier areas of the Brazilian Amazon. (v2,#3)

Anderson, Anthony B., Alternatives to Deforestation: Steps Toward Sustainable Use of the Amazon Rain Forest. Columbia University Press, 1990. \$ 65.00. 281 pages. (v2,#3)

Anderson, Bob, Beartooth Country: Montana's Absaroka and Beartooth Mountains. Helena, MT: Montana Geographic Series # 7, rev. ed., American and World Geographic Publishing Co., (P. O. Box 5630, Helena, MT 59604), 1994. Anderson was the first executive director of the Greater Yellowstone Coalition and influential in forming the Absaroka-Beartooth Wilderness east of Yellowstone National Park. (v.10,#1)

Anderson, Brent C., "Valuation of Environmentally Impaired Properties," Natural Resources & Environment 15(no.2, Fall 2000):100- . (EE v.12,#1)

Anderson, Bruce N., ed., Ecologue: The Environmental Catalogue and Consumer's Guide for a Safe Earth (Englewood Cliffs, NJ: Prentice-Hall, 1990). \$18.95. 256 pages. (v2,#1)

Anderson, Chris, and Lex Runciman, A Forest of Voices: Reading and Writing the Environment. Mountain View, CA: Mayfield, 1994. 775 pages. \$ 24.95. (v6,#4)

Anderson, Christopher B., Gene E. Likens, Ricardo Rozzi, Julio R. Gutiérrez, Juan J. Armesto, and Alexandria Poole. "Integrating Science and Society through Long-Term Socio-Ecological Research." *Environmental Ethics* 30(2008):295-312. Long-term ecological research (LTER), addressing problems that encompass decadal or longer time frames, began as a formal term and program in the United States in 1980. While long-term ecological studies and observation began as early as the 1400s and 1800s in Asia and Europe, respectively, the long-term approach was not formalized until the establishment of the U.S. long-term ecological research programs. These programs permitted ecosystem-level experiments and cross-site comparisons that led to insights into the biosphere's structure and function. The holistic ecosystem approach of this initiative also allowed the incorporation of the human-dimension of ecology and recently has given rise to a new concept of long-term socio-ecological research (LTSER). Today, long-term ecological research programs exist in at least thirty-two countries (i.e., members of the International Long-Term Ecological Research Network, ILTER). However, consolidation of the

international network within the long-term socio-ecological research paradigm still requires: (1) inclusion of certain remote regions of the world, such as southwestern South America, that are still poorly represented; (2) modifications of the type of research conducted, such as integrating social and natural sciences with the humanities and ethics; and (3) the incorporation of findings and results into broader social and political processes. In this context, a nascent long-term socio-ecological research network in Chile, which extends over the longest latitudinal range of temperate forest in the Southern Hemisphere, adds a new remote region to international long-term ecological research previously overlooked. In addition, collaboration with the University of North Texas and other international partners helps to further develop an interdisciplinary approach for the integration of the ecological sciences and environmental philosophy together with traditional ecological knowledge, informal and formal education, policy, the humanities, socio-political processes, and biocultural conservation. (EE)

Frodeman, Robert. "Philosophy Unbound: *Environmental Ethics* at the End of the Earth." *Environmental Ethics* 30(2008):313-324. Environmental challenges such as those facing the Cape Horn region of Chile exceed the competency of any disciplinary framework. Interdisciplinary approaches to knowledge—combining the expertise of several disciplines as well as the trans-disciplinary perspectives of the public and private sectors—require a unifying element that helps integrate such disparate perspectives. The field of philosophy, which traditionally has offered a view of the whole of knowledge, can serve in this role again, if philosophers are willing to embrace a de-disciplined expression of philosophy. (EE)

Rozzi, Ricardo, Ximena Arango, Francisca Massardo, Christopher Anderson, Kurt Heidinger, and Kelli Moses. "Field Environmental Philosophy and Biocultural Conservation: The Omora Ethnobotanical Park Educational Program." *Environmental Ethics* 30(2008):325-336. Habitats (where we live), habits (how we live), and inhabitants (who we are) constitute an ecosystem unit. The biosphere is composed of a reticulate mosaic of these habitat-habit-inhabitant units, where humans (with their indigenous languages, ecological knowledge, and practices) have coevolved. Today, these diverse ecosystem units are being violently destroyed by the imposition of a single global colonial cultural model. In Cape Horn at the southern end of the Americas, educators, authorities, and decision makers do not know about the native habitats, language, and flora, and do not distinguish between Cape Horn's flora and the flora that grows in other parts of the country or the world. In contrast, indigenous people and old residents have a detailed knowledge, but they do not participate in education, and decision making. It is not *Homo sapiens* in general, but bioculturally biased educators, authorities, and decision makers who need to be transformed into (educated and responsible) members and citizen of biocultural communities. The Omora Ethnobotanical Park educational program was launched to contribute to a biocultural citizenship involving three critical steps: (1) the disclosing of biocultural diversity with a "fine filter" approach that permits understanding of the cultural and ecological diversity hidden by general universal labels; (2) direct "face-to-face" encounters with human and nonhuman co-inhabitants; and (3) actions for protection of habitats and implementation of interpretative spaces that facilitate direct encounters and conservation of biocultural diversity. These steps have been implemented at local and regional scales through the creation of the Omora Ethnobotanical Park and the UNESCO Cape Horn Biosphere Reserve. (EE)

Anderson, Dana. "Ethical Sight." *Environmental Ethics* 29(2007):113-130. Unconsidered visual acts carry with them embedded presuppositions that arise with the speed of thought. The mind's virtually instantaneous labeling of objects perceived forces subconscious (though learned) categorization that infects the results obtained from acts seeing acts. Chief among these biased results is a presumed divide between self and other that is both ecologically false and philosophically dangerous. (EE)

Anderson, David and Grove, Richard, eds. Conservation in Africa: People, Policies and Practice. Cambridge: Cambridge University Press, 1989.

Anderson, David S. and David R. Bridge, Focus on Africa: Wildlife, Conservation, and Man. Santa

Barbara, CA: Bridgewood Productions, 1994. ISBN 0-9639261-0-1. Mostly pictures. (v6,#3)

Anderson, E. N. Ecologies of the Heart: Emotion, Belief, and the Environment. New York: Oxford University Press, 1996. 272pp. \$25. A new way of thinking about humans and our place in the universe. Why do we treat our environment and its resources the way we do? (v8,#1)

Anderson, E. N., Ecologies of the Heart: Emotion, Belief, and the Environment. New York: Oxford University Press, 1996. 256 pages. \$ 25.00. Diverse but in many ways analogous approaches of a wide range of traditionally based societies in their approaches to their home environments. (v7,#2)

Anderson, EN, "Tropical Forest Game Conservation," Conservation Biology 15(no.3, 2001):791-792. (v.12,#4)

Anderson, J. W., "U. S. Has No Role in U. N. Treaty Process; Senate Reluctant to Ratify," Resources (Resources for the Future), Issue 148, Summer 2002, pp. 12-16. Thirteen global environmental treaties have gone into force in the last three decades, but the United States is party to only half of them. The Senate's great reluctance to ratify loosely worded treaties, such as the Kyoto Protocol, has meant the United States has no role in their implementation. One reason the Senate is reluctant to ratify is that the United States takes these treaties more seriously than do other nations. Elsewhere the treaties, vaguely worded, are loosely enforced. In the United States treaties become U.S. law, and the nature of the legal system, including lawsuits by environmentalists, would force the U.S. government to live up to its treaty commitments more rigorously than other countries might. Elsewhere, especially in developing countries, these treaties mostly gather dust on the desks of government officials. Thoughtful article. Anderson is a journalist in residence at Resources for the Future, Washington. (v.13,#4)

Anderson, J. E., "A Conceptual Framework for Evaluating and Quantifying Naturalness," Conservation Biology 5(1991):347-352.

Anderson, James C. "Moral Planes and Intrinsic Values." Environmental Ethics 13(1991):49-58. In his book, Earth and Other Ethics, Christopher Stone attempts to account for the moral dimension of our lives insofar as it extends to nonhuman animals, plants, species, ecosystems, and even inanimate objects. In his effort to do this, he introduces a technical notion, the moral plane. Moral planes are defined both by the ontological commitments they make and by the governance rules (moral maxims) that pertain to the sorts of entities included in the plane. By introducing these planes, Stone is left with a set of problems. (1) Do the planes provide anything more objective than a set of alternative ways of looking at moral problems? (2) How can one resolve apparent conflicts between the recommendations forthcoming from distinct planes? (3) Why do certain entities constitute moral planes; and how do we decide which planes to "buy into?" Stone's answers to these questions endorse a series of concessions to moral relativism. In this paper I outline an alternative to Stone's moral planes which, while sympathetic to his ethical concerns, comes down squarely on the side of moral realism. Anderson is in the department of philosophy, University of Wisconsin-Madison, Madison, WI. (EE)

Anderson, James C., "Species Equality and the Foundations of Moral Theory." Environmental Values Vol.2 No.4(1993):347-366. ABSTRACT: The paper discusses various concepts of 'species equality' and 'species superiority' and the assumptions concerning intrinsic value on which they depend. I investigate what philosophers from the traditional deontological (Taylor and Lombardi) and utilitarian (Singer and Attfield) perspectives have meant by their claims for species equality. I attempt to provide a framework of intrinsic values that justifies one sense in which members of a species can be said to be superior to members of another species. KEYWORDS: Equality, superiority, intrinsic values. Department of Philosophy, University of Wisconsin-Madison, Madison, Wisconsin 53706, USA.

Anderson, Jay A., "A Conceptual Framework for Evaluating and Quantifying Naturalness," Conservation

Biology, vol. 5, no. 3, September 1991. "Naturalness is a scientific concept that can be evaluated and quantified. Intactness or integrity of ecosystems can be defined and assessed in similar ways. Three indices of naturalness are proposed: 1) the degree to which the system would change if humans were removed, 2) the amount of cultural energy required to maintain the functioning of the system as it currently exists, and 3) the complement of native species currently in an area compared to the suite of species in the area prior to settlement. These indices are complementary and provide a conceptual framework for evaluating naturalness. The latter two can be quantified. Anderson is in the Department of Biological Sciences, Idaho State University, Pocatello. (v2,#2) With reply, Götmark, Frank, "Naturalness as an Evaluation Criterion in Nature Conservation: A Response to Anderson," Conservation Biology 6 (1992):455-458. And further reply, Anderson, Jay E., "Reply to Götmark," Conservation Biology 6(1992):459-460.

Anderson, Jerry L., "Takings and Expectations: Toward a 'Broader Vision' of Property Rights," Kansas Law Review 37(1989):529- . (v7,#2)

Anderson, Johan, Vadjal, Dan, and Uhlin, Hanz-Erik, "Moral Dimensions of the WTA-WTP Disparity: An Experimental Examination," Ecological Economics 32(2000):153-162. Economists puzzle over the fact that in willingness-to-pay (WTP) versus willingness-to-accept payment (WTA) surveys regarding environmental goods, in theory there should be no difference between WTP and WTA. But in empirical studies WTA exceeds WTP; these authors conduct surveys that lead them to conclude that the valuation disparity increases with a corresponding increase in the sense of moral responsibility at stake. The authors are in the Department of Economics, Swedish University of Agricultural Sciences, Uppsala.

Anderson, Lykke E. "The Causes of Deforestation in the Brazilian Amazon," The Journal of Environment and Development 5(no.3, 1996):309. (v8,#2)

Alampay, Jose Gerardo A. "Revisiting Environmental Security in the Philippines," The Journal of Environment and Development 5(no.3, 1996):329. (v8,#2)

Anderson, Michael, ed., Human Rights Approaches to Environmental Protection. New York: Oxford University Press, 1996. 336 pages. \$ 65.00. Linkages between the environment and human rights. The legal status of environmental rights in both international and domestic law. (v.7,#4)

Anderson, Nick. "A Whale of a Debate Over Salt Stirs Debate in a Baja California Lagoon." The Christian Science Monitor, July 10, 1995, pp. 1, 18. (v6,#2)

Anderson, Sarah, ed., Views from the South: The Effects of Globalization and the WTO on the Third World. Oakland, CA: Foodfirst Books, Institute for Food and Development Policy, 2002. www.foodfirst.org. Phone 510-654-4400. Essays by Third World activists and scholars. (v.13,#4)

Anderson, Stephen R., Doctor Dolittle's Delusion: Animals and the Uniqueness of Human Language. New Haven: Yale University Press, 2005. Animals communicate and have many remarkable skills, memory, and can learn somewhat complicated procedures. They can link symbols to objects, as a red button to a banana. But they do not have language. They have no syntax; they have no reflective ideas communicated in language. So if kindly John Doolittle of Puddleby-on-the-Marsh was hearing voices, they weren't coming from Jip the dog or Gub-Gub the pig. Anderson is in linguistics and psychology at Yale University. (v.14, #4)

Anderson, T. L. and Leal, R. R., Review of Proops, John, Free Market Environmentalism. Environmental Values 3(1994):185. (EV)

Anderson, Terry L., Hill, Peter J., eds. Wildlife in the Marketplace. Lanham, MD: Rowman and

Littlefield Publishers, Inc., 1995. 208 pp. \$22.95 paper, \$57.50 cloth. Economists and wildlife experts challenge the prevailing idea that wildlife and markets are inimical to one another, arguing that markets can play an important role in preserving animal species and their habitat. (v8,#2)

Anderson, Terry L., Hill, Peter, J., eds. Environmental Federalism. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1997. 225 pp. \$22.95 paper, \$57.50 cloth. The contributors provide a wide variety of strategies to challenge what they view as Washington's unsophisticated, ineffective, and harmful approaches. They provide a general framework for how states can regain control of their environmental destiny. (v8,#2)

Anderson, Terry, and Leal, Donald, Enviro-Capitalists: Doing Good While Doing Well. Review by Andrew Dobson, Environmental Values 7:(1998):488.

Anderson, Terry L., Leal, Donald R., Enviro-Capitalists: Doing Good While Doing Well. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1997. 200 pp. \$16.95 paper, \$52.50 cloth. Demonstrating why Americans should turn to private entrepreneurs rather than the federal government to guarantee the protection and improvement of environmental quality, the authors document numerous examples of how entrepreneurs have satisfied the growing demand for environmental quality. (v8,#2)

Anderson, Warwick, "A New Approach to Regulating the Use of Animals in Science", Bioethics 4(1990):45-54. There is now a growing acceptance amongst scientists world-wide that rational and effective guidelines are needed for experimental work involving animals. Ideally, these rules in each country should be based on a set of internationally accepted general principles but at the same time reflect local cultural, scientific and legal conditions. In Australia, the national Code of Practice for the scientific use of animals has just been revised. The development of the Australian Code has been driven largely by the research community itself, and partly because of this the Code has unique features. Amongst the most important features is the requirement that an animal experimentation ethics committee should approve experiments only if the worth of the experiment outweighs the adverse effects on the animals. The paper discusses animal experimental ethics committees and other features of the Code.

Anderson, William, Green Man: The Archtype of our Oneness with the Earth (San Francisco: Harper and Row, 1990). A search for "green" in architecture and art of the past. Harper is selling this book with a wraparound that says: "To keep our Earth green, Harper, San Francisco, will plant two trees in the Rainforest for every one used in the publication of this book." (v2,#1)

Andersson, Meike; Gradstein, S., "Impact of management intensity on non-vascular epiphyte diversity in cacao plantations in western Ecuador," Biodiversity and Conservation 14(no.5, May 2005):1101-1120(20).

Andersson, Petra. *Humanity and Nature: Towards a Consistent Holistic Environmental Ethics*. Göteborg, Sweden: Acta Philosophica Gothoburgensia, no 20, 2007. Andersson completed and has now published this Ph.D. thesis in the Department of Philosophy, Göteborg University (Box 200, SE-405 30 Göteborg). Within the theoretical framework of holistic environmental ethics, moral status is ascribed to biotic wholes, such as ecosystems, species and landscapes. The purpose of holistic environmental ethics is not entirely clear, since the framework contains conflicting ideas about which properties of the biotic whole contribute to moral status, and to which moral reasons this moral status gives rise. The aim of this thesis is to investigate the prospects of an internally consistent version of holistic environmental ethics. On the basis of an initial analysis, the tensions are organized in three themeshuman-centered, integrity-centered, and nature-centered ethicsand are then analyzed with regard the claim that naturalness is an important contributor to the moral status of biotic wholes. If naturalness is seen as a binary property, it creates a grave incoherence. If naturalness is instead understood in more nuanced terms (so that naturalness can be

a question of different degrees or senses), some of these problems become less serious, but new problems emerge. In particular, the question whether a version of holistic environmental ethics that incorporates nature-centeredness may allow human beings a reasonable space remains. If nature-centeredness is rejected, however, several internal tensions within a holistic environmental ethics may be resolved. It is therefore argued that a plausible ethics should abandon the nature-centered theme, i.e., reject the idea of "natural nature" as being morally significant in itself. The idea that integrity gives rise to moral status of a biotic whole is more fruitful, and can also be combined with most of the particular opinions that might motivate nature-centeredness. Integrity-centeredness may also be consistently combined with human-centeredness, and a holistic environmental ethic may thus provide reasonable room for human beings in nature. Keywords include biotic communities, biotic wholes, denaturalization, ecocentrism, environmental ethics, holism, human membership in biotic communities, moral status, naturalness, nature, nature knows best, and the end of nature.

Andonova, L., "Openness and the Environment in Central and Eastern Europe: Can Trade and foreign Investment Stimulate Better Environmental Management in Enterprises?," Journal of Environment and Development 12(no. 2, 2003): 177-204. (v 14, #3)

Andow, David A., David A. Ragsdale, and Robert F. Nyvall, eds. Ecological Theory and Biological Control. Boulder, CO: Westview Press, 1994. 350 pages. \$69.50. Addresses issues of theory and practice in non-chemical methods of pest control. (v5,#2)

Andow, David A.; Hilbeck, Angelika, "Science-Based Risk Assessment for Nontarget Effects of Transgenic Crops," BioScience 54(no.7, 1 July 2004):637-649(13). (v. 15, # 3)

Andreae, Christopher. "A Few Trashy Tales from Scotland." Christian Science Monitor 89 (21 July 1997): 16. (v8,#3)

Andreas, Peter. "Border Troubles: Free Trade, Immigration and Cheap Labour." The Ecologist 24 (no. 4, July 1994): 230- . As millions of people are uprooted by the increasing integration of the global economy, pressure has mounted on governments to impose more restrictive immigration controls. But attempting to stop people moving around while encouraging the mobility of everything else is a recipe for policy frustration. Illegal immigration from Mexico into the US illustrates the problems. (v6,#1)

Andrew, Anne Slaughter. "Brownfield Redevelopment: A State-Led Reform of Superfund Liability." Natural Resources and Environment 10(no. 3, Winter 1996):27. (v7,#1)

Andrews, John, Review of: Kellert, Stephen R., and Farnham, Timothy J., eds., The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World. Environmental Values 12(2003):539-542. (EV)

Andrews, John, "Weak Panpsychism and Environmental Ethics," Environmental Values 7(1998): 381-396. Weak panpsychism, the view that mindlike qualities are widespread in nature, has recently been argued for by the prominent ecofeminist Val Plumwood and has been used by her to ground an ethic of respect for nature. This ethic advocates a principle of respect for difference, the rejection of moral hierarchy and the inclusion of plants, mountains, rivers and ecosystems within the moral community. I argue that weak panpsychism cannot, convincingly, justify the rejection of moral hierarchy, as it is compatible with it. Also the intentional criterion of mind, employed by weak panpsychism, which includes teleology, has the counter-intuitive implication of giving machines moral status. I cast doubt on the claims that (i) intentionality is a necessary condition for moral status and that (ii) it is sufficient for the ascription of agency. It is suggested that any account of intentionality that allows it to be predicated of mountains, rivers etc. would be widely, and correctly regarded as a reductio of that account. Finally an

aesthetic reinterpretation of weak panpsychism is offered. KEYWORDS: weak panpsychism, assimilationism, dualism, intentionality, agency. John Andrews is at the University of Reading, UK. (EV)

Andrews, John, "Warren, Plumwood, a Rock and a Snake: Some Doubts About Critical Ecological Feminism," Journal of Applied Philosophy 13(No.2, 1996):141. (v.10,#2)

Andrews, John, Review of: Wim Zweers, Participating with Nature, Environmental Values 11(2002):243-245.

Andrews, Richard N. L., Managing the Environment, Managing Ourselves: A History of American Environmental Policy. New Haven: Yale University Press, 1999. 419 pages. \$ 30.00 paper. American environmental policy is not just a product of late twentieth concerns, but is rooted in America's nearly four hundred year history of government actions to promote or control human uses of nature. The interplay between environmental policies and broader patterns of economic, social, and political development, showing how present environmental policy emerged from earlier patterns and precedents. Andrews teaches environmental policy at the University of North Carolina, Chapel Hill. (v.9,#4)

Andrews, Richard N. L., Managing the Environment, Managing Ourselves: A History of American Environmental Policy. New Haven: Yale University Press, 1999. \$ 30.00. American environmental policy is not just a product of late twentieth-century concerns about the environment. It is also rooted in America's nearly four-hundred-year history of government actions to promote or control human uses of nature. That rich history affects environmental issues today and in the future. Andrews is professor of environmental policy in the Department of Environmental Sciences and Engineering, University of North Carolina at Chapel Hill. (v.10,#1)

Andrews, Tamra, A Dictionary of Nature Myths. New York: Oxford University Press, 1998, 2000. Natural forces, gods or goddesses of natural forces, terms related to the myths of natural forces, geographical regions. Tales of an animated (often enchanted) and meaningful universe. (v.12,#4)

Andruss, Van, Christopher Plant, Judith Plant, and Eleanor Wright, eds., Home! A Bioregional Reader (Philadelphia: New Society Publishers, 1990). \$14.95. 181 pages. (v2,#1)

Andrzejewski, Boleslaw, ed. Humanistyka i Ekologia (Humanistics and Ecology). In Polish. Poznan: Fundacja WARTA, 1992. Paper. 190 pages. Seventeen authors who are mostly at Adam Mickiewicz University, Poznan, Poland. With English summaries at the end of each articles. Sample articles (titles translated from Polish): Wlodzimierz Wilowski, "The Ecological Man Ideal of Lao Tsu"; Ryszard Stachowski, "Man and the World in Greek Natural Philosophy"; Boleslaw Andrzejewski, "Philosophy and Ecology"; Andrzej Przylebski, "Heidegger's Critique of Metaphysics as a Possible Foundation of the Ecology Philosophy"; Zbigniew Kuderowicz, "System of Values and Protection of Environment"; Eugeniusz Kosmicki, "Basic Problems of Ethics in Ecology"; Jan Wawrzyniak, "The Elements of Neonaturalistic Environmental and Evolutionary Ethics"; Zbigniew Blok, "Ecology as the Main Premise for the Construction of a New Paradigm of Social Development." Andrzejewski is professor of philosophy, Institute of Philosophy, Adam Mickiewicz University, Poland. (v4,#3)

Andrzejewski, Boleslaw, ed., Ochrona Srodowiska w Refleksji Humanistycznej (Environmental Protection in Humanistic Reflection). Poznan, Poland: Wydawnictwo Poznanskiego Towarzystwa Przyjaciol Nauk (Poznan Society of Friends of the Sciences), 1992. Fifteen essays in Polish: Some samples: Boleslaw Andrzejewski, "The Ecological Motif in Romantic Philosophy of Language"; Andrzej Przylebski, "Martin Heidegger and the So-Called Deep Ecology"; Bernard Piotrowski, "The Swedish Ecological Culture in Recent Times"; Eugeniusz Kosmicki, "Basic Problems of Ecological Ethics"; Jan

Wawrzyniak, "Man--It Does Not Sound Honorable: A Conception of Neonaturalistic Evolutionary and Environmental Ethics"; Luomira Domka, "Humanistic Faculties at Universities in the Defense of Nature."

Angell, Linda C. Review of Frank G.A. de Bakker, "Product Oriented Environmental Management", Organization and Environment, 15, (No. 4, 2002): 507-510. Angell is a senior lecturer in operations management at Victoria Management School in Wellington, New Zealand.

Angelmyer, Mary Eleanor R. Seagreaves, and Catherine C. Le Maistre, comps. A Search for Environmental Ethics: An Initial Bibliography. Reviewed in Environmental Ethics 4(1982):89-91.

Angermeier, P. L., and Karr, J. R., "Biological Integrity versus Biological Diversity as Policy Directives: Protecting Biotic Resources," BioScience 44(1994):690-697.

Angermeier, P. L., "Does Biodiversity Include Artificial Diversity?" Conservation Biology 8(1994):600-602.

Angermeier, Paul L., "Does Biodiversity Include Artificial Diversity?" Conservation Biology 8(1994):600-602. (v7,#2)

Angermeier, P. L., "The Natural Imperative for Biological Conservation," Conservation Biology 14 (No. 2, 2000 Apr 01): 373-380. (v.11,#4)

Angier, Natalie, "In Mandrill Society, Life Is a Girl Thing," New York Times (5/23/00). Mandrills threatened by logging and commercial hunting. A type of monkey called Mandrills form huge societies sometimes numbering over 1000 individuals. These groupings are extremely cohesive and persistent and they consist almost exclusively of females and their young. Males, who are three times larger than females (three feet tall and weighing about 90 pounds versus 25 pounds for females), live alone and only interact with the group when the females are in estrus. The recent rise in the "bush meat trade" the hunting of wild animals in general and primates in particular -- is a threat to Mandrills because they travel long distances in huge numbers making them especially vulnerable to commercial hunters who use the expanding network of logging roads to penetrate once inaccessible forests. "Some conservation organizations now rank the bush meat trade as the single greatest threat to primates and other wildlife, outstripping in severity even the familiar ecovillain, habitat loss." Conservationists are trying to add "sensitivity to wildlife" to the criteria logging companies must meet to have their wood certified as sustainable, thus forcing timber companies to keep commercial hunters off their logging roads and away from threatened species. Home Depot, a chain of home-improvement stores, has announced it will buy sustainable wood "whenever possible." (v.11,#2)

Anglemyer, Mary and Eleanor R. Seagraves, comps. The Natural Environment. Reviewed in Environmental Ethics 8(1986):91-93.

Animal and their Legal Rights. 4th edition, 1990. Washington, DC: Animal Welfare Institute, 1990. Fifteen articles and an appendix with the principal laws affording animal welfare. (v3,#1)

Animal Conservation: A Journal of Ecology, Evolution, and Genetics, a new journal, calls for papers. The journal is published for the Zoological Society of London. There are several editors: in the U.K.: Dr. Michael W. Bruford, Institute of Zoology, Zoological Society of London, London NW1 4RY, UK., In the U.S.: Dr. John L. Gittleman, Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN 37996. (v8,#2)

Animal Issues is a new journal aimed to investigate philosophical and ethical issues related to human/animal interactions. Papers are invited on any topics within this general area. Word length should be 4,000-10,000 words and papers should preferably be sent on a Mac disc by e-mail to the editor, or if this is not possible, a hard copy should be sent to the editor. The founding editor is Denise Russell, Department of General Philosophy, University of Sydney, N.S.W. 2006, Australia, e-mail: Denise.Russell@philosophy.su.edu.au. Co-editors: L. Birke, Institute for Women's Studies, University of Lancaster, United Kingdom; B. Forsman, Department of Medical Ethics, University of Lund, Sweden; P. Hallen, Institute of Science and Technology Policy, Murdoch University, Perth, Australia; F. Mathews, School of Philosophy, La Trobe University, Victoria, Australia; V. Plumwood, Department of Philosophy, Montana University, United States.

Vol. 1, No. 1, 1997, contained the following articles:

Freya Mathews, "Living with Animals"

Val Plumwood, "Babe: The Tale of the Speaking Meat," Part 1

Lynda Birke, "Science and Animals, or, Why Cyril Won't Win the Nobel Prize" Emma Munro, "Speciesism and Sexism"

plus an interview with Peter Singer.

Vol. 1, No. 2 1997, contained the following articles:

Andrew Brennan, "Ethics, Conflict and Animal Research"

Birgitta Forsman, "Two Different Approaches to Gene Technology in Animals" Val Plumwood, "Babe: The Tale of the Speaking Meat," Part II

Lynda Birke and Mike Michael, "Hybrids, Rights and Their Proliferation"

plus an interview with Julia Bell.

Subscriptions (1998-99 rates): Australia and New Zealand: A\$12 per issue (including postage). Other countries: A\$20 per issue (including postage). Send payment with your name and address to: Dr. Denise Russell, The Editor, Animal Issues, address above. (v9,#1)

Animal Issues has now published three volumes. Sample articles:

--Brennan, Andrew, "Ethics, Conflict, and Animal Research," vol. 1, No. 2, 1997.

--Mathews, Freya, "Living with Animals," vol. 1, no. 1, 1997.

--Quain, Anne, "Is There a Problem in Attributing Beliefs and Intentionality to Animals," vol. 2, no. 2, 1998.

--Murphy, Elizabeth, "In What Respects, If Any, Should the Primates Be Equal?" vol. 3, no. 1, 1999.

The editor is Denise Russell, Department of General Philosophy, University of Sydney, N.S.W., Australia 2008. E-mail: Denise.Russell@philosophy.usyd.edu.au (v.10,#2)

Animal Issues is a new journal, starting spring 1997. Denise Russell, Department of General Philosophy, University of Sydney, Sydney, N.S.W. is the editor. (v8,#1)

Animal Law is the only law review exclusively devoted to animals and the law. It is in its second issue, is published by the Northwestern (Oregon) School of Law, and is sponsored by the Animal Legal Defense Fund. Address: Animal Law, 10015 S.W. Terwilliger Blvd., Portland, Oregon 97219 USA. Phone: 503/768-6798. (v7, #3)

Animal Rights Handbook: Everyday Ways to Save Animal Lives (Los Angeles: Living Planet Press, 1990). \$4.95. 113 pages. (v2,#1)

Animal Welfare Institute. Animals and their legal rights. Washington, DC: Animal Welfare Institute, 1990.

Anker, Peder, The Political Limits of Deep Ecology, M.A. dissertation (in Norwegian), in the Department

of Philosophy, University of Oslo. The argument is that deep ecology provides insufficient guidance for the solution of political problems requiring compromises in setting standards that must do justice to both sides, with particular reference to pollution issues. Other philosophers, such as Habermas and Rawls, although operating from an anthropocentric position, have important insights about justice that deep ecology lacks and needs. Address: Peder Anker, Erling Skjalgssonsgt 1b, 0267 Oslo. (Norway)

Anker, Peder. "Risk Management, Rationality and Deep Ecology." Pages 61-70 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Anker, Peder. Imperial Ecology: Environmental Order in the British Empire, 1895–1945. Reviewed in Environmental Ethics 25(2003):321-324. (EE)

Annals of Earth is a periodical published by the Center for the Protection and Restoration of Waters at Ocean Arks International and the Lindisfarne Association. Ocean Arks was incorporated in 1982 to disseminate the ideas and practice of ecological sustainability throughout the world. It has recently established a Center for the Protection and Restoration of Waters. Lindisfarne, founded in 1972, is an association of individuals and groups dedicated to fostering the emergence of a new global culture. Their objective is to "restore the land, protect the seas, and inform the Earth's stewards." Annals of Earth can be obtained for a contribution of \$ 15.00 annually. Address: One Locust Street, Falmouth, MA 02540. John Todd is president of Ocean Arks International and Nancy Jack Todd is vice-president and editor of Annals. (v1,#3)

Anoliefo, G.O., Isikhuemhen, O.S., and Ochije, N.R., "Environmental implications of the erosion of cultural taboo practices in Awka-South local government area of Anambra State, Migeria: 1. Forests, trees, and water resource preservation," Journal of Agricultural and Environmental Ethics 16(2003):281-296. Cultural taboos and their sanctions have helped to check abuse of the environment at least among the local people. The disregard for these traditional checks and balances especially among Christians has adversely affected their enforcement at this time. The "god" of the shrine in Obunagu village was much revered until the advent of Christianity. This religion has had an eroding effect on the taboos, which were put in place to protect their forests and streams. The abandonment of traditional cultural practices is doing harm that goes beyond the abrogation of traditional cultural practices to serious threat to natural environmental structures. KEY WORDS: cultural taboos, forest, shrines, sustainability, traditional practices, trees. (JAEE)

Anoliefo, G.O., O.S. Isikhuemhen and E.C. Okolo. "Traditional Coping Mechanism and Environmental Sustainability Strategies in Nnewi, Nigeria," Journal of Agricultural and Environmental Ethics 11(1999):101-109. Nnewi is situated some 30 kilometres South East of Onitsha in Anambra State in the southeastern part of Nigeria. This highly commercial town has undergone rapid urbanisation and industrialisation within the past two decades, since the end of the 1967-1970 Nigerian civil war. The Igbo community of the study area had traditionally employed bioconversion methods and other indigenous technology to process or recycle bio and non-degradable wastes. Industrialisation has enjoyed priority status in this locality as a requirement for modernisation and economic progress. The rapid urbanisation, aggressive industrialisation, and the attendant uncontrolled population growth have had a deleterious impact on the environment. There is now a wide range of industrial wastes that are released daily into the environment. Effects of these activities on the socio-cultural practices of the people, plant genetic resources and the environment are highlighted. In addition to palliative measures suggested here, a call is made to revisit the successful indigenous waste treatment and management technology formerly practised by the Igbo community. The importance of combining modern biotechnological approaches with the indigenous technology, norms and practices of Nnewi people to effect suitable waste treatment and management, as well as improving the living habits and the education of the people about their

environment, is recommended. (JAEE)

Ansink, Erik, Lars Hein and Knut Per Hasund, "To Value Functions or Services? An Analysis of Ecosystem Valuation Approaches," *Environmental Values* 17(2008):489-503. Monetary valuation of ecosystem services is a widely used approach to quantify the benefits supplied by the natural environment to society. An alternative approach is the monetary valuation of ecosystem functions, which is defined as the capacity of the ecosystem to supply services. Using two European case-study areas, this paper explores the relative advantages of the two valuation approaches. This is done using a conceptual analysis, a qualitative application, and an overall comparison of both approaches. It is concluded that both approaches can be defended on theoretical grounds, and - if properly applied - will provide the same value estimates. However, valuation of ecosystem services is preferred from a practical point of view. Because there is no one-to-one match between functions and services, researchers should be consistent in their valuation approach. To avoid overlooking or overlapping of values, valuation should either be solely based on functions, or solely based on services.

Anthologies, Environmental Ethics: (See separate entries for more detail.)

- Abel, Donald C., ed., Customized environmental ethics anthology. McGraw Hill electronic database with which instructors can customize their own anthology. See bibliographic entry. Website: <http://mhhe.com/primis/philo>
- Armstrong and Botzler, eds., Environmental Ethics: Convergence and Divergence. McGraw Hill, 1993.
- Botzler and Armstrong, eds., Environmental Ethics: Divergence and Convergence, 2nd ed., McGraw Hill, 1998.
- Armstrong and Botzler, eds., Environmental Ethics: Divergence and Convergence, 3rd ed., 2003.
- Attfield and Belsey, eds., Philosophy and the Natural Environment. Cambridge, 1994
- Benson, John, author and editor, Environmental Ethics: An Introduction with Readings. Routledge, 2000.
- Bormann and Kellert, eds., Ecology, Economics, Ethics: The Broken Circle. Yale, 1991.
- Boylan, Michael, Environmental Ethics. Upper Saddle River, NJ: Prentice-Hall, 2001.
- Chappell, Timothy D. J., ed., Respecting Nature: Environmental Thinking in the Light of Philosophical Theory. University of Edinburgh Press and Columbia University Press, 1997.
- Cooper and Palmer, eds. The Environment in Question. Routledge, 1992.
- Dallmeyer and Ike, eds., Environmental Ethics and the Global Marketplace. University of Georgia, 1998.
- Derr, Patrick G., and McNamara, Edward M., Case Studies in Environmental Ethics. Lanham, MD: Rowman and Littlefield, 2003.
- DesJardins, ed., Environmental Ethics: Concepts, Policy, Theory. Mayfield, 1999.
- Engel and Engel, eds., Ethics of Environment and Development: Global Challenge and International Response. Arizona, 1990.
- Elliot, Robert, Environmental Ethics, Oxford, 1995.
- Ferré and Hartel, eds., Ethics and Environmental Policy: Theory Meets Practice. Georgia, 1994.
- Goldin, Owen and Patricia Kilroe, eds., Human Life and the Natural World: Readings in the History of Western Philosophy. Peterborough, Ont.: Broadview Press, 1997. Twenty-seven readings all from classical philosophers.
- Gottlieb, Roger S., ed. The Ecological Community. New York: Routledge, 1997.
- Gudorf, Christine E. and Huchingson, James E., Boundaries: A Casebook in Environmental Ethics. Washington, DC: Georgetown University Press, 2003.
- Gruen and Jamieson, eds., Reflecting on Nature: Readings in Environmental Philosophy. Oxford, 1994.
- Kaufman, Frederik A., Foundations of Environmental Philosophy: A Text with Readings. Boston: McGraw-Hill, 2003.
- Light, Andrew, and Rolston, III, Holmes, eds., Environmental Ethics: An Anthology. Oxford: Blackwell, 2003.
- List, Peter, ed., Radical Environmentalism: Philosophy and Tactics. Wadsworth, 1993.

--List, Peter, ed., Environmental Ethics and Forestry. Philadelphia: Temple University Press, 2000.

--Newton and Dillingham, Watersheds 3: Ten Cases in Environmental Ethics. Wadsworth, 2002, and earlier editions.

--Oelschlaeger, ed., Postmodern Environmental Ethics. State University of New York Press, 1995.

--Pojman, Louis P., ed., Environmental Ethics: Readings in Theory and Application. Jones and Bartlett, 1994.

--Pojman, Louis P., ed., Environmental Ethics: Readings in Theory and Application, third edition. Wadsworth, 2001.

--Pojman, Louis P., Global Environmental Ethics. Mayfield, 2000.

--Scherer, ed., Upstream/Downstream: Issues in Environmental Ethics. Temple, 1990.

--Schmidtz, David, and Willott, Elizabeth, eds., Environmental Ethics: What Really Matters, What Really Works. New York: Oxford University Press, 2002.

--Smith, Mark J., ed., Thinking through the Environment: A Reader. London: Routledge, 1999.

--Sterba, ed., Earth Ethics: Environmental Ethics, Animal Rights, and Practical Applications. Prentice-Hall, 1995.

--VanDeVeer and Pierce, eds., People, Penguins, and Plastic Trees, 2nd ed. Wadsworth, 1995.

--VanDeVeer and Pierce, eds., The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics. Wadsworth, 1994. Second edition, 1997. Third edition, 2003.

--Westphal and Westphal, eds., Planet in Peril: Essays in Environmental Ethics. Harcourt Brace, 1994.

--Weston, Anthony, ed., An Invitation to Environmental Philosophy. New York: Oxford University Press, 1999.

--Zimmerman et al., eds., Environmental Philosophy: From Animal Rights to Radical Ecology. Prentice-Hall, 1993. 3rd edition, 2001.

Older:

--Scherer and Attig, eds., Ethics and the Environment. Prentice-Hall, 1983.

--Regan, ed., Earthbound: New Introductory Essays in Environmental Ethics. Reprinted in 1990 by Waveland Press (Prospect Heights, IL; \$ 19.95; 708/634-0081), first published by Random House, 1984.

Anthony, Brian Patrick, "Nature's Cathedral: The Union of Theology and Ecology in the Writings of John Muir," Ecotheology 7 (1, July 2002):74-80. John Muir has strongly impacted the environmental movement since he penned his works during the nineteenth and early twentieth centuries. While the Scottish-born naturalist is well-known for his rugged individualism, the driving force behind his thought and effort was his connection with the Divine. Muir inherited a seeking soul from his devoutly Reformist father, Daniel. The younger Muir, however, would find his principal inspiration in the gospel of nature. A foray into industry convinced Muir that the stain of civilisation blinds us to this original scripture. Muir spoke of a distinct correlation between humanity's spiritual ills and the destruction of the natural world, and suggested an extension of the Christian ethic to all creatures. In his various travelogues, he offers an illuminating vision of the God of nature, and humanity's position in relation to both Creator and creation.

Anthony, R., and Paul B. Thompson, "Biosafety, Ethics and Regulation of Transgenic Animals," in The GMO Handbook: Genetically Modified Animals, Microbes and Plants in Biotechnology. S.R. Barekh, Ed. Totoway, NJ: 2004, Humana Press, pp. 183-206.

Anthony, Raymond, "Risk Communication, Value Judgments, and the Public-Policy Maker Relationship in a Climate of Public Sensitivity toward Animals: Revisiting Britain's Foot and Mouth Crisis," Journal of Agricultural and Environmental Ethics 17(2004):363-383. This paper offers some suggestions on, and encouragement for, how to be better at risk communication in times of agricultural crisis. During the foot and mouth epizootic, the British public, having no precedent to deal with such a rapid and widespread epizootic, no existing rules or conventions, and no social or political consensus, was forced to confront the facts of a perceived "economic disease." Foot and mouth appeared as an economic disease because the major push to eradicate it was motivated exclusively by trade and economic reasons and not because of

threats it posed to the lives of human beings and livestock. The British public deferred responsibility to their elected officials for a speedy end to this non-life threatening viral epizootic. The latter, however, did not have a contingency plan in place to tackle such an extensive outbreak. The appeal to an existing policy, i.e., mass eradication, as the exclusive strategy of containment was a difficult pill for the public to swallow well before the end of the 226-day ordeal.

Public moral uneasiness during the crisis, while perhaps symbolic of growing discontent with an already fractured relationship with farmed animals and the state of animal farming today, arguably, also reflected deep disappointment in government agents to recognize inherently and conditionally normative assumptions in their argument as well as recognize their narrow conception of risk. Furthermore, broader stakeholder participation was clearly missing from the outset, especially with respect to the issue of vaccination. A greater appreciation for two-way risk communication is suggested for science-based public policy in agriculture, followed by suggestions on how to be more vigilant in the future. Keywords: agricultural ethics, animal agriculture, foot and mouth disease, risk. The author is in the Department of Philosophy and Religious Studies, Iowa State University, Ames, Iowa. (JAEE)

Antrop, M., "Changing Patterns In The Urbanized Countryside Of Western Europe," Landscape Ecology 15 (No. 3, Apr 01 2000): 257- . (v.11,#2)

Anzovin, Steven, The Green PC: Making Choices that Make a Difference. New York: McGraw-Hill, 1993. Explores advances toward environmentally friendly computing, from paper use to energy efficiency. (v6,#4)

Apel, K.O, et al, Het discursieve tegengif. De sociale en ethische aspecten van de ecologische crisis (The discursive antidote. The social and ethical aspects of the ecological crisis). Kampen, Netherlands: Kok Agora, 1996, ISBN 90-391 0652 5. In Dutch. A collection of essays by prominent authors in the field of political-ethical aspects of the environmental crisis and the risk society. Contents: Introduction: The role of the public debate, etc. K. O. Apel (Frankfurt am Main), "The ecological crisis in the perspective of discourse ethics"; Ph. Visser 't Hooft (Utrecht), "The ecological crisis and the duty to survive"; I. Fetscher (Frankfurt am Main), "Ecology and Democracy: a politico-cultural problem"; V. Hoesle (Essen), "Economy and Ecology"; Rene von Schomberg (Tilburg), "Discourse and context. The unavoidable social contexts of discourse"; A van Dommelen (Amsterdam), "Environmental crisis and methodology. On the quality of science." (Thanks to Johan Hattingh.)

Apffel-Marglin, Frederique, "From Fieldwork to Mutual Learning: Working with PRATEC," Environmental Values 11(2002):345-367. This paper places the work of a Peruvian NGO (PRATEC), with which the author collaborates, within a broad context of the theory of knowledge. The three members of PRATEC were engaged in different aspects of the development enterprise. Out of their perceived failure of that enterprise, they deprofessionalised themselves and founded this NGO. The author argues that within the professional academic disciplines it is impossible to produce a knowledge that can contribute to the procreative concerns of communities, that is, their concerns about their continuity and well-being. She does a brief historical review of the emergence of the modern university in the nineteenth century and the hidden political agenda of the new so called value-free knowledge it institutionalised. She ends up advocating a rejection of the double participation necessitated by professional academic disciplines. (EV)

Aplet, Greg, Nels Johnson, Jeffrey T. Olson, and V. Alaric Sample, eds., Defining Sustainable Forestry. Washington: Island Press, 1993. 320 pages. \$ 24.95 paper. \$ 49.95 hardcover. The conclusions from a national conference convened by The Wilderness Society, American Forests, and the World Resources Institute. (v4,#3)

Aplet, Gregory H., "On the Nature of Wilderness: Exploring what Wilderness Really Protects," Denver

University Law Review 76(1999):347-367. Wilderness is neither simply an idea nor a place. It is a place where an idea is clearly expressed. ... In an effort to bridge the chasm that has developed between the critics and the defenders of wilderness, this Essay examines the qualities of a place that confer wildness and explores some of the implications of treating wildness as a quality best expressed in the places we call wilderness, but also infused in special places closer to home" (p. 349). "Wilderness is criticized for separating people from nature, for ignoring aboriginal people, and for holding nature static, even as it is revered as a place. The representation of wilderness described here as the end of two-dimensional continuum of wildness defined by naturalness and freedom from human control offers a way out of this dilemma. By describing wildness as a continuum, we acknowledge the wildness that is all around us even as we celebrate the places at the end of the continuum" (p. 366). Aplet is a forest ecologist with The Wilderness Society. (v.12,#4)

Aplin, Graeme, Australians and their Environment. 2nd ed. New York: Oxford University Press, 2002. Aplin is at Macquarie University, Australia.

Aplin, Graeme, Mitchell, Peter, Cleugh, Helen, Pitman, Andrew, Rich, David. Global Environmental Crises: An Australian Perspective. New York: Oxford University Press, 1995. 344pp. \$26.95. A distinctively Australian perspective on environmental priorities. In Australia, these are in many ways different from those in other parts of the world. (v8,#1)

Appleby, Michael C., "Sustainable Agriculture is Humane, Humane Agriculture is Sustainable," Journal of Agricultural and Environmental Ethics 18(2005):293-303. Procedures that increase the sustainability of agriculture often result in animals being treated more humanely: both livestock in animal and mixed farming and wildlife in arable farming. Equally, procedures ensuring humane treatment of farm animals often increase sustainability, for example in disease control and manure management. This overlap between sustainability and humaneness is not coincidental. Both approaches can be said to be animal centered, to be based on the fact that animal production is primarily a biological process. Proponents of both will gain from recognition of commonality and development of cooperation. A collaborative approach to humane sustainable agriculture will benefit animals, people, and the environment. Keywords: agriculture - animal production - animal welfare - humaneness - livestock - sustainability. Appleby is with the Humane Society of the United States, Washington, DC. (JAEE)

Appleby, Michael C. et al (six others), "What price cheap food?" Journal of Agricultural and Environmental Ethics 16(2003):395-408. Report of a meeting that gathered many of UK senior animal scientists with representatives of the farming industry, consumer groups, animal welfare groups, and environmentalists. There was strong consensus that the current economic structure of agriculture cannot adequately address major issues of concern to society: farm incomes, food security and safety, the needs of developing countries, animal welfare, and the environment. These issues must be addressed by a combination of legislation, restructuring of the market, and use of public funds. KEY WORDS: agriculture, animal welfare, development, economics, environment, food, sustainability. (JAEE)

Appleby, Mike. What Should We Do About Animal Welfare? Review by Lantz Miller, Journal of Agricultural and Environmental Ethics 10(2001):457-459.

Miller, Lantz. Review of Mike Appleby, What Should We Do About Animal Welfare?, Journal of Agricultural and Environmental Ethics 10(2001):457-459. (JAEE)

Appleton, Arthur E., "The Labeling of GMO (Genetically Modified Organism) Products Pursuant to International Trade Rules," New York University Environmental Law Journal 8(no.3, 2000):566- . (EE v.12,#1)

Appleton, Jay, "Nature as Honorary Art," Environmental Values 7(1998): 255-266. This paper addresses

the apparent difficulty experienced by philosophers in applying the methodology of art criticism to the aesthetics of nature and uses the idea of 'narrative' to explore it. A short poem is chosen which recounts the 'narrative' of a simple natural process - the passage of day into night - and this is followed by a simplified critique illustrating how the poem invites questions relating to style, technique, subject, etc., leading to the query whether the art form (poem) can be dispensed with and the subject (nature) be left to tell its own story, using the 'language' of symbolism. The interface between art and science is reviewed particularly in the light of the ideas of John Dewey and what has happened since. The 'symbolism of environmental opportunity' is proposed as the key to crossing the arts/science boundary, and the question is raised whether the distinctiveness of nature is of paramount importance in this context. Various grounds for scepticism are examined, e.g. the danger of drawing inferences about human interaction with nature from the behaviour of other species. KEYWORDS: Nature, art, aesthetics, symbolism, prospect/refuge theory. Jay Appleton is at Cottingham, East Yorkshire, UK. (EV)

Appleton, Jay. The Experience of Landscape, Review by John Stuart-Murray Environmental Values 7(1998):359.

Arai, A. Bruce "Science and Culture in the Environmental State: The Case of Reactor Layups at Ontario Hydro", Organization and Environment 14 (No. 4, December 2001) pp.409-24. The widespread concern about the declining state of our physical environment is often accompanied by frustration about what to do to prevent or even reverse such deterioration. In the past, policy makers, legislators, and the general public have usually turned to scientists and scientific knowledge for answers. But recently, theorists and others have re-emphasized the importance of culture in understanding the environment. In this article, this culturalist critique of scientific knowledge is discussed and is then related to the decision by Ontario Hydro to lay up seven of its nuclear reactors. This situation is used to illustrate the continuing relevance of scientific knowledge for addressing environmental concerns. Arai is associate professor in the Department of Sociology and Anthropology at Wilfred Laurier University, Waterloo, Ontario. (v.13,#2)

Araujo, MB, "Biodiversity Hotspots and Zones of Ecological Transition," Conservation Biology 16(no.6, 2002): 1662-1663.

Arbor, J.L., "Animal Chauvinism, Plant-Regarding Ethics and the Torture of Trees", Australasian Journal of Philosophy, 64, (1986): 335-39. The extension of moral considerability to "higher" animals on the basis of properties possessed by both animals and humans excludes many species of animals and non-animate beings. The author claims that the exclusion of "lower" animals from the class marked out for privileged treatment by Western ethics together with the assumption that living inanimate beings can safely be excluded deserves to be queried. It is not suggested that the value of human and animal states of consciousness be denied, however, a plant-regarding ethic would reject the claim that in all cases of conflict between the interests of animals and plants the former always prevails. According to the author "[a] plant-regarding ethic requires the rooting out of all ... forms of animal chauvinism and a branching forth of new sentiments and new systems of thought."

Archhibugi, Franco. The Ecological City and City Effect. Brookfield, VT: Ashgate, 1998. 252 pp. \$63.95. A critique of the current approaches to conventional urban policies which, the author claims, lack long-term vision and are limited to technological interventions for short-term improvements, without taking into consideration the conditions and constraints of town planning.

Archhibugi, Franco. The Ecological City and City Effect. Brookfield, VT: Ashgate, 1998. 252 pp. \$63.95. A critique of the current approaches to conventional urban policies which, the author claims, lack long-term vision and are limited to technological interventions for short-term improvements, without taking into consideration the conditions and constraints of town planning.

Argow, Keith A. "This Land Is Their Land: The Potential and Diversity of Nonindustrial Private Forests."

Ariansen, Per, "Anthropocentrism with a Human Face" draft article, in English. Ariansen proposes an anthropocentric environmental ethic that gives due room for the moral intuitions that it is blameworthy to mistreat animals and even, in some cases, to destroy inanimate objects, though direct moral obligations are toward humans and human projects only. Ariansen holds that we could not act morally directly toward plants or animals, even if we very strongly wanted to. Still, a deep respect for the suffering of others imposes upon humans a limited prime facie commitment also to animal welfare, and even to the wanton destruction of the environment. Copies on request from the author: Filosofisk institutt, P. A. Munchs hus, Postboks 1020, Blindern, 0315 Oslo, Norway. (v5,#2) (Finland)

Ariansen, Per, "Anthropocentrism with a Human Face," Opuscula (published by the Examen Philosophicum Section of the Department of Philosophy, University of Oslo), Fall 1994. In English. Ariansen argues for an anthropocentric environmental ethic that finds it morally blameworthy to mistreat animals, although direct moral obligations are towards humans. We could not act morally directly towards plants or animals even if we very strongly wanted to. Sentient animals are, as far as we know, in a position where they are unable to see wilfully inflicted pain as different from any other occurrence of pain. It is therefore simply impossible to offer ethics to animals. They will not be able to understand what they are being offered. It is impossible to morally offend an animal, though clearly it is possible to inflict pain on them and in manners that morally offend humans.

Duties toward animals are in reality duties towards ourselves, though the way this is so is often misunderstood. We ought to have respect for the pain of others even if it is clear that the patient will never discover that the pain or loss inflicted had a human origin. The morally relevant relationship between humans and non-humans is essentially dependent upon the scheme of morality as it unfolds in inter-human society. Although this scheme centers around the autonomy of the moral agent, it nevertheless presupposes a respect for the suffering of others, since in a world without suffering, lying and cheating would have no moral significance. A deep respect for the suffering of others imposes on humans a limited prima facie commitment also to animal welfare. Some case can also be made that the destruction of non-sentient and non-animate nature, such as a crystal, can be analogously treated. Ariansen teaches philosophy at the University of Oslo and is the author of Miljøfilosofi: En Innføring (Environmental Philosophy: An Introduction).

Ariansen also has two forthcoming papers: (1) "Sustainability, Morality and Future Generations," given at a conference in Kyoto, Japan, sponsored by the Future Generation Alliance Foundation and the Kyoto Forum. (2) "Beyond Parfit's Paradox," prepared for the October 1994 conference, "Our Responsibilities toward Future Generations," held in Malta. Copies on request: Per Ariansen, Filosofisk Institutt, Universitetet i Oslo, Boks 1020, 0315 Blindern, Oslo, Norway. FAX: (+47) 22 85 75 51 (v5,#4)

Ariansen, Per, Miljøfilosofi: En Innføring (Environmental Philosophy: An Introduction). Oslo: Universitetsforlaget, 1992. ISBN 82-00-21659-4. 248 pages. Paper. The first general text in environmental ethics in Norwegian. Per Ariansen is on the philosophy faculty at Oslo in the examen philosophicum program. Address: Department of Philosophy, University of Oslo, Boks 1020, 0315 Oslo 3. Phone 47 22 855938. Fax 857551. E-mail: per.ariensen@filosofi.uio.no. From the analytical table of contents: Chapter 1. Introduction. A philosophical searchlight on environmental problemstotics of the book. Attitudes, choices of action, and the concept of nature. Chapter 2. Attitudes toward Nature: A Historical Sketch. The intellectual tradition as a source of renewed attitudes to nature. The idea of the conquest of nature in biblical texts. Where is the root of the crisis? Other hypotheses about the origin of an attitude of conquest toward nature. The technological optimism of our times. The development of ecology. Chapter 3. Environmental Problems: Topics for Science and Philosophy. Analyzing environmental problems. What does it mean that something is a problem.

Chapter 4. Analyzing lines of action: a decision theoretical approach. Decision theory and analysis of action. Models for the dynamics of complex systems: an example. Complex situations of

cooperation: the game-theoretical situation. Chapter 5. What Is It That Has Value? Description and evaluation. Science and valuelessness. Concepts of value. Chapter 6. Ethical Theories. Consequentialist ethics. Non-consequentialist ethics. Moral disagreement. Chapter 7. Anthropocentric Environmental Ethics. The various schools of environmental ethics. Anthropocentric consequentialism: ideal types of attitudes and perspectives. Anthropocentric deontological ethics, rights and duties for humans only. Unspoiled nature as a transcendental condition for morality.

Chapter 8. Non-anthropocentric Environmental Ethics. Animal rights and animal welfare. Rights based on subjective interests. Rights stemming from objective interests (biocentrism). Rights for non-living objects and superindividual entities. Deep ecology. Chapter 9. Future Generations as Morally Concerned Parties. The welfare of future generations. Rights for future generations. Chapter 10. Responsibility and the Placing of Responsibility. Refining concepts of responsibility. Are there degrees of responsibility? To place responsibility. Epilogue: A Common future. References and a detailed table of contents. This book has been used at the University of Oslo, at the University of Trondheim, at the Telemark Distrikthogskole, at Bo (a district college), and at the Landbunkshogskolen pa As, at As (the Agricultural University). This book has also been translated into Swedish. Per Ariansen, Miljöfilosofi: En Introduktion. Nora: Bokförlaget Nya Doxa, 1993. ISBN 91-88248-33-X. Translated by Per Lennart Mansson. (Norway)

Ariansen, Per, "Heggelianismen i norsk miljødebatt," Tidsskrift for Alternativ Framtid (The Norwegian Journal for an Alternative Future), no. 3, 1994. An analysis of Hjalmar Hegge's environmental philosophy. Hegge is a Norwegian influential for two decades in the public debate on environmental issues, drawing on Rudolf Steiner and Johann V. von Goethe, and offering a critique of industrial society. (v5,#4)

Ariansen, Per and Jon Wetlesen, "Miljöfilosofi (Environmental Philosophy)," in K. E. Johansen, ed., Allmen inforing i etikk (Oslo: Cappelen, 1994). The authors are in philosophy at the University of Oslo. (Finland)

Ariansen, Per. "Platforms, Nature and Obligational Values" in Nina Witoszek and Harold Glasser, eds., Philosophical Dialogues: Arne Naess and the Progress of Ecophilosophy, Berkeley: University of California Press, forthcoming. An interpretation of the function of the deep ecology platform with an attempt to explain why the "doctrines" of deep ecology appear evasive. In the discussion about the concept of intrinsic value, a sketch of Ariansen's own brand of anthropocentrism is presented. (v7,#4)

Ariansen, Per. "The Non-utility Value of Nature. A contribution to understanding the value of biological diversity." Research paper by grant from The Norwegian Research Council. Norwegian Forestry Institute, 1995. Published in August 1996 as Working Paper No. 99, Centre for Technology and Culture, Oslo, 1996. In addition to all possible instrumental value, biological diversity also holds a constitutional value, in that it marks the constitutional framework for forming human identity, a framework which is prima facie protected against human destruction. (v7,#4)

Ariansen, Per. "Sustainability, Morality and Future Generations." Future Generations Journal, No. 17 (1995/3) Valletta, Malta. A revision in Norwegian is Ariansen, Per, "Barekraftighet, moral og fremtidige generasjoner." Printed in W. Lafferty & O. Langhelle (red.), Berekraftig utvikling. Oslo: AdNotam, Gyldendal, 1995. An English translation of the revision will appear in 1997. In addition to bringing forward some aspects of Ariansen's brand of anthropocentrism, the article also addresses briefly the "Parfit paradox", suggesting that the hypothetical question posed to future generations, whether they would rather exchange their plight for never having been born, rests on the mistaken understanding that this question is analogous to other questions about the preference of one state over another. The question breaks an "existential syntax". The state of never having been born cannot be evaluated by those who actually were born. Ariansen is in philosophy at the University of Oslo. (v7,#4)

Ariansen, Per. "Spirituality in a Secular World." In Masahiku Yazaki, ed. Beyond Egoism. Kyoto: Future Generations Alliance, 1996. A discussion about the possibility of giving meaning to a concept of spirituality. (v7,#4)

Arias, Hector M., "International Groundwaters: The Upper San Pedro River Basin Case," Natural Resources Journal 40(no. 2, Spring 2000):199- . (v.12,#2)

Arias-Maldonado, Manuel, "An Imaginary Solution? The Green Defence of Deliberative Democracy," *Environmental Values* 16(2007): 233-252. As part of the recent rethinking of green politics, the construction of a green democracy has been subjected to increasing scrutiny. There is a growing consensus around deliberative democracy as the preferred model for the realisation of the green programme. As a result several arguments emerge when deliberative principles and procedures are to be justified from a green standpoint. This paper offers a critical assessment of the green case for deliberative democracy, showing that deliberation is being asked to deliver more than it is able to. However, it is suggested that the connection between sustainability, understood as a normative principle, and deliberative procedures may ultimately offer the best grounds for such a defence. Arias-Maldonado is in political science, University of Malaga, Malaga, Spain.

Arita, Hector T., Figueroa, Fernanda, Santos-Del-Prado, Karina. "Geographical Range Size and the Conservation of Mexican Mammals,"

Arkow, Phil, "Application of Ethics to Animal Welfare," Applied Animal Behaviour Science 59(1998):193-200. Veterinarians face ethical dilemmas for which there are few analogs in human medicine. In a theme issue on Ethics, Ethology, and Animal Welfare, resulting from sessions at the 25th World Veterinary Congress. Arkow is a veterinarian, Stratford, NJ. (v.13,#2)

Arler, Finn, "Aspects Of Landscape Or Nature Quality," Landscape Ecology 15 (No. 3, Apr 01 2000): 291- . (v.11,#2)

Arler, Finn, "Justice in the Air: Energy Policy, Greenhouse Effect, and the Question of Global Justice," Human Ecology Review 2 (no. 1, winter/spring 1995):40- . The central ethical issues in reacting to the problem of an increasing greenhouse effect. Energy policy, dilemmas of justice, impartiality versus mutual advantage, ideal versus conditional justice, monological (ideal observer) versus procedural (participant parties) justice, membership and the concentric circle theory (increased obligations toward those nearest us), global partnership, criteria of justice (need, desert, entitlement, luck, means, abilities), principles versus judgment. The principles of equality, precaution, prevention, cost-effectiveness, responsibility, care, solidarity, self-determination, sovereignty, justice between generations. Cost-benefit analyses, the relevance of previous actions, justice across borders. Arler is with the Man and Nature, Humanities Research Center, Odense University, and was until recently in philosophy and human ecology, Aarhus University, Denmark. (v6,#4)

Arler, Finn, "Aspects of Landscape or Nature Quality," Landscape Ecology 15(2000):291-302. Landscape or nature quality has become a key concept in relation to nature policy and landscape planning. In the first part of the article it is argued that these qualities should not be conceived as mere expressions of private or subjective preferences. Even though there may not be any "objective" or "scientific" method dealing with them, they are still values which can be shared, reflected on, and discussed in a reasonable way. The connoisseurs are introduced as experienced persons, who are particularly capable of identifying different kinds of qualities, bridge builders between cognition and evaluation. The second part of the article deals with four central sets of landscape or nature qualities: qualities related to species diversity, qualities related to "the atmospheres" and characters of places, pictorial qualities, and qualities related to narrativity. It is argued that experience of these and similar

qualities are an important part of human flourishing, and that they should therefore all have a prominent place in landscape planning. Arler is in philosophy, Aarhus University, Denmark.

Arler, Finn, "Energy Policy, Greenhouse-effect and Global Justice." Surveys the position of Denmark on CO₂ emissions, compares this with that of the United States and other countries, considers the rights of developing countries to energy use, recalls statements from the UNCED Rio de Janeiro conference, and asks what principles of justice might be used to set policy for energy in view of the greenhouse effect. Copies from Finn Arler, Department of Philosophy, University of Aarhus, Ndr. Ringgade Buildn. 327, DK-8000, Aarhus C, Denmark. (v5,#2)

Arler, Finn, and Svennevig, Ingeborg, eds. Cross-Cultural Protection of Nature and the Environment. Odense, Denmark: Odense University Press, 1997. 248 pp. Contents include the following:

--Norton, Bryan, "A Community-based Approach to Multi-generational Environmental Valuation," pp.17-28.

--Deshalit (de-Shalit), Avner, "Sustainability and the Liberal-communitarian Debate," pp. 29-41.

--O'Neill (O'Neill), John, "The Good Life Below the Snow-line: Pluralism, Community and Narrative," pp. 42-60.

--Agger, Peder, and Sandoe, Peter, "The Use of 'Red Lists' as an Indicator of Biodiversity," pp. 61-70.

--Milton, Kay, "Nature, Culture and Biodiversity," pp. 711-83.

--Sorensen, Merete, "Increase of Biodiversity Through Biotechnology: Genetic Pollution or Second Order Evolution," pp. 84-92.

--Anker, Helle Tegner, "Biodiversity and the Importance of the Legal Framework," 93-106.

--Richards, Paul, "Common Knowledge and Resource Conservation, Globally and Locally," pp. 107-118.

--Posey, Darrell, "Utilizing Amazonian Indigenous Knowledge in the Conservation of Biodiversity: Can Kayapo Management Strategies Be Equitably Utilized and Applied?" pp. 119-133.

--Foller, Maj-Lis, "Protecting Nature in Amazonia: Local Knowledge as a Counterpoint to Globalization," pp. 134-147.

--Svennevig, Ingeborg, "Local Peoples of the Western World: The Introduction of Local Cultures in the Wadden Sea Area," pp. 148-160.

--Pedersen, Poul, "Modernity, Nature and Ethics," pp. 161-175.

--Arler, Finn, "Global Partnership: A Matter of Friendship, Reciprocity or Mutual Advantage?" pp. 176-191.

--Jensen, Tim, "Religions and Conservation: A Survey," pp. 192-205.

--Kaarhus, Randi, "Policy Discourses on Environmental Problems in Ecuador and Norway: A Comparative Perspective," pp. 206-217.

--Lindegard, Klaus, Segura, Olman, "Trade Offs in Joint Implementation Strategies: The Central American Forestry Case," pp. 218-231.

--Zeitler, Ulli, "Global Solutions and Local Understanding: Conceptual and Perceptual Obstacles to Global Ethics and International Environmental Law," pp. 232-244. (v.9,#4)

Arler, Finn. "Global Partnership, Climate Change and Complex Equality," Environmental Values:Environmental Values 10(2001):301-330. The prospect of climate change due to human activities has put the question of inter- and intragenerational justice or equity in matters of common concern on the global agenda. This article will focus on the question of intragenerational justice in relation to these issues. This involves three basic questions. Firstly, the question of which distributive criteria may be relevant in the distribution of the goods and bads related to the increasing greenhouse effect. A series of criteria are discussed in relation to different understandings of the problem. The second question is which kind of relationship the global partnership is or should be considered to be in issues of common concern. It is argued that various understandings of the global partnership can be expected to result in the use of different criteria. This diversity leads us to the third question concerning the possibility of identifying an overall social ideal which can be used in cases where several different criteria may be useful. I shall

discuss one such ideal in particular, namely the ideal of complex equality. In the concluding remarks it is argued that a distribution of emission quotas to countries in accordance with population size is a reasonable starting point for an equitable solution, although it involves various problems of application. Keywords: Climate change, greenhouse effect, equity, justice, global partnership, common concerns, distributive criteria, social ideals, complex equality. Finn Arler is at the Department of Development and Planning, Division of Technology, Environment and Society, Aalborg University, Aalborg O, Denmark. (EV)

Arluke, A., and Sanders, C. R. 1996. Regarding animals. Philadelphia: Temple University Press, 1996.

Armitage, D., "Community Based Narwhal Management in Nunavut, Canada: Change, Uncertainty, and Adaptation," Society and Natural Resources 18(no. 8, September 2005): 715-731.

Armitage, Derek, Fikret Berkes, and Nancy Doubleday, eds. *Adaptive Co-Management, Collaboration, Learning, and Multi-Level Governance*. Vancouver: University of British Columbia Press, 2007. Co-management is when traditional government resource agencies share power in varying degrees with local communities and groups. Contents include: (1) "Introduction: Moving beyond Co-Management" by Derek Armitage, Fikret Berkes, and Nancy Doubleday, (2) "Adaptive Co-Management and Complexity: Exploring the Many Faces of Co-Management" by Fikret Berkes, (3) "Connecting Adaptive Co-Management, Social Learning, and Social Capital through Theory and Practice" by Ryan Plummer and John FitzGibbon, (4) "Building Resilient Livelihoods through Adaptive Co-Management: The Role of Adaptive Capacity" by Derek Armitage, (5) "Adaptive Co-Management for Resilient Resource Systems: Some Ingredients and the Implications of Their Absence" by Anthony Charles, (6) "Challenges Facing Coastal Resource Co-Management in the Caribbean" by Patrick McConney, Robin Mahon, and Robert Pomeroy, (7) "Adaptive Fisheries Co-Management in the Western Canadian Arctic" by Burton G. Ayles, Robert Bell, and Andrea Hoyt, (8) "Integrating Holism and Segmentalism: Overcoming Barriers to Adaptive Co-Management between Management Agencies and Multi-Sector Bodies" by Evelyn Pinkerton, (9) "Conditions for Successful Fisheries and Coastal Resources Co-Management: Lessons Learned in Asia, Africa, and the Wider Caribbean" by Robert Pomeroy, (10) "Communities of Interdependence for Adaptive Co-Management" by John Kearney and Fikret Berkes, (11) "Adaptive Co-Management and the Gospel of Resilience" by Paul Nadasdy, (12) "Culturing Adaptive Co-Management: Finding 'Keys' to Resilience in Asymmetries of Power" by Nancy Doubleday, (13) "Novel Problems Require Novel Solutions: Innovation as an Outcome of Adaptive Co-Management" by Gary P. Kofinaa, Susan J. Herman, and Chanda Meek, (14) "The Role of Vision in Framing Adaptive Co-Management Processes: Lessons from Krisianstads Vattenrike, Southern Sweden" by Per Olsson, (15) "Using Scenario Planning to Enable an Adaptive Co-Management Process in the Northern Highlands Lake District of Wisconsin" by Garry Peterson, and (16) "Synthesis: Adapting, Innovating, Evolving" by Fikret Berkes, Derek Armitage, and Nancy Doubleday.

Armstrong, Adrian, "Is God Green? Christian Contributions to the Environmental Debate," Bulletin of the Society of Ordained Scientists, no. 13, 1995, p. 2. (v7,#4)

Armstrong, Bob. "Our Federal Public Lands," Natural Resources & Environment 12(no.1,1997):3

Armstrong-Buck, Susan. "Whitehead's Metaphysical System as a Foundation for Environmental Ethics." Environmental Ethics 8(1986):241-59. Environmental ethics would greatly benefit from an adequate metaphysical foundation. In an attempt to demonstrate the value of Whitehead's metaphysical system as such a foundation, I first discuss five central tenets of his thought. I then compare aspects of his philosophy with Peter Singer's utilitarianism, Tom Regan's rights theory, Aldo Leopold's land ethic, and Spinoza's system in order to indicate how a Whiteheadian approach can solve the difficulties of the other views as currently developed, and provide the basis for an environmental ethics which values individual entities in themselves and in their connectedness in a purposive natural order. Armstrong-Buck is in the

department of philosophy, Humboldt State University, Arcata, CA. (EE)

Armstrong, Scott, "Deep Dilemma in Grand Canyon: Improve Access or Retain Natural Beauty," The Christian Science Monitor 86 (2 August 1994): 1, 4. (v5,#3)

Armstrong, Susan J. Review of Arran Gare. Incorporated: European Civilization and Environmental Destruction: (Bungendore, Australia, Eco-logical Press, 1993). (EV)

Armstrong, Susan J. and Richard G. Botzler, eds., Environmental Ethics: Convergence and Divergence. New York: McGraw-Hill, 1993. Soft cover, under \$ 25. Principally for the college text market. The biggest anthology in the field, 70 articles, quite comprehensive, and shows McGraw-Hill's intention to enter this market. Likely to be one of the dominant introductory anthologies. Section 1 is "The Role of Science" in environmental ethics and policy. Section 2 is "The Role of Moral Philosophy." Section 3: "The Aesthetic Value of Nature." Section 4: "Historical Context" (environmental history). Section 5: "Economic/Political/Legal Issues." Section 6: "Anthropocentrism" (mostly those defending it). Section 7: "Individualism" (animal rights, biocentrism for individual organisms). Section 8: "Ecocentrism" (the land ethic). Section 9: "The Challenge of Ecofeminism." Section 10: "Judeo-Christian Perspectives." Section 11: "Multicultural Perspectives" (Native Americans, Islam, Taoism, Hinduism, Buddhism). Armstrong is professor of philosophy at Humboldt State University, Botzler is professor of wildlife there. (v3,#4)

Armstrong, Susan, and Richard G. Botzler, eds., Environmental Ethics: Divergence and Convergence, Reviewed by David Rothenberg in Environmental Ethics 16(1994):215

Armstrong, Susan and Botzler, Richard, eds., The Animal Ethics Reader. New York: Routledge 2003. A comprehensive, state-of-the-art reader.

Armstrong, Susan J. Review of Being and Value: Toward a Constructive Postmodern Metaphysics. By Frederick Ferré. Environmental Ethics 21(1999):425-428.

Armstrong, Susan, and Botzler, Richard, eds., Animal Ethics Reader. New York: Routledge, 2003. Over fifty selections. Theories of animal ethics. Animal capacities: pain, emotion, consciousness. Primates and cetaceans. Animals for food. Animal experimentation. Animals and biotechnology. Ethics and wildlife. Zoos, aquaria, and animals in entertainment. Animal companions. Animal law/animal activism. Armstrong is in philosophy, Botzler in wildlife at Humboldt State University, California. (v 14, #3)

Armstrong, Susan J. and Botzler, Richard G. (eds.), Environmental Ethics: Divergence and Convergence, Third Edition. (New York: McGraw-Hill, 2003). This anthology is designed to help students develop their own environmental ethic, based on a sympathetic but critical look at all of the major contemporary approaches, including ecofeminism and multicultural perspectives. The anthology encourages students to incorporate moral, aesthetic, scientific, historical, political and economic perspectives in developing their environmental ethic. This third edition is 60% new, with expanded attention to application of theories, including biotechnology, and includes case studies.

Armstrong, Susan J., and Botzler, Richard G., eds., Environmental Ethics: Divergence and Convergence. Third ed. Boston: McGraw Hill, 2003. Third edition of one of the most popular texts in environmental ethics. Over sixty percent of the readings are new, including land rights, biodiversity, environmental justice, and genetic engineering. Multidisciplinary. Includes non-Western perspectives. Ecofeminist perspectives. Cutting-edge articles in environmental theory. Includes a structure and standardized terminology for this developing field. Instructional aids for each chapter. Armstrong is in philosophy, Botzler in biology at Humboldt State University, California. (v.14, #4)

Armstrong, Susan J. Review of *The Ethics of Creativity: Beauty, Morality and Nature in a Processive Cosmos*. By Brian G. Henning. *Environmental Ethics* 29(2007):2209-212. (EE)

Armstrong, Susan, and Richard G. Botzler, eds. *The Animal Ethics Reader*, 2nd edition. New York: Routledge, 2008. Contents include: (1) "The Case for Animal Rights" by Tom Regan, (2) "Reply to Tom Regan" by Carl Cohen, (3) "Are Human Rights Human?" by Paola Cavalieri, (4) "Practical Ethics" by Peter Singer, (5) "Feminism and the Treatment of Animals: From Care to Dialogue" by Josephine Donovan, (6) "Rights, Interests, Desires and Beliefs" by R.G. Frey, (7) "Animals and the Harm of Death" by Frederike Kaldewaij, (8) "Consciousness, Emotion and Animal Welfare: Insights from Cognitive Science" by M. Medl and E.S. Paul, (9) "Reflections" by Barbara Smuts, (10) "Anthropomorphism and Cross-Species Modeling" by Sandra D. Mitchell, (11) "A Neuropsychological and Evolutionary Approach to Animal Consciousness and Animal Suffering" by Bob Bermond, (12) "Animal Consciousness: What Matters and Why" by Daniel C. Dennett, (13) "Animal Minds and Animal Emotions" by Marian Stamp, (14) "New Evidence of Animal Consciousness" by Donald R. Griffin and Gayle R. Speck, (15) "Animal Pain" by Bernard Rollin, (16) "How Facts Matter" by Gary Varner, (17) "Deep Ethology, Animal Rights, and the Great Ape/Animal Project: Resisting Speciesism and Expanding the Community of Equals" by Marc Bekoff, (18) "Ape Consciousness—Human Consciousness: A Perspective Informed by Language and Culture" by Sue Savage-Rumbaugh, William M. Fields, and Jared Taglialetela, (19) "Cultures in Chimpanzees" by A. Whiten, J. Goodall, W.C. McGrew, T. Nishida, V. Reynolds, Y. Sugiyama, C.E.G. Tutin, R.W. Wrangham, and C. Boesch, (20) "Are Apes Persons? The Case for Primate Intersubjectivity" by Juan Carlos Gómez, (21) "Problems Faced by Wild and Captive Chimpanzees: Finding Solutions" by Jane Goodall, (22) "Culture and Conservation of Non-Humans with Reference to Whales and Dolphins" by Hal Whitehead, Luke Rendell, Richard W. Osborne, and Bernd Wursig, (23) "Into the Brains of Whales" by Mark Peter Simmons, (24) "Whales as Persons" by Paola Cavalieri, (25) "Meat-Eating" by David DeGrazia, (26) "Thinking like Animals" by Temple Grandin, (27) "A Major Change" by Temple Grandin, (28) "Food Prices and Animal Welfare" by Michael C. Appleby, (29) "Animal Agriculture: Myths and Facts" by Animal Agriculture Alliance, (30) "The Least Harm Principle May Require that Humans Consume a Diet Containing Large Herbivores, not a Vegan Diet" by Steven L. Davis, (31) "The Ethical Imperative to Control Pain and Suffering in Farm Animals" by Bernard Rollin, (32) "The Basic Argument for Vegetarianism" by James Rachels, (33) "The Rape of Animals, the Butchering of Women" by Carol J. Adams, (34) "A Paradox of Ethic Vegetarianism: Unfairness to Women and Children" by Kathryn Paxton George, (35) "Judaism" by Norman Solomon, (36) "Enhancing the Divine Image" by Rabbi Stephen Fuchs, (37) "The Bible and Killing for Food" by Andrew Linzey, (38) "Islam" by Martin Forward and Mohamed Alam, (39) "The Case for Animal Rights" by Tom Regan, (40) "The Ethics of Animal Research: What are the Prospects for Agreement?" by David DeGrazia, (41) "Defending Animal Research: An International Perspective" by Baruch A. Brody, (42) "Who—or What—are the Rats (and Mice) in the Laboratory?" by Lynda Birke, (43) "Ethical Themes of National Regulations Governing Animal Experiments: An International Perspective" by F. Barbara Orlans, (44) "Summary of Recommendations" by Jonathan Balcombe, (45) "Human Education: The role of Animal-based Learning" by Andrew J. Petto and Karla D. Russell, (46) "Ecological Ethics: Building a New Tool Kit for Ecologists and Biodiversity Managers" by Ben A. Minteer and James P. Collins, (47) "Ethics and Experimentation: Hard Choices for the Field Ornithologist" by Stephen T. Emlen, (48) "Some Ethical Issues in Biotechnology Involving Animals" by David Morton, (49) "Crossing Species Boundaries" by Jason Scott Robert and Francoise Baylis, (50) "In Defense of the Moral Relevance of Species Boundaries" by Robert Streiffer, (51) "Animal Genetic Manipulation: A Utilitarian Response" by Kevin R. Smith, (52) "The Inevitability of Animal Biotechnology? Ethics and Scientific Attitude" by Jeffrey Burkhardt, (53) "On Telos and Genetic Engineering" by Bernard E. Rollin, (54) "Brave New Birds: The Use of 'Animal Integrity' in Animal Ethics" by Bernice Bovenkerk, Frans W.A. Brom, and Babs J. van den Bergh, (55) "Cloning Advances and Challenge for Conservation" by Oliver A. Ryder, (56) "Creating Fido's Twin: Can Pet Cloning be Ethically Justified?" by Autumn Fiester, (57) "The Philosophical Value of Wildlife" by J. Baird Callicott, (58) "The Ethic of Care and the Problem of

Wild Animals” by Grace Clement, (59) “Game and Wildlife Conservation” by Aldo Leopold, (60) “The Killing Game: An Ecofeminist Critique of Hunting” by Marti Kheel, (61) “Environmental Ethics and Trophy Hunting” by Alastair S. Gunn, (62) “Exotic Species, Naturalisation, and Biological Nativism” by Ned Hettinger, (63) “To Eat the Laughing Animal” by Dale Peterson, (64) “Orcas and Dolphins in Captivity” by Randall L. Eaton, (65) “Zoos and Eyes: Contesting Captivity and Seeking Successor Practices” by Ralph Acampora, (66) “Against Zoos” by Dale Jamieson, (67) “In Defense of Zoos and Aquariums: The Ethical Basis for Keeping Wild Animals in Captivity” by Michael Hutchings, Brandie Smith, and Ruth Allard, (68) “Zoos and the Rights of Animals” by Donald G. Lindburg, (69) “Opportunities Lost: Zoos and the Marsupial that Tried to be a Wolf” by Chris Wemmer, (70) “Affection’s Claim” by Konrad Lorenz, (71) “Dogmatism and Catechisms: Ethics and Companion Animals” by Bernard E. Rollin and Michael D.H. Rollin, (72) “The Pet World” by Paul Shepard, and (73) “Hand-Raising a Rhino in the Wild” by Anna Merz.

Armstrong, Susan. Review of *Reinhabiting Reality: Towards a Recovery of Culture*. By Freya Mathews. Environmental Ethics 28(2006):99-102. (EE)

Armstrong, Susan. Review of *For Love of Matter: A Contemporary Panpsychism*. By Freya Mathews. Environmental Ethics 28(2006):99-102. (EE)

Armstrong-Buck, Susan, "What Process Philosophy Can Contribute to the Land Ethic and Deep Ecology," Trumpeter 8(1991):29-34. An analysis of intrinsic and inherent value, with attention to Callicott, Rolston, Regan, and others, also analysis of the sense of self-identification in deep ecology in Naess, Fox, Fox, and others. Armstrong-Buck claims that process metaphysics can complement these attempts at forming an environmental ethic, although process metaphysics is not without its own difficulties. Armstrong-Buck is professor of philosophy at Humboldt State University, Arcata, CA. (v2,#1)

Armstrong-Buck, Susan, "Whitehead's Metaphysical System as a Foundation for Environmental Ethics," Environmental Ethics 8(1986):241-259. Intuitions about the intrinsic value of nature require a metaphysical basis, and here it is argued that Whitehead's metaphysic provides that basis. Without this metaphysical grounding of value, Leopold's land ethic commits the Naturalistic Fallacy (p. 258). (Katz, Bibl # 1)

Arnason, Thorvardur, "Eigingildi í náttúrunni -- heimspeki á villigötum?" (in Icelandic). Interview by Thorvardur Arnason with Holmes Rolston, III, in Hugur 17(2005), pages 12-26. Published in 2006. Hugur is an annual, the only Icelandic periodical that is solely dedicated to philosophy. Intrinsic values in nature, multi-leveled values in nature, humans in nature, uniqueness of humans, anthropogenic and anthropocentric values in nature, duties to species, ecosystems. Iceland as an especially challenging landscape for environmental ethics, far north, on the mid-Atlantic ridge, a harsh environment, life in extreme environments, unusual aesthetic beauty.

Arnhart, Larry, Natural Right: The Biological Ethics of Human Nature. Albany, NY: State University of New York Press, 1998. 331 pages. How Darwinian biology supports an Aristotelian view of ethics as rooted in human nature. Defending a conception of "Darwinian natural right" based on the claim that the good is desirable, Arnhart argues that there are at least twenty natural desires that are universal to all human societies because they are based in human biology. The satisfaction of these natural desires constitutes a universal standard for judging social practice as either fulfilling or frustrating human nature, although prudence is required in judging what is best for particular circumstances. The familial bonding of parents and children and the conjugal bonding of men and women illustrates social behavior that conforms to Darwinian natural right. Slavery and psychopathy illustrate social behavior that contradict Darwinian natural right. The natural moral sense does not require religious belief, although such belief can sometimes reinforce the dictates of nature. Arnhart is in political science at Northern Illinois University. (v.9,#3)

Arnhart, Larry., "Thomistic Natural Law as Darwinian Natural Right", Social Philosophy and Policy (Winter 2001), Social Philosophy and Policy Center, Bowling Green State University, Bowling Green, Ohio. Reviewed recently in the Wilson Quarterly. (v.12,#2)

Arnold, Craig Anthony, "The Reconstitution of Property: Property as a Web of Interests," The Harvard Environmental Law Review 26(no. 2, 2002):281-364. Theoretical critiques of the bundle of rights metaphor (e.g. its alienating effects, its preoccupation with the margins of property law, its abstraction, and its excessive rights focus). How courts persist in defining property rights according to the nature of the object of those rights. Three different theoretical perspectives that emphasize the importance of the object and person-object relationships in understanding property: environmental theories, personhood theories, and expectations theories. A web of interests is a superior metaphor, because the web of interests represents not only a set of interconnected relationships among persons who share interests (more than rights) in an object, whether tangible or intangible, but also a set of particular relationships persons have with objects that have particular characteristics relevant to property law. Ways in which the web of interests metaphor helps us see certain property issues differently than the bundle of rights metaphor--regulatory takings, ownership of ecologically valuable resources like land, water, and wildlife, and property issues in corporations or intellectual property. Arnold is in law, Chapman University, Orange, CA. (v.13, #3)

Arnold, Craig Anthony (Tony), "The Reconstitution of Property: Property as a Web of Interests," Harvard Environmental Law Review 26(no. 2, 2002):281-364. In an odd and surprising irony, a robust, comprehensive concept of private property is necessary to advance environmental values, and conversely, a decline in the importance and meaning of property hurts environmental values. A person claiming a property interest or property right should be expected to show how he or she is connected to the object of the property interest. Reconceiving every area of property law from a web-of-interest perspective deserves attention. For example, a landowner may not have a reasonable expectation of making an economically productive use of fragile coastal wetlands. Landowners' experiences with implementation of the Endangered Species Act by the U.S. Fish and Wildlife Service have resulted in significant landowner frustration. In the past, the bundle of rights metaphor served to free property law from both antiquated doctrines and a narrow concept of property as absolute control over physical things. In this Article, I have not only criticized the bundle of rights concept of property but also argued that property law is alive but in search of a reconstituting metaphor. Arnold is Professor of Law and Director of the Center for Land Resources, Chapman University School of Law, Orange, CA.

Arnold, Craig Anthony (Tony). "The Structure of Land Use Regulatory System in the United States." *Journal of Land Use and Environmental Law*, Vol. 22, no. 4 (2007): 441-523. This paper systematically analyzes the functions, location and scale, components, processes, values of the land use regulatory system in the United States. Arnold contends that critiques of the system as inherently inefficient, inequitable, or environmentally harmful are misplaced, and instead the system is able to mediate between people and places in a dynamic, functional, and adaptive manner. The system is relatively thin on law but thick on policy, tools, authority, and discretion. The article can be downloaded for free from the Social Science Research Network at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020305>.

Arnold, Craig Anthony (Tony). *Fair and Healthy Land Use: Environmental Justice and Planning*. Chicago: APA Planning Advisory Service, 2007. Arnold offers a systematic evaluation of the relationships between environmental justice and land use planning. After summarizing the rise of the environmental justice movement, Arnold discusses the promise and failure of land use planning to achieve fair and healthy land use and environmental conditions in low-income and minority communities, including empirical evidence of zoning and land use disparities. He then lays out principles and tools of land use planning and regulation to achieve environmentally just communities: environmental justice

planning principles, the relationship between environmental justice and smart growth, regulatory tools (e.g., zoning, discretionary permits, impact fees), community participation principles and methods (emphasizing robust and meaningful deliberative participatory processes), environmental impact assessments, inherent limits on land use planning and regulation (e.g., private property rights, state preemption, and politics), and community infrastructure, housing, redevelopment, and brownfields.

Arnold, Craig Anthony, "Working Out an Environmental Ethic: Anniversary Lessons from Mono Lake," Wyoming Law Review 4(no. 1, 2004):1-55. Does environmental law reflect or encourage an environmental ethic? The Mono Lake (California) conflict, now twenty-five years old, offers an ideal case study of the role of environmental law and litigation in achieving environmental conservation and implementing an environmental ethic. The California Supreme Court's Mono Lake opinion is regarded as one of the ten most important environmental law cases of the twentieth century. It has been cited in over 100 judicial or administrative opinions. Environmental law matters but only as a component of a broader social and natural whole. Anthony is in law, Chapman University School of Law, Orange, CA. (v. 15, # 3)

Arnold, Craig Anthony (Tony). "The Structure of Land Use Regulatory System in the United States." *Journal of Land Use and Environmental Law*, Vol. 22, no. 4 (2007): 441-523. This paper systematically analyzes the functions, location and scale, components, processes, values of the land use regulatory system in the United States. Arnold contends that critiques of the system as inherently inefficient, inequitable, or environmentally harmful are misplaced, and instead the system is able to mediate between people and places in a dynamic, functional, and adaptive manner. The system is relatively thin on law but thick on policy, tools, authority, and discretion. The article can be downloaded for free from the Social Science Research Network at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020305>.

Arnold, Craig Anthony (Tony). *Fair and Healthy Land Use: Environmental Justice and Planning*. Chicago: APA Planning Advisory Service, 2007. Arnold offers a systematic evaluation of the relationships between environmental justice and land use planning. After summarizing the rise of the environmental justice movement, Arnold discusses the promise and failure of land use planning to achieve fair and healthy land use and environmental conditions in low-income and minority communities, including empirical evidence of zoning and land use disparities. He then lays out principles and tools of land use planning and regulation to achieve environmentally just communities: environmental justice planning principles, the relationship between environmental justice and smart growth, regulatory tools (e.g., zoning, discretionary permits, impact fees), community participation principles and methods (emphasizing robust and meaningful deliberative participatory processes), environmental impact assessments, inherent limits on land use planning and regulation (e.g., private property rights, state preemption, and politics), and community infrastructure, housing, redevelopment, and brownfields.

Arnold, D., and Guha, R., Nature, Culture, Imperialism: Essays on the Environmental History of South Asia. Delhi, India: Oxford University Press, 1995. (v.12,#4)

Arnot, C; Fisher, PF; Wadsworth, R; Wellens, J, "Landscape metrics with ecotones: pattern under uncertainty", Landscape Ecology 19 (no.2, 2004): 181-195(15).

Arnold, Pat, "Dead Coyote Walking," Philosophy and Geography 4 (No. 1, 2001): 129-132. Book review of Barbara Kingsolver's "Prodigal Summer", New York: HarperCollins, 2000. (P&G)

Arntzen, Sven, "Natural Beauty, Ethics and Conceptions of Nature", in Ales Erjavec, Lev Kreft and Marija Bergamo (utg.), Proceedings of the XIVth International Congress of Aesthetics Pt. II, Acta philosophica XX (Ljubljana: Filozofski institut ZRC SAZU, 1999), pp. 291-301. (v.12,#3)

Aron, Joan L., and Patz, Jonathan A., eds. Ecosystem Change and Public Health: A Global Perspective.

Baltimore: Johns Hopkins University Press, 2001. (v 14, #3)

Aron, W; Burke, W; Freeman, M, "Scientists versus Whaling: Science, Advocacy, and Errors of Judgment," Bioscience 52(no.12, 2002): 1137-1140.

Aronow, Mary Ellen; Binkley, Clark S; Washburn, Courtland L, "Explaining Timberland Values in the United States", Journal of Forestry 102(no.8, December 2004):14-18(5).

Arp, William, III; and Kenny, Christopher. "Black Environmentalism in the Local Community Context." Environment and Behavior 28, no.3 (1996): 267. (v7, #3)

Arredondo, Edgar., On the Defence of the Human Individual and Non-Human Nature, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Arredondo, Edgar., On the Defence of the Human Individual and Non-Human Nature, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Arrow, Kenneth, et al., "Economic Growth, Carrying Capacity, and the Environment," Science 268 (April 28, 1995): 520-521. Eleven authors, reporting from a Swedish conference; other authors include Robert Costanza, C. S. Holling, and David Pimentel. Economic policy typically ignores environmental concerns, or considers them tangential. But economic liberalization and other policies that promote gross national product are not substitutes for environmental policy. It is typically thought that in developing nations, environmental quality first degenerates and, with further development, later improves, a U-shaped curve. This is true for selected pollutants but not true for environmental quality as a whole. Economic policy needs to recognize carrying capacity and ecosystem resilience, though these are complex and dynamic, not simple and fixed relations. Economic liberation may require more, not less regulation, because the signals of ecosystem stress are frequently received after irreversible changes have already occurred, or are misinterpreted, or relocated to other nations, and there is little incentive under present policy for a more ecologically sustainable economics. Arrow is in economics at Stanford University; Costanza in ecological economics at the University of Maryland; Holling in zoology at the University of Florida; Pimentel in entomology, ecology, and systematics at Cornell University. (v6,#2)

Arthur, John, ed., Morality and Moral Controversies, 3rd ed. Englewood Cliffs, NJ: Prentice-Hall, 1993. 480 pages. 4th ed., 1996. An introductory text with a section on environment: "The Value of Life: People, Animals, and the Environment." There are three readings: William F. Baxter, "People or Penguins: The Case for Optimal Pollution"; Peter Singer, "All Animals Are Equal"; and J. Baird Callicott: "Animal Liberation: A Triangular Affair." The 4th edition adds Bonnie Steinbock, "Speciesism and the Ideal of Equality." Arthur is at the State University of New York, Binghamton. (v3,#4)

Arthur, Wallace, The Green Machine: Ecology and the Balance of Nature. Oxford: Basil Blackwell, 1990. All life is part of the Green Machine, that subtle and complex balance of nature which is the ecosystem which is now threatened by so many human activities. An introduction to the science of ecology, a bottom-up approach building to a holistic view of ecosystems. The evolution of ecosystems. Ecosystems in the human-nature interface. Arthur is lecturer in ecology at Sunderland Polytechnic, U.K.

Arts, Bas, Rudig, Wolfgang. "Negotiating the `Berlin Mandate': Reflecting on the First `Conference of the Parties' to the UN Framework Convention on Climate Change," Environmental Politics 4(no.3, Fall 1995):481- . (v6,#4)

Asato, Cathy, "Beneath the Surface," Blue Planet 2 (no. 2, Fall 2002):30-33. Thirty years after the Clean Water Act mandated healthy water for America, American oceans are still in peril. This whole issue of Blue Planet is a thirty-year retrospective on progress and the lack of it in conserving oceans. (v.13,#4)

Asbjornsen, H; Brudvig, LA; Mabry, CM; Evans, CW; Karnitz, HM, "Defining Reference Information for Restoring Ecologically Rare Tallgrass Oak Savannas in the Midwestern United States," Journal of Forestry 103 (no. 7, Oct/Nov 2005): 345-350.

Ascher, William, "Understanding Why Governments in Developing Countries Waste Natural Resources," Environment 42 (No. 2, 2000): 8- . Although ignorance and corruption play some role in the waste of natural resources, the principle cause often lies elsewhere. (v.11,#2)

Ashby, Eric. Reconciling Man with the Environment. Reviewed in Environmental Ethics 3(1981):187-88.

Asheim, GB; Buchholz, W; Tungodden, B, "Justifying Sustainability," Journal of Environmental Economics and Management 41(no.3, 2001):252-268. (v.12,#4)

Ashenafi, Z. and Leader-Williams, N., "Indigenous Common Property Resource Management in the Central Highlands of Ethiopia," Human Ecology 33(no. 4, August 2005): 539-563.

Ashford, Nicholas, Caldart, Charles. Technology, Law, and the Working Environment, rev. ed. Covelo, CA: Island Press, 1996. 650 pp. \$39.95 paper. Discussion of the legal issues relevant to technology-related workplace problems. There are detailed chapters that examine occupational health and safety, toxic substance regulations, technology bargaining, and the law as it applies to the work environment.

Ashford, Nicholas A., and Charles C. Caldart. *Environmental Law, Policy, and Economics: Reclaiming the Environmental Agenda*. Cambridge, MA: The MIT Press, 2008. Ashford and Caldart survey the past several decades of environmental law, policy, and economics, focusing much of their discussion on pollution control and prevention. They argue that clear and stringent legal requirements, along with flexible means for meeting them and meaningful stakeholder participation, are necessary for creating technological transformations and environmental improvements.

Ashley, MV; Willson, MF; Pergams, OR; Odowd, DJ; Gende, SM; Brown, JS; "Evolutionarily enlightened management", Biological Conservation 111(no.2, 2003):115-123.

Ashley, Rebecca; Russell, Diane; Swallow, Brent, "The Policy Terrain in Protected Area Landscapes: Challenges for Agroforestry in Integrated Landscape Conservation," Biodiversity and Conservation 15 (no.2, February 2006): 663-689 (27).

Ashlin, Alison and Richard J. Ladle, "Environmental Science Adrift in the Blogosphere," Science 312 (14 April 2006): 201. There are now more than 11.7 million weblogs, and the number is doubling every five months. There are 400,000 featuring discussions on environmental and conservation-related issues. Some are highly credible, many are not; weblogs are here to stay. Generally the public rates them as more reliable than they are. Consider extinction rates. There is some scientific consensus that the rate is in the range of 74-150 species going extinct every day. A survey of 20 blogs produced a range of one to several thousand per day, with nearly half the sites claiming over 200 per day. The authors argue that environmental scientists need to become more effective and credible bloggers. Ashlin and Ladle are at the Oxford University Centre for the Environment.

Ashton, Paul, Review of: Alison Stone, Petrified Intelligence: Nature in Hegel's Philosophy, Environmental Values 15(2006):121-124

Asimov, Isaac and Pohl Frederik, Our Angry Earth. New York: Tom Doherty, 1991. 109 pages.

Asmar, BN, "The Science and Politics of the Dead Sea: Red Sea Canal or Pipeline," Journal of Environment and Development 12(no.3, 2003):325-339. (v.14, #4)

Asner, Gregory P, et al., "Selective Logging in the Brazilian Amazon," Science 310(21 October 2005):480-482. Remote sensing by satellite detects lands cleared for agriculture but forests selectively logged have mostly been invisible to satellites. These authors developed a large-scale, high-resolution remote sensing analysis, to discover that "selective logging doubles previous estimates of the total amount of forest degraded by human activities, a result with potentially far-reaching implications for the ecology of the Amazon forest and the sustainability of the human enterprise in the region." A considerable amount of this logging is on supposed forest reserves. Asner is in global ecology, Carnegie Institution of Washington, Stanford, CA.

Asquith, Nigel M., "Misdirections in Conservation Biology," Conservation Biology 15(no.2, 2001): 345-. (v.12,#3)

Asquith, Pamela J., and Kalland, Arne, eds., Japanese Images of Nature: Cultural Perspectives. Richmond, Surrey, UK: Curzon Press, 1997. Sample contributions;:

--Hendry, Joy, "Nature Tamed: Gardens as a Microcosm of Japan's View of the World"

--Knight, John, "Soil as Teacher: Natural Farming in a Mountain Village," and many more. (v.13,#4)

Association for the Study of Literature and the Environment, Bibliography, 1990-1993. Nearly 700 books, articles, and dissertations on fiction, poetry, and non-fiction literature of the environment, criticism, environmental politics, history, philosophy, ethics, rhetoric, and theology. Cost \$6.50, checks payable to ASLE, to Allison B. Wallace, ASLE Treasurer, HC78, Box 200, Unity College of Maine, Unity, ME 04988, USA. (v6,#2)

Association for the Study of Literature and the Environment, Handbook on Graduate Study in Literature and Environment. Cost \$5.00, checks payable to ASLE, to Allison B. Wallace, ASLE Treasurer, HC78, Box 200, Unity College of Maine, Unity, ME 04988, USA. (v6,#2)

Aswani, Shankar, "Common Property Models of Sea Tenure: A Case Study from the Roviana and Vonavona Lagoons, New Georgia, Solomon Islands," Human Ecology 27(no. 3, Sept 01 1999):417-. (v10,#4)

Athanasiou, Tom, Divided Planet: The Ecology of Rich and Poor. New York: Little, Brown and Co., 1996. (v6,#4)

Athanasiou, Tom, Divided Planet: The Ecology of Rich and Poor. Athens, GA: University of Georgia Press, 1998. "Divided Planet has a simple premise--environmentalism is only now reaching its political maturity. Past enthusiasms offer little solace, and before the challenges of Asia and Africa, of the oceans and the air, past victories seem only the slightest prelude. Faith in solar democracy, easy reform, deep ecology and simple utopias of all kinds has faded year by year. The greens need enthusiasm, but they need all the powers of adulthood besides, and they know it" (p. 3). Athanasiou is active in environmental and technology politics, an active writer, who also runs an electronic publishing group at Sun Microsystems. (v.11,#3)

Atkin, Ross. "Golf Course With a Conscience." Christian Science Monitor 89 (16 July 1997): 11. (v8,#3)

Atkinson, G., R. Dubourg, K. Hamilton, M. Munasinghe, D. Pearce, and C. Young. Measuring Sustainable Development: Macroeconomics and the Environment. Review by Amitrajeet A. Batabyal, Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Atkinson, Giles, and Hamilton, Kirk. "Accounting for Progress: Indicators for Sustainable Development." Environment 38, no.7 (1996): 16. Green accounting would greatly benefit from linking physical and economic data in the national income accounts and expressing environmental changes in monetary terms. (v7, #3)

Atkinson, Giles. Review of E. Lutz, ed. Toward Improved Accounting for the Environment: Washington, D.C.: World Bank, 1993). (EV)

Atkinson, Richard C. et al (13 others)., "Public Sector Collaboration for Agricultural IP Management," Science 301(11 July 2003):174-175. An appeal by the presidents of universities and directors of public-sector research institutes concerned that the private and commercial patenting of intellectual property rights on agricultural plants is impeding research, particularly that which affects subsistence crops in the developing world. In many cases discoveries and technologies that were originally generated with public funding are no longer accessible as public goods. "Golden rice," for example has more than forty patents associated with it, which constrains further research on rice. These officials are proposing a Public-Sector Intellectual Property Resource for Agriculture to help correct these problems. (v 14, #3)

Atkinson, Robert B., James E. Perry, and John Cairns, Jr., "Vegetation Communities of 20-year old Created Depressional Wetlands," Wetlands Ecology and Management 13 (no. 4, 2005):469-478. Most species do not change, but there is some tendency for transition from annuals to perennial grasses. None of the wetlands tended to become shrub-scrub or forested wetlands. Atkinson is at VPI, Blacksburg, VA.

AtKisson, Alan, "Thou Shalt Care for the Earth: Evangelical Christians and Catholics are Beginning to See the Green Light," Utne Reader 68(1995):15-16. (v8,#3)

Atran Scott, and Douglas Medin. *The Native Mind and the Cultural Construction of Nature*. Cambridge, MA: The MIT Press, 2008. Growing concern with protecting the environment is accompanied by diminishing human contact with nature, with adverse effects on conservation. Atran and Medin examine the cognitive consequences of this loss of knowledge, the relationship between how people think about nature and how they act upon it, and how thinking and acting are affected by cultural differences. They argue that despite a base of universal processes, cultural differences in how nature is understood are associated with significant differences in environmental decision-making and intergroup conflict. There is extensive discussion of two case studies: (1) agro-forestry among Maya Indians and Spanish speakers in Mexico and Guatemala, and (2) resource conflict between American Indians and Euro-American fishers in Wisconsin.

Attfield, Robin and Katharine Dell, eds., Values, Conflict and the Environment, published by the Ian Ramsey Centre, Oxford, and the Centre for Applied Ethics, Cardiff. 110 pages. 1989. This report of the Environmental Ethics Working Party, Ian Ramsey Center, St. Cross College, Oxford is a timely and stimulating contribution to current discussions about the future of the environment and human interaction with it. In the main report (Part One) a method of comprehensive weighting is introduced, defended, and then applied to public procedures and social practice. In Part Two, there is a criticism of comprehensive weighting and a response. Part Three contains four essays that depict value systems that form the broader sources of values in environmental issues: the Judeo-Christian tradition, and the traditions of secular humanism, Marxism, and environmentalism. First published by Westminster College, Oxford in 1989, and re-issued by Ashgate Publishing Co., in 1996. (v1,#4)

Attfield, Robin, "Ethics and the Environment: A Global Perspective." In Brenda Almond, ed., Introducing Applied Ethics, pp. 331-42. Oxford, UK: Blackwell, 1995. (v7,#2)

Attfield, Robin and Wilkins, Barry, "Sustainability". Environmental Values 3(1994):155-158. This paper supplies a critique of the view that a practice which ought not to be followed is ipso facto not sustainable, a view recently defended by Nigel Dower. It is argued that there are ethical criteria independent of the criterion of sustainability. The concept of sustainability is thus retrieved for the distinctive role and the important service in which environmental and social theorist (paradoxically including Dower) have hitherto employed it, not least when debating the nature, merits and demerits of sustainable of development. KEYWORDS:Sustainability, arguments, development, beneficiality, justice. Attfield and Wilkins are in the philosophy section at the University of Wales College of Cardiff, U.K. (EV)

Attfield, Robin, "Sylvan, Fox and Deep Ecology: A View from the Continental Shelf." Environmental Values Vol.2 No.1(1993):21-32. ABSTRACT: Both Richard Sylvan's trenchant critique of Deep Ecology and Warwick Fox's illuminating reinterpretation and defence are presented and appraised. Besides throwing light on the nature and the prospects of the defence of Deep Ecology and of its diverse axiological, epistemological and metaphysical strands, the appraisal discloses the range of normative positions open to those who reject anthropocentrism, of which Deep Ecology is no more than one (and, if Fox's account of its nature is right, may not be one at all). A position intermediate between Deep Ecology and anthropocentrism is advocated, which has been called by Wayne Sumner "middle-depth environmentalism--a kind of continental shelf between the shallow and deep extremes." KEYWORDS: Deep Ecology, impartiality, value-theory, identification, self-realization, biocentrism. School of English Studies, Journalism and Philosophy University of Wales College of Cardiff, PO Box 94, Cardiff CF1 3XB, UK.

Attfield, Robin, "Unto the Third and Fourth Generations," Second Order: An African Journal of Philosophy, VIII.1 and 2 (1979), 55-70.

Attfield, Robin, "Biocentrism, Moral Standing and Moral Significance." Philosophica 39 (1987): 47-58. A defence of the moral standing of all living entities, based on the analogical argument that all living entities have the capacity to realize a good of their own; a rejection of Taylor's biocentric egalitarianism. (Katz, Bibl # 2)

Attfield, Robin and Barry Wilkins, eds., International Justice and the Third World: Essays in the Philosophy of Development. London: Routledge, 1992. This anthology contests the view that there is no such thing as justice between societies of unequal power, and that there is no obligation to assist poor people in distant countries. Third World indebtedness is profoundly exploitative, and Third World debts should be unconditionally cancelled. This collection includes Robin Attfield, "Development and Environmentalism"; Geoff Hunt, "Is There a Conflict between Environmental Protection and the Development of the Third World?"; Nigel Dower, "Is There a Right to Sustainable Development?"; Barry Wilkins, "Debt and Underdevelopment: The Case for Cancelling Third World Debts." Other contributors are Kai Nelsen and Onora O'Neill. Both editors are at the University College of Wales, Cardiff. (v3,#3)

Attfield, Robin, "Biocentric Consequentialism, Pluralism and 'The Minimax Implication': A Reply to Alan Carter," Utilitas 15 (no. 1, March 2003): Alan Carter's recent review in Mind of my Ethics of the Global Environment combines praise of biocentric consequentialism (as presented there and in Value, Obligation and Meta-Ethics) with criticisms that it could advocate both minimal satisfaction of human needs and the extinction of 'inessential species' for the sake of generating extra people. Carter also maintains that as a monistic theory it is predictably inadequate to cover the full range of ethical issues, since only a pluralistic theory has this capacity. In this reply, I explain how the counterintuitive implications of biocentric consequentialism suggested by Carter (for population, needs-satisfaction and biodiversity preservation) are not implications, and argue that since pluralistic theories (in Carter's sense) either generate contradictions or collapse into monistic theories, the superiority of pluralistic theories is

far from predictable. Thus Carter's criticisms fail to undermine biocentric consequentialism as a normative theory applicable to the generality of ethical issues." Attfield is in philosophy at University of Wales, Cardiff.

Attfield, Robin, The Ethics of the Global Environment. Edinburgh: Edinburgh University Press, 1999.

1. Nature and the Global Environment
2. Global Ethics and Environmental Ethics
3. Trustees of the Planet
4. The Threat of Extinction
5. Global Resources and Climate Change
6. Sustainable Development
7. Population and Poverty
8. Biodiversity and Preservation
9. Environmental Justice and World Order
10. Sustainability: Perspectives and Principles
11. World Citizenship in a Precarious World

Attfield is in philosophy, University of Wales, Cardiff, and known in environmental ethics since the publication of his The Ethics of Environmental Concern, 1983 (2nd ed. 1993). (v.10,#1)

Attfield, Robin and Andrew Belsey, eds., Philosophy and the Natural Environment, Royal Institute of Philosophy Supplement: 36 (Cambridge: Cambridge University Press, 1994). 250 pages. Paper. £ 13.95. Contributors: Holmes Rolston, III (Colorado State University), "Value in Nature and the Nature of Value"; Robert Elliot (University of New England, Armidale, Australia), "Ecology and the Ethics of Environmental Restoration"; Robin Attfield (University of Wales, Cardiff), "Rehabilitating Nature and Making Nature Habitable"; Frederick Ferré (University of Georgia), "Personalistic Organicism: Paradox or Paradigm?"; Roger Crisp (St. Anne's College, Oxford), "Values, Reasons and the Environment"; Keekok Lee (University of Manchester), "Awe and Humility: Intrinsic Value in Nature. Beyond an Earthbound Environmental Ethics"; Mary Midgley (formerly University of Newcastle upon Tyne), "The End of Anthropocentrism?"; Stephen R. L. Clark (University of Liverpool), "Global Religion"; Tim Hayward (University of Glamorgan), "Kant and the Moral Considerability of Non-Rational Beings"; Nigel Dower (University of Aberdeen), "The Idea of Environment"; Andrew Belsey (University of Wales, Cardiff), "Chaos and Order, Environment and Anarchy"; Alan Holland (University of Lancaster), "Natural Capital"; Peter List (Oregon State University), "Some Philosophical Assessments of Environmental Disobedience"; Dale Jamieson (University of Colorado), "Global Environmental Justice"; and Ruth McNally (University of West England, Bristol) and Peter Wheale (European Business School), "Environmental and Medical Bioethics in Late Modernity: Anthony Giddens, Genetic Engineering and the Post-Modern State." These are papers from the Royal Institute of Philosophy Conference, "Philosophy and the Natural Environment," held at the University of Wales in Cardiff in July 1993. (v5,#3)

Attfield, Robin, "Development: Some Areas of Consensus," Journal of Social Philosophy, XVII, Summer, 1986, 36-44.

Attfield, Robin, "Discounting, Jamieson's Trilemma and Representing the Future." Pages 85-96 in Hayward, Tim, and O'Neill, John, eds., Justice, Property and the Environment: Social and Legal Perspectives. Aldershot (UK): Ashgate, 1997.

Attfield, Robin, "Christian Attitudes to Nature." Journal of the History of Ideas 44 (1983): 369-386. A criticism of three critics of Christian attitudes to Nature: Lynn White, Jr., John Passmore, and William Coleman. Attfield argues that our current ecological problems should not be laid at the feet of Christianity. See also Chapters 2-5 of his book, The Ethics of Environmental Concern (Section II). (Katz,

Bibl # 1)

Attfield, Robin, Environmental Philosophy: Principles and Prospects. Reviewed by Clare Palmer. Environmental Values 6(1997):237-239. (EV)

Attfield, Robin, "Deep Ecology and Intrinsic Value: A Reply to Andrew Dobson," Cogito 4(Spring 90):61-66. A discussion of whether intrinsic value is relevant to the Green Movement politically, replying to Andrew Dobson, "Deep Ecology," Cogito, 3/1 (1989):41-46. Dobson claims, "There may be no doubt that Deep Ecology is indeed the Green Movement's philosophical basis," but Attfield replies that various philosophical positions can support the Green Movement. A theory of intrinsic value in some nonhuman living things, both those with and without subjective experience, is intelligible and important in supplying a philosophical basis for the Green Movement. Attfield is at the University of Wales, College of Cardiff. (v1,#3)

Attfield, Robin, Environmental Philosophy: Principles and Prospects. Aldershot, Hampshire, UK: Avebury Series in Philosophy, 1994. 256 pages. Hardback. £ 35.00. Sixteen essays. See Newsletter 4, 3. Representative essays: "Christianity and the Ecological Crisis," "Attitudes to Wildlife in the History of Ideas," "Has the History of Philosophy Ruined the Environment?," "Methods of Ecological Ethics," "Sylvan, Fox and Deep Ecology: A View from the Continental Shelf," "Biocentrism, Moral Standing and Moral Significance," "Preservation, Art and Natural Beauty," and "Development and Environmentalism." Attfield is professor of philosophy at the University of Wales, College of Cardiff. (v4,#4) (v4,#3)
Attfield, Robin, "Environmental Ethics and Intergenerational Equity," Inquiry 41(no. 2, 1998):207-222).

Attfield, Robin, "Methods of Ecological Ethics." Metaphilosophy 14, nos. 3 & 4 (July/October 1983): 195-208. Attfield criticizes the arguments of John Rodman and J. Baird Callicott for justifying value-ascriptions to nonhuman natural entities. Rodman's criticism of moral extensionism is not specific enough, and Callicott's holism is incoherent unless based on the value of individuals. An important paper for all holistic environmental philosophers to consider. (Katz, Bibl # 1)

Attfield, Robin, "Attitudes to Wildlife in the History of Ideas," special issue: The Moral Sense of Nature, Environmental History Review, vol. 15, no. 2, Summer 1991. (v2,#3)

Attfield, Robin, "Preferences, Health, Interests and Value," EJAP, The Electronic Journal of Analytic Philosophy, Issue on Justifying Value in Nature, 3 (Spring 1995). ISSN: 1071- 5800. Unlike artefacts, living creatures have a good of their own and are morally considerable. The capacity for preferences is sufficient but not necessary for having interests and moral considerability. The capacity for health is also sufficient. This also has the important implication that there is more to human good than mental states and their objects. To subscribe to EJAP (at no cost): Send a message to: <listserv@iubvm.ucsf.edu> with "subscribe ejap [Firstname] [Lastname]" in the body. Subscribers receive instructions for retrieving EJAP files from the listserver. Anonymous FTP: phil.indiana.edu/ejap/ Gopher: phil.indiana.edu World Wide Web: http://www.phil.indiana.edu/ejap/ EJAP is produced at the Department of Philosophy, Indiana University: ejap@phil.indiana.edu. (v6,#4)

Attfield, Robin, "The Precautionary Principle and Moral Values." Pages 152-164 in O'Riordan, Tim, and Cameron, James, eds., Interpreting the Precautionary Principle. London: Cameron and May, 1994.

Attfield, Robin, The Ethics of Environmental Concern. New York: Columbia University Press, 1983. Pp. xi, 220. Second edition: Athens, GA: University of Georgia Press, 1993. Hardback and paper. First edition: This is a major work of scholarship and argument that attempts, perhaps, to cover too much ground. Attfield has patterned his book after Passmore's Man's Responsibility for Nature (1974), the first important philosophical work in environmental ethics. Like Passmore, Attfield first canvasses the

religious and philosophical traditions of Western culture to show that "Stewardship" of nature does not imply "Domination"; thus, no new ethic of environmental concern is needed. This journey into the history of ideas is then followed by an argument designed to show that one old ethical theory, classical utilitarianism, is more than adequate to justify moral treatment of the environment. But Attfield's utilitarianism is nonanthropocentric: the intrinsic value to be maximized is not happiness or rational experience but the satisfaction of interests. Whatever has interests is valuable, and for Attfield, all living individuals have interests.

He thus arrives at a position that is "not as deep as 'deep ecology'" and yet deeper than the "shallow" kind of human-interest environmentalism. But the sticking point for any classical or total-view utilitarianism is the weighting of the values to be maximized. Attfield adopts Donald VanDeVeer's "Two Factor Egalitarianism" ["Interspecific Justice," *Inquiry* 22 (1979):55-79], the balancing of basic, serious, and peripheral interests in beings that lack or have self-consciousness. This view needs a very precise casuistry if it is to be at all successful, but I think it will always lead to a hopeless muddle: we are back with Mill's contrast of the dissatisfied Socrates and the satisfied pig. Is the gourmet's interest in milk-fed veal a basic interest or a peripheral one? Attfield is ultimately unable to overcome an anthropocentric bias, because of his rejection of environmental holism. Chapters on obligations to the future and the existence of possible people also reveal the unintelligibility of utilitarian thinking. Contains an extensive and valuable bibliography. (Katz, Bibl # 1) Attfield, Robin. The Ethics of Environmental Concern. Reviewed in Environmental Ethics 8(1986):77-82.

The second edition is updated with a new introduction and a detailed review of recent literature. (v3,#1)

Attfield, Robin, Value, Obligation, and Meta-Ethics. Amsterdam/Atlanta: Editions Rodopi B.V., 1995. 319 pages. \$ 31.00 paper. Part I, on Value, defends a biocentric theory of moral standing and the coherence and objectivity of belief in intrinsic value, despite recent objections. Chapter 3 is "What is Intrinsic Value?"; Chapter 4 begins with "The Intrinsic Value of Flourishing"; Chapter 6 is "Priorities Among Values." Intrinsic value is located in the flourishing of living creatures; specifically, a neo-Aristotelian, species-relative account is developed of wellbeing or flourishing, in terms of the essential capacities of species. There follows a theory of priorities, or of relative intrinsic value, in which the satisfaction of basic needs takes priority over other needs and wants, and the interests of complex and sophisticated creatures over those of others, where they are at stake. Parts two and three continue with theories of rightness and obligation and meta-ethics, defending a naturalist meta-ethic. This analysis continues Attfield's earlier work, A Theory of Value and Obligation (1987). Attfield teaches philosophy at the University of Cardiff, Wales. (v7,#1)

Attfield, Robin, Environmental Ethics: An Overview for the Twenty-First Century. Cambridge: Polity Press (Blackwell), 2003. Includes: Local and global environmental problems; theories of value; environmental ethics and its neighbors; human stewardship of nature; holism, anthropocentrism and biocentrism compared; biocentric consequentialism (Attfield's preference); critiques of environmental ethics. Can environmental ethics make a difference? Taking the future seriously. Do human interests and environmental responsibilities converge? Sustainable development; population, and precaution; the global community and global citizenship. A most inclusive, global, cosmopolitan, universal ethic. An unexcelled survey and synthesis of the enormous range of challenging issues, and of the literature of their debate. Attfield is in philosophy, University of Wales, Cardiff. (v 14, #3)

Attfield, Robin, "Saving Nature, Feeding People and Ethics," Environmental Values 7(1998): 291-304. Holmes Rolston's case for holding that it is sometimes right to let people starve in order to save nature is argued to be inconclusive at best; some alternative responses to population growth are also presented. The very concept of development implies that authentic development, being socially and ecologically sustainable, will seldom conflict with saving nature (sections 1 and 2). While Rolston's argument about excessive capture of net primary product is fallacious, his view should be endorsed about the wrongness

of 'development' in areas where sustainable development is impossible, but not unqualifiedly endorsed about those areas where it is feasible (section 3). Important as policies promoting sustainable levels of population are, representing population growth as a cancer is misguided, and could engender indifference to suffering (sections 4 and 5). The neo-Malthusian paradigm (which makes population growth the cause of both poverty and environmental degradation) appears to conflict with a considerable body of empirical evidence; the kind of policies needed in Third World countries are ones which enlist people's energies for producing food and preserving nature alike (section 6). KEYWORDS: nature, development, value, ethics, population. Robin Attfield is at University of Wales Cardiff, UK. (EV)

Attfield, Robin, "Unprojected Value, Unfathomed Caves and Unspent Nature: Reply to an Editorial," Environmental Values 14(2005): 513-518. This article replies to Alan Holland's challenge to reconcile belief in non-anthropogenic intrinsic value with the poetry of John Clare and its projection onto nature of human feelings, and thus with projective humanism. However, in literature and broadcasts, feelings are found projected upon buildings and belongings as well as upon natural creatures. This and the fact that many living creatures (such as the Northamptonshire species not remarked by Clare) never become objects of human projections but still remain valuable suggests that the basis of natural value lies elsewhere, at least in part. Such themes, together with that of nature's independent value, are variously illustrated from poems of Gray, Cowper and Marvell, and from expressions of nature's otherness in the Christian verse of Hopkins (who also helps answer Holland's further question concerning 'what we have lost'), and in the pantheistic (or pagan) prose of Grahame's Wind in the Willows. In none of these writers does the value of nature depend on the projection of a humanistic sensitivity, but in different ways on the nature (diversely conceptualised) of natural creatures themselves. Attfield is in philosophy, University of Wales, Cardiff. (EV)

Attfield, Robin. "In Defense of Environmental Ethics." Environmental Ethics 27 (2005):335-336.

Attfield, Robin. "In Defense of The Ethics of Environmental Concern." 7(1985):377-78. (EE)

Attfield, Robin. Review of Progress and Privilege. By William Tucker. Environmental Ethics 7(1985):181-83.

Attfield, Robin. "Has the History of Philosophy Ruined the Environment?" Environmental Ethics 13(1991):127-37. I review and appraise Eugene C. Hargrove's account of the adverse impacts of Western philosophy on attitudes to the environment. Although significant qualifications have to be entered, for there are grounds to hold that philosophical traditions which have encouraged taking nature seriously are not always given their due by Hargrove, and that environmental thought can draw upon deeper roots than he allows, his verdict that the history of philosophy has discouraged preservationist attitudes is substantially correct. Environmental philosophy thus has a significant (if not quite an unrivalled) role to play in the reconstruction of many of the traditional branches of philosophy, as well as in the protection of the natural world. Attfield is at the Philosophy Section, University of Wales College of Cardiff, Cardiff, Wales, UK. (EE)

Attfield, Robin. Value, Obligation, and Meta-Ethics. Atlanta & Amsterdam, Editions Rodopi B. V., 1995. Defends a biocentric theory of moral standing and the coherence and objectivity of belief in intrinsic value, despite recent objections. Intrinsic value is located in the flourishing of living creatures. A theory of priorities, or of relative intrinsic value, in which the satisfaction of basic needs takes priority over other needs and wants, and the interests of complex and sophisticated creatures over those of others. A practice-consequentialist theory of rightness and obligation. Meta-ethical theories are sifted and moral relativism rejected, and a cognitivist and naturalist meta-ethic defended. Attfield teaches philosophy at the University of Wales, Cardiff. (v6,#3)

Attfield, Robin. Review of Environmental Ethics. By Holmes Rolston, III. Environmental Ethics 11(1989):363-68.

Attfield, Robin. "Postmodernism, Value and Objectivity," Environmental Values 10(2001):145-162. The first half of this paper replies to three postmodernist challenges to belief in objective intrinsic value. One lies in the claim that the language of objective value presupposes a flawed, dualistic distinction between subjects and objects. The second lies in the claim that there are no objective values which do not arise within and/or depend upon particular cultures or valuational frameworks. The third comprises the suggestion that belief in objective values embodies the representational theory of perception. In the second half, a defence is offered of belief in objective intrinsic value. Objectivists hold that axiological properties supply interpersonal reasons for action for any relevant moral agent. The intrinsically valuable is understood as what there is reason to desire, cherish or foster in virtue of the nature of the state or object concerned. The concept of intrinsic value is shown to be instantiated, and defended against a range of criticisms. Keywords: Intrinsic value, extrinsic value, postmodernism, objectivity, subjectivism, dualism, representationalism, axiology. Robin Attfield is at the School of English, Communication and Philosophy, University of Wales Cardiff. UK. (EV)

Attfield, Robin. "Beyond the Earth Charter: Taking Possible People Seriously." Environmental Ethics 29(2007):359-367. The Earth Charter is largely a wholesome embodiment of a commendable and globally applicable ecological ethic. But it fails to treat responsibilities toward future generations with sufficient clarity, presenting these generations as comparable to present and past generations, whose members are identifiable, when in fact most future people are of unknown identity, and when the very existence of most of them depends on current actions. It can be claimed that we still have obligations with regard to whoever there will be whom we could affect, and in addition, all the possible people of the future whom we could affect have moral standing, as well as corresponding members of other species. These obligations clash with the person-affecting principle, which considerably restricts such obligations and the scope of moral standing at the same time. Finally, there are implications for sustainability, at least with regard to sustainable levels of population and with regard to global warming, and thus a need for further clarification of the content of responsibilities toward future generations. (EE)

Aubin, D., "Review of: Terry L. Anderson and Peter J. Hill (Eds.), The Technology of Property Rights," Environmental Politics 12(no. 2, 2003): 165.

Aubry, K. B. and Lewis, J. C., "Extirpation and Reintroduction of Fishers (*Martes Pennanti*) in Oregon: Implications for their Conservation in the Pacific States," Biological Conservation 114(no. 1, 2003): 79-90.

Audi, Robert, ed., The Cambridge Dictionary of Philosophy. New York: Cambridge University Press, 1995. 4,000 entries, said to be the most comprehensive and authoritative such dictionary, and yet also on "pure" philosophy, and therefore no entries on environmental philosophy, animal welfare, ecofeminism, and other impure types of philosophy. Hence also perhaps not as comprehensive and authoritative as claimed, not to say provincial or even narrow in its purity. Biographical entries are restricted to dead philosophers. (v6,#4)

Audley, J, "Lemons into Lemonade: Environment's New Role In U.S. Trade Policy", Environment 45(no.2, 2003):29-35.

Auer, Matthew R., Rafael Reuveny, and Lisa Adler, "Environmental Liability and Foreign Direct Investment in Central and Eastern Europe," The Journal of Environment And Development 10(no.1, 2001 Mar 01): 5-. (v.12,#3)

Auer, M., and C. Farley, "Nontimber forest Values: the "Understory" of the International Tropical Timber organization," Journal of forestry 101(no. 5, 2003): 42-45. (v 14, #3)

Augros, Robert M. "Is Nature Purposeful?", Perspectives on Science and Christian Faith 48(no.4,1996):216.

Augros, Robert, and George Stanciu. The New Biology: Discovering the Wisdom in Nature. Reviewed in Environmental Ethics 11(1989):93-94.

AUMaddox (AU Maddox), Gregory. "Introduction: Africa and Environmental History." Environmental History 4(No. 2, April 1999):162- . (v10,#4)

Austin, April. "Seeds for the Heart in the Inner City." The Christian Science Monitor, vol. 89, 27 Feb. 1997, p. B3.

Austin, April. "Family-Friendly Gardening." The Christian Science Monitor, vol. 89, 27 Feb. 1997, pp. B1, B2.

Austin, April. "Thinking Garden in Midwinter." The Christian Science Monitor, vol. 89, 27 Feb. 1997, p. B2.

Austin, Richard Cartwright, Reclaiming America: Restoring Nature to Culture. Creekside Press, P. O. Box 331, Abingdon, VA 24210. Phone 703/628-6416. This is the fourth in a series on environmental theology, all by Austin, who is a Presbyterian minister active in environmental conservation in the Appalachian area. Previous titles, Beauty of the Lord: Awakening the Senses; Hope for the Land: Nature in the Bible, and Baptized into Wilderness: A Christian Perspective on John Muir, were published by John Knox Press, now Westminster/John Knox, though all may now be ordered from Creekside Press. (v1,#2)

Austin, Richard Cartwright. Beauty of the Lord. Reviewed in Environmental Ethics 11(1989):277-80.

Austin, Richard Cartwright. "Beauty: A Foundation for Environmental Ethics." Environmental Ethics 7(1985):197-208. Human awareness of natural beauty stimulates the formation of environmental ethics. I build from the insights of Jonathan Edwards, the American Puritan theologian. The experience of beauty creates and sustains relationships. Natural beauty is an aspect of that which holds things together, supporting life and individuation. Beauty joins experience to ethics. We experience beauty intuitively: it is an affecting experience which motivates thought and action. The experience of beauty gives us a stake in the existence of the beautiful. Ecology can explore the relationships of natural beauty scientifically: it may be a science of the beauty of the Earth. The beauty of the world is necessary to its survival. Beauty is manifest in the interplay of interdependence with individuality, yielding diversity. The most beautiful relationships are those which recognize diversity, support individuality, and empathetically span the distinctions between beings. The sense of beauty is not a luxury, but a distinctive human vocation. Austin is an environmental theologian with Holston Presbytery, Dungannon, VA. (EE)

Austin, Richard Cartwright. Review of Of Gods and Pelicans: A Theology of Reverence for Life and Earth, Sky, Gods & Mortals: Developing an Ecological Spirituality. By Jay B. McDaniel. Environmental Ethics 13(1991):361-65.

Austin, Richard Cartwright. Hope for the Land: Nature in the Bible. Environmental Theology, Book 3. Atlanta, GA: John Knox Press, 1988.

Austin, Richard Cartwright. Reclaiming America: Restoring Nature to Culture. Environmental Theology, Book 4. Abingdon, VA: Creekside Press, 1990.

Austin, Susan A. "Tradable Emissions Programs: Implications Under the Takings Clause." Environmental Law 26, no.1 (1996): 323. Tradable emissions programs are an innovative, market-based alternative to the traditional command-and-control method of air pollution regulation. Austin explores whether tradable emissions programs could render the government vulnerable to a Fifth Amendment takings claim should subsequent government actions decrease or destroy the value of tradable emissions permits. (v7, #3)

Australian Wilderness. French's Forest, NSW 2086: National Book Distributors and Publishers, 1995. 160 pages. ISBN 1 86436 051 8. Coffee table book, the Australian wilderness in all its glory. (v7, #3)

Ausubel, Jesse H., "Can Technology Spare the Earth?" American Scientist 84(1996):166-178. Evolving efficiencies in our use of resources suggest that technology can restore the environment even as population grows. Ausubel directs the Program for Human Environment at Rockefeller University. (v7,#2)

Auxier, Randall E. Review of Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism. Edited by Bron Raymond Taylor. Environmental Ethics 21(1999):97-100.

Auyero, Javier, and Debora Swistun. "The Social Production of Toxic Uncertainty." *American Sociological Review* Vol. 73, no. 3 (2008): 357-79. Using two and a half years of archival research and ethnographic fieldwork in an Argentine shantytown with high levels of air, ground, and water contamination, Auyero and Swistun examine residents' perceptions of contamination. The authors argue that the residents' confusion about the sources and effects of pollution is the result of the "relational anchoring" of risk perceptions and a "labor of confusion" created by powerful outside actors.

Auyero, Javier, and Debora Swistun. "The Social Production of Toxic Uncertainty." *American Sociological Review* Vol. 73, no. 3 (2008): 357-79. Using two and a half years of archival research and ethnographic fieldwork in an Argentine shantytown with high levels of air, ground, and water contamination, Auyero and Swistun examine residents' perceptions of contamination. The authors argue that the residents' confusion about the sources and effects of pollution is the result of the "relational anchoring" of risk perceptions and a "labor of confusion" created by powerful outside actors.

Avery, Alex, "Organic and Conventional Agriculture Reconsidered," Bioscience 55(no. 10, October 2005): 820. Response to Pimentel et al, "Environmental, Energetic, and Conventional Farming Systems," BioScience 55:573-582, contesting soil erosion differences in the two systems. With further response by Pimentel et al.

Avery, Stephen, "The Misbegotten Child of Deep Ecology," Environmental Values 13(2004):31-50. This paper offers a critical examination of efforts to use Heidegger's thought to illuminate deep ecology. It argues that deep ecology does not entail a non-anthropocentric or ecocentric environmental ethic; rather, it is best understood as offering an ontological critique of the current environmental crisis, from a perspective of deep anthropocentrism. Avery is in philosophy, University of New England, Armidale, NSW, Australia. (EV)

Avise, John C., ed., The Hope, Hype, and reality of Genetic Engineering: Remarkable Stories from Agriculture, Industry, Medicine, and the Environment. New York: Oxford University Press, 2004.

Axelrod, Lawrence J., and Suedfeld, Peter. "Technology, Capitalism, and Christianity: Are They Really

the Three Horsemen of the Eco-Collapse?" Journal of Environmental Psychology, vol. 15, no. 3 (September 1995): 183-95. An examination of the evidence for the frequent accusation that technology, capitalism, and Christianity, the three bases of modern Western Society, are root causes of environmental degradation. Although these three are associated with failures to protect the environment, label them as causal factors contradicts known facts. Axelrod and Suedfeld are in psychology at the University of British Columbia. (v7, #3)

Axelsen, Kaarin L., "Problems of Punitive Damages for Political Protest and Civil Disobedience," Environmental Law 25 no. 2 1(995):495- . Axelsen examines Huffman & Wright Logging Co. v. Wade, a recent Oregon case in which members of Earth First! were assessed punitive damages for trespassing on private property to protest a logging operation. She concludes that the freedom of expression provisions of the U.S. and Oregon Constitutions make punitive damages inappropriate in cases of political protest and civil disobedience. (v6,#2)

Axline, Michael, "Federal Lands and Invisible Hands," Ecology Law Quarterly 25(No.4, 1999):611-. (v.10,#2)

Axline, Michael. "Forest Health and the Politics of Expediency." Environmental Law 26, no.2 (1996): 613. In the summer of 1995, Congress attached a now-notorious salvage logging rider to an emergency appropriations bill. Axline criticizes the salvage logging rider as poor policy and a violation of proper Congressional procedure. Recognizing the dual needs for a sound Northwest economy and healthy national forests, Axline concludes that the salvage logging rider fails to achieve either objective and may instead frustrate both of them. (v7, #3)

Ayenu, Edward, et al. (a couple dozen others!), "International Ecosystem Assessment," Science 286(22 October 1999):685-686. Ecosystem management on global scales. The authors argue that an international system of ecosystem modelling and monitoring, integrating the many differing factors-- climate change, biodiversity loss, food supply and demand, forest loss, water availability and quality--is urgently needed. The magnitude of human impacts on ecosystems is escalating. One third of global land cover will be transformed in the next hundred years. In twenty years world demand for rice, wheat, and maize will rise by 40%. Demands for water, for wood will double over the next half century. At the turn of the millennium, we need to undertake the first global assessment of the condition and future prospects of global ecosystems. (v10,#4)

Ayers, Harvard; Hager, Jenny; and Little, Charles E., eds., An Appalachian Tragedy. San Francisco: Sierra Club Books, 1998. \$ 45.00. The splendor of Appalachia, from forest floor to treetops, is threatened by pollution. Text and 200 photographs reveal the beauty and document the harm. (v9,#2)

Ayres, Robert U., Jeroen C. J. M. van den Bergh, and John M. Gowdy. "Strong versus Weak Sustainability: Economics, Natural Sciences, and "Consilience." Environmental Ethics 23(2001):155-168. The meaning of sustainability is the subject of intense debate among environmental and resource economists. Perhaps no other issue separates more clearly the traditional economic view from the views of most natural scientists. The debate currently focuses on the substitutability between the economy and the environment or between "natural capital" and "manufactured capital" a debate captured in terms of weak versus strong sustainability. In this article, we examine the various interpretations of these concepts. We conclude that natural science and economic perspectives on sustainability are inconsistent. The market-based Hartwick-Solow "weak sustainability" approach is far removed from both the ecosystem-based "Holling sustainability" and the "strong sustainability" approach of Daly and others. Each of these sustainability criteria implies a specific valuation approach, and thus an ethical position, to support monetary indicators of sustainability such as a green or sustainable Gross Domestic Product (GDP). The conflict between "weak sustainability" and "strong sustainability" is more evident in the

context of centralized than decentralized decision making. In particular, firms selling "services" instead of material goods and regarding the latter as "capital" leads to decisions more or less consistent with either type of sustainability. Finally, we discuss the implications of global sustainability for such open systems as regions and countries. Open systems have not been dealt with systematically for any of the sustainability criteria. (EE)

Azar, Christian, Review of Nordhaus, William D. Managing the Global Commons. Environmental Values 6(1997):106-108.

Azariah, Jayapaul, Azariah, Hilda, and Macer, Darryl R. J., eds., Bioethics in India. Christchurch, New Zealand: Eubios Ethics Institute, 1998. Proceedings of the International Bioethics Workshop in Madras (India): Bioethical Management of Biogeoresources, 16-19 January 1997, University of Madras. ISBN 0-908897-10-3. Contains 115 papers, mostly short, on diverse bioethical topics. Biotechnology and the genome. Philosophy of life and death. Reverence for Life. Biodiversity. Medical ethics. Animal rights. Environmental ethics. Ethics of large-scale systems. Philosophy and environmental science. Costs and benefits in environmental ethics. Land ethics and ecoethical management. Excellent for an introduction to Indian concerns and perspectives in bioethics and environmental ethics. These seminars have been taking place for several years, at various location in India. A key figure is Jayapaul Azariah, who teaches zoology at the University of Madras. An e-mail contact is Darryl Macer: macer@sakura.cc.tsukuba.ac.jp. (v10,#4)

Azizan Haji Baharuddin, ed. Environment and Development: Ethical and Educational Considerations. Kuala Lumpur, Malaysia: Institute for Policy Research (Insistut Kajian Dasar), 1995. (ISBN 983-884-035-1). Includes papers by Alastair S. Gunn, Padmasiri de Silva and Robin Attfield. Dr. Azizan is at the University of Malaya and Institute for Policy Research. (v6,#1)

B'TSELM, "Lifestyle: Water Shortage in the West Bank: Update Summer 1999," Ecotheology No 9 (July 2000):107-110.

Babbitt, Bruce, "Kudzu, Kudzu, Kill! Kill! Kill!" Harper's Magazine (July 1998): 17-18. Secretary of Interior Bruce Babbitt believes fighting "invasive alien species" can bring people together. According to Babbitt, weeds cause environmental havoc on a scale only matched by floods, earthquakes, mud slides, hurricanes, and fire. They infest 100 million acres in the U.S. (an area equivalent in size to a square with 400-mile sides) and are spreading at a rate of 14 percent per year. Weeds "homogenize the diversity of creation," threaten native plants and animals with extinction, erode soil, spread wildfire, ignore borders and property lines, and damage property values. Speaking before the Science in Wildland Weed Management Symposium, Babbitt said, "Weeds slowly, silently, almost invisibly, but steadily, spread all around us until, literally encircled, we can no longer turn our backs. The invasion is now our problem. Our battle. Our enemy. ... The invasion and spread of noxious alien weeds unites us. It unites across political, economic and property boundaries. It brings solidarity among opposing groups. It compels us to share strategic responses. It calls on us to rise above our sometimes petty day-to-day concerns." Babbitt urges everyone to "act now and act as one" in order to "beat this silent enemy." (v9,#2)

Babbitt, Bruce, "Another Attack on the Arctic," New York Times, July 8, 2004. This time a proposal to lease rights for gas and oil development on Teshekpuk Lake in Alaska, a shallow lake 30 miles across, the summer breeding ground for hundreds of thousands of waterfowl, as well as important to indigenous Inupiat communities. Babbitt was U.S. Secretary of the Interior from 1993-2001. (v. 15, # 3)

Baber, Walter F., and Robert V. Bartlett. Deliberative Environmental Politics: Democracy and Ecological Rationality. Cambridge, MA: The MIT Press, 2005. The "deliberative turn" in democratic theory presents an opportunity to move beyond the policy stalemates of interest group liberalism and

offers a foundation for reconciling rationality, strong democracy, and demanding environmentalism.

Baber, Walter F., and Robert V. Bartlett, Deliberative Environmental Politics: Democracy and Ecological Rationality. Cambridge, MA: The MIT Press, 2005.

Babu, Suresh Chandra and Reidhead, William, "Monitoring Natural Resources For Policy Interventions: A Conceptual Framework, Issues, and Challenges," Land Use Policy 17 (No. 1, Jan 01 2000): 1- . (v.11,#2)

Bacevich, AJ, "Culture, Globalization, and U.S. Foreign Policy," World Policy Journal 19(no.3, 2002): 77-82.

Backes, David, Canoe Country: An Embattled Wilderness. Minocqua, WI: NorthWord Press, 1991. (P. O. Box 1360, Minocqua, WI 54548) 207 pages, paper. This history and current status of the Boundary Waters Canoe Area in Minnesota. Roads, motors, timber harvest, mining, fishing, resorts, outfitters, local versus national interests, motorized portages, wilderness as sacred place, relations with the Canadian Quetico Provincial Park. Backes is in mass communications at the University of Wisconsin, Milwaukee. (v7,#1)

Backes, David, A Wilderness Within: The Life of Sigurd F. Olson. Minneapolis: University of Minnesota Press, 1997. 376 pages. \$ 24.95. Olson as the conservationist responsible for ensuring the protection of the Boundary Waters Canoe area from logging and fly-in fishing. (v8,#3)

Backes, David, A Wilderness Within: The Life of Sigurd F. Olsen. Minneapolis: University of Minnesota Press, 1997. 387 pages. \$ 25.00. Also there is a new release of four volumes of Olsen work from the University of Minnesota Press: The Singing Wilderness, 1997; The Lonely Land, 1997; Listening Point, 1997; and Runes of the North, 1997. (v9,#2)

Backhaus, Gary and Murungi, John, eds., Transformations of Urban and Suburban Landscapes: Perspectives from Philosophy, Geography, and Architecture. Lanham, MD: Lexington Books, Rowman and Littlefield, 2002. Place and space in contemporary landscapes, both natural and urban.

Backhaus, Gary, and John Murungi, eds., Ecoscapes: Geographical Patterning of Relations. Lanham, MD: Rowman and Littlefield, 2006. An ecoscape is a cultural perspective entwined with a geographical perspective.

Backhaus, Gary and Murungi, John, eds., Earth Ways: Framing Geographical Meanings. Lanham, MD: Lexington Books, Rowman and Littlefield, 2004. The organizing component, or "framings," that bridge philosophy and geography. Backhaus teaches philosophy at Morgan State University. Murungi is in philosophy, Towson University.

Backhaus, Gary, "The Creative Imagination and the Study Of Place," Philosophy and Geography 4 (No. 2, 2001): 239-243. Book review of Anna-Teresa Tymieniecka (Ed.) Analecta Husserliana Volumes XLIV and LI, London: Kluwer Academic Publishers, 1995 and 1997, respectively. (P&G)

Backhaus, Gary. Review of Safeguarding Our Common Future: Rethinking Sustainable Development. By Ingrid Leman Stefanovic. Environmental Ethics 24(2002):437-440. (EE)

Backstrand, Karin, Kronsell, Annica, Soderholm, Peter. "Organisational Challenges to Sustainable Development", Environmental Politics 5(no.2, 1996):209. (v7,#4)

Backus, G.B.C., Den Hartigm, L.A., Verstegen, M.W.A., "Implications of Animal Production Technology for the Environment", Journal of Agricultural and Environmental Ethics 6(1993). Intensive agricultural production has adverse effects on the quality of the environment. The pollution of air, water and soil has become a serious problem in the Netherlands due to the failure of the market to convey to the individual farmer the social cost associated with agricultural production. Environmental policies that take into account environmental costs and benefits as well as income consequences must be further developed. Backus and Den Hartigm are in the Research Institute for Pig Husbandry, P.O. Box 83, 5240 AB Rosmalen, The Netherlands. M.W.A. Verstegen is in the Department of Animal Nutrition, Agricultural University, Wageningen, The Netherlands.

Bada, Cheryl. "Federal Agency Management Plans Are 'Ongoing' Actions under Endangered Species Act's Section 7: Pacific Rivers Council v. Thomas and Northwest Forest Resources Council." Natural Resources Journal 35, no.4 (1995): 981. (v7, #3)

Badalamenti, F., Ramos, A. A., and Riggio, S., "Cultural and socio-economic impacts of Mediterranean marine protected areas," Environmental Conservation 27(no.2, JUN 01 2000):110- . (EE v.12,#1)

Baden, John A. and Donald Leal, eds., The Yellowstone Primer: Land and Resource Management in the Greater Yellowstone Ecosystem. San Francisco: Pacific Research Institute for Public Policy, 1989. 220 pages, cloth \$ 29.95, paper \$ 12.95. Claims an alternative means of ecosystem land management based on secure property rights and principles of free-market environmentalism known as the New Resource Economics. (v1,#4)

Baden, John A., and Noonan, Douglas, eds., Managing the Commons, 2nd ed. Bloomington, ID: Indiana University Press, 1998. The first edition was twenty years ago. Much attention to Garrett Hardin and the problems he raises, and various efforts in economics and politics to manage the commons. (v9,#2)

Baden, John A., ed, Environmental Gore: A Constructive Response to Earth in the Balance. San Francisco: Pacific Research Institute for Public Policy, 1994. Articles on the environmental policy of Vice-President Al Gore. (v6,#4)

Baden, John, "Spare that Tree!" Forbes, December 9, 1991. Under the U. S. Forest Service, Washington is managing the national forests in ways that are both economically and environmentally unsound. (v3,#1)

Baden, John A., Snow, Donald, eds. The Next West: Public Lands, Community, and Economy in the American West. Covelo, CA: Island Press, 1997. 272 pp. \$45 cloth, \$22.95 paper. The writers reflect on what has gone wrong in the region, and point the way to a Next West based on the renewal of Jeffersonian democracy, experiments in local and supra-local control of public lands, and the use of markets to replace the political allocation of natural resources. (v8,#2)

Bader, Harry R. "Not So Helpless: Application of the U.S. Constitution Property Clause to Protect Federal Parklands from External Threats." Natural Resources Journal 39(No. 1, Winter 1999):193- . (v10,#4)

Bader, HR; Finstad, G, "Conflicts Between Livestock and Wildlife: An Analysis of Legal Liabilities Arising from Reindeer and Caribou Competition on the Seward Peninsula of Western Alaska," Environmental Law 31(no. 3, 2001):549-580. (v.13,#1)

Badiner, Allan Hunt, Dharma Gaia: A Harvest of Essays in Buddhism and Ecology. Essays by over thirty Buddhist thinkers and ecologists. Parallax Press, P. O. Box 7355, Berkeley, CA 94707. 1990. \$ 15.00. (v1,#2)

Badiner, Allan Hunt, ed. Dharma Gaia: A Harvest of Essays in Buddhism and Ecology. Reviewed in Environmental Ethics 14(1992):279-82.

Baer, M., "Review of: Canan, Penelope, and Nancy Reichman. Ozone Connections: Expert Networks in Global Environmental Governance," Society and Natural Resources 16(no. 5, 2003): 465-467. (v 14, #3)

Baer, Paul, et al., "Equity and Greenhouse Gas Responsibility," Science 289(2000):2287. Developed countries have agreed to base emissions goals on 1990 levels, and the U.S. insists on "meaningful participation" by the developing countries. But this just grandfathers in existing disproportions. Global carbon emissions average one metric ton per year per person; developed nations emit three to five, the U.S. five. Developing nations emit about .6, though many of them only .2. When the global population reaches ten billion as currently estimated, per capita emissions must be stabilized at .3 per person per year. A more just principle would be to base emissions on a per capita basis. This is simple and it gives each person equal access to and responsibility for the atmosphere. The authors are (mostly) with the Energy and Resources Group, University of California at Berkeley. But, replies Arthur Westing, this proposal just grandfathers in existing population excesses, no better than grandfathering in existing development excesses. A more equitable proposal is to allocate a country's emissions total on the basis of the airspace over that country. See Arthur H. Westing, "Atmospheric Ethics," Science 291(2001):827. (EE v.12,#1)

Baer-Brown, Leslie, Rhein, Bob. Earth Keepers: A Sourcebook for Environmental Issues and Action. San Francisco: Mercury House, 1995. (v8,#2)

Bagachwa, M.S.D., and Limbu, Festus, Policy Reform and the Environment in Tanzania. Dar-es-Salaam, Tanzania: Dar-es-Salaam University press, 1995. ISBN 9976-60-276-6. (v.10,#2)

Bagdikian, Ben H., The Media Monopoly. Boston: Beacon Press, 1992, 4th edition. One cannot understand environmental politics without understanding the role of the mass media in American politics.

Bagla, Pallava, "Indian Activists Release Disputed Report," Science 309(30 September 2005):2146. A report commissioned by the Indian Ministry of Environment and Forests has prepared a 1,300 page report on biodiversity in India, but the government does not want the report released. The group plans to defy the order not to release it and to release it anyway. The report was prepared with funds from the Global Environment Facility and with the co-operation of the India office of the United Nations Development Programme (UNEP). The report concludes that "India's model of development is inherently unsustainable and destructive to biodiversity." Government officials consider the report inaccurate in part and also an embarrassment.

Bagla, Pallava, "50 Monkeys Taken from Indian Lab," Science 285(1999):997. India and experiments on monkeys. Armed with a government order and escorted by police, animal activists took 50 rhesus monkeys from India's National Center for Laboratory Animal Sciences in Hyderabad and released them into the wild. The monkeys were to have been used in testing a potential drug against immune disorders. India has new regulations on the care of animals used in research, and the laboratory was not meeting those standards. Researchers protest that half of India's research of this kind could be shut down. (v. 10, # 3)

Bagla, Pallava. "Controversial Rivers Project Aims to Turn India's Fierce Monsoon into a Friend." Science Vol. 313, no. 5790 (25 August 2006): 1036-37. Bagla discusses a controversial project to divert monsoon runoff from twelve rivers in eastern India to parched western states involving relocating tens of thousands of people.

Bahm, Archie J. Review of Marx and Engels on Ecology. By Howard Parsons. Environmental Ethics 1(1979):283-85.

Bahre, Conrad Joseph, A Legacy of Change: Historic Human Impact on Vegetation in the Arizona Borderlands (Tempe: University of Arizona Press, 1991). 250 pages. \$ 29.95. Most of the degradation of southeastern Arizona lands has occurred since the Anglo settlers began to arrive in the 1870's. Bahre is a geographer at the University of California, Davis. (v2,#1)

Bahro, Rudolf, Avoiding Social and Ecological Disaster. Bath, U.K.: Gateway Books, 1994. Social and ecological disaster is imminent. Bahro calls for abolition of the existing economic orders, a world transformation, a new collective psyche, a spiritual renaissance, the rise of a new consciousness. There is a need to change the basic psychological structure of Western humanity. We do not wish to ecologize the boat in which we presently live but to build new lifeboats. Bahro teaches philosophy at Humbolt University, Berlin. (v6,#4)

Bai, X, "Industrial Relocation in Asia: A Sound Environmental Management Strategy?," Environment 44(no.5, 2002):8-21. (v.13, #3)

Bailey, Britt, and Lappe, Marc, (eds.), Engineering the Farm: Ethical and Social Aspects of Agricultural Biotechnology. Reviewed by Lehman, Hugh. Journal of Agricultural and Environmental Ethics 16(2003):513-516. (JAEE)

Bailey, Britt and Lappé, Marc., eds., Engineering the Farm: Ethical and Social Aspects of Agricultural Biotechnology. Washington, DC: Island Press, 2002. Bailey and Lappé are at the Center for Ethics and Toxics in Gualala, CA. (v.14, #4)

Bailey Catherine, "Africa Begins at the Prynees': Moral Outrage, Hypocrisy, and the Spanish Bullfight," Ethics and the Environment 12(no. 1, 2007):23-37. The long history of criticism directed at bullfighting usually suggests that there is something especially morally noxious about it. I analyze the claims that bullfighting is distinctively immoral, comparing it to more widely accepted practices such as the slaughtering of animals for food. I conclude that, while bullfighting is horrific, the emphasis on it as especially "uncivilized" may serve to disguise the similarities that it has with other practices that also depend on animal suffering. I conclude that, for many, the hypocritical maintenance of a self-image as "civilized," despite great moral crimes committed against animals, seems to be facilitated by a focus on this especially dramatic example of animal cruelty. Bailey is at Minnesota State University.

Bailey, Cathryn, "On the Back of Animals: The Valorization of Reason in Contemporary Animal Ethics," Ethics and the Environment 10(no. 1, 2005):1-18. Despite the fact that feminists have compellingly drawn connections between traditional notions of reason and the oppression of women and nature, many animal ethicists fail to deeply incorporate these insights. After detailing the links between reason and the oppression of women and animals, I argue that the work of philosophers such as Tom Regan and Peter Singer fails to reflect that what feminists have called is not the mere inclusion of emotion, but a recognition of the inherent continuity between the two. To ignore this continuity, I conclude, risks reinscribing the very suffering we seek to eliminate. Bailey is in philosophy, Minnesota State University, Mankato. (Eth&Env)

Bailey, Conner, and Pomeroy, Caroline. "Resource Dependency and Development Options in Coastal Southeast Asia." Society and Natural Resources 9, no.2 (1996): 191

Bailey, Ronald, ed., The True State of the Planet. New York: Free Press, 1995. Paper, \$15. The perils of

deforestation and global warming are exaggerated, but the oceans are in trouble. (v6,#2)

Bailey, Ronald, Eco-Scam: The False Prophets of Ecological Apocalypse. St. Martin's. 228 pages. \$ 19.95. Bailey skewers false prophets and their failed forecasts. Paul Ehrlich won a MacArthur Foundation "genius" grant and the Swedish Academy's Crafoord price. He also predicted in 1969 that hundreds of millions would soon perish in smog disasters in New York and Los Angeles, that the oceans would die of DDT poisoning by 1979, and that the U. S. life expectancy would drop to 42 years by 1980 due to cancer epidemics. Lester Brown, another MacArthur genius and Worldwatch Institute president, predicted that global oil production would peak in 1990. Carl Sagan predicted that the Kuwaiti oil fires would lead to a global freeze. The global warming issue, "the mother of all environmental scares" is a another eco-scam. All the risks associated with the ozone layer do not amount to moving more than 100 miles south, from Washington, DC to Richmond, Virginia. Only fifteen years ago, Stephen Schneider, now fearing global warming, was then fearing global cooling. Nor does it make any difference what the eco-catastrophe faced is, the problem is always industrial capitalism. Bailey was formerly a writer with Forbes and is now a producer for the PBS series, "Technopolitics." (v4,#2)

Bailey, S. A., Haines Young, R. H., and Watkins, C., "Species Presence in Fragmented Landscapes: Modelling of Species Requirements at the National Level," Biological Conservation 108(no.3, 2002): 307-16. (v.13,#4)

Baillie, Harold W., "Genetic Engineering and our Human Nature," Philosophy and Public Policy Quarterly 23(nos. 1-2, 2003):28-31. "Understanding the sacred helps us identify elements in nature and human nature that ought to be preserved..." "There is a richness of content derived from the rootedness of the sacred in a larger reality, a reality that transcends the human, and to which humans need access." Baillie is in philosophy, University of Scranton.

Baillie, J., and Groombridge, B., eds. 1996 IUCN Red List of Threatened Animals. Gland, Switzerland: IUCN, 1996. (v.10,#1)

Bain, Daniel, "Immortal River: The Upper Mississippi in Ancient and Modern Times," Landscape Ecology 21 (no.2, February 2006): 307-308 (2).

Baird, Davis. Review of Eric Higgs, Andrew Light, and David Strong, eds. Technology and the Good Life? Environmental Ethics 25(2003):325-328. (EE)

Baird, Nicola, "Danger islands," The Ecologist 31(no.2, MAR 01 2001):58-. The Solomon Islands are no paradise. Rising sea levels and political turmoil threaten this south sea island group as never before. (v.12,#4)

Baird, R. M., and Rosenbaum, S.E.. eds., Animal Experimentation: The Moral Issues. Buffalo, NY: Prometheus Books, 1991.

Baird, Robert M., and Rosenbaum, Stuart E., eds. Animal Experimentation: The Moral Issues. Amherst, N.Y.: Prometheus Books, 1997. 182pp. \$16.95 paper. A collection of 16 essays provides an introduction to the major normative, political, and cultural issues involved in the animal rights controversy. Contributors include: Carl Choen, Alan Freeman, J.A. Gray, Peter Harrison, Edwin Converse Hettinger, Betty Mensch, Tom Regan, Bernard E. Rollin, Richard Ryder, Richard Schwarz, Peter Singer, William Timberlake, Mary Anne Warren, Robert White, Robert Wright, and Steven Zak. (v8,#1)

Baish, SK; David, SD; Graf, WL, "The Complex Decisionmaking Process for Removing Dams," Environment 44(no.4, 2002):20-31. (v.13, #3)

Bajracharya, Siddhartha, Peter Furley, and Adrian Newton, Adrian. "Impacts of Community-based Conservation on Local Communities in the Annapurna Conservation Area, Nepal." *Biodiversity and Conservation* Vol. 15, no. 8 (2006): 2765-86.

Baker, Beth, "Environmentalists Sue Small Business Administration over Urban Sprawl," *Bioscience* 51(no.1, 2001 Jan 01): 14-. (v.12,#3)

Baker, Beth, "Government Regulation of Wetlands Is Under Siege from All Sides" *Bioscience* 49(no. 11, Nov 01 1999):869- . (v10,#4)

Baker, Beth, "Washington Watch: Nations Coming to Agreement That Polluted Oceans Need a Cleanup", *Bioscience*, 46(No.3, 1996):183- . (v7,#1)

Baker, Beth, "Farm Bill Environmental Program May Threaten Native Prairie Habitat.," *Bioscience*. 50 (No. 5, 2000 May 01): 400- . (v.11,#4)

Baker, Beth, "Washington Watch: The Environment as Election Issue." *Bioscience* 46, no.8 (1996): 574. (v7, #3)

Baker, Beth, "Washington Watch: New Federal Task Force Tackles Amphibian Troubles," *Bioscience* 49(No.5, 1999):366-. (v.10,#2)

Baker, Beth. "Building a Better Oyster." *Bioscience* 46, no.4 (1996): 240. Scientists use biotechnology to produce a steady supply of a favorite seafood. (v7, #3)

Baker, Beth. "A Reverent Approach to the Natural World", *Bioscience* 46(no.7, 1996):475. Religious organizations are uniting with each other and with the scientific community to improve environmental protection. (v7,#4)

Baker, Beth. "Washington Watch: Man in the Biosphere Under Bombardment," *Bioscience* 46(no.10, 1996):748. (v7,#4)

Baker, Beth. "Washington Watch: The Nation's Seed Bank Could Use Some Congressional Cash." *Bioscience* 46, no.4 (1996): 288. (v7, #3)

Baker, Beth. The Greening of Utilities. *Bioscience* 49(No.8, August 1999):612- . Biologists are making a difference at electric utilities across the United States. (v10,#4)

Baker, D. James, *Planet Earth: The View from Space* (Cambridge, MA: Harvard University Press, 1990). 192 pages. \$25.00 cloth. An introduction to Earth-observing satellite technology and its relevance to understanding global environmental changes. (v2,#2)

Baker, Jennifer. Review of *The Environmental Crisis: Understanding the Value of Nature*. By Mark Rowlands. *Environmental Ethics* 24(2002):321-324. (EE)

Baker, Katharine K., "Consorting with Forests: Rethinking Our Relationship to Natural Resources and How We Should Value Their Loss," *Ecology Law Quarterly* (Berkeley: School of Law of the University of California) 22 (no. 4, 1995):677-728. "The destruction of natural environments causes harm to people because it weakens their connections to the natural world. The quantification of nonuse value measures the extent of that harm. Contingent valuation (CV) is the only accessible vehicle thought capable of such

quantification" (p. 714). Responses to four principal criticisms of contingent valuation. "To properly assess nonuse value, the law must reconceptualize the human loss associated with natural resource damage as an emotional injury to the person, not a deprivation of a property right. The loss associated with environmental degradation is the loss that humans experience when their subjective connection to the environment is damaged. The legitimacy of compensating for this loss requires recognizing that the injury does not involve the loss of any individual resource's intrinsic value, but is instead people's sense of loss associated with the destruction of ecosystems. When irreplaceable natural communities are destroyed, the human connection to nature has been injured. Contingent valuation, the current means of assessing the psychological injury associated with natural resource loss, is a crucial vehicle for measuring damages because it allows people to assess their own subjective sense of loss" (p. 728). Baker is professor of law, Chicago-Kent College of Law. (v.10,#2)

Baker, Katherine K. "Consorting with Forests: Rethinking Our Relationship to Natural Resources and How We Should Value Their Loss." Ecology Law Quarterly 22(no.4, 1995):677. (v7,#1)

Baker, Nathan. "Water, Water, Everywhere, and at Last a Drop for Salmon? NRDC v. Houston Heralds New Prospects Under Section 7 of the Endangered Species Act." Environmental Law 29(No. 3, 1999):607- . Mr. Baker discusses Natural Resources Defense Council v. Houston's potential to revolutionize federal water delivery programs in the Pacific Northwest. He concludes that this recent Ninth Circuit decision will lead to greater protection of imperiled salmon and other listed species in the Pacific Northwest, because the Bureau of Reclamation will be required to increase consultation with the fish and wildlife agencies on the effects of its various projects in the region. (v10,#4)

Baker, Ron. The American Hunting Myth. Reviewed in Environmental Ethics 9(1987):87-90.

Baker, S, "The Dynamics of European Union Biodiversity Policy: Interactive, Functional and Institutional Logics," Environmental Politics 12(no.3, 2003):23-41. (v.14, #4)

Baker, Steve, The Postmodern Animal. London: Reaktion Books, 2000. Review by Elisa Aaltola, Environmental Values 10(2001):417. (EV)

Baker, Susan and Baumbartl, Bernd. "Bulgaria: Managing the Environment in an Unstable Transition." Environmental Politics 7(no.1, Spring 1998):183- . (v10,#4)

Baker, Susan and Jehlicka, Petr. "Dilemmas of Transition: The Environment, Democracy and Economic Reform in East Central Europe - An Introduction." Environmental Politics 7(no.1, Spring 1998):1- . (v10,#4)

Baker-Fletcher, Karen. "Afro-American Thoughts on God in Creation." Earth Letter (Spring 2007): 5-6.

Bakken, Peter W., J. Ronald Engel, and Joan Gibb Engel, 1993. Ecology, Justice, and Christian Faith: A Guide to the Literature, 1960-1990. Westport, CT: Greenwood Press. In Press. (v4,#1)

Bakken, Peter W., Joan Gibb Engel, and J. Ronald Engel, Ecology, Justice, and Christian Faith: A Critical Guide to the Literature. Westport, CT: Greenwood Press, 1995. This book can be obtained at 40% discount = \$33 (instead of \$55 list price) from Greenwood Press Order Line 1-800-225-5800. Have credit card information ready. Refer to code #F308 to qualify. Part one is "Critical Survey: The Struggle to Integrate Ecology, Justice, and Christian Faith," a review essay. Part two is a Bibliography Survey, 1961-1993, arranged in eleven categories with 512 entries, each well annotated. There is an author index, a title index, and a subject index. An extensive work, the labor of many years, and valuable for its critical insights. A related work is Joseph K. Sheldon, Rediscovery of Creation: A Bibliographical Study of the

Church's Response to the Environmental Crisis, 1992, which has 1,700 references, also a historical overview, but few critical annotations. Bakken is coordinator of outreach for the Au Sable Institute of Environmental Studies. Joan Engel is a free lance writer and Ronald Engel is professor of social ethics, Meadville/Lombard Theological School. (v7,#1)

Bakken, Peter W., The Ecology of Grace: Ultimacy and Environmental Ethics in Aldo Leopold and Joseph Sittler. Ph.D. dissertation, University of Chicago, Divinity School, August 1991. An influential articulation of a secular environmental ethic, Leopold's Sand County Almanac, invests the natural environment with an aura of ultimacy that grounds that ethic and gives it a subtly but genuinely religious character. A contemporary interpretation of the Christian doctrines of creation, Christ, and grace, in the theology of Joseph Sittler, invests the nonhuman world with a similar aura of ultimacy. Leopold's greater attention to "wildness" can critique Sittler's treatment of grace in nature. But Leopold seems unaware of his dependence on religious or quasi-religious factors, and leaves him unable to provide ultimate answers to the place and role of humans in nature. Christian theology can both be corrected by and add deeper dimensions to Leopold's land ethic. The co-advisors were Robin Lovin and J. Ronald Engel.

Bakken, Peter W., J. Ronald Engel, and Joan Gibb Engel. Ecology, Justice, and Christian Faith: A Guide to the Literature 1960-1993. Westport, CT: Greenwood Press, 1995. An annotated bibliography of literature published in English that expresses, analyzes, or critiques Christian perspectives on the relationship between social justice and ecological integrity. There is an introductory review essay followed by over 460 complete annotations by over 250 authors. The annotations focus on works that include each of the following three components: (1) attention to ecological issues such as environmental quality, resource limitations, and biotic diversity; (2) attention to social-ethical values and problems such as distributive justice, community, racism, and sexism; and (3) explicitly theological or religious reflection on ecological and social ethics and their interrelations. (v6,#1)

Bakken, Peter W. "The Eco-Justice Movement in Christian Theology: Patterns and Issues," Theology and Public Policy 7(no. 1, 1995).

Bakker, J. I. Hans, "The Gandhian Approach to Swadeshi or Appropriate Technology: A Conceptualization in Terms of Basic Needs and Equity", Journal of Agricultural Ethics 3(1990):50-88. This is an examination of the significance of Gandhi's social philosophy for development. It is argued that, when seen in light of Gandhi's social philosophy, the concepts of appropriate technology and basic needs take on new meaning. Gandhi's social philosophy has been neglected by most development specialists. This analysis attempts to draw out some aspects of M. K. Gandhi's background and his thinking about swadeshi (i.e.local self-reliance and use of local knowledge and abilities) and swaraj (i.e.independent development that leads to equity and justice). Bakker is in sociology and anthropology at the University of Guelph, Ontario.

Bakker, Karen; Bridge, Gavin, "Material worlds? Resource geographies and the 'matter of nature'," Progress in Human Geography 30 (no.1, February 2006): 5-27 (23).

Balbontin, Javier; Penteriani, Vincenzo; Ferrer, Miguel, "Humans act against the natural process of breeder selection: A modern sickness for animal populations?" Biodiversity and Conservation 14(no.1, January 2005):179-186(8).

Balbus, Isaac. Marxism and Domination. Reviewed in Environmental Ethics 6(1984):185-91.

Balcombe, Jonathan. "Dissection and Dissent." The Animals' Agenda 16(Jul. 1996):23. (v7,#2)

Baldauf, Scott, "Farmers and Scientists Work to Save the Earth, One Acre at a Time," The Christian

Science Monitor 86 (10 August 1994): 14. (v5,#3)

Baldwin, A. Dwight, Judith deLuce (de Luce), and Carl Pletsch, eds., Beyond Preservation: Restoring and Inventing Landscapes. Minneapolis: University of Minnesota Press, 1993. Sample articles: Baldwin, de Luce, and Pletsch, "Ecological Preservation versus Restoration"; William R. Jordan, III, "'Sunflower Forest': Ecological Restoration as the Basis for a New Ecological Paradigm"; Frederick Turner, "The Invented Landscape" (we ought, "when the occasion warrants and the knowledge is sufficient, to create new ecosystems, new landscapes, perhaps even new species" (p. 36); G. Stanley Kane, "Restoration or Preservation: Reflections on a Clash of Environmental Philosophies"; Carl Pletsch, "Humans Assert Sovereignty over Nature"; Dora G. Lodwick, "Changing Worldviews and Landscape Restoration." Baldwin is in geography, de Luce teaches classics, and Pletsch history at Miami University. (v5,#4)

Baldwin, Dwight, Jr., Judith de Luce, and Carl Pletsch, eds., Beyond Preservation: Restoring and Inventing Landscapes. Minneapolis: University of Minnesota Press, 1993. The theory of preservation is predicated on the assumption that as humans we are different from and opposed to the rest of nature, but the contributors here explore the belief that humans are inextricably entangled with nature and therefore have an unavoidable impact upon the entire ecosystem. The contributors explore the possibilities of restoring damaged landscapes and even of inventing new ones. The editors are landscape architects at the University of Miami, Ohio. (v4,#2)

Baldwin, Ian T., et al., "Volatile Signaling in Plant-Plant Interactions: 'Taling Trees' in the Genomics Era," Science 311 (10 February 2004): 812-814. Well, maybe it's more like "eavesdropping." Plants pick up on volatiles released by nearby plants under herbivore attack and prepare their defenses. And those under attack may release volatiles to draw predators on their attacking herbivores. Such signalling can be better tested now because of our ability to genetically modify "deaf" and "mute" plants.

Baldwin, Jeff, "The Culture of Nature through Mississippian Geographies," &e Ethics and the Environment 11(2006):13-44. The paper's first interest is in re-forming exploitive human-environment relations. It shows that culture/nature dichotomies are not only false, but obscure the commonality of culture to humans and nonhuman beings and processes. The paper draws upon the Roman genesis of "culture" to describe its function in finding appropriateness among co-evolving human and nonhuman projects. Culture, thus, is the process through which co-eval projects are brought together. The study argues that through dialectic interrelationships, culture works to move biospheric relations towards mutualism and away from parasitism (or exploitation). This is evident among nonhuman beings and processes as well as cultures in which humans are more central. The paper draws upon various interrelationships in the Mississippi watershed to illustrate these points. It then briefly explores the usefulness of a culture of nature perspective in planning and managing development projects. Baldwin is in earth and environmental studies, Wilamette University, Salem, Oregon. (Eth&Env)

Bale, T., "'As You Sow, So Shall You Reap': The New Zealand Greens and the General Election of 2002," Environmental Politics 12(no. 2, 2003): 140-144.

Balick, Michael J., Elisabetsky, Elaine, Laird, Sarah A., eds. Medical Resources of the Tropical Forest: Biodiversity and Its Importance to Human Health. New York: Columbia University Press 1996. \$35 paper. Covers a wide spectrum of subjects in biodiversity, ethnomedicine, ethnobotany, and pharmacology. Regional work ranging from Africa to Asia, from the Caribbean to Central and South America. The most comprehensive survey available of the current literature. The authors call attention to the ways in which the natural habitats of these plants can be protected from damage or destruction. Information on drug discovery efforts, laying the groundwork for a basic pool of knowledge for pharmaceutical companies and smaller-scale entrepreneurs. Ethical issues of intellectual property rights pertaining to tropical resources and their medicinal uses.

Balirwa, JS; et al., "Biodiversity and Fishery Sustainability in the Lake Victoria Basin: An Unexpected Marriage?," Bioscience 53(no.8, 2003):703-716. (v.14, #4)

Ball, Ian, Goodall, Margaret, Palmer, Clare, and Reader, John, eds., The Earth Beneath: A Critical Guide to Green Theology. London: SPCK, 1992. Sample articles, Grove White, Robin, "Human Identity and Environmental Crisis"; Palmer, Clare, "Stewardship: A Case Study in Environmental Ethics"; Carter, "Teilhard de Chardin: An Ecological Spirituality"; Goodall, Margaret and Reader, John, "Why Matthew Fox Fails to Change the World." (v.10,#1)

Ball, Ian, Margaret Goodall, Clare Palmer, and John Readers, eds., The Earth Beneath: A Critical Guide to Green Theology. London: SPCK, 1992. 216 pages. Robin Grove-White, "Human Identity and Environmental Crisis"; Margaret Goodall and John Reader, "Environmentalism as the Question of Human Identity; Clare Palmer, "Stewardship: A Case Study in Environmental Ethics"; Ian Carter, "Teilhard de Chardin: An Ecological Spirituality"; Margaret Goodall and John Reader, "Why Matthew Fox Fails To Change the World"; and others. (v4,#3)

Ball, Jim. "Evangelicals, Population, and the Ecological Crises," Christian Scholars Review 28(No.2. 1998):226-253. The focus of this article is a review and analysis of the population debate in the Evangelical Protestant literature on ecological crises. Six major writings are considered in depth. The conclusion reached is that the literature thus far has provided an excellent introduction, but the ethical consequences of intrinsic value and overconsumption are undeveloped. (v.11,#2)

Ball, Matt. "On Being Vegan," The Animals' Agenda 17(no.1, 1997):19. Matt Ball cautions against vegans becoming joyless fanatics. (v8,#2)

Ball, Terence, "'The Earth Belongs to the Living': Thomas Jefferson and the Problem of Intergenerational Relations," Environmental Politics 9(no. 2, Summer 2000):61- . (v.12,#2)

Balmford, A., Lyon, A.J.E. and Lang, R.M., "Testing The Higher-Taxon Approach To Conservation Planning In A Megadiverse Group: The Macrofungi," Biological Conservation 93 (No. 2, 2000): 209- . (v.11,#2)

Balmford, Andrew et al (two dozen others), "The Convention on Biological Diversity's 2010 Target," Science 307(14 January 2005):212-213. Short-term, and for people in need or with power, destruction of biological diversity has a beneficial effect on personal well-being. But long-term, conserving biodiversity and the services it provides is essential to human self-interest. How can scientists present information about biodiversity in ways that are useful to making longer-term decisions? Part of the answer is establishing better and more reliable indicators that are rigorous, repeatable, widely accepted, and easily understood. In this respect economists have long had a set of common and clear indicators that track markets. Ecologists need something similar.

Balmford, Andrew et al (eighteen others), "Economic Reasons for Conserving Wild Nature," Science 297(9 August 2002):950-953. "On the eve of the World Summit on Sustainable Development, it is timely to assess progress over the 10 years since its predecessor in Rio de Janeiro. Loss and degradation of remaining natural habitats has continued largely unabated. However, evidence has been accumulating that such systems generate marked economic benefits, which the available data suggest exceed those obtained from continued habitat conversion. We estimate that the overall benefit/cost ratio of an effective global program for the conservation of remaining wild nature is at least 100:1." "Development is clearly essential. However, current development trajectories are self-evidently not delivering human benefits in the way that they should: income disparity world-wide is increasing and most countries are not on track to meet the United Nations' goals for human development and poverty eradication by 2015. ... Retaining as

much as possible of what remains of wild nature through a judicious combination of sustainable use, conservation, and, where necessary, compensation for resulting opportunity costs ... makes overwhelming economic as well as moral sense." Balmford is with the Conservation Biology Group, Department of Zoology, University of Cambridge, UK. (v.13,#4)

Balmford, Andrew; Mace, Georgina M.; and Leader-Williams, N. "Designing the Ark: Setting Priorities for Captive Breeding." Conservation Biology 10, no.3 (1996): 719. (v7, #3)

Balogh, James C. and William J. Walker, Golf Course Management and Construction: Environmental Issues. Boca Raton, FL: Lewis Publishers, 1992. The environmental effects of turfgrass in golf courses, lawns, parks, greenways, and similar areas, which are widespread in landscape architecture. Ways that these areas do and do not, can and cannot have environmental benefits, such as recreational, aesthetic, erosion control, green space, and wildlife habitat uses. Balogh is a soil scientist with Spectrum Research, Duluth, MN. Walker is a geochemist at the University of California, Davis. (v7,#1)

Baltensperger, B. H., "Review of: Clinton L. Evans, The War On Weeds in the Prairie West: An Environmental History," Environmental History 8(no. 3, 2003): 489-490.

Balter, Michael, "The Baby Deficit," Science 312(30 June 2006):1894-1897. As fertility rates decline across the developed world, governments are offering big incentives for childbearing. Experts don't expect them to have much effect. Demographers predict that the E.U. countries will lose between 24 million and 40 million people during each coming decade. Replacement level total fertility rates in European countries are 2.1 children per couple, and nearly all the world's industrialized countries are below this, some much below. The U.S. is at replacement level. Below replacement levels also mean that a population ages, the proportion of elderly adults relative to the active labor force increases, making a higher economic burden on the active labor force to support the elderly.

On global scales, demographers predict that the world's total population will continue to increase for decades to come, rising from its current 6.5 billion to somewhere between 8 and 11 billion by 2050. But nearly all of the increase will be in developing countries.

Balvanera, Patricia et al (eight others), "Conserving Biodiversity and Ecosystem Services," Science 291(2001):2047. A lead editorial in Science. "Above all, we must remember that biodiversity is in serious jeopardy for a reason: namely, that the opportunity costs of conservation are perceived to be too high. The best hope for biodiversity is to create and align diverse incentives for conservation wherever possible and to integrate these into the larger policy-making arena." (v.12,#2)

Bammel, Gene, "Which World? Which Wilderness? or Getting Back to the Right Cronon," International Journal of Wilderness 7 (no. 2, August 2000):16-19. William Cronon is a heretic. But heretics often serve as useful correctives. Heretics serve to bring the orthodox back to their roots. Perhaps Crononism will serve to bring true believers in wilderness back to the bedrock of their belief and practice. Bammel is emeritus professor of philosophy, West Virginia University. (v.12,#4)

Bandara, R; Tisdell, C, "Comparison of rural and urban attitudes to the conservation of Asian elephants in Sri Lanka: Empirical evidence", Biological Conservation 110(no.3, 2003):327-342.

Bandara, R; Tisdell, C, "Asian Elephants as Agricultural Pests: Economics of Control and Compensation in Sri Lanka," Natural Resources Journal 42(no.3, 2002): 491-520.

Bandeira, Fabio; Martorell, Carlos; Meave, Jorge; Caballero, Javier, "The role of rustic coffee plantations in the conservation of wild tree diversity in the Chinantec region of Mexico," Biodiversity and Conservation 14(no.5, May 2005):1225-1240(16).

Bandrapalli, Suman. "Fisherman Aren't Laughing Over Clowns of the Sea." The Christian Science Monitor, vol. 89, 13 Feb. 1997, p. 11.

Bansal, S; Gangopadhyay, S, "Tax/subsidy policies in the presence of environmentally aware consumers", Journal of Environmental Economics and Management 45(no.2, 2003):333-355.

Banta, Erik Haugland. Review of Ecophilosophy: A Field Guide to the Literature. By Donald Edward Davis. Environmental Ethics 12(1990):369-70.

Bao Qingde, "Replacement and Transformation: Sustainable Development and the Evolution of the Conception of Development." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol. 3, no. 4 (December 30, 2000). Abstract: The idea of sustainable development represents a major shift in people's conception of development. Its essence is a thorough replacement and innovative transformation of peoples' values regarding social development. The focus of this paper is to clarify the origins of the idea of sustainable development and its connotation, and to give an overview of such issues as the evolution of people's conception of development. In Chinese. (EE v.12,#1)

Bar-Ilan University Library maintains, on computer disk, a list of all the publications, with abstracts, known in Hebrew and English, on environmental ethics in Judaism, and this can be made available either on disk or in printout (about 80-100 pages when printed). (Israel) (v5,#1)

Barash, David P. Sociobiology and Behavior. Reviewed in Environmental Ethics 1(1979):181-85.

Barbanell, Edward Morris, Private Property and Common-property Arrangements: The Case of Water in the West, Pd.D. thesis, Department of Philosophy, University of Utah, 1999. Private ownership is not the preferred end state for all scarce resources, illustrated by water in the American West. Because of water's "factor endowments", e.g., its degrees of jointness, divisibility and excludability, one individual's use creates significant negative externalities for other users. Individuals' interests can be better protected by splitting the various rights of ownership between individual resource users and the "resource community" to which they belong. This dissertation offers an expanded framework of "ownership", or rights-relationships. Locke's account of property is inadequate for water and other resources with similar factor endowments. Economists often conflate "open access" with "common ownership." The former describes a state of affairs where there are no rights-relationships at all, whereas the latter denotes a situation where definite property rights have been established. When the rights-relationship among members of a resource community is based on shared expectations of reciprocal behavior, then a common-property arrangement can function effectively to control the overuse of scarce resources. The advisor was Bruce Landesman. (v.13,#4)

Barbato, Joseph and Lisa Weinerman, eds., Heart of the Land: Essays on the Last Great Places. New York: Pantheon Books, 1994. 297 pages. A Nature Conservancy sponsored book. Thirty essays by well-known nature writers about places that still retain the ability to inspire, to awe, and to fire our collective imaginations. The essayists find that such places move us in ways that we intuitively understand but cannot adequately explain. Samples: Terry Tempest Williams, "Winter Solstice at the Moab Slough (Colorado Plateau, Utah)"; Rick Bass, "On Willow Creek" (Texas Hill Country); Joel Achenbach, "The Most Patient of Animals" (Clinch Valley, Virginia). "Of course we shouldn't protect a wild core such as the Texas hill country because it is a system still intact with the logic and sanity that these days too often eludes our lives in the city. We should instead protect the hill country simply for its own sake, to show that we are still capable of understanding (and practicing) the concept of honor: loving a thing the way it is, and trying, for once, not to change it" (Rick Bass). Barbato is an editorial director at the Nature Conservancy; Weinerman is with Nature Conservancy in Latin America. (v7,#1)

Barber, Benjamin R., "Democracy at Risk: American Culture in a Global Culture," World Policy Journal 15(no.2, 1998), p.29. (v.9,#4)

Barber, Charles Victor. "Forest Resource Scarcity and Social Conflict in Indonesia," Environment 40(no. 4, May 1998):4- . As economic tensions escalate and unsustainable logging practices continue, the risk of civil violence in Indonesia is rising. (v9,#2)

Barber, Jeffrey. "The Sustainable Communities Movement," The Journal of Environment and Development 5(no.3, 1996):338. (v8,#2)

Barbier, Edward B., "The Concept of Sustainable Economic Development," Environmental Conservation 14(no. 2, Summer, 1987):101-110. Sustainable development is perhaps a difficult concept to define with analytical rigor but it is nevertheless a useful concept. One makes an effort to maximize simultaneously goals in three areas (1) Biological system goals, such as genetic diversity, resilience, biological productivity; (2) Economic system goals, such as satisfying basic needs, reducing poverty, equity-enhancing, increasing useful goods and services; and (3) Social system goals, such as cultural diversity, institutional sustainability, social justice, and participation. This forces tradeoffs, since all these goals cannot at once be maximized, and optimum solutions can be sought. Barbier is with the International Institute for Environment and Development, London.

Barbier, Edward B. "Elephant Ivory and Tropical Timber: The Role of Trade Interventions in Sustainable Management," The Journal of Environment and Development 4, no. 2 (Summer 1995): 1- . (v6,#4)

Barbour, Ian G. Technology, Environment, and Human Values. Reviewed in Environmental Ethics 5(1983):367-70.

Barbour, Ian G., "The Churches and the Global Environment," CTNS (Center for Theology and the Natural Sciences) Bulletin 16 (No. 3, Summer 1996):1-9. A response to Al Gore's Earth in the Balance. We are not isolated individuals but are constituted by our relationship as persons-in-community, and we are part of a wider created order. ... Stewardship can easily be distorted into care for nature merely for the sake of the benefits it confers on us. Barbour taught religion and science at Carleton College, Northfield, Minnesota. (v7,#4)

Barbour, Ian G., "Experiencing and Interpreting Nature in Science and Religion," Zygon 29(1994):457-487. Three paths from nature to religious interpretation: (1) From religious experience in the context of nature. (2) Scientific findings concerning cosmology or evolution used as evidence of design. (3) Traditional religious beliefs reformulated in the light of current natural science. All three can contribute to relating science and religion. Barbour is in physics and religion at Carleton College, emeritus. (v5,#4)

Barbour, Ian G., "Theology, Ethics, and the Environment," Chapter 6 (pp. 119-140) in Barbour, Nature, Human Nature, and God (Minneapolis: Fortress Press, 2002). Brief survey of the main issues, with Barbour's characteristic capacity to digest and appraise the critical issues. (v.14, #4)

Barbour, Ian G., Nature, Human Nature, and God. Minneapolis: Fortress Press, 2002. (v.13,#4)

Barbour, Ian. Ethics in an Age of Technology: The Gifford Lectures 1989-1991, vol 2. New York: HarperCollins, 1993.

Barcalow, Emmett, Moral Philosophy: Theory and Issues. Belmont, CA: Wadsworth, 1994. 432 pages. Paper. Contains a chapter on "Morality and the Environment." Environmental threats. Sustainable development. Present and future people. Life-centered versus human-centered environmental ethics. Barcalow is in philosophy at Western New England College. (v4,#3)

Barcalow, Emmett, Moral Philosophy: Theories and Issues, 2nd ed. Belmont, CA: Wadsworth Publishing Co., 1998. Chapter 23 is "Morality and the Environment." Barcalow is at Western New England College. (v9,#1)

Barclay, Oliver R., "Animal Rights: A Critique," Science and Christian Belief, vol. 4, no. 1, pp. 49-61. A broader and more soundly established Christian approach than that of "animal rights" (in Andrew Linzey, Tom Regan, and others) will find responsibilities for and duties to animals in the context of those to the whole creation. The term "animal rights" is inappropriate for animals. It is best abandoned for these more satisfactory and Biblically-based concepts. There is a positive mandate given to humans to care for the whole natural world. Barclay is a zoologist. (v4,#3)

Barcott, Bruce. "Kill the Cat that Kills the Bird?" *New York Times Magazine* (December 2, 2001): 46-51. Jim Stevenson shot a feral cat that was about to kill a piping plover, an endangered species on an estuary in Galveston Bay, Texas. He was taken to court on charges of cruelty to animals. But the case resulted in a hung jury and was dismissed. Barcott's article cites J. Baird Callicott and Holmes Rolston III, siding with the endangered species and against the cat lovers.

Barham, Elizabeth, "Ecological Boundaries as Community Boundaries: The Politics of Watersheds," Society & Natural Resources 14(no.3, MAR 01 2001):181-. (v.12,#4)

Barham, Elizabeth. "Social Movements for Sustainable Agriculture in France: A Polanyian Perspective," Society & Natural Resources 10(no.3, 1997):239. (v8,#2)

Barker, Barry, Environmental Studies: Concepts, Connections, and Controversies. Dubuque, IA: Kendall/Hunt Publishing Co., 2001. Biodiversity, human populations, food supplies, environmental health, energy, urbanization, and globalization. Chapter 1 is "Environmental Ethics."

Barker, Rocky, Saving All the Parts: Reconciling Economics and the Endangered Species Act. Washington: Island Press, 1993. 260 pages. Hardbound, \$ 30.00 The "jobs versus the environment" issues, explored in detail. Ways in which economic activity can be sustained without the loss of essential natural values. Barker is a journalist with the Idaho Falls Post Register. (v4,#2)

Barker, Terry, Review of Colin Price, Time, Discounting and Value, Environmental Values 7(1998):116.

Barker, Terry, and Jonathan Kohler, eds. International Competitiveness and Environmental Policies, Cheltenham: Edward Elgar, 1998. Review by Marialusia Tamborra and Dino Pinelli, Environmental Values 10(2001):268. (EV)

Barkham, J.P. "Environmental Needs and Social Justice," Biodiversity and Conservation 4(no.8, Nov. 1995):857-. (v6,#4)

Barkin, J. Samuel, and Shambaugh, George E., eds., Anarchy and the Environment: International Relations of Common Pool Resources. Albany, NY: State University of New York Press, 1999. 205 pages. \$ 18.00 paper. (v.10,#1)

Barling, David , "Food Supply Chain Governance And Public Health Externalities: Upstream Policy Interventions and the UK State," *Journal of Agricultural and Environmental Ethics* 20(2007):285-300. Contemporary food supply chains are generating externalities with high economic and social costs, notably in public health terms through the rise in diet-related non-communicable disease. The UK State is developing policy strategies to tackle these public health problems alongside intergovernmental responses. However, the governance of food supply chains is conducted by, and across, both private and

public spheres and within a multilevel framework. The realities of contemporary food governance are that private interests are key drivers of food supply chains and have institutionalized a great deal of standards-setting and quality, notably from their locations in the downstream and midstream sectors. The UK State is designing some *downstream* and some *midstream* interventions to ameliorate the public health impacts of current food consumption patterns in England. The UK State has not addressed *upstream* interventions towards public health diet at the primary food production and processing stages, although traditionally it has shaped agricultural policy. Within the realities of contemporary multilevel governance, the UK State must act within the contexts set by the international regimes of the Common Agricultural Policy and the World Trade Organization agreements, notably on agriculture. The potential for further upstream agricultural policy reform is considered as part of a wider policy approach to address the public health externalities issuing from contemporary food supply chains within this multilevel governance context. Keywords: The State - agricultural policy and public health - food governance - World Health Organization. Barling is at Centre for Food Policy, City University, London, UK.

Barlow, Chuck D., "Why the Christian Right Must Protect the Environment: Theocentricity in the Political Workplace," The Boston College Environmental Affairs Law Review 23 (no. 4, Summer, 1996):781- . Originally a LL.M. (Master of Laws) thesis, in the environmental law and natural resources program at the Northwestern School of Law of Lewis & Clark College, Portland, Oregon, December 1995. The faculty advisor was Professor William Funk. Analyzes the rise of the Christian right as a force in American political policy, demanding adherence to traditional Biblical values. The Christian right has taken, at best, an indifferent, and at worst, a heavily anthropocentric attitude toward the use and conservation of the environment. Barlow rebuts the proposition, asserted by Lynn White, Jr., Aldo Leopold, and others, and implicitly accepted by the environmental inaction of the Christian right, that the scriptures of the Judeo-Christian tradition promote an anthropocentric environmental ethic. Rather, the Bible sets forth a "theocentric," or God-centered, approach to care of the environment. Those who claim to base their political agenda on Christianity ought to consider the Biblical mandate to use the earth's resources wisely. Address: Chuck D. Barlow, c/o Phelps Dunbar, L.L.P., P.O. Box 23066, Jackson, MS 39225-3066. (v.7,#4)

Barlow, Chuck D., Why the Christian Right Must Protect the Environment: Theocentricity in the Political Workplace, LL.M. (Master of Laws) thesis in the environmental law and natural resources program at the Northwestern School of Law of Lewis & Clark College, Portland, Oregon, December 1995. The faculty advisor was Professor William Funk. The thesis analyzes the rise of the Christian right as a force in American political policy, demanding adherence to traditional Biblical values. The Christian right has taken, at best, an indifferent, and at worst, a heavily anthropocentric attitude toward the use and conservation of the environment. Barlow rebuts the proposition, asserted by Lynn White, Jr., Aldo Leopold, and others, and implicitly accepted by the environmental inaction of the Christian right, that the scriptures of the Judeo-Christian tradition promote an anthropocentric environmental ethic. Rather, the Bible sets forth a "theocentric," or God-centered, approach to care of the environment. Those who claim to base their political agenda on Christianity ought to consider the Biblical mandate to use the earth's resources wisely. The thesis will be published in The Boston College Environmental Affairs Law Review, Summer, 1996. Chuck D. Barlow, c/o Phelps Dunbar, L.L.P., P.O. Box 23066, Jackson, MS 39225-3066. (v7,#1)

Barlow, Connie. "Re-Storying Biodiversity by Way of Science," Wild Earth 7(no.1, 1997):14. Sidebar: A Conversation with Edward O. Wilson. (v8,#2)

Barlow, R. M., "Buber Looks at Nature: An Alternative Epistemology," Contemporary Philosophy 12 (no. 10, July, 1989):5-11. Martin Buber's alternative, dialogic existential epistemology counters the subject-object thrust of traditional epistemologies. (v5,#4)

Barnard, AC 1991. Die lewe voor God se aangesig (Ps 65). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 135-145. (Africa)

Barnard, E., "Perspective: Old-Growth: Some Questions, Truths, and Consequences," Journal of Forestry 102(no.3, April/May 2004):60-60(1). (v. 15, # 3)

Barnard, Helen. *Nature, Human Nature and Value*. Ph.D. Dissertation, Cardiff University, 2006. The main concern of environmental philosophy has been to find value for nature. This thesis links a theory of nature, a theory of human nature and a theory of value. A definition of nature is explored, requiring a brief history of the concept of nature. There has been a decline of teleological explanations and the development of two main contemporary explanations of human nature in relation to nature: Ultra-Darwinism (a reductionist explanation of human nature) and postmodernism. An analysis of these two positions shows that neither has an adequate metaphysics for finding value in nature, and this is revealed by an examination of two different types of environmental philosophy influenced respectively by the two opposing views. The problem of values is discussed with particular emphasis on moral values. An argument for objective values based on objective knowledge is put forward as well as a theory of human nature which leads to the conclusion that teleological explanations link a theory of nature, a theory of human nature, and a theory of value more satisfactorily than the non-teleological explanations of Ultra-Darwinism and postmodernism. This conclusion is relevant to the problems of the environment. The advisor was Robin Attfield.

Barnato, Teri. "Should Dogs and Cats Be Vegetarian?," The Animals' Agenda 17(no.3,1997):28. Teri Barnato examines the nutritional and ethical factors of meatless diets for companion animals. (v8,#3)

Barnea, A., and Nottebohm, Fernando. "Seasonal Recruitment of Hippocampal-Neurons in Adult Free-Ranging Black-Capped Chickadees." *Proceedings of the National Academy of Sciences of the United States of America* Vol. 91, no. 23 (1994): 11217-21. Chickadees develop new neurons before the stress of winter, hiding food before onset of winter and needing new neurons to remember where to find it. Interestingly, chickadees living in the wild produce double the number of neurons of chickadees that are kept as captive birds. Does wild nature builds better brains, or at least better bird brains? Similar studies have found that the brains of lions kept in zoos have much degenerated. The authors are in the Field Research Center for Ecology and Ethology at Rockefeller University.

Barnes, Don. "Vivisection: A Window to the Dark Ages of Science." The Animals' Agenda 16(Jul. 1996):20. (v7,#2)

Barnes, Matthew. Review of Wilkinson, Fire on the Plateau: Conflict and Endurance in the American Southwest. Environmental Values 9(2000):403.

Barnes, Michael, ed., An Ecology of the Spirit: Religious Reflection and Environmental Consciousness. Lanham, Md: University Press of America, 1993. The Annual Publication of the College Theological Society, vol. 36. 248 pages. \$ 21.50 paper. \$ 52.00 cloth. Barnes is professor of religious studies at the University of Dayton, Ohio. (v4,#4)

Barnett, Jonathan, ed. Planning For a New Century. Covelo, CA: Island Press, 2000. 218 pages. Paper \$29.95. Ways in which public policies have helped create, and can help solve, many of the problems facing our communities, federal, state, and local, including environmental quality. (v.11,#4)

Barnett, Tanya Marcovna, ed., Greening Congregations Handbook: Stories, Ideas, and Resources for Cultivating Awareness and Care in Your Congregation. Seattle, WA: Earth Ministry, 2002. (6512 23rd Ave. N.W., Suite 317, Seattle, WA 98117). (v.13,#4)

Barnhill, David Landis, and Gottlieb, Roger S., eds., Deep Ecology and World Religions. Albany, NY: State University of New York Press, 2001. This book grew out of a session on deep ecology and world religions at the 1997 American Academy of Religion, Annual Meeting. Sample chapters: Mary Evelyn Tucker, "Confucianism and Deep Ecology"; Eric Katz, "Faith, God, and Nature: Judaism and Deep Ecology"; Nawal Ammar, "Islam and Deep Ecology"; John B. Cobb, Jr., "Protestantism and Deep Ecology." And others. (v.12,#3)

Barnhill, David Landis, ed., At Home on the Earth: Becoming Native to our Place. A Multicultural Anthology. Berkeley: University of California Press, 1999. \$ 18.00 (v10,#4)

Barnhill, David Landis and Roger S. Gottlieb, eds. Deep Ecology and World Religions: New Essays on Sacred Ground. Reviewed in Environmental Ethics 25(2003):215-219. (EE)

Barnosky, AD; Hadly, EA; Maurer, BA; Christie, MI, "Temperate Terrestrial Vertebrate Faunas in North and South America: Interplay of Ecology, Evolution, and Geography with Biodiversity," Conservation Biology 15(no.3, 2001):658-674. (v.12,#4)

Barns, Ian, "Eschatological Hope and Ecological Justice," Ecotheology No 5/6 (Jul 98 / Jan 99):173-184.

Barns, Ian. "Environment, Democracy and Community." Environmental Politics 4(Winter 1995):101. (v7,#2)

Barr, Cameron. "Japan at a Boil Over Nuclear Agency's Coverups." The Christian Science Monitor 89.101 (21 April 1997): 5.

Barr, James, "Was Everything that God Created Really Good? A Question in the First Verse of the Bible." Pages 55-65 in Linadelt, Tod and Beal, Timothy, eds., God in the Fray: A Tribute to Walter Bruggeman. Minneapolis: Fortress, 1998. (v.10,#2)

Barr, James. Biblical Faith and Natural Theology. Oxford: Clarendon Press, 1993. 244 pages. Writing against the background of the rejection of natural theology by prominent twentieth century theologians (especially Karl Barth), Barr, well-known for his biblical exegesis, argues that natural theology is a legitimate enterprise within biblical thought. Any religious claim, no matter how strongly defended as revealed, includes some element of "anterior knowledge" that arises out of what has traditionally been viewed as natural theology. Natural theology is an essential and lively component of Biblical faith. Unfortunately, Barr chooses not to bring his new regard for natural theology to bear in any substantial way on the new discussions of the world and nature prompted by the ecological crisis. Barr presented these as Gifford lectures in 1991; an earlier Gifford lecturer denying natural theology was Karl Barth in 1938. (v6,#3)

Barreto, Luis S. "On Sayre's Alternative View of Environmental Ethics." Environmental Ethics 14(1992):377. (EE)

Barreto, Luís Soares, Ética Ambiental: Uma Anotação Introdutória (Environmental Ethics: An Annotated Introduction). 61 pages. Lisbon: Publicações Ciência Vida, Lda., 1994. ISBN 972-590-055-3. Chapter titles (in Portuguese): Introduction. General Perspective. Moral Extensionism. The Christian Perspective. Biocentrism. Ecocentrism. Radical Environmentalism (Deep Ecology, Ecofeminism, Social Ecology, Bioregionalism). Closing Commentary. Selected Bibliography. A brief introduction to the main schools of thought; the author is quite well read in the literature in English. Barreto is Professor Catedrático (Tenured) at the Instituto Superior de Agronomia, Lisbon. Address: Instituto Superior de Agronomia, Tapada da Ajuda, P-1399 Lisboa Codex, Portugal. (v5,#4)

Barrett, Alan, Lawlor, John, Scott, Sue. The Fiscal System and the Polluter Pays the Principle: A Study of Ireland. Brookfield, VT: Ashgate, 1997. 240 pp. \$63.95. The Irish fiscal system examined to see if the incentives generated by the taxes and subsidies are environmentally positive or negative. Are polluters being taxed in a way that makes them pay for their damage?

Barrett, Alan, Lawlor, John, Scott, Sue, eds. The Fiscal System and the Polluter Pays Principle. Brookfield, VT: Ashgate, 1997. 180pp. \$59.95 cloth. The Irish fiscal system is examined to find out if polluters are taxed in a way that makes them pay for their damage, or if they are being subsidised and so effectively encouraged to pollute. The book also suggests possible improvements to the system. The authors are at the Economic and Social Research Institute, Ireland. (v8,#1)

Barrett, Alan, Lawlor, John, Scott, Sue. The Fiscal System and the Polluter Pays the Principle: A Study of Ireland. Brookfield, VT: Ashgate, 1997. 240 pp. \$63.95. The Irish fiscal system examined to see if the incentives generated by the taxes and subsidies are environmentally positive or negative. Are polluters being taxed in a way that makes them pay for their damage?

Barrett, CB; Brandon, K; Gibson, C; Gjertsen, H, "Conserving Tropical Biodiversity amid Weak Institutions," Bioscience 51(no. 6, 2001):497-502. (v.13,#1)

Barrett, Christopher B., and Ray Grizzle. "A Holistic Approach to Sustainability Based on Pluralism Stewardship." Environmental Ethics 21(1999):23-42. In this paper, we advance a holistic ecological approach based on a three-compartment model. This approach favors policy initiatives that lie at the intersection of the three major areas of concern common to most environmental controversies: environmental protection, provision of basic human needs, and advancing economic welfare. In support of this approach, we propose a "pluralistic stewardship" integrating core elements of anthropocentrism, biocentrism, and ecocentrism. After presenting the basics of our model, we then explain why it is important to identify and promote a holistic ecological approach to sustainability. Here we employ the economic concept of path dependence, emphasizing that there exist multiple paths society can follow in environmental ethics and policy but once one has been chosen, implicitly or explicitly, there may be little opportunity to reverse such choices. (EE)

Barrett, Christopher B., Batabyal, Amitrajeet A. "Modeling Ecological Constraints on Tropical Forest Management: Comment," Journal of Environmental Economics and Management 32(1997):271.

Barrett, Gary W. and Farina, Almo, "Integrating Ecology and Economics," Bioscience 50 (No. 4, 2000 Apr 01): 311- . (v.11,#4)

Barrett, Gary W., and Barrett, Terry L. eds., Holistic Science: The Evolution of the Georgia Institute of Ecology (1949-2000). New York: Taylor and Francis, 2001. Contributions by Ronald Pulliam, Eugene P. Odum, Frank B. Golley, Gene E. Likens. Reviewed by Jianguo Liu, Landscape Ecology 18(no. 2, 2003):211-212. (v 14, #3)

Barrett, Greg. "Hawaiians Thundering Protest Shakes Private Property Debate." The Christian Science Monitor 89.107 (29 April 1997): 3.

Barrett, James, Segerson, Kathleen. "Prevention and Treatment in Environmental Policy Design," Journal of Environmental Economics and Management 33(no.2, 1997):196. (v8,#3)

Barrett, L, "Great Apes and Humans: the Ethics of Coexistence," Biological Conservation 107(no.3, 2002):375-376.
(v.13, #3)

Barrett, Scott, *Environment and Statecraft: The Strategy of Environmental Treaty-making*. New York: Oxford University Press, 2003.

Barrett, Suzanne. "Everything is Connected to Everything Else: Toronto and the Waterfronts, Shores and Coasts of the Great Lakes", Environments 24(no. 1, 1996).

Barringer, Felicity, "Unusual Alliance Is Formed to Clean Up Mine Runoff, New York Times, August 18, 2004, A13. In Utah unexpected alliances (ski resort operators, businesses, the U.S. Forest Service, and environmental groups) are co-operating to clean up the U.S. West, where mining waste has polluted the headwaters of 40 percent of all watersheds. (v. 15, # 3)

Barringer, Felicity, "A Search for Pearls of Wisdom in the Matter of Swine," New York Times, July 7, 2004, p. A4. Pig farms in eastern North Carolina produce massive wastes in land, water, and air and have become one of the most politically divisive issues in the state. During the 1990's the number of hogs grew from three to over nine million. Systems to deal with the waste, using lagoons and spraying treated wastes onto fields--the wastes do contain phosphorus and nitrogen, the main ingredients in fertilizer--has repeatedly failed. The EPA has done little and the State of North Carolina has mandated a study to which industry has contributed \$ 18 million. That study, two years overdue, is about to be released, lead by C. M. Williams of North Carolina State University. The better the solutions are, the more expensive they are. (v. 15, # 3)

Barringer, Felicity, "Forest Service Seeks Limits on All-Terrain Vehicles," New York Times, July 8, 2004, p. A12. The U.S. Forest Service is proposing that ATV's must stay on established trails, rather than drive anywhere they please, creating "outlaw" trails. Such non-trails now cover five times as many miles as the proper trails. ATV riders particularly like the challenge of steep slopes and this creates much erosion. ATV use has increased sevenfold in the past thirty years. Some of the 155 National Forests already require staying on trails, but many do not. ATV use has increased sevenfold in the past thirty years. One rider, asked about the appeal of riding in the mud, said, "I like getting muddy. If you haven't gotten muddy, you haven't ridden." (v. 15, # 3)

Barringer, Felicity, "Logging and Politics Collide in Idaho," New York Times, August 9, 2004, A10. Roadless area disputes, resulting from President Bush's plan to withdraw a Clinton ban. (v. 15, # 3)

Barringer, Felicity and Michael Manofsky, "G.O.P. Plans to Give Environmental Rules a Free-Market Tilt," New York Times, November 6, 2004, p. A14. The Bush administration intends to accelerate conservation by distributing billions of dollars to private landowners for the preservation of wetlands and wildlife habitat. Michael O. Leavitt, administrator of the Environmental Protection Agency, said: "We will make more progress in less time while maintaining the economic competitiveness for the country. That's my mission." (v.14, #4)

Barringer, Felicity, "U.S. Rules Out Dam Removal To Aid Salmon," New York Times, December 1, 2004, p. A1. The Bush administration has ruled out removing any dams on the Columbia and Snake Rivers to save endangered salmon species, even as a last resort. Previous Clinton administration policy has stated that dam removal might be an option, as a last resort. Authorities now claim it is unrealistic to consider removing dams and that they can solve the problem with better fish ladders and other solutions. (v.14, #4)

Barringer, Felicity, "New Provision Would Allow Slaughtering of Wild Horses," New York Times, November 25, 2004, p. A20. A provision attached to an Omnibus Spending Bill by Senator Conrad Burns, Republican, Montana, would allow the sale for slaughter of feral horses that have been rounded up and are more than ten years old or have been offered for adoption successfully three times. The bill is

awaiting final action. There are about 37,000 feral horses and burros running free in ten U.S. Western states; most are in Nevada. The Bureau of Land Management rounds up some when numbers increase and now has about 30,000 horses in holding areas. The feral horses compete with livestock and elk for grass. In some areas of Nevada wild animals, including horses, had consumed two-thirds of the available forage before cattle were let onto the land at the end of winter. This time it is the cattlemen, not the ecologists, who want the horses thinned off the landscape. B.L.M. prefers adoption; over 203,000 horses and burros have been adopted in three decades; about 6,600 were adopted last year. But there are many more horses than persons willing to adopt them. (v.14, #4)

Barringer, Felicity, "U.S. Panel Recommends No Protection for Grouse," New York Times, December 3, 2004, p. A 14. Amid an intense lobbying effort by energy and ranching interests in the U.S. West, a team of Interior department biologists has recommended that the sage grouse, a bird whose sagebrush territory has been vastly reduced by farming and development is not threatened with extinction and does not for the moment need to be protected under the Endangered Species Act.

Barringer, Felicity, "Steps Taken to Help Eagle Leave Endangered List," New York Times, February 14, 2006. U.S. Fish and Wildlife is resuming efforts to remove the bald eagle from the endangered species list, with cooperation of environmental groups. One problem, raised by developers, is whether two earlier laws protecting the eagle make it even more difficult for developers. Bald eagles in the U.S. numbered 413 breeding pairs in 1963; today there are 7,000-9,000 breeding pairs.

Barro, Susan C.; Manfredo, Michael J.; and Peterson, George L. "Examination of the Predictive Validity of CVM (Contingent Valuation) Using an Attitude-Behavior Framework." Society and Natural Resources 9, no.2 (1996): 111. (v7, #3)

Barrows, Paul L., "Wildlife Health: When to Intervene," Transactions of the Fifty-Seventh North American Wildlife and Natural Resources Conference, 1992, pages 433-438. When is intervention appropriate and to what degree in the treatment of wildlife diseases? Some advocate a laissez faire attitude, let nature take its course; but others believe we ought to rehabilitate each sick, injured, or dying wild bird or animal encountered. Reason and practicality lie between these extremes. Examples of intervention are discussed, both at the individual and population level, also reports from organizations and study symposia on this issue. Colonel Barrows is commanding officer of the U.S. Army Veterinary Command with a special interest in the welfare of wildlife on military reservations. (v5,#4)

Barry, Brian. Review of John O'Neill. Ecology, Policy, and Politics: Human Well-Being and the Natural World: (London: Routledge, 1993). (EV)

Barry, D., "Toward Reconciling the Cultures of Wilderness and Restoration," Restoration and Management Notes 16(1998):125-127. (v.12,#4)

Barry, Dwight, and Oelschlaeger, Max, "A Science for Survival: Values and Conservation Biology," Conservation Biology 10(no. 3, June 1996):905-911. Practice of conservation biology that does not actively and continuously question the values that shape it is self-defeating. Conservation biology is inescapably normative. Advocacy for the preservation of biodiversity is part of the scientific practice of conservation biology. Conservation biologists should reflect on the constitutive values underlying their research programs and policy recommendations. Such reflection is itself an inherent element of scientific objectivity and takes into account the social nature of scientific knowledge. Without openly acknowledging such a perspective, conservation biology could become merely a subdiscipline of biology, intellectually and functionally sterile and incapable of averting an anthropogenic mass extinction. Barry is in the School of Forestry and Environmental Studies, Yale University. Oelschlaeger was then in philosophy, University of North Texas, and now is at the University of Northern Arizona. (v.10,#1)

Barry, Dwight, and Oelschlaeger, Max. "A Science for Survival: Values and Conservation Biology." Conservation Biology 10, no.3 (1996): 905. (v7, #3)

Barry, John, Review of: Bluhdorn (Blüdorn), Ingolfur, Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm. Environmental Values 13(2004):127-130. (EV)

Barry, John, Environment and Social Theory. New York: Routledge, 2000. The historical relationship between social theory and the environment. Pre-Enlightenment and Enlightenment social theory and the environment. Twentieth century social theory and the environment. Economical theory and the environment. The relationship between ecology, biology, and social theory. Recent theoretical approaches to the environment. The development of a green social theory. Barry is at Keele University. (v.11,#1)

Barry, John, Review of: John Bellamy Foster, Marx's Ecology: Materialism and Nature, Environmental Values 11(2002):103-106.

Barry, John, *Environment and Social Theory*. Reviewed by Frank Schalow, *Environmental Values* 16(2007):406-408.

Barry, John, Review of John Dryzek, *The Politics of the Earth*, *Environmental Values* 16(2007):269-272.

Barry, John. "The Limits of the Shallow and the Deep: Green Politics, Philosophy, and Praxis." Environmental Politics 3 (no. 3, 1994): 369- . (v6,#1)

Barry, John. Review of John O'Neill, R. Kerry Turner & Ian Bateman (Eds.), "Environmental Ethics and Philosophy", Organization and Environment, 15, (No. 3, 2002): 347-9. Barry is a reader in the School of Politics, Queen's University Belfast. (v.13, #3)

Barry, John. Review of Matthew A. Cole, "Trade Liberalisation, Economic Growth and the Environment", Organization and Environment 14 (No. 4, December 2001) pp.477-80. Barry is a reader in politics at Queen's University Belfast, and has published extensively on normative aspects of green politics. (v.13,#2)

Barry, John. Rethinking Green Politics: Nature, Virtue and Progress. London: Sage Publications, 1998, 304pp. Reviewed by Patrick Curry. Environmental Values 9(2000):119.

Barry, John. *Environment and Social Theory*, 2nd ed. London: Routledge, 2007. Barry explores the contested character of the environment and nature within social theory. He examines the way the nonhuman environment plays roles in past thinkers such as Rousseau, Malthus, Marx, Darwin, Mill, Freud, and Horkheimer (and the Frankfurt School), as well as contemporary people such as Habermas, Dawkins, Diamond and Lomborg. Barry also discusses the relationship between the environment and gender, postmodernism, risk society schools of thought, and orthodox economic thinking. He concludes with an argument for an interdisciplinary green social theoretical approach to environmental issues.

Barry, John. *Environment and Social Theory*, 2nd ed. London: Routledge, 2007. Barry explores the contested character of the environment and nature within social theory. He examines the way the nonhuman environment plays roles in past thinkers such as Rousseau, Malthus, Marx, Darwin, Mill, Freud, and Horkheimer (and the Frankfurt School), as well as contemporary people such as Habermas, Dawkins, Diamond and Lomborg. Barry also discusses the relationship between the environment and

gender, postmodernism, risk society schools of thought, and orthodox economic thinking. He concludes with an argument for an interdisciplinary green social theoretical approach to environmental issues.

Barry, Joyce M. Review of *Nature's Altars: Mountains, Gender, and American Environmentalism*. By Susan Schrepfer. Environmental Ethics 28(2006):443-444. (EE)

Bartas, Jeanne-Marie, The Tale of the Starry Heavens Above and the Moral Law Within: Kant's Aesthetic Theory. Kant's aesthetic theory as a basis for environmental ethics. Master's thesis at Colorado State University, completed spring 1992. (v3,#4)

Bartas, Jeanne-Marie, "Aquaculture: An Overview," Part I in Vegetarian Journal, May/June 1997, pages 20-26, Part II in Vegetarian Journal July/August 1997, pages 17-22. The environmental and ethical ramifications of the raising of fish and other marine and aquatic animals, including such issues as water usage, genetic engineering, drugs, effluent and wastes control, and global environmental impacts. Bartas is a researcher at The Vegetarian Resource Group, and specializes in environmental chemistry. (v8,#2)

Bartholow, John M., Douglas, Aaron J., and Taylor, Jonathan G. "Balancing Hydropower and Environmental Values: The Resource Management Implications of the US Electric Consumers Protection Act and the AWARETM Software." Environmental Values 4(1995):255-270. This paper reviews the AWARETM software distributed by the Electric Power Research Institute (EPRI). The program is designed to facilitate the Federal Energy Regulatory Commission (FERC) license renewal process for US hydropower installations. The discussion reviews the regulatory, legal, and social contexts that give rise to the creation and distribution of AWARETM. The principal legal impetus for AWARETM is the Electric Consumer Protection Act (ECPA) of 1986 that directs FERC to give equal consideration to power and non-power resources during relicensing. The software is reviewed in this paper from several perspectives including those of natural resource economics, systems modeling, and the social context within which FERC licensing decisions are made. We examine both the software and its underlying methodology and find significant problems with each. Because of its flaws, AWARETM does little to further ECPA's equal consideration requirement. We find that the conservation and restoration impact of ECPA for US fisheries could be seriously hampered by the widespread use of AWARETM. KEYWORDS: AWARETM, Electric Consumer Protection Act, hydropower, water resources, Federal Energy Regulatory Commission. Bartholow, Douglas, and Taylor are at the Midcontinent Ecological Science Center, Fort Collins, Colorado. (EV)

Bartkowski, John P., and Swearingen, W. Scott, "God Meets Gaia in Austin, Texas: A Case Study in Environmentalism as Implicit Religion," Review of Religious Research 38(1997):308-324. Drawing on insights from Mircea Eliade's theory of sacred space, the authors call attention to a series of striking similarities between classical modes of religious experience on the one hand and the sacralization of a prized natural resource located in Austin, Texas, on the other. Using interview data, they argue that Austin's Barton Springs is construed in terms that provide (1) nodal space to individuals giving access to ultimate reality, (2) integrative space which binds them to the local Austin community, and (3) democratic space that furnishes Austin with a distinctive character in opposition to surrounding locales. The authors are at the University of Texas, Austin.

Bartlein, Patrick J., Whitlock, Cathy, Shafer, Sarah L. "Future Climate in the Yellowstone National Park Region and Its Potential Impact on Vegetation," Conservation Biology 11(no.3, 1997):782. The changes that might result from global warming are difficult to predict but models indicate they will be as great or greater than those seen in the paleoecologic record during previous warming intervals, and will likely exceed the capacities of present species to adjust to them, resulting in communities without any analogue in present-day vegetation. The authors are in geography, University of Oregon. (v8,#2)

Bartlett, Robert V. "Ecological Rationality: Reason and Environmental Policy." Environmental Ethics 8(1986):221-39. Ecological rationality is a concept important to most environmental and natural resources policy and to much policy-relevant literature and research. Yet ecological rationality as a distinctive form of reason can only be understood and appreciated in the context of a larger body of work on the general concept of rationality. In particular, Herbert Simon's differentiation between substantive and procedural rationality and Paul Diesing's specification of forms of practical reason are useful tools in mapping and defining ecological rationality. The significance and characteristics of ecological rationality suggest that it is a fundamental kind of reason, having precedence over others. Bartlett is in the department of Political Science, Purdue University, West Lafayette, IN. (EE)

Bartlett, Robert V., "Ecological Rationality: Reason and Environmental Policy," Environmental Ethics 8(1986):221-239. By analyzing the concept of rationality itself, we can see that one form of rationality ecological rationality--is fundamental, a necessary condition for human social life. (Katz, Bibl # 1)

Bartolommei, Sergio, Etica e Ambiente, Guerini e Associati s.r.l., Via A. Sciema 7, 20135 Milano, Italy, sec. ed., 1990. L. 25,000. 187 pages. An Italian work on environmental ethics. (v2,#1)

Bartolommei, Sergio. Etica e Ambiente. Reviewed in Environmental Ethics 13(1991):367-69.

Barton, A., "Review of: Daily, Gretchen C., and Katherine Ellison. The New Economy of Nature: the Quest to Make Conservation Profitable," Society and Natural Resources 16(no. 7, 2003): 668-670.

Barton, Harry, "The Isle of Harris Superquarry: Concepts of the Environment and Sustainability," Environmental Values 5(1996):97-122. In 1991 Redland Aggregates Ltd. put forward a proposal to embark upon the largest mining project in Europe, the chosen location being the remote island of Harris and Lewis in the Western Isles of Scotland. The proposal sparked off an impassioned debate between planners, conservationists and developers, while the local residents have attempted to come to terms with an operation on a scale previously inconceivable on the island. This paper attempts to examine the proposed development from a sociological angle. It is less concerned with justifying or condemning the project on economic or political grounds and more with analyzing the roots of the various viewpoints held by those involved, willingly or unwillingly, in the debate. From this analysis arise implications regarding different perspectives on the environment and different interpretations of the term sustainable. It is argued that these diverse perceptions are grounded in different interpretations of the environment, shaped by the cultural and historical context within which the groups or individuals that hold these views exist and interact. Ultimately, the paper makes a plea for a wider recognition of the diversity of meanings and interpretations implied by the term environment, a broader definition of the term development, and an expansion of the concept of sustainability to incorporate the variety of situations and perceived needs of different cultures. KEYWORDS: Cultural theory, empowerment, Isle of Harris, sustainability (EV)

Bascompte, Jordi, Pedro Jordano, and Jens M. Olesen, "Asymmetric Coevolutionary Networks Facilitate Biodiversity Maintenance," Science 312 (21 April, 2006): 431-433. In a study of pollinators and fruit-eating birds in forests in Spain, the authors find mutualistic webs but with asymmetric dependency. A plant may require a particular bird to distribute its seed (strong dependency) but that bird may eat the seeds of many kinds of plants (weak dependency), generalists versus specialists. The argument is that this mutualistic asymmetry tends to stabilize the coevolution of the whole ecosystemic network. The lead author is an ecologist in Seville, Spain. With commentary, John H. Thompson, "Mutualistic Webs of Species," Science 312 (21 April, 2006): 372-373.

Baskerville, G. L., 1997. "Advocacy, science, policy, and life in the real world." Conservation Ecology 1(1):article 9. Online:

<http://www.consecol.org/vol1/iss1/art9/>

Ecology does not provide information that is relevant to management and policy.

Baskin, Y, "The Greening of Horticulture: New Codes of Conduct Aim to Curb Plant Invasions," Bioscience 52(no.6, 2002):464-471. (v.13, #3)

Baskin, Yvonne, "Ecologists Dare to Ask: How Much Does Diversity Matter?" Science 264(April 8, 1994):202-203. Report from a workshop, sponsored by SCOPE/Global Biodiversity Assessment Synthesis Conference, in California earlier this year, on whether or how much diversity contributes to healthy ecosystem functioning. Mixed opinions, but it seems clear that some species are "rivets" (in Ehrlich's metaphor) in the Earth spaceship system, while others are only "passengers." Biodiversity is valuable up to a certain point (which may differ with different systems), but most ecosystems contain more diversity than is needed to reach peak productivity. See related item in issues section, below. (v5,#1)

Baskin, Yvonne. "Curbing Undesirable Invaders," Bioscience 46(no.10, 1996):732. The Norway/United Nations Conference on Alien Species calls for global action to squelch the rising tide of unwanted species. (v7,#4)

Baskin, Yvonne. The Work of Nature. Covelo, CA: Island Press, 1997. 288 pp. \$25 cloth. Baskin examines the threats posed to humans by the loss of biodiversity, distilling the work of the world's leading ecologists. She explains the practical consequences of declining biodiversity on ecosystem health and function. (v8,#2)

Basney, Lionel. An Earth-Careful Way of Life: Christian Stewardship and the Environmental Crisis. Downer's Grove, IL: InterVarsity Press, 1994. 168 pages. \$9.99 paper. Basney is professor of English at Calvin College. Narrative, story-like style. (v5,#2)

Bassett, Libby, ed., Earth and Faith: A Book of Reflection for Action. New York: United Nations Environment Programme, 2000. Produced by the New York office of UNEP, headquarters in Nairobi, Kenya. Brings forward the voices of the world's religions as engaged partners in facing the current environmental crisis, resulting from the Forum on Religion and Ecology, Mary Evelyn Tucker, Coordinator. The Germeshausen Foundation has supported the printing of 50,000 copies. Copies available from UNEP: e-mail: uneprona@un.org. (v.12,#2)

Basso, Keith, Wisdom Sits in Places: Landscape and Language Among the Western Apache. Albuquerque: University of New Mexico Press, 1996.

Basso, Keith, and Feld, Steven, eds., Senses of Place. Santa Fe, NM: School of American Research Press, 1996.

Basso, Keith, Wisdom Sits in Places: Landscape and Language Among the Western Apache. Albuquerque: University of New Mexico Press, 1996.

Basso, Keith, and Feld, Steven, eds., Senses of Place. Santa Fe, NM: School of American Research Press, 1996.

Bast, Joseph L., Peter J. Hill, and Richard C. Rue, Eco-Sanity: A Common-Sense Guide to Environmentalism. Lanham, MD: Madison Books, 1994. \$ 22.95. 316 pages. Bast is president of The Heartlands Institute, Palatine, Illinois and Detroit Michigan. Hill teaches economics at Wheaton College, Illinois. Rue is vice-president of the Heartlands Institute. (v5,#3)

Bastian, O, "Landscape Ecology : Towards a Unified Discipline?," Landscape Ecology 16(no.8, 2002):757-766. (v.13, #3)

Batabyal, A. A., Kahn, J. R. and Oneill, R. V., "On the Scarcity Value of Ecosystem Services," Journal of Environmental Economics and Management 46(no. 2, 2003): 334-352.

Batabyal, Amitrajeet A. Review of R. Nau, R., E. Gronn, M. Machina, and O. Bergland, eds., Economic and Environmental Risk and Uncertainty: New Models and Methods, Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Batabyal, Amitrajeet A. Review of A. Cornwell, and J. Creedy, Environmental Taxes and Economic Welfare. Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Batabyal, Amitrajeet A. Review of G. Atkinson, G., R. Dubourg, K. Hamilton, M. Munasinghe, D. Pearce, and C. Young, Measuring Sustainable Development: Macroeconomics and the Environment., Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Batabyal, Amitrajeet A. Review of J.B. Braden and S. Proost, eds., The Economic Theory of Environmental Policy in a Federal System, Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Batabyal, Amitrajeet A., and Beladi, Hamid, eds., The Economics of International Trade and Environment. Boca Raton: Lewis, 2001. Reviewed by Ackrill, Rob, Environmental Values 12(2003):537-539. (EV)

Batabyal, Amitrajeet A. Review of: Feiler, Bruce, Abraham: A Journey to the Heart of Three Faiths. Journal of Agricultural and Environmental Ethics 16(2003):516-518. (JAEE)

Batabyal, Amitrajeet A., Review of: Roy, Arundhati, Power Politics. Journal of Agricultural and Environmental Ethics 16(2003):96-98. (JAEE)

Batabyal, Amitrajeet A., Review of: Lewis, Bernard, What Went Wrong? Western Impact and Middle Eastern Response. Journal of Agricultural and Environmental Ethics 16(2003):416-418. (JAEE)

Batabyal, Amitrajeet A., Book Review of Michael Kremer and Rachel Glennerster, "Strong Medicine: Creating Incentives for Pharmaceutical Research on Neglected Diseases (Princeton, NJ: Princeton University Press, 2004. Journal of Agricultural and Environmental Ethics 18(2005):415-417. (JAEE)

Batabyal, Amitrajeet A., Book Review of Talbott, Strobe, Engaging India: Diplomacy, Democracy, and the Bomb (Washington, DC, USA. Brookings Institution Press, 2004) Journal of Agricultural and Environmental Ethics 18(2005):311-313. (JAEE)

Batabyal, Amitrajeet A., Book Review: The Argumentative Indian: Writings on Indian History, Culture and Identity by Amartya Sen (London, UK. Allen Lane, 2005), Journal of Agricultural and Environmental Ethics 19(2006):195-197. Batabyal is in the Department of Economics, Rochester Institute of Technology, Rochester, NY. (JAEE)

Batabyal, Amitrajeet A., Book review of Richard Dawkins, The God Delusion. Journal of Agricultural and Environmental Ethics 20(2007):221-223.

Batchelor, Martine, and Kerry Brown, ed., Buddhism and Ecology, 114 pages. In a series; the others are:

Breuilly, Elizabeth and Martin Palmer, ed., Christianity and Ecology, 118 pages. Ranchor Prime, Hinduism and Ecology, 118 pages. Khalid, Fazlun with Joanne O'Brien, ed., 111 pages. Rose, Aubrey, ed., Judaism and Ecology, 142 pages. The editors in each case include a variety of perspectives from that tradition (Prime is a single author, but interviews various persons). All in paper. London: Cassell Publishers Limited, for the World Wide Fund for Nature, 1992. \$ 5.99 each. A review of the series is in CTNS (Center for Theology and Natural Sciences) Bulletin 16 (no. 3, Summer, 1996):18-19.

Bate, Jonathan, Romantic Ecology: Wordsworth and the Environmental Tradition. New York: Routledge, 1991. "Modern ecological politics teaches us that to consider society only in terms of production, income, and ownership is insufficient. What is done to the land is as important as who owns it" (p. 46). "It is profoundly unhelpful to say there is no nature at a time when our most urgent need is to address and readdress the consequences of human civilisation's insatiable desire to consume the products of the earth" (p. 56). "The whole concept of society having an economic base with legal and political superstructure fails to address the fact that the economy of human society may in the end be dependent on something larger, the economy of nature" (p. 57). (v7,#1)

Bate, Jonathan. The Song of the Earth. London: Picador, 2000. Review by John Foster, Environmental Values 10(2001):541. (EV)

Bates, D., "Book Review: Beyond Great Walls: Environment, Identity, and Development On the Chinese Grasslands of Inner Mongolia. By Dee Mack Williams.," Human Ecology 31(no. 2, 2003): 328-330. (v 14, #3)

Bates, Diane and Rudel, Thomas K., "The Political Ecology of Conserving Tropical Rain Forests: A Cross-National Analysis," Society & Natural Resources 13(no.7, OCT 01 2000):619- . (EE v.12,#1)

Bates, Gerry M., Environmental Law in Australia, 4th ed. Sydney: Butterworths, 1995. 405 pages. (v7,#4)

Bates, H.E., Parker, Agnes Miller. Through the Woods: The English Woodland--April to April. London: Frances Lincoln, 1995 (distributed by Trafalgar Square, North Promfet, VT 05053; 800 423 4525. The playwright H.E. Bates took his turn in the 1930's at praising the beauty of the English land in a delightfully observant journal of woodsy rambles. Through the Woods has been reissued with its original woodcuts by Agnes Miller Parker. (v7,#1)

Bates, Jennifer. "An Inquiry into the Nature of Environmentally Sound Thinking." Environmental Ethics 25(2003):183-197. Many philosophers advocate a change in our thinking in order to move beyond an anthropocentric view of the environment. In order to achieve the kind of thinking that makes for sound environmental thinking, we have to look more deeply into the nature of thought and to revise the relation between thought directed outward to the world and thought directed inwardly to thought itself. Only with such insight can we begin to think soundly about the environment. Thought exhibits a characteristic that makes it hard to think environmentally soundly. This characteristic is the inability to think of something without at the same time making it one's property. In other words, if sound environmental thinking means moving beyond anthropocentric attitudes and, for example, extending moral categories to creatures other than humans, then we need to address how our thinking turns everything into "mine" before we go about establishing a theory about how that extension should take shape. Hegel is the philosopher who most deeply analyses the inevitable, yet dangerous role of "mining"—in the sense of "making mine," in the act of thinking. This potentially problematic character of thought risks making a number of otherwise sound environmental ways of thinking, unsound. However, we can provide a balance for this problematic characteristic in our thinking. (EE)

Bates, Lisa, Review of Three Challenges to Ethics by James Sterba. Oxford University Press, 2000.

Ethics and the Environment 8(no. 2, 2003):126-131.

Bates, Sara F., David H. Getches, Lawrence J. MacDonnell, and Charles F. Wilkinson, Searching Out the Headwaters: Change and Rediscovery in Western Water Policy. Washington, DC: Island Press, 1993. 250 pages. Paper, \$ 17.95. Western water use and the outmoded rules that govern it. Only by understanding the waters of the West and the people whose lives depend upon them can concerned citizens comprehend the seriousness of the current situation and help take steps toward reform. The authors are at the University of Colorado School of Law. (v4,#2)

Batie, SS, "Managing Pesticide Tradeoffs, " Environment 43(no. 8, 2001):40-44. (v.13,#1)

Batisse, Michel. "New Prospects for Biosphere Reserves." Environmental Conservation 22, no.4 (1995): 367. (v7, #3)

Battersby, John, "A Human Face for South Africa's Park System," The Christian Science Monitor 86 (23 August 1994): 12-13. (v5,#3)

Battisti, C; Gippoliti, S, "Conservation in the Urban-Countryside Interface: a Cautionary Note from Italy", Conservation Biology 18 (no.2, 2004): 581-583.

Baubosa, Joao Lopes, O Homem no Universo. Reflexao sobre possíveis implicações éticas da coincidência antrópica cosmológica (Man and Universe. Study on the possible implications of the cosmological anthropic coincidence), Faculdade de Letras da Universidade de Lisboa, 2000. M.A. thesis on cosmology and environmental ethics. This study is about the ethical implications of the cosmological anthropic principle and of John Gribbin's theory that defends the Universe as alive. These two theories, both based on the cosmological anthropic coincidence, have been put forward during the last four decades and are cosmological conceptions about the place of man and intelligent life in the Universe, having strong ethical implications. However, only the ethical implications of the anthropic principle's weak version are really acceptable because only this version has scientific credibility, being able to play an important role in environmental ethics. (v.12,#4)

Bauckham, Richard, "Joining Creation's Praise of God," Ecotheology 7 (No 1 July 2002):45-59. In the Bible and the Christian tradition an important aspect of the way the relationship of God, humanity and other creatures is understood is the idea that all creatures praise God and humans are to join in the praise offered by the other creatures. This theme has been misunderstood and neglected in the modern period. We should avoid distorting it in an hierarchical and anthropocentric direction, as happens in the idea that humans are the priests of creation. Instead this theme should act as a strong corrective to hierarchical and anthropocentric views of creation, It puts us among, rather than over the creatures, and encourages us to be helped in our own praise of God by appreciating the value other creatures have for God. Francis of Assisi and the eighteenth-century poet Christopher Smart are fine exemplars of the way humans may join creation's praise.

Bauer, DM; Cyr, NE; Swallow, SK, "Public Preferences for Compensatory Mitigation of Salt Marsh Losses: a Contingent Choice of Alternatives", Conservation Biology 18 (no.2, 2004): 401-411.

Bauer, Joanne, ed. *Forging Environmentalism: Justice, Livelihood, and Contested Environments*. Armonk, NY: M.E. Sharpe, 2006. Through a five-year multinational study, Bauer brings together eight case studies of industrial pollution and nature protection in China, Japan, India, and the US, along with commentary articles. The case studies include air pollution in Benxi (China), wetlands preservation in the Sanjiang Plain (China), industrial water pollution in Minamata Bay (Japan), power generation versus nature preservation at Lake Biwa and the Nagara River (Japan), industrial air pollution in Delhi (India),

fisheries management in Kerala (India), hazardous oil pollution in Grand Bois (US), and the development of the eco-community of Civano (US). The commentaries on the case studies represent an attempt to understand values cross-nationally in China, Japan, India, and the US and include: (1) "The Value of *Legality* in Environmental Action" by Sheila Jasanoff, (2) "Environmental Transformation and the Values of Modernity" by Arun Agrawal, (3) "Evaluating Environmental Justice Claims" by Robert Melchior Figueroa, (4) "Framing Shared Values: Reason and Trust in Environmental Governance" by Clark A. Miller, and (5) "How Shall We Study Environmental Values?" by Joanne Bauer and Anna Ray Davies.

Bauer, Joanne, ed. *Forging Environmentalism: Justice, Livelihood, and Contested Environments*. Armonk, NY: M.E. Sharpe, 2006. Through a five-year multinational study, Bauer brings together eight case studies of industrial pollution and nature protection in China, Japan, India, and the US, along with commentary articles. The case studies include air pollution in Benxi (China), wetlands preservation in the Sanjiang Plain (China), industrial water pollution in Minamata Bay (Japan), power generation versus nature preservation at Lake Biwa and the Nagara River (Japan), industrial air pollution in Delhi (India), fisheries management in Kerala (India), hazardous oil pollution in Grand Bois (US), and the development of the eco-community of Civano (US). The commentaries on the case studies represent an attempt to understand values cross-nationally in China, Japan, India, and the US and include: (1) "The Value of *Legality* in Environmental Action" by Sheila Jasanoff, (2) "Environmental Transformation and the Values of Modernity" by Arun Agrawal, (3) "Evaluating Environmental Justice Claims" by Robert Melchior Figueroa, (4) "Framing Shared Values: Reason and Trust in Environmental Governance" by Clark A. Miller, and (5) "How Shall We Study Environmental Values?" by Joanne Bauer and Anna Ray Davies.

Baulch, Helen, "Fish Fight, " *Alternatives* 25(no. 4, Fall 1999):4- . Alien salmon in Lake Huron keep anglers happy, but threaten native lake trout. (v10,#4)

Baulch, Helen. "Clear-cutting the Ocean Floor." *Alternatives* 25(No.3, Summer 1999):7- . Trawling gear devastates the world's continental shelves. (v10,#4)

Bauman, Whitney A. "The "Eco-Ontology" of Social/ist Ecofeminist Thought." *Environmental Ethics* 29(2007):279-298. The epistemological and ontological claims of social/ist ecofeminist thought (a combination of social and socialist ecofeminism) are moving away from the dichotomy between idealism and materialism (both forms of colonial thinking about humans and the rest of the natural world). The social/ist ecofeminists have constructed a postfoundational "eco-ontology" of nature-cultures (Haraway) in which the ideal and the material are co-agents in the continuing process of creation. Given that contemporary public discourse in the United States on the topic of "environmental issues" is still heavily shaped by Christian theology and metaphors, changing or challenging this discourse must also mean speaking theologically. Based upon an understanding of social/ist ecofeminist "eco-ontology," a new understanding of God (ideal) and Creation (material) can be constructed which suggests that God is a human horizon that helps reconnect (religion/re-ligare) Christian humans with the rest of the natural world and with the many human "others" of different religious traditions. In this construction, Carolyn Merchant's understanding of humans as "partners" with nature and Catherine Keller's postcolonial critique of the Christian doctrine of creation out of nothing are the most helpful. (EE)

Bauman, Zygmunt. *Consuming Life*. Cambridge: Polity Press, 2007. Bauman examines the impact of consumerist attitudes and patterns of conduct on communities and partnerships, identity building, politics and democracy, the production and use of knowledge, and social divisions and stratifications. He discusses the invasion and colonization of human relations by the worldviews and behavioral patterns shaped and inspired by commodity markets and the sources of dissent, resentment, and resistance to occupying forces.

Baumgartner, Christoph, "Exclusion by Inclusion? On Difficulties with Regard to an Effective Ethical

Assessment of Patenting in the Field of Agricultural Bio-Technology." Journal of Agricultural and Environmental Ethics 19(2006):521-539. In order to take ethical considerations of patenting biological material into account, the so-called "ordre public or morality clause" was implemented as Article 6 in the EC directive on the legal protection of biotechnological inventions, 98/44/EC. At first glance, this seems to provide a significant advantage to the European patent system with respect to ethics. The thesis of this paper argues that the ordre public or morality clause does not provide sufficient protection against ethically problematic uses of the patent system within the area of life. On the contrary, there are worrisome obstacles to any effective and comprehensive critical analysis of the ethical aspects of bio-patenting, especially in the field of agriculture. These obstacles can be seen as indirect consequences of the implementation of ethical considerations in form of the ordre public and morality clause in the EC Directive. Therefore, Article 6 of the EC Directive on the legal protection of biotechnological inventions seems to ultimately weaken the position of ethics in the debate concerning bio-patenting because the ordre public and morality clause is usually interpreted in an exclusively bio-ethical way in the sense of an "intrinsic ethics," which is primarily interested in questions regarding the moral status of particular entities. It is argued that an important cause of this phenomenon is that the decisive reasons against bio-patenting are concerns of social ethics, and not bio-ethics. Keywords: agricultural bio-technology - EC bio-patenting directive-ethics - ordre public and morality clause - patents. Baumgartner is in the Faculty of Arts and the Humanities/Theology, University of Utrecht, Utrecht, The Netherlands. (JAEE)

Baumgartner, Johann and Josef Hartmann. "The Design and Implementation of Sustainable Plant Diversity Conservation Program for Alpine Meadows and Pastures." Journal of Agricultural and Environmental Ethics 14(2001):67-83. Dr. Baumgartner is at the International Centre of Insect Physiology and Ecology (ICIPE), Nairobi, Kenya. (JAEE)

Baumslag, David, "Choosing Scientific Goals: The Need for a Normative Approach," Studies in the History and Philosophy of Science 29(no. 1, 1998):81-96. One needed normative goal is that appreciation of nature should be a goal of science equally with understanding of nature. Environmental philosophy has helped to shift the goals of science in this direction. Baumslag is in philosophy, University of Calgary, Alberta, Canada.

Baur, Gene, *Farm Sanctuary: Changing Hearts and Minds about Animals and Food* (New York: Touchstone, Simon and Schuster, 2008). Reviewed by David Hoch in *Journal of Agricultural and Environmental Ethics* 21(2008):485-490.

Bauston, Lorri. "Seven Billion Reasons to Go Vegetarian." The Animals' Agenda 16(Jul. 1996):35. (v7,#2)

Bautista, LM; Garcia, JT; Calmaestra, RG; Palacin, C; Martin, CA; Morales, MB; Bonal, R; Vinuela, J, "Effect of Weekend Road Traffic on the Use of Space by Raptors," Conservation Biology 18(no.3, 2004):726-732. (v. 15, # 3)

Bavidge, Michael, and Ground, Ian. Can We Understand Animal Minds? New York: St. Martin's Press, 1995. 192pp. \$29.95 cloth. Analyzes the assumptions that underlie our thoughts about animals. Bavidge and Ground examine reasons for reluctance to attribute psychological states and capacities to animals, and focus on the expressive life of animals. This approach allows for the removal of obstacles that stand in the way of a proper sensitivity to the world as shared. (v8,#1)

Bavington, D, "Managerial Ecology and its Discontents: Exploring the Complexities of Control, Careful Use and Coping in Resource and Environmental Management", Environments 30(no.3, 2002):3-22.

Bavington, D., "Review of: Earth, Air, Fire, Water: Humanistic Studies of the Environment, Jill Ker

Conway, Kenneth Keniston, and Leo Marx, editors," Environments 29(no.1, 2001): 143-45. (v.13,#2)

Bavington, D; Slocombe, S, "Moving Beyond Managerial Ecology: Contestation and Critique", Environments 30(no.3, 2002):1-2.

Bavington, D; Slocombe, S, "Moving Beyond Managerial Ecology: Counterproposals," Environments 31(no.1, 2003):1-4. (v.14, #4)

Bavington, Dean, "The Iatronic Effects of Environmental Management: Servicing a Needy Nature?" Faculty of Environmental Studies Occasional Papers, York University, Ontario, Canada, vol. 4, no. 1, September 1998. An "iatrogenic" effect in medicine is when an intended cure makes things worse. Environmental management can intend to fix, but in fact make things worse. Bavington is at York University. (v.13,#1)

Bawa, Kamaljit S., Menon, Shaily, Gorman, Leah R. "Cloning and Conservation of Biological Diversity: Paradox, Panacea, or Pandora's Box," Conservation Biology 11(no.4, 1997):829. (v8,#3)

Bawden, Richard. Review of T.B. Mepham, G.A. Tucker, J. Wiseman Issues in Agricultural Bioethics, Journal of Agricultural and Environmental Ethics 11(1999):145-150. (JAEE)

Bawe, Laurens. "Private Profit at Public Expense: The Bakun Hydroelectric Project", The Ecologist 26(no.5, 1996):229. In 1993, the Malaysian government revived its plans for a huge hydroelectric project in Sarawak, Malaysia--the Bakun dam--and announced that it would be built with private (rather than public) money. Private finance has not been forthcoming, however. Direct and indirect government subsidies are now bailing the project out. Many Malaysians have expressed concern at the consequences of "privatization" in the country and the ways in which Bakun has entrenched unaccountable political-corporate networks.

Baxter, Brian, Ecologism: An Introduction. Edinburgh: Edinburgh University Press, and Washington: Georgetown University Press, 2000. Articulates and defends "ecologism"--an ideology that has grown from the developing interest in the moral, political, economic, and scientific issues centering on human relationships with the environment. Ecologism starts from the position that the non-human world is worthy of moral consideration and that this should be taken into account in the ordering of social, economic and political systems. Ecologism is a major development in environmental politics and, increasingly, a significant alternative to existing political philosophies. A comprehensive and systematic survey of the main components ecologism, examining elements which have been neglected in the existing literature. (v.11,#2)

Baxter, Brian H., "Naturalism and Environmentalism: A Reply to Hinchman," Environmental Values 15(2006): 51-68. The values which are definitive of the humanist project, such as freedom and self-determination, are of central concern to environmentalism. This means, according to Lewis P. Hinchman, that environmentalists should seek a rapprochement with humanism, rather than rejecting it for its apparent anthropocentrism. He argues that this requires in turn the acceptance of those approaches to human self-understanding which are central to the hermeneutic traditions and the rejection of naturalist approaches, such as sociobiology, which is accused of producing deterministic, reifying, reductionist, dehumanising forms of understanding of human beings and human life. This paper seeks to show that sociobiology does not pose the kinds of threat to humanism and environmentalism outlined by Hinchman. (EV)

Baxter, Brian H., "Ecocentrism and Persons," Environmental Values 5(1996):205-219. Ecocentrism has to establish an intrinsic connection between its basic value postulate of the non-instrumental value of the

nonhuman world and a conception of human flourishing, on pain of failure to motivate acceptance of its social and political prescriptions. This paper explores some ideas recently canvassed by ecocentrists such as Robyn Eckersley, designed to establish this connection--transpersonal ecology, autopoietic value theory and ecofeminism--and finds them open to objection. An alternative approach is developed which concentrates on the connection between non-human nature and personhood, via the phenomenon of culture. Persons are conceived of as essentially culture-creators, and the fact of their embodiment in ecosystems is argued to be essential to their activities as culture creators. The variety and integrity of such systems thus turns out to be essential for the flourishing of what is essential to personhood. This means that ecocentrism has to be abandoned in its pure form, and replaced with person-centrism, but this conclusion is argued for on the basis of the extension of the concept of the self--a strategy often endorsed by ecocentrists themselves. KEYWORDS: Ecocentrism, environmental ethics, intrinsic value theory, persons (EV)

Baxter, Brian. "Environmental Ethics - Values or Obligations? A Reply to O'Neill." Environmental Values 8(1999):107-112. ABSTRACT: Onora O'Neill recently argued that environmental ethics could and should be reformulated in terms of a search for the obligations held by moral agents towards each other, with respect to the non-human world. The more popular alternative, which seeks to establish the intrinsic value of the non-human, is plagued with various theoretical difficulties attaching to the concept of value. It is here argued that O'Neill's attempt to determine fundamental obligations of moral agents on the basis of a non-universalisability criterion does not succeed. It is further claimed that such an approach, in spite of the advantages which O'Neill sees it as having, is itself open to serious objection from the viewpoint of environmental ethics, especially as human beings are able in principle to release each other from mutual obligations. It is concluded that, in spite of the difficulties involved, postulations of (intrinsic) value to non-human nature do seem to be indispensable to environmental ethics. KEYWORDS: Environmental ethics, obligations, values, universalisability. Brian Baxter Political Science and Social Policy University of Dundee Dundee DD1 4HN, UK. (EV)

Baxter, Brian. *Ecologism: An Introduction*. Translator: Zheng Jiangping. (Chongqing: Chongqing Publishing House, 2007). (in Chinese)

Baxter, G. S., M. Hockings, and Beeton, R. J. S. "Trends in Wildlife Management and the Appropriateness of Australian University Training." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 4, August 1999):842- . (v10,#4)

Bay, Ian S. "A Response to Seven Vogel's 'The End of Nature.'" Environmental Ethics 24(2002):335-336. (EE)

Baydack, Richard K., Campa, Henry III, Haufler, Jonathan B., eds. Practical Approaches to the Conservation of Biological Diversity. Covelo, CA: Island Press, 1999. 320 pp. \$65 cloth, \$35 paper. Typical real-world constraints, criticisms, and related management problems; alternative solutions and options for managers. Future directions and innovations in biodiversity conservation. (v.10,#1)

Bayet, Fabienne, "Overturning the Doctrine: Indigenous People and Wilderness--Being Aboriginal in the Environmental Movement." Social Alternatives 13(no. 2, July, 1994):27-32. There is no such thing as wilderness in Australia and has not been for millennia. "The whole of Australia is an Aboriginal artefact" (p. 28). "'Wilderness', in this [European] perspective, denotes land which is wild, uninhabited, or inhabited only by wild animals. Such conceptions of wilderness and conservation are yet another form of paternalism and dispossession if they continue conceptually to remove Aboriginal people from the Australian landscape" (p. 27). Bayet is an Australian Aboriginal and in research at the Aboriginal Research Institute, University of South Australia. (v.9,#3)

Bayles, Michael D. and Kenneth Henley, Right Conduct: Theories and Applications. First published by Random House, now bought by McGraw Hill. The first edition, 1983, had a section, "Population, Hunger, and the Environment," but the second and current edition, 1989, has dropped that, substituting a section on "Future Generations." (v2,#3)

Bayon, R, "More Than Hot Air: Market Solutions to Global Warming," World Policy Journal 19(no.3, 2002): 60-68.

Beacham's Guide to Environmental Issues and Sources. 5 volumes; 3,350 pages; 40,000 citations. 39 chapters in entries varying from 35 to 150 pages. \$ 240. Claims to be the only comprehensive bibliography related to environmental issues worldwide, organized by topic and by type of source for useful access. Beacham Publishing, Inc., 2100 S Street, N. W., Washington, DC 2008. 800/466-9644. Fax 202/234-1402. (v4,#3)

Beachy, Roger N., "The Very Structure of Scientific Research Does Not Mitigate Against Developing Products to Help the Environment, The Poor, and the Hungry", Journal of Agricultural and Environmental Ethics 4(1991):159ff. In a debate: Does the very structure of scientific research mitigate against developing products to help the hungry, the poor, and the environment?

Beamish, Richard. Getting the Word Out in the Fight to Save the Earth. Baltimore: John Hopkins University Press, 1995. An instruction manual on how environmental and not-for-profit organizations can use existing avenues of mass communication to maximum effect. How any non-profit citizens group can expand and activate its membership, pressure government officials, use the news media, and shape public policy in the fight to save the earth. Beamish is a communications consultant. (v7,#1)

Bean, Michael J., Rowland, Melanie. The Evolution of National Wildlife Law, 3rd ed. Westport, Ct.: Praeger Publishers, 1997. \$75 cloth, \$28 paper. Since the second edition of 1983, intense interest in wildlife law has been matched only by a greatly increased level of litigation within the field and by the amount of new legislation enacted. This third edition thoroughly re-examines the field and provides a comprehensive review. (v8,#3)

Bean, Michael J., Wilcove, David S. "The Private-Land Problem," Conservation Biology 11 (no.1, 1997):1. (v8,#2)

Bean, Michael J. The Evolution of National Wildlife Law. Reviewed in Environmental Ethics 1(1979):189-92.

Bean, MJ, "The Endangered Species Act under Threat," BioScience 56 (no. 2, February 2006): 98-98.

Beaney, Peter. "China's Superdam: The Three Gorges Project," Environmental Politics 4, no.2 (Summer 1995):333- . (v6,#4)

Beans, Bruce E., Eagle's Plume: Preserving the Life and Habitat of America's Bald Eagle. New York: Scribner, 1996. \$ 25. Even among the millions of Americans who seem to care that the eagle survives, there is an almost total lack of information about its natural history and present status. (v7,#4)

Bear, D, "Some Modest Suggestions for Improving Implementation of the National Environmental Policy Act," Natural Resources Journal 43(no.4, 2003):931-960. (v. 15, # 3)

Beard, Daniel P., "Dams Aren't Forever," New York Times (10/6/97): A17. Draining Lake Powell. See write up under the entry for: Brooke, James, "In the Balance, the Future of a Lake," New York Times

(9/22/97): A10. (v8,#3)

Beardsley, Tim, "Where Science and Religion Meet" Profile of Francis S. Collins, Director of the National Human Genome Research Institute. Scientific American 278 (no. 2, February 1998):28-29. The head of the U.S. human genome project is a conservative Christian who worries that the resulting genetics will be used for unjustified abortions, of fetuses who have what prospective parents judge to be undesirable traits, such as a genetic disposition to obesity. Humans have an innate sense of right and wrong that "doesn't arise particularly well" from evolutionary theory, but has religious origins. One needs much ethical sensitivity facing the possibilities in human genetics. (v.9,#3)

Beardsley, Timothy M., "Metagenomics Reveals Microbial Diversity," BioScience 56 (no.3, March 2006): 192-196 (5).

Beardsley, Timothy M., "Review of: J. Craig Venter: Taking Genomics into the Environment," BioScience 56 (no.3, March 2006):197-201 (5).

Beardsley, Timothy M., "Catastrophe in the Wings?," BioScience 56 (no.3, March 2006): 179-179 (1).

Bearnet is (was) edited by Margaret Pettis, issued periodically as an update on bear welfare throughout the United States and Canada, sometimes elsewhere, with particular attention to bear hunting, to Animal Damage Control measures, and on bear recovery plans. The current issue contains news from Washington, Oregon, Alaska, B.C., California, Nevada, Utah, Idaho, Colorado, Wyoming, New Mexico, Texas, Florida, Virginia, Pennsylvania, Maryland, New York, New Hampshire, Michigan, and Ontario. Bearnet, Box 72, Hyrum, UT 84319. (v5,#1) Now discontinued.

Beatley, Timothy, Manning, Kristy. The Ecology of Place: Planning for Environment, Economy, and Community. Covelo, CA: Island Press, 1997. 225 pp. \$25. Policy and development issues that affect a community--from its economic base to its transit options, to the ways in which its streets and public spaces are managed--and examine the wide range of programs, policies, and creative ideas that can be used to turn the vision of sustainable places. (v9,#2)

Beatley, Timothy. Ethical Land Use: Principles of Policy and Use. Johns Hopkins University Press, 1994. 352 pages, \$55.00; \$17.95 paper. All land-use decisions--from interstate highways to lawn chemicals--involve ethical choices. Analyzes and describes issues faced by individuals and policy makers. Sections include: ethical framework; market perspectives, harm, rights, distributive obligations, duties, future generations; individual liberties; community and politics; concluding principles. (v5,#2)

Beauchamp, André, Pour une sagesse d'environnement (Ottawa: Novalis, 1991). Beauchamp is president of Enviro-Sage, Inc., Montreal. (v5,#1)

Beauchamp, E. G., "Animals and Soil Sustainability", Journal of Agricultural Ethics 3(1990):89ff. Domestic livestock animals and soils must be considered together as part of an agroecosystem which includes plants. Soil sustainability may be simply defined as the maintenance of soil productivity for future generations. There are both positive and negative aspects concerning the role of animals in soil sustainability. The key component for a fully compatible and acceptable association between domestic animals and soil productivity is proper management. Careful management of the components of an animal-based agroecosystem is required if soil productivity and environmental quality are to be maintained. Beauchamp is in land resource science at the University of Guelph, Ontario.

Beauchamp, E.G., Review of Solbrig, Otto T., Solbrig, Dorothy J., So Shall You Reap: Farming and Crops in Human Affairs. Journal of Agricultural and Environmental Ethics 9(1996):86-87. (JAEE)

Beauchamp, Tom L., Case Studies in Business, Society, and Ethics, 3rd ed. Englewood Cliffs, NJ: Prentice-Hall, 1993. Includes a section on cases involving business and the environment. (v3,#4)

Beaud, Michel, Calliope Beaud, and Mohamed Larbi Bouguerra, eds., L'état de l'environnement dans le monde. Paris: La Librairie La Decouverte, 1993. (v5,#1)

Beaumont, T. The End of the Yellowbrick Road. Review by Roger Levett, Environmental Values 7(1998):496.

Bebbington, Anthony, "NGOs and uneven development: geographies of development intervention", Progress in Human Geography 28(no.6, December 2004): 725-745(21).

Becher, Anne, ed., American Environmental Leaders: From Colonial Times to the Present, 2 vols. Santa Barbara, CA: ABC-CLIO, 2000. 921 pages in the two volumes. \$ 175.00. Almost 350 American environmental leaders, typically with a two-page introductory and summary article. Many historical figures, although most of the leaders portrayed are alive today. Includes the most visible movers and shakers but also those who importantly collaborate on conservation efforts from behind the scenes. Scientists, activists, government personnel, business leaders, lawyers, poets, farmers, economists. Among the philosophers and theologians (and cousins): Wendell Berry, J. Baird Callicott, John B Cobb, Bill Devall, Wes Jackson, Bryan Norton, Holmes Rolston, Rosemary Radford Ruether, Theodore Roszak, George Sessions, Donald Worster. Each entry has a springboard bibliography. This is a good one to encourage your library to buy. (EE v.12,#1)

Beck, A. and Katcher, A. 1996. Between pets and people: The importance of animal companionship, rev. ed., West Lafayette, IN: Purdue University Press, 1996. Contains list of world-wide-web sites as of 1996.

Beck MW; Heck, KL; Able, KW; Childers, DL; Eggleston, DB; Gillanders, BM; Halpern, B; Hays, CG; Hoshino, K; Minello, TJ, "The Identification, Conservation, and Management of Estuarine and Marine Nurseries for Fish and Invertebrates," Bioscience 51(no. 8, 2001):633-642. (v.13,#1)

Beck, Roy, The Case Against Immigration. New York: W. W. Norton, 1996. The moral, economic, social, and environmental reason for reducing U.S. immigration back to traditional levels. (v8,#1)

Beck, Roy, and Kolankiewicz, Leon, "The Environmental Movement: Retreat from Advocating U.S. Population Stabilization (1970-1998): A First Draft of History", Journal of Policy History 12, No 1, 2000. "The years surrounding 1970 marked the coming of age of the modern environmental movement. As that movement approaches its fourth decade, perhaps the most striking change is the virtual abandonment by national environmental groups of U.S. population stabilization as an actively-pursued goal. To begin to understand why that shift has occurred and the significance of that shift, it will be important to review the 1970-era movement and its population roots." The article then examines in detail the events leading to abandonment of domestic population stabilization efforts by major environmental organizations. ZPG and Sierra Club are used as case studies. Important for analyzing immigration policy. The published (short) version can be ordered from: NumbersUSA, 1601 N. Kent St., #1100, Arlington, VA 22209. (703) 816-8820. E-mail: info@numbersusa.com. In addition, the entire article is on the web at <http://www.numbersusa.com/cgi/text.cgi?Jph>. (v.11,#2)

Beck, Ulrich, Ecological Politics in an Age of Risk (Cambridge: Polity Press, 1995). Reviewed by Jo Smith. Environmental Values 6(1997):239-241. (EV)

Beck, Ulrich and Mark A. Ritter translator. Ecological Enlightenment: Essays on the Politics of the Risk

Society. Atlantic Highlands, NJ: Humanities Press, 1994. In the sequel to Risk Society Beck now examines the politics of that risk society. He starts from the assumption that the ecological issue, considered politically and sociologically, is a systematic, legalized violation of fundamental civil rights and, from this position, adduces that the ecological conflict is the successor to the industrial conflict. Beck is at the Ludwig-Maximilians University, Munich. (v7,#1)

Becker, Christian and Reiner Manstetten, "Nature as a You: Novalis' Philosophical Thought and the Modern Ecological Crisis," Environmental Values 13(2004):101-118. This paper aims to introduce the German Romantic poet Novalis into the discussion of the modern ecological crisis. In particular we examine Novalis' unique philosophy of nature as a You in which he deals with both of the two aspects of the relationship between humans and nature: their original identity as well as the distinction between them. We analyse the way in which Novalis understood the relationship between nature and humankind dynamically, and show the significance of his concept of poetry for this question. This concept is analysed and described in respect to its principal features: creativity and love. The former is regarded by Novalis as a general capacity of humans as well as an expression of nature itself. Together with love it forms the base for a possible harmonious relationship between humans and nature. We furthermore interpret Novalis' economic thought against the general background of his philosophy of nature and his understanding of humankind. Novalis recognises the crucial role economic action plays in the relationship between nature and humankind and he offers some important insights into this issue. Finally, we discuss the relevance of Novalis' concept of nature as a You for environmental philosophy. By comparison with other concepts of nature in the modern environmental debate, we show how Novalis' thought offers a new perspective on the human-nature relationship and thus fruitful stimulation for today's environmental philosophy. Becker is in the Interdisciplinary Institute for Environmental Economics, University of Heidelberg. Manstetten is at the Alfred-Weber-Institute, University of Heidelberg. (EV)

Becker, Gerhold K., and James P. Buchanan, eds., Changing Nature's Course: The Ethical Challenge of Biotechnology. Hong Kong: Hong Kong University Press, 1996. 220 pages. Paper, US \$ 19.00 ISBN 962-209-403-1. Hong Kong University Press, 139 Pokfulam Road, Hong Kong. Phone 852 2550 2703 Fax 852 2875 0734. Biotechnology marks a new scientific revolution. It holds the promise of generating resources to meet human needs in the fight against hunger, disease and environmental disasters. However, critics argue that biotechnology will jeopardize evolution and add incalculable, self-made risks to the fragile conditions of life on this planet. (v7,#4)

Beckerman, Wilfred, "'Sustainable Development': Is it a Useful Concept?" Environmental Values 3(1994):191-209. It is argued that 'sustainable development' has been defined in such a way as to be either morally repugnant or logically redundant. 'String sustainability, overriding all other considerations, is morally unacceptable as well as totally impractical and 'weak' sustainability, in which compensation is made for resources consumed, offers nothing beyond traditional economic welfare maximization. Apart from a few small developing countries heavily dependent on minerals or other finite primary products, the measurement of some wider concept of 'sustainable' GNP is a waste of time and such estimates as have been made are virtually worthless. KEYWORDS: Environmental policy, intergenerational justice, measurement of GNP, optimality, social discount rate, sustainability constraints, sustainable development, welfare maximization. Beckerman is at Balliol College, Oxford, U.K. (EV)

Beckerman, Wilfred, Pasek, Joanna, "Plural Values and Environmental Valuation," Environmental Values 6(1997):65-86. ABSTRACT: The paper discusses some of the criticisms of contingent valuation (CV) and allied techniques for estimating the intensity of peoples preferences for the environment. The weakness of orthodox utilitarian assumptions in economics concerning the commensurability of all items entering into peoples choices is discussed. The concept of commensurability is explored as is the problem of rational choice between incommensurate alternatives. While the frequent claim that the environment has some unique moral intrinsic value is unsustainable, its preservation often raises ethical

and other motivations that are not commensurate with the values that people place on ordinary marketable goods. Nevertheless, CV is also claimed to have some advantages and it is concluded that little progress will be made in this area until both sides in the debate recognise what is valid in their opponents arguments. (EV)

Beckerman, Wilfred, and Joanna Pasek, Review of Broom, John, Counting the Cost of Global Warming. Environmental Values Vol.1 No.4(1992):363.

Beckerman, Wilfred. Review of Foster, Valuing Nature? Ethics, Economics and the Environment. Environmental Values 9(2000):122.

Beckerman, Wilfred. "How Would You Like Your 'Sustainability', Sir? Weak or Strong? A Reply to my Critics." Environmental Values 4(1995):169-179. This article concentrates on the Jacobs and Daly criticisms (Environmental Values, Spring 1994) of my earlier article in the same journal (Autumn 1994) criticising the concept of 'sustainable development.' Daly and Jacobs agreed with my criticisms of 'weak' sustainability, but defended 'strong' sustainability on the grounds that natural and manmade capital were 'complements' in the productive process and that economists are wrong, therefore, in assuming that they are infinitely substitutable. This article maintains that they are confusing different concepts of 'complementarity' and 'substitutability.' It is also argued that, in fact, they do both sell crucial passes in their defence of strong sustainability without providing any clear criteria for their abandonment of it in certain cases. It is also denied that the fact that environmental services may provide different satisfactions from those obtained from other goods and services elevates it to the status of some over-riding moral value, or that discounting future costs and benefits is 'unfair' to future generations. KEYWORDS: discounting, economic welfare, environmental values, inter-generational justice, natural capital, scarce resources, sustainability. Beckerman is at Balliol College, Oxford. (EV)

Beckert, Cristina, ed., Natureza e Ambiente: Representações na Cultura Portuguesa (Nature and Environment: Representations in Portuguese Culture). Lisboa: Centro de Filosofia da Universidade de Lisboa, 2001. Introduction by Viriato Soromenho-Marques. Papers from a symposium held in 1998 at the University of Lisbon. The papers in this anthology show different features of nature and environment in Portuguese culture and were put together in three main groups. The first group regards the way popular Portuguese tradition and contemporary literature conceive the relation between man and nature and how some Portuguese writers and poets predict the environmental crisis we are living now. The second group consists of political and sociological analysis concerning the history of the Portuguese environmental associations and the image of environmental issues released by the media. Finally, the third group concerns nature and environment as philosophical categories and includes papers about the relation between nature and technique, the notion of a "natural community" inherited from Aldo Leopold, along with studies on Kant's aesthetic concept of nature and Portuguese philosophical views on this category. Beckert and Soromenho-Marques are in philosophy at the University of Lisbon. (v.12,#4)

Becket, Fiona, and Terry Gifford, eds. *Culture, Creativity and Environment: New Environmentalist Criticism*. Amsterdam: Rodopi, 2007. Contents include: (1) "Introduction" by Fiona Becket and Terry Gifford, (2) "Journey to the Heart of Stone" by Val Plumwood, (3) "What is (ecological) 'nature'? John Stuart Mill and the Victorian Perspective" by John Parham, (4) "Fear and Flowers in Anya Gallaccio's *Forest Floor, Keep off the Grass, Glaschu and Repens*" by Judith Rugg, (5) "Like a Ship to be Tossed: Emersonian Environmentalism and Marilynne Robinson's *Housekeeping*" by Hannes Bergthaller, (6) "In the Mirror of Middle Earth: Langland's use of the world as a book and what we can make of it" by Gillian Rudd, (7) "Poodles and Curs: Eugenic Comedy in Ibsen's *An Enemy of the People*" by Greg Garrard, (8) "The Hunter as Nature-Lover: Idyll, aggression and ecology in the German animal stories of Otto Alscher" by Axel Goodbody, (9) "Postcolonialism, Ecocriticism and the Animal in Recent Canadian Fiction" by Graham Huggan, (10) "Barry MacSweeney's Moorland Romance" by Matthew Jarvis, (11)

“Painting Landscape: Mediating Dislocation” by Judith Tucker, (12) “Modernity and the Politics of Place in Luis Trenker’s *Der verlorene Sohn*” by Guinevere Narraway, and (13) “Heidegger and Merleau-Ponty: Eco-poetics and the Problem of Humanism” by Louise Westling.

Beder, S., "Neoliberal Think Tanks and Free Market Environmentalism," Environmental Politics 10(no. 2, 2001):128-133. (v.13,#1)

Beder, Sharon, Global Spin: Corporate Assault on Environmentalism. White River Junction, Vermont: Green Books, Chelsea Green Publishing Co., 1997, 1998. Large corporations are using sophisticated techniques to change the way the public and politicians think about the environment and to weaken gains made by environmentalists, turning politicians against increased environmental regulation. Among their techniques: employing PR firms to set up front groups that promote the corporate agenda while posing as public interest groups; creating "astroturf"--artificially created grassroots support groups for corporate causes; strategic lawsuits against public participation (SLAPPS); getting corporate-based environmental educational materials into public schools; and funding conservative think tanks. Beder is a lecturer in science and technology studies, University of Wollongong, Australia.

Beebe, JT, "Review of: Principles of Water Resources: History, Development, Management and Policy by Thomas V. Cech", Environments 31 (no.3, 2003): 85-86.

Beechey, Tom, McLeod, Angus. "Parks and Other Heritage Areas in Ontario's Countryside," Environments 24(no.3, 1997):37. (v8,#3)

Beekman, Volkert, "Feeling Food: The Rationality of Perception," Journal of Agricultural and Environmental Ethics 19(2006):301-312. Regulatory bodies tend to treat people's emotional responses towards foods as a nuisance for rational opinion-formation and decision-making. This position is thought to be supported by such evidence as: (1) people showing negative emotional responses to the idea of eating meat products from vaccinated livestock; and (2) people showing positive emotional responses to Magnum's "7 sins" marketing campaign. Such cases are thought to support the idea that regulatory communication about foods should abstract from people's emotional perceptions and that corporate marketing of foods should show restraint in capitalizing upon these weaknesses of the heart. This paper, on the contrary, argues that people's emotional perceptions of foods represent valuable sources of knowledge. This argument is developed by making the dominant reception of people's emotions intelligible by tracing its roots through the history of the Platonic paradigm. Although this paradigm has dominated the philosophical and psychological debate about emotions, the idea that emotions are sources of knowledge has recently gained force. This paper also traces the historical roots of the alternative Aristotelian paradigm. The cases of meat products from vaccinated livestock and Magnum's 7 sins serve to illustrate this controversy. The paper concludes by showing that a neo-Platonic emphasis on the irrationality of emotions does not contribute to a fruitful discussion about implications of people's perceptions for agricultural and food politics, whereas a neo-Aristotelian account of rational emotions could enable regulatory bodies to engage people in a fruitful process of opinion-formation and decision-making about food production and consumption.

Keywords: cognitivism - emotions - food perception - rationality. Beekman is at the Agricultural Economics Research Institute (LEI), The Hague, The Netherlands. (JAEE)

Beekman, Volkert, "Sustainable Development and Future Generations," Journal of Agricultural and Environmental Ethics 17(2004):3-22. This paper argues, mainly on the basis of Rawls's savings principle, Wissenburg's restraint principle, Passmore's chains of love, and De-Shalit's trans-generational communities, for a double interpretation of sustainable development as a principle of intergenerational justice and a future-oriented green ideal. This double interpretation (1) embraces the restraint principle and the argument that no individual can claim an unconditional right to destroy environmental goods as a

baseline that could justify directive strategies for government intervention in non-sustainable lifestyles, and (2) suggests that people's concerns about the deterioration of nature and the environment articulate future-oriented narratives of self-identity that could fuel non-directive strategies to develop further responsibilities towards nearby future generations. Sustainable development, thus, provides sound arguments to restrict people's freedom to follow their own lifestyles, when these lifestyles transgressed the baseline of the restraint principle. However, the individual freedom of choice should not be restricted for any further environmental considerations. Non-directive strategies are thus to stimulate the development of such further responsibilities towards nearby future generations. Keywords: future generations, ideals, justice, sustainable development. Beekman is at the Agricultural Economics Research Institute, The Hague, The Netherlands. (JAEE)

Beekman, Volkert, "Environmental Utilization Space between Science and Politics," Journal of Agricultural and Environmental Ethics 17(2004):293-300. This paper addresses the issue of operationalizing, or quantifying, sustainable development as a practical guideline for day-to-day environmental policy-making. It criticizes attempts at quantifying some environmental utilization space and argues that the uncertainty of scientific knowledge about the unintended environmental repercussions of consumptive choices casts serious doubt about attempts to justify government intervention in non-sustainable lifestyles. Keywords: environment, risks, trust, uncertainty. Beekman is at the Agricultural Economics Research Institute, The Hague, The Netherlands.

Beekman, Volkert, and Frans W. A. Brom, "Ethical Tools to Support Systematic Public Deliberations about the Ethical Aspects of Agricultural Biotechnologies," *Journal of Agricultural and Environmental Ethics* 20(2007):3-12 This special issue of the *Journal of Agricultural and Environmental Ethics* presents so-called ethical tools that are developed to support systematic public deliberations about the ethical aspects of agricultural biotechnologies. This paper firstly clarifies the intended connotations of the term "ethical tools" and argues that such tools can support liberal democracies to cope with the issues that are raised by the application of genetic modification and other modern biotechnologies in agriculture and food production. The paper secondly characterizes the societal discussion on agricultural biotechnology and defends the thesis that normative perspectives fuel this discussion, so one cannot come to grips with this discussion if one neglects these perspectives. The paper thirdly argues that no such thing exists as "one" societal debate in which these issues should be discussed. There are several intertwined debates, and different actors participate in different discourses. Some practical instruments are necessary in order to include the right issues in these debates. These instruments will be coined as "ethical tools," since they are practical instruments that can be used (tools) in order to support debates and deliberative structures for a systematic engagement with ethical issues (hence, ethical tools). Finally, the paper clarifies the ethics of these ethical tools and presents the tools as discussed in the remainder of this special issue: 1) tools to include ethical issues in public consultation and involvement; 2) tools to support systematic reflection upon ethical issues in decision-making; and 3) tools to support explicit communication about values in the food chain. Keywords: Ethical tools - GM evaluation - normative perspective - societal debate - values in the food chain - participatory decision-making - communicative space - value pluralism. Beekman is at Agricultural Economics Research Institute, Wageningen University and Research Centre, The Hague, The Netherlands. Brom is at Ethics Institute, Utrecht University, Utrecht, The Netherlands.

Beeman, Randal. "Friends of the Land and the Rise of Environmentalism, 1940-1954." Journal of Agricultural and Environmental Ethics 8(1995):1-16. The rise of the postwar environmental movement is rooted in the development of ecological consciousness within intellectual circles as well as the general public. Though many commentators cite the 1960s as the focal point of the new environmentalism, the ecological ethic had actually evolved by the 1930s in the writings and speeches of both scientists and public commentators. Agricultural conservationists led the way in broadcasting the message of ecology. Friends of the Land, an agriculturally-oriented conservation organization formed in 1940 and active through the 1950s, is an interesting example of how the agricultural community was an integral

component in the rise of environmentalism. While Friends of the Land flourished only for a brief period, its goals and the ideas that the group represented illustrate how the ecological ethic was burgeoning by the early-1950s. Furthermore, the history of Friends of the Land is an important chapter in the ongoing quest for ecological agriculture and societal permanence. (JAEE)

Beever, Erik. "The Roles of Optimism in Conservation Biology." *Conservation Biology* Vol. 14, no. 3 (2000): 907-9. Although the conservation news can be discouraging, an optimistic outlook will make conservation biologists more effective. An overly skeptical perspective will result in missed opportunities to create new methods of conservation. Beever is in ecology at the University of Nevada, Reno.

Beevers, Paul, Ecocentrism and Misanthropy, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Beger, M; Jones, GP; Munday, PL, "Conservation of coral reef biodiversity: a comparison of reserve selection procedures for corals and fishes," Biological Conservation 111(no.1, 2003): 53-62.

Behn, Sharon. "A Mighty Sea Slowly Becomes a Mud-Flat Desert." The Christian Science Monitor 89.88 (2 April 1997): 7.

Behro, R., "STS Perspective: Theology Not Ecology," Bulletin of Science, Technology and Society, vol 9, no. 5, 1989. (v2,#1)

Beisner, E. Calvin, Where Garden Meets Wilderness: Evangelical Entry into the Environmental Debate. Grand Rapids, MI: Eerdmans, 1997. 208 pages. \$ 18. (v9,#2)

Beisner, E. Calvin, Prospects for Growth: A Biblical View of Population, Resources, and the Future. Westchester, IL: Crossway Books, 1990. "Certainly the environment should be protected, but it must be protected for the sake of man, not for its own sake. Anything else is idolatry of nature" (p. 165). "It is man, not the earth or anything else in it, that was created in the image of God. To make man subservient to the earth is to turn the purpose of God in creation on its head" (p. 24). (v5,#1)

Beissinger, Steven R., Steadman, Eric C., Zack, Steve. "Null Models for Assessing Ecosystem Conservation Priorities: Threatened Birds as Tilters of Threatened Ecosystems", Conservation Biology 10(no.5,1996):1343. A threatened ecosystem is one in which the likelihood of encountering a species threatened by habitat destruction is greater than would be expected by chance alone. Birds are good indicators of such threatened species.

Bekoff, Marc, "Social Cognition: Exchanging and Sharing Information on the Run," Erkenntnis 51(1999):113-128. This is a theme issue of Erkenntnis on "Animal Minds." (v10,#4)

Bekoff, Marc and Dale Jamieson, eds., Interpretation and Explanation in the Study of Animal Behavior. Vol. I: Interpretation, Intentionality, and Communication. \$ 45.00 Vol. II: Explanation, Evolution, and Adaptation. Boulder, CO: Westview Press, 1990. \$ 45.00. Twenty-one essays in vol. I; 16 essays in vol. II. Softcover. Some sample essays: John Andrew Fisher: "The Myth of Anthropomorphism"; Michael L. Rosenzweig, "Do Animals Choose Habitats?"; Bernard E. Rollin, "How Animals Lost Their Minds: Animal Mentation and Scientific Ideology"; John Dupré, "The Mental Lives of Nonhuman Animals"; and a concluding section in vol. II on Moral Dimensions. Bekoff is professor in the Department of Environmental, Population, and Organismic Biology and Jamieson is professor in the Department of Philosophy at the University of Colorado. (v1,#4)

Bekoff, Marc, Review of Rachels, James, Created from Animals: The Moral Implications of Darwinism. Environmental Values Vol.1 No.1(1992):83.

Bekoff, Marc, "The Evolution of Animal Play, Emotions, and Social Morality: On Science, Theology, Spirituality, Personhood, and Love," Zygon: Journal of Religion and Science 36(no. 1, December 2001):615-655. How scientists could well benefit from reciprocal interactions with theologians. The evolution of social morality and the ways in which aspects of social play behavior relate to the notion of "playing fairly". Spiritual and religious perspectives are important in our coming to a fuller understanding of the evolution of morality. Animal emotions, the concept of personhood, and our special relationships with other animals, especially companion animals, help us to define our place in nature, our humanness. The importance of ethological studies, behavioral research in which a serious attempt is made to understand animals in their own worlds. Species other than primates need to be studied. Bekoff advocates a compassionate and holistic science that allows for interdisciplinary talk about respect, grace, spirituality, religion, love, Earth, and God. Bekoff is in biology, University of Colorado, well known for his defense of animal welfare. (v.13,#1)

Bekoff, Marc and Elzanowski, A, "A. Collecting Birds: The Importance of Moral Debate," Bird Conservation International 7(1997):357-361. (v.8,#4)

Bekoff, Marc, and Dale Jamieson. "Sport Hunting as an Instinct." Environmental Ethics 13(1991):375-78. (EE)

Bekoff, Marc, "What is a 'Scale of Life?'," Environmental Values 1(1992):253-256. Mary Midgley's appeal to a scale of life in making decisions about the culling one species of animal rather than another is troublesome and arbitrary. Sociality and intelligence are not reliable indicators of such scale. Bekoff is a biologist at the University of Colorado, Boulder.

Bekoff, Marc, "Jinxed Lynx? Some Very Difficult Questions with Few Simple Answers," Boulder (Colorado) Daily Camera, January 24, 1999. The Division of Wildlife released lynx in the Colorado San Juan Mountains in habitat from which they had become extinct, bringing trapped lynx from Canada for release. There is an expected starvation rate of 50% for the released lynx. Bekoff has serious reservations whether the project is well planned, justified in terms of the animal stress and suffering, and involves too much human dominion over nature, and may be "faking nature." Bekoff is a biologist, University of Colorado, Boulder. The article is on website: <http://www.bouldernews.com/opinion/columnists/mark.html>.

Later update: Four of the thirteen Canada lynxes released in an effort to restore the 18 to 25 pound wildcats to Colorado have starved to death as of mid-April. The Colorado Division of Wildlife's three year, three-quarter million dollar project has been severely criticized from its inception for its lack of scientific rigor and for its failure to respect the individual animals used for restoration purposes. Both animal rights advocates and environmentalists have criticized the project. Reed Noss (former editor of Conservation Biology) has called the project "pathetic" and wrote: "A variety of data and modeling approaches are available to investigate the biological feasibility of reintroducing lynx to Colorado. The state agency chose to ignore the potential of a habitat modeling approach, and instead is rushing in with untested reintroduction of animals. This action suggests that their motivations are political, not biological or ethical. Nevertheless, I hope the project works and that the animals survive and establish a breeding population." University of Colorado biologist, Marc Bekoff objects to the 50% possible mortality rate of the released lynx and to the lack of adequate evaluation of food resources for the animals. He argues that it is irrelevant that these Canadian lynx would likely die anyway at the hands of trappers because "just because animals might be killed one way doesn't justify killing them in other ways." The issue is politically tricky because property rights advocates and ranchers opposed the restoration effort as well. They fear Endangered Species Act restrictions on their uses of property and display a general dislike of

predators. See "4th Lynx Dies In State's Effort At Restoration," NY Times (4/14/99): A20. Contact: bekoffm@spot.Colorado.EDU. See also an editorial of Bekoff's at: <http://www.bouldernews.com/opinion/columnists/mark.html>. See also Lloyd, Jillian, "When Saving a Species Proves To Be Hard on the Animals," Christian Science Monitor, Mar 11, 1999, p. 2. (v.10,#1) Bekoff Marc, and Jamieson Dale, "Ethics and the study of carnivores," In Carnivore Behavior, Ecology, and Evolution. Ithaca, NY: Cornell University Press, 1994.

Bekoff, Marc, "Conservation Behavior Is Here to Stay" Review of: Festa-Bianchet, M. and M. Appollonio, eds., Animal Behavior and Wildlife Conservation, Conservation Biology 18(2004):591-595. (v. 15, # 3)

Bekoff, Marc "Cognitive ethology and the treatment of nonhuman animals: How matters of mind inform matters of welfare." Animal Welfare 3(1994):75-96.

Bekoff, Marc, "Animal Emotions: Exploring Passionate Natures," Bioscience 50(no. 10, Oct. 1, 2000):861- . (v.12,#2)

Bekoff, Marc, Minding Animals Awareness, Emotions, and Heart. Foreword by Jane Goodall. New York: Oxford University Press, 2002. A tour of the emotional and mental world of animals, where creatures do amazing things. Bekoff has spent the last 30 years studying animals--from coyotes in Wyoming to penguins in Antarctica. Grooming and gossip, self-medication, feeding patterns, dreaming, dominance, and mating behavior, elephants mourning a dead group member. Animal cognition, intelligence, and consciousness, examples of animal passions, highlighting the deep emotional lives of our animal kin. Conclusions about human humility and duties of animal protection, respect, grace, compassion, and love for all animals. Bekoff is in biology, University of Colorado. (v.13,#1)

Bekoff, Marc, with Meaney, Carron A. Encyclopedia of Animal Rights and Animal Welfare. Foreword by Jane Goodall. Westport, CT: Greenwood Press, 1998. 446 pages. \$ 60.00 hardcover. Useful and relatively compact handbook. Each article ends with a brief selected bibliography. A chronology (1822-1995) related to animals of events in the USA, UK, and other countries (pp.xvii-xxi). A long appendix entitled "Resources on Animal Welfare and Humane Education." Bekoff teaches biology at the University of Colorado, and Meaney is at the Denver Museum of Natural History. The Encyclopedia sold 1500 copies in its first month!

Here'a a sampling of articles:

- Hettinger, Ned, "Environmental Ethics," pages 159-61.
- Sapontzis, Steve F., "Environmental Ethics versus Animal Rights," pages 161-62.
- Pacelle, Wayne, "Hunting," pages 196-97.
- Cartmill, Matt, "History of Ideas Surrounding Hunting," pages197-99.
- Varner, Gary, "Environmental Ethics and Hunting," pages 200-201.
- Varner, Gary, "Vegetarian Diets: Ethics and Health," pages 351-52.
- Bissell, Steven J., "Hunting in the United States," pages 201-2
- Causey, Ann S., "Fair Chase," pages 202-3.
- Sapontzis, Steve F., "Predation," pages 275-76.
- Landsell Herbert, "Nonrightist's View [of Hunting]," pages 277-78.
- Linzey, Andrew, "Animal Theology," pages 283-84, and several other articles on Religion and Animals.
- Fox, Michael Allen, "Vegetarianism," pages 349-51," and other articles.
- Rolston, Holmes, "Wild Animals, Duties to," pages 262-64.
- Rolston, Holmes, "Endangered Species," pages 154-56.
- Weir, Jack, "Virtue Ethics," pages 357-58.
- Rollin, Bernard E., "Veterinary Ethics," pages 354-56, and other articles.
- Jamieson, Dale, "Zoos and Animal Welfare," pages 376-77, and other articles.

--Clark, Stephen R. L., "Anthropocentrism: Humanism," pages 68-69.
--Clark, Stephen R. L., "Species-Essentialism," pages 319-20.
--DeGrazia, David D., "Autonomy of Animals," pages 83-85.
--DeGrazia, David D., "Well-Being of Animals," pages 359-60, and other articles.
--Kreger, Michael D., "History of Zoos," pages 369-70, and several other articles on zoos.
--Regan, Tom, "Animal Rights," pages 42-43.
--Gruen, Lori, and Birke, Lynda, "Animal Rights: Ecofeminists' Perspectives," pages 48-49.
--Beauchamp, Tom L., "Moral Standing of Animals," pages 248-50.
--Peter Singer, "Utilitarianism," pages 343-44.
--Frey, R. G., "Content, Value, and Richness of Animal Life," pages 116-18. (v9,#2)

Bekoff, Marc, "Redecorating Nature: Deep Science, Holism, Feeling, and Heart," BioScience 50 (no. 8, August 2000):635. "To make science more attractive to students, creative, passionate, and bold dreaming needs to be reinforced in the scientific arena. ... Questioning science and deepening and broadening its scope are healthy moves toward a world in which magnificent nature--her deep and rich sensuality, her beneficence, her complexity--will be respected, cherished, and loved." Bekoff is in Environmental, Population, and Organismic Biology, University of Colorado, Boulder. (v.11,#3)

Bekoff, Marc, Strolling with Our Kin: Speaking for and Respecting Voiceless Animals. New York: Lantern Books, 2000. Foreword by Jane Goodall. We can and ought help save and heal animal lives; we can stroll with our kin by acting on behalf of them. Addressed to youth and children. (v.11,#3)

Bekoff, Marc, ed., The Encyclopedia of Animal Rights and Animal Welfare. Westport, CT: Greenwood Press, 1998. Foreword by Jane Goodall. (v9,#1)

Bekoff, Marc, and Ned Hettinger, "Animals, Nature, and Ethics," Journal of Mammalogy 75(no. 1, 1994):219-223. Responds to Howard, Walter E., "Animal Research is Defensible," Journal of Mammalogy 74(no.1, 1993):234-35, arguing that we do not want an ethic that sanctions human treatment of animals as long as it is better than what nature typically has in store for similar animals. (v5,#1)

Bekoff, Marc, and Ned Hettinger, "Animals, Nature, and Ethics," Journal of Mammalogy 75(1994):219-223. A reply to Howard, see above. Howard is unnecessarily combative, lacking in detail, unbalanced, and poorly argued. His vague platitudes do not help in understanding the variety of ethical issues that arise from the diverse uses of animals. For example, nature has no death ethic, nor can nature have one. An ethic that permits any use of animals by humans that causes them less suffering or allows them a longer life than is typical for animals is far too weak. Superficial appeals to nature's brutality to justify the treatment of nonhumans will not do. Bekoff is in biology at the University of Colorado; Hettinger in philosophy at the College of Charleston. (v5,#4)

Bekoff, Marc, "Beastly Passions," New Scientist No. 2236, 29 April 2000, pages 32-35. Besotted whales, ecstatic iguanas and embarrassed chimps have persuaded Marc Bekoff and other biologists that we humans are not alone in our passions. (v.11,#3)

Bekoff, Marc, "Deep Ethology, Animal Rights, and the Great Ape/Animal Project: Resisting Speciesism and Expanding the Community of Equals," Journal of Agricultural and Environmental Ethics 10(1997/1998):269-296. ABSTRACT. In this essay I argue that the evolutionary and comparative study of nonhuman animal (hereafter animal) cognition in a wide range of taxa by cognitive ethologists can readily inform discussions about animal protection and animal rights. However, while it is clear that there is a link between animal cognitive abilities and animal pain and suffering, I agree with Jeremy Bentham who claimed long ago the real question does not deal with whether individuals can think or reason but rather with whether or not individuals can suffer. One of my major goals will be to make the case that the

time has come to expand The Great Ape Project (GAP) to The Great Ape/Animal Project (GA/AP) and to take seriously the moral status and rights of all animals by presupposing that all individuals should be admitted into the Community of Equals. I also argue that individuals count and that it is essential to avoid being speciesist cognitivists; it really doesn't matter whether "dogs ape" or whether "apes dog" when taking into account the worlds of different individual animals. Narrow-minded primatocentrism and speciesism must be resisted in our studies of animal cognition and animal protection and rights. Line-drawing into "lower" and "higher" species is a misleading speciesist practice that should be vigorously resisted because not only is line-drawing bad biology but also because it can have disastrous consequences for how animals are viewed and treated. Speciesist line-drawing also ignores within species individual differences. KEY WORDS: Cognitive ethology, animal cognition, The Great Ape Project (GAP), The Great Ape/Animal Project (GA/AP), Community of Equals, speciesism, moral individualism, animal rights. (JAEE)

Bekoff, Marc, ed., The Smile of a Dolphin: Remarkable Accounts of Animal Emotions. New York: Random House, 2000. With foreword by Stephen Jay Gould. The surprisingly complex lives of animals revealed in firsthand stories by leading animal behavior researchers, and in 120 photographs by some of the world's best wildlife photographers. (v.11,#3)

Bekoff, Marc, "Redecorating Nature: Reflections on Science, Holism, Community, Humility, Reconciliation, Spirit, Compassion, and Love," Human Ecology Forum 7(no. 1, 2000):59-67. "Holistic and heart-driven compassionate science needs to replace reductionist and impersonal science. I argue that creative proactive solutions drenched in deep caring, respect, and love for the universe need to be developed to deal with the broad range of problems with which we are confronted. ... My vision is to create a world-wide community in which humans perceive themselves as a part of nature and not apart from her, in which humans who are overwhelmed and whose spirits and souls have been robbed and squelched by living in and amongst steel, concrete, asphalt, noise, and a multitude of invasions of their private space reconnect with raw nature. ... Nature is our unconditional friend and reconnecting with nature can help overcome alienation and loneliness. The power of love must not be underestimated as we forge ahead to reconnect with nature."

Bekoff, Marc, "Consciousness and Self in Animals: Some Reflections," Zygon: Journal of Religion and Science 38(2003):229-245. With reply, Peterson, Gregory R., "Being Conscious of Mark Bekoff: Thinking of Animal Self-Consciousness," Zygon 38(2003):247-256.

Bekoff, Marc, "Minding Animals, Minding Earth: Old Brains, New Bottlenecks," Zygon: Journal of Science and Religion 39(2003):911-941. "I emphasize the importance of broadening behavioral, ecological, and conservation science into a more integrative, interdisciplinary, socially responsible, compassionate, spiritual, and holistic endeavor. I stress the significance of studies of animal behavior, especially ethological research concerned with animal emotions in which individuals are named and recognized for their own personalities, for helping us to learn not only about the nonhuman animal beings with whom we share Earth but also about who we are and our place in nature. We are best understood in relationship with others. To this end I develop the notion of 'minding animals' and 'deep ethology.' Animals are sources of wisdom, a way of knowing." Bekoff is in biology, University of Colorado, Boulder. (v.14, #4)

Bekoff Marc and Jamieson Dale, "Reflective ethology, applied philosophy, and the moral status of animals," Perspectives in Ethology 9(1991):1-47.

Bekoff, Marc. Strolling with our Kin: Speaking for and Respecting Voiceless Animals. Review in Journal of Agricultural and Environmental Ethics 10(2001):349-350 by Bernard Rollin. (JAEE)

Bekoff, Marc. "Deep Ethology." The AV Magazine, Winter 1998, pp. 10-19. Based on years of research and personal experience, Bekoff presents a straightforward and inspiring account of his scientific beliefs and moral convictions regarding nonhuman animals. He defines "deep ethology" as "naming and bonding with animals and expanding the Community of Equals." The article summarizes Bekoff's views on the nature of animal minds and well-being, and on how animals should be treated by humans. Bekoff is a biologist at the University of Colorado, Boulder. (v9,#2)

Bekoff, Marc. "The Importance of Ethics in Conservation Biology: Let's Be Ethicists not Ostriches." Endangered Species Update Vol. 19, no. 2 (2002): 23-27.

Bekoff, Mark and Jan Nystrom, "The Other Side of Silence: Rachel Carson's Views of Animals." Human ecology Review 11/2 (2004): 186-200. Carson favored responsible stewardship, was more of an animal welfarist and environmentalist/conservation biologist who privileged ecosystems and species than an animal activist who privileged individuals, and she did not advocate an animal rights agenda. (v.14, #4)

Belanger, L; Grenier, M, "Agriculture intensification and forest fragmentation in the St. Lawrence valley, Quebec, Canada," Landscape Ecology 17(no.6, 2002): 495-507.

Belin, Daniel L. et al., "Assessing Private Forest Owner Attitudes Toward Ecosystem-Based Management," Journal of Forestry 103(no.1, January/February 2005):28-35(8).

Bell, Barbara Currier. "Humanity in Nature: Toward a Fresh Approach." Environmental Ethics 3(1981):245-57. Human beings have always been preoccupied with the relationship between humanity and nature, and imaginative literature reflects that preoccupation. The group of views about humanity in nature to be found there is strikingly pluralistic, contrary to the simple "pro" and "con" set to which the environmental debate is often reduced. The richness, however, is not easy to appreciate. In this essay I argue for a new approach to understanding views about the relationship between humanity and nature, one that transcends the conventional terms for such analysis and emphasizes plurality. The approach has ethical dimensions: it aims at strengthening both our hope and our ability to find a better relationship with nature. Bell resides in Southport, CT. (EE)

Bell, D; Gray, T, "The Ambiguous Role of the Environment Agency in England and Wales," Environmental Politics 11(no.3, 2002): 76-98.

Bell, Derek. "Environmental Justice and Rawls' Difference Principle." Environmental Ethics 26(2004):287-306. It is widely acknowledged that low-income and minority communities in liberal democratic societies suffer a disproportionate burden of environmental hazards. Is "environmental injustice" a necessary feature of liberal societies or is its prevalence due to the failure of existing liberal democracies to live up to liberal principles of justice? One leading version of liberalism, John Rawls' "justice as fairness," can be "extended" to accommodate the concerns expressed by advocates of environmental justice. Moreover, Rawlsian environmental justice has some significant advantages over existing conceptions of environmental justice. (EE)

Bell, Derek. Review of Noxious New York: The Racial Politics of Urban Health and Environmental Justice. By Julie Sze. Environmental Ethics 30(2008):221-222. (EE)

Bell, Michael Mayerfeld. *An Invitation to Environmental Sociology*, 3rd ed. Thousand Oaks, CA: Pine Forge Press, 2008.

Bell, Michael Mayerfeld. *An Invitation to Environmental Sociology*, 3rd ed. Thousand Oaks, CA: Pine Forge Press, 2008.

Bell, Philip J.P., "Contesting rural recreation: the battle over access to Windermere," Land Use Policy 17(no.4, OCT 01 2000):295- . (EE v.12,#1)

Bell, R. G., Stewart, J. B., and Nagy, M. T., "Fostering a Culture of Environmental Compliance through Greater Public Involvement," Environment 34-44, 2002 (v.13,#4)

Bell, Ruth Greenspan, "Building Trust: Laying A Foundation For Environmental Regulation In The Former Soviet Bloc," Environment 42 (No. 2, 2000): 20- . Formulating effective environmental laws in the countries in transition from totalitarianism to democracy involves developing critical institutions and creating a climate of trust in the law-drafting process. (v.11,#2)

Bella, David A. "The Pressures of Organizations and the Responsibilities of University Professors", Bioscience 46(no.10, 1996):772. (v7,#4)

Bellesiles, Michael A., Arming America: The Origins of a National Gun Culture New York: Knopf, 2001. Contrary to the gun-toting myth, "gun ownership was exceptional in the seventeenth, eighteenth, and early nineteenth centuries, and guns became a common commodity only with the industrialization of the mid-nineteenth century" and the militarization of American during the Civil War. Prior to that soldiers routinely entered combat with swords, pikes, or even hoes. Pioneers ate meat from the woods, but snared it; guns and bullets were inefficient. clumsy, and expensive. Muskets often exploded, gunpowder could not be used in the rain, and were difficult to aim. Hunting with guns was an upper class activity. The Kentucky marksmen that could outshoot the British are mythology. The Western shoot-ups of the movies are pure fiction. The gun culture was created by gun entrepreneurs, such as Samuel Colt. As is no surprise, Bellesiles has lots of critics. (v.12,#2)

Later: Bellesiles has been accused of such careless scholarship that he was forced to resign as professor of history at Emory University. See Olsen, Florence, "Bellesiles Resigns from Emory after University Report Questions his Research for Book on Guns," Chronicle of Higher Education, Daily News (daily on line edition, not the printed Chronicle), October 28, 2002.

Bellingham, Philip, Unnatural Selection: the Possibility of a Phenomenological Ecology, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Bellingham, Philip, Unnatural Selection: the Possibility of a Phenomenological Ecology, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Bello, Walden. "Neither Market Nor State: The Development Debate in South-East Asia", The Ecologist 26(no. 4,1996):167. Fast track capitalism has brought huge growth rates for the newly-industrialized countries of Asia. But the assertion that such rapid growth is due to free trade and free market policies is a myth. The explanation lies in a combination of protection, state intervention and a massive infusion of Japanese capital following the relocation of Japanese companies to South-East Asia in search of cheap labor. As a result, the region's economies are now subordinate to, and dependent on, Japan. (v7,#4)

Bellon, Mauricio R. "Landholding Fragmentation: Are Folk Soil Taxonomy and Equity Important? A Case Study from Mexico." Human Ecology 24, no.3 (1996): 373. (v7, #3)

Bellows, Anne C., "Exposing violences: Using women's human rights theory to reconceptualize food rights," Journal of Agricultural and Environmental Ethics 16(2003):249-279. Exposing food violences - hunger, malnutrition, and poisoning from environmental mismanagement - requires policy action that confronts the structured invisibility of these violences. Along with the hidden deprivation of food is the physical and political isolation of critical knowledge on food violences and needs, and for policy

strategies to address them. I argue that efforts dedicated on behalf of a human right to food can benefit from the theoretical analysis and activist work of the international Women's Rights are Human Rights (WRHR) movement. I introduce the United Nations' early Declaration (1948) and Covenant (1966) language on the human right to food and review problems of household access and grassroots engagement that are "written into" this early documentation. A case study set in Poland across the transition from (more) Communist to (more) capitalist political economies attempts to illuminate the discussion through a grounded example. KEY WORDS: cold war, food policy, food security, group rights, human rights, Poland, political and economic rights, right to food, transition, women's rights. (JAE)

Belluck, Pam, "Girls and Boys, Meet Nature, Bring your Gun," New York Times, Sept. 18, 2005, National, p. 1, p. 26. Nine-year old Samantha Marley, dressed in camouflage and chewing bubble gum, her own shotgun in hand, went hunting for black bear in Vermont woods, winner of a dream hunt, all expenses paid including taxidermy, designed to interest children in hunting. (She took three days out of school.) She has already killed a deer at age seven, also a turkey. But they found no bear.

Belovsky, GE; Botkin, DB; Crowl, TA; Cummins, KW; Franklin, JF; Hunter Jr, ML; Joern, A; Lindenmayer, DB; MacMahon, JA; Margules, CR; Scott, JM, "Ten Suggestions to Strengthen the Science of Ecology", BioScience 54 (no.4, 2004): 345-351(7). There are few well-documented, general ecological principles that can be applied to pressing environmental issues. When they discuss them at all, ecologists often disagree about the relative importance of different aspects of the sciences original and still important issues. It may be that the sum of ecological science is not open to universal statements because of the wide range of organizational, spatial, and temporal phenomena, as well as the sheer number of possible interactions. We believe, however, that the search for general principles has been inadequate to establish the extent to which generalities are possible. We suggest that ecologists may need to reconsider how we view our science. This article lists 10 suggestions for ecology, recognizing the many impediments to finding generalizations in this field, imposed in part by the complexity of the subject and in part by limits to funding for the study of ecology.

Belowground Biodiversity, Six articles in Bioscience 49, no. 2, February, 1999. Rather largely unknown, rather largely microscopic, and may be greater biodiversity than that above the surface. (v.10,#2)

Belshaw, Christopher, Environmental Philosophy: Reason, Nature, and Human Concern. Chesham, Buckshire [UK]: Acumen, 2001. Montreal: McGill-Queen's University Press, 2001. Chapters: Problems, Causes, Solutions I: Voting and Pricing, Solutions II: Moral Theory, Animals, Life, Rivers, Species, Land, Deep Ecology, Value, Beauty, Human Beings.

"To philosophize about the environment is to reason about nature, and about our various concerns and involvements with the natural world. But this isn't a simple one-way procedure, for we are, of course, a part of nature, not distinct from it, and our concerns are themselves an upshot of natural procedures. Moreover, reason itself is hardly autonomous; it too, is something that has evolved within the natural world, and even if we are still able still to speak, somewhat archaically, of the faculty of reason, we only mistakenly believe that it might operate alone in determining what we think, and what we do. There is no reason to think we can or should be wholly reasonable beings. To philosophize about the environment, then, we need to take the complexity of our own natures fully into account" (p. viii).

"The longest part of the book deals with one of the central questions in environmental philosophy: that of what sorts of things are of direct moral concern. ... I begin with animals, arguing that they matter at least in so far as they are sentient. ... As far as non-sentient life forms are concerned, the claim is that even if we agree, as well we might, that such things have a good of their own, are able to be benefited or harmed, and can flourish or decline, still none of this gives us reason to promote their well-being or further their ends" (pp xi-xii). Belshaw is in philosophy, The Open University, Milton Keynes, UK. Reviewed by D. J. Philippon in Progress in Human Geography 27(no. 3, 2003):382. (v 14, #3)

Belshaw, Christopher. "In Defense of Environmental Philosophy." Environmental Ethics 26(2004):335-336. (EE)

Belshaw, Christopher. Environmental Philosophy: Reason, Nature and Human Concern. Reviewed in Environmental Ethics 25(2003):317-320. (EE)

Belsie, Laurent. "World's Scientists Learn New Ways to Clear Deadly Land Mines." The Christian Science Monitor, vol. 89. 11 Feb. 1997, p. 12.

Belsie Laurent. "Utility Deregulation Fuels Regional Spat." The Christian Science Monitor, vol. 89, 28 Feb. 1997, p. 4.

Belsie, Laurent. "Whimsy, Wit, and Wonder Bloom at the Philadelphia Flower Show." The Christian Science Monitor, vol. 89, 6 March 1997, p. 12.

Belsie, Laurent. "Home Heating Costs Enter Era of Volatility." The Christian Science Monitor, vol. 88, 18 Nov. 1996, pp. 1, 8.

Belsky, Joy. "Wild and Prescribed Fire in Forests of the Intermountain West", Wild Earth 6(no.3, 1996):44. (v7,#4)

Ben-Ari, Elia T. Better than a Thousand Words. Bioscience 49(No.8, August 1999):602- . Botanical artists blend science and aesthetics. (v10,#4)

Ben-Ari, Elia T., "A Throbbing in the Air," Bioscience 49(No.5, 1999):353-. The discovery of infrasonic communication among elephants has given researchers a whole new way of hearing things. (v.10,#2)

Ben-Ari, Elia T., "Defender Of The Voiceless: Wallace Stegner's Conservation Legacy," Bioscience 50 (No. MAR 01 2000): 3- . (v.11,#2)

Benari , Ella T., "Speaking for Nature," Bioscience 50 (No. 7, 2000 July 01): 556- . (v.11,#4)

Benari, Ella T., "Not just slime," Bioscience 49 (No. 9, 1999 Sep 01): 689- . Beneath the slippery exterior of a microbial biofilm lies a remarkably organized community of organisms. (v.11,#4)

Benatar, David. "Why the Naive Argument against Moral Vegetarianism Really is Naive," Environmental Values 10(2001):103-112. When presented with the claim of the moral vegetarian that it is wrong for us to eat meat, many people respond that because it is not wrong for lions, tigers and other carnivores to kill and eat animals, it cannot be wrong for humans to do so. This response is what Peter Alward has called the naive argument. Peter Alward has defended the naive argument against objections. I argue that his defence fails. Keywords: Vegetarianism, naive argument. Benatar is at the Philosophy Department, University of Cape Town, South Africa. (EV)

Benda, LE; Poff, NL; Tague, C; Palmer, MA; Pizzuto, J; Cooper, S; Stanley, E; Moglen, G, "How to Avoid Train Wrecks When Using Science in Environmental Problem Solving," Bioscience 52(no.12, 2002)

Bender, Frederic L., *The Culture of Extinction: Toward a Philosophy of Deep Ecology*. Amherst, MA: Humanity Books, 2004.

Bender, Jonathan. "Societal Risk Reduction: Promise and Pitfalls," New York University Environmental Law Journal 3(no.2, 1995):255- . (v6,#4)

Bender, William H. "How Much Food Will We Need in the 21st Century?" Environment 39(1997):6. Focusing on the future demand for food rather than the supply suggests ways of feeding more people with less environmental damage. (v8,#1)

Bendik Keymer, Jeremy, *The Ecological Life: Discovering Citizenship and a Sense of Humanity*. Lanham, MD: Roman and Littlefield, 2006. A humanistic perspective on environmental philosophy that challenges some dogmas of deep ecology and radical environmentalism while speaking for their best desires. Written as a series of lectures, the book argues that being human-centered leaves us open to ecological identifications, rather than the opposite. Draws on analytic and continental traditions, as well as literature and visual media. Environmental philosophy needs a sense of ecological justice consonant with human rights. Bendik-Keymer is in philosophy, Dept of International Studies, American University of Sharjah, United Arab Emirates.

Bendik-Keymer, Jeremy, "Analogical Extension and Analogical Implication in Environmental Moral Philosophy," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):149-158. Two common claims in environmental moral philosophy are that nature is worthy of respect and that we respect ourselves in respecting nature. In this paper, I articulate two modes of practical reasoning that help make sense of these claims. The first is analogical extension, which understands the respect due human life as the source of a like respect for nature. The second is analogical implication, which involves nature in human life to show us what we are like. These forms of reasoning are relevant to environmental virtue ethics in that both help us conceptualize how respect for nature can be part of our sense of humanity, and not opposed to our sense of humanity. (v.13,#2)

Benedick, Richard E., ed., Ozone Diplomacy: New Directions in Safeguarding the Planet, Enlarged Edition. 512 pages. Cambridge, MA: Harvard University Press, 1999. (v10,#4)

Benedick, Richard Elliot, Ozone Diplomacy: New Directions in Safeguarding the Planet (Cambridge: Harvard University Press, 1991). \$10.95. 300 pages. By the chief negotiator of the Montreal Protocol. (v2,#1)

Benestad, Olav, "Energy Needs and CO₂ Emissions: Constructing a Formula for Just Distributions," Energy Policy 22(no. 9 1994):725-734. Countries differ substantially in their capabilities to limit future emissions of CO₂. Fairness, or equity, should be seen against the background of these differences. Benestad proposes an "Equal burden" formula for emissions, based on John Rawls theory of justice, showing how quotas given according to needs may be operationalized for different sectors and different countries in a comprehensive way, and with the net result that atmospheric concentrations do not increase. Benestad was with the Centre for Development and the Environment, University of Oslo, Norway, until his death. (v.10,#1)

Bengston, David N., and Fan, David P. "Roads on the U.S. National Forests: An Analysis of Public Attitudes, Beliefs, and Values Expressed in the News Media." Environment and Behavior 31(No. 4, July 1999):514- . (v.11,#1)

Bengston, David N. and Xu, Zhi., Changing National Forest Values: A Content Analysis. USDA Forest Service General Technical Report NC-323, 1995. 29 pages. The authors identify four ways in which people value forests and forest ecosystems: (1) economic/utilitarian, (2) life support, (3) aesthetic, and (4) moral/spiritual. These values are either instrumental, where the good is equated with some desirable human end, or non-instrumental, the worth of something seen as an end in itself. It is important to separate values from objects-of-value. "Objects of value are the things that we care about or think are

important, values are the ways in which we care about those things. Values are a conception of what is good about objects of value. Confusion between values and objects of value is common because the dividing line between these two concepts is subjective and dependent on how the terms are defined" (p. 6). Report produced at the U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station, 1992 Folwell Ave., St. Paul, MN 55108. (v.9,#4)

Bengston, David N., "Changing Forest Values and Ecosystem Management," Society and Natural Resources 7(1994):515-533. We are currently in a period of rapid and significant change in forest values. Forest managers must address the questions: (1) What is the nature of forest values? Can all forest values be reduced to a single dimension, as assumed in utilitarian- based traditional forestry and economics, or are these values multidimensional and incommensurate? (2) What specific values are involved? (3) What is the structure of these values? How are they related to each other in value systems? (4) How and why have forest values changed over time? (5) What do changing forest values imply for ecosystem management? Bengston is with the USDA Forest Service, North Central Forest Experiment Station, St. Paul, MN. (v.10,#1)

Bengston, David N., Trevor J. Webb and David P. Fan, "Shifting Forest Value Orientations in the United States, 1980-2001: A Computer Content Analysis," Environmental Values 13(2004):373-392. This paper examines three forest value orientations - clusters of interrelated values and basic beliefs about forests - that emerged from an analysis of the public discourse about forest planning, management, and policy in the United States. The value orientations include anthropocentric, biocentric, and moral/spiritual/aesthetic orientations toward forests. Computer coded content analysis was used to identify shifts in the relative importance of these value orientations over the period 1980 through 2001. The share of expressions of anthropocentric forest value orientations declined over this period, while the share of biocentric value expressions increased. Moral/spiritual/aesthetic value expressions remained constant over time. The observed shifts in forest value orientations have implications for identifying appropriate goals for public forest management and policy, developing socially acceptable means for accomplishing those goals, and dealing with inevitable conflict over forest management. Bengston is at the North Central Research Station, USDA Forest Service, St. Paul, MN. Webb is with the Social Sciences Program, Bureau of Rural Studies, Agriculture, Fisheries, Forestry--Australia, in Canberra. (EV)

Bengston, David N. and Fan, David P. I. "The Public Debate about Roads on the National Forests: An Analysis of the News Media, 1994-98." Alternatives 25(No.3, Summer 1999):4- . The debate about forest roads as expressed in news stories reflects the changing social context in which the Forest Service must overhaul its policy. Some of the conflicting views are predictable, but the debate among recreational users is surprising. (v10,#4)

Bengston, DN; Xu, G; Fan, DP, "Attitudes Toward Ecosystem Management in the United States, 1992-1998," Society and Natural Resources 14(no. 6, 2001):471-488. (v.13,#1)

Benidickson, Jamie, "Termagami Old Growth: Pine, Politics and Public Policy", Environments 23(No.2, 1996):41- . (v7,#1)

Benn, S. I., "Personal Freedom and Environmental Ethics: The Moral Inequality of the Species," in Dorsey, Gray L., ed., Equality and Freedom: International Comparative Jurisprudence (Dobbs Ferry, NY: Oceana, 1977). Papers from the World Congress on Philosophy of Law and Social Philosophy, St. Louis, August 1975.

Bennett, David H., "Triage as a Species Preservation Strategy," Environmental Ethics 8(1986):47-58. The use of selective preservation for species is seen as basically unethical. Either it selects appropriate

species on the basis of human instrumental use, or it makes the logical/ethical flaw of treating collectives as individuals. If triage is ethical, it is so only as applied to individuals. (Katz, Bibl # 1)

Bennett, David H. "Triage as a Species Preservation Strategy." Environmental Ethics 8(1986):47-58. In this paper I discuss what triage is and how it might be applied to the preservation of endangered species. I compare the suggested application of triage to endangered species with its application to wartime military practice, distribution of food aid, and human population control to show that the situation of endangered species is not analogous to these other suggested uses. I argue that, as far as species preservation is concerned, triage starts with the wrong norms and values: it is "human chauvinistic," giving primacy to economic, political, and sociocultural aspects that emphasize human interests without recognizing the connection between the survival of other species and the survival of humans. Bennett is in the department of philosophy, Australian National University, Canberra, Australia. (EE)

Bennett, EL, "Is There a Link between Wild Meat and Food Security?," Conservation Biology 16(no.3, 2002):590-592. (v.13, #3)

Bennett, Jane and William Chaloupka, eds., In the Nature of Things: Language, Politics, and the Environment. Minneapolis: University of Minnesota Press, 1993. 224 pages. \$ 17.95, paper. Informed by recent developments in literary criticism and social theory, the contributors address the presumption that nature exists independently of culture and, in particular, of language. The theoretical approaches of the contributors range across both modernist and postmodernist positions, including feminist theory, critical theory, Marxism, science-fiction, theology, and botany. The concept of nature is invoked and constituted in a wide range of cultural projects--from the Bible to science fiction movies, from hunting to green consumerism. How far is nature a social construct? (v4,#2)

"Nature, like everything we talk about, is first and foremost an artifact of language." Jane Bennett and William Chaloupka, "Introduction: TV Dinners and the Organic Brunch," pp. vii-xvi, on p. xi.

Reviewed by Michael Welsh in Environmental Ethics 17(1995):327-330. (EE)

Bennett, John W. Human Ecology as Human Behavior: Essays in Environmental and Development Anthropology, expanded edition. New Brunswick, NJ: Transaction Publishers, Rutgers, 1996. 396pp. \$23.95 paper. John Bennett's collection of essays, dating back some thirty years, examine this topic from an anthropological perspective. He claims that this perspective needs to be a more influential force in future analytic environmental research.

Bennett, Larry E., Colorado Gray Wolf Recovery: A Biological Feasibility Study. Final Report -- 31 March 1994. US Fish and Wildlife Service, Mountain-Prairie Region, Denver Federal Center, Denver CO. The study finds seven areas in western Colorado that meet the minimum recommended requirements for a sustainable population of about 1,000 wolves in total. This is about the same as the estimated population of wolves in the state in 1915. Bennett is with the University of Wyoming Fish and Wildlife Cooperative Research Unit, Laramie. A second part of this study, a sociological feasibility study, is to be released in December 1994, and done by the Human Dimensions in Wildlife Unit at Colorado State University. Wolves are being released in Wyoming in Yellowstone National Park this fall, see more below. (v5,#3)

Bennett, Lorne. A review of Richard Huggett, Environmental Change. Journal of Agricultural and Environmental Ethics 11(1999):151-154. (JAEE)

Bennett, R. M., Anderson, J., and Blaney, R. J. P., "Moral Intensity and Willingness to Pay Concerning Farm Animal Welfare Issues and the Implications for Agricultural Policy," Journal of Agricultural and

Environmental Ethics 15(no. 2, 2002):187-202, (JAEE)

Bennett, Steven J., Ecopreneuring: The Complete Guide to Small Business Opportunities from the Environmental Revolution. San Francisco: John Wiley and Sons, 1991. \$ 34.95 cloth, \$ 17.95 paper. 308 pages. (v2,#3)

Benoit-Asselman, David, Ways of Seeing, Ways of Knowing: Some Perspectives on the Relationship Between Phenomenology and Landscape Photography, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Benoit-Asselman, David, Ways of Seeing, Ways of Knowing: Some Perspectives on the Relationship Between Phenomenology and Landscape Photography, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Benson, John, Environmental Ethics: An Introduction with Readings. New York: Routledge, 2001. \$ 20. 304 pages. A blending of a systematic introduction and readings through which the student is led. Some chapters: Environmental goods and human well being. Environmental goods and the problem of co-operation. Environmental virtues. What entities have independent moral status? Relating to nature: Following Nature. Relating to nature: Being a part of nature. Techniques that have been used to value the environment and a critical evaluation of environmentalism, from "light" to "deep green."

Readings: Richard and Val Routley, "Environmental Ethics in Practice"; Bryan G. Norton, "The Cultural Approach to Conservation Biology"; E. O. Wilson, "The Environmental Ethic"; Jane Howarth, "Neither Use nor Ornament: A Consumers' Guide to Care"; David Pearce et al, "Economic Valuation of Environmental Goods"; Garrett Hardin, "A Tragedy of the Commons"; J. L. Mackie, "Game Theory Analysis"; R. W. Hepburn, "Wonder"; John O'Neill, "Science, Wonder and Lust of the Eyes"; Paul W. Taylor, "Respect for Nature"; J. S. Mill, "Nature"; Holmes Rolston, III, "Can and Ought We to Follow Nature?"; Arne Naess, "Identification, Oneness, Wholeness and Self-Realization"; Warwick Fox, "Transpersonal Ecology and the Varieties of Identification"; Val Plumwood, "Nature, Self and Gender: Feminism, Environmental Philosophy and the Critique of Rationalism"; Phil Larkin et al, "Environmental Verses." Benson is emeritus, Lancaster University, UK, also at the Open University, UK. (EE v.12,#1)

Benson, John, "Aesthetic and Other Values in the Rural Landscape," *Environmental Values* 17(2008):221-238. The paper discusses some relationships between aesthetic and non-aesthetic reasons for valuing rural landscape, i.e., landscape shaped by predominantly non-aesthetic purposes. The first part is about the relationship between aesthetic reasons and considerations of utility and argues for an intimate connection between them. The next part considers the relationship between aesthetic and other non-instrumental reasons for valuing landscape and argues that there are important contingent but no essential connections between them. The third part considers the strength or weakness of aesthetic reasons for resisting landscape changes that would result from changes in land use.

Benson, Reed D. "A Watershed Issue: the Role of Streamflow Protection in Northwest River Basin Management." Environmental Law 26, no.1 (1996): 175. Benson examines how watershed protection efforts have become popular in the Northwest, as governments at all levels have found reasons to embrace them. He concludes that although these efforts promise a holistic approach to environmental problems, Western water law and politics may prevent them from addressing a key need of healthy watersheds: adequate instream flows. (v7, #3)

Bensted-Smith, Robert, "Repelling Invaders and Other Challenges for the Charles Darwin Foundation and the Galapagos National Park Service," Society for Conservation Biology Newsletter 9 (no. 4, 2002):1, 3. As of May 2002, after intensive efforts, including GPS technology, feral pigs have been finally and completely removed from Santiago, the largest island in the world from which pigs have been eradicated.

The pigs have wreaked havoc on Santiago since the mid 1800's. Now the biggest challenge to conservation in the Galapagos is exotic insects and plants. There are over 600 introduced species of plants, and these outnumber native species. (v.13,#4)

Benton, L. M. "Selling the Natural or Selling Out? Exploring Environmental Merchandising." Environmental Ethics 17(1995):3-22. In the twenty years since the first Earth Day, the environmental movement has become increasingly "commercialized." I examine why many environmental organizations now offer an array of products through catalogs and magazines, or manage stores and outlets. In part one, I explore some of the economic and political influences during the 1970s and 1980s that resulted in increased organizational sophistication and an increased production of environmental products. The part two, I explore the "commercialization" of environmentalism from two angles. First, in terms of a deconstructionist critique of the system of commodities and image, I demonstrate that when environmental organizations partake in this consumer culture, they actually reproduce precisely the values and institutions that they criticize. Second, from a "constructionist" perspective, I argue that environmental products can re-enchant or reconnect people with nature, and thus can help change cultural attitudes about human-nature relationships. I conclude that environmental products are contradictory because environmental merchandise is juxtaposed uneasily between environmental ideological rhetoric and material ambition. Environmental organizations must recognize this ambiguity before they can deal with the problem effectively. Benton is in geography at Syracuse University. (EE)

Benton, Ted, ed. The Greening of Marxism. New York: Guilford Publications, Inc., 1996. 310 pp. \$42.95 cloth, \$17.95 paper. Tracing the history of the integration of ecological understanding with Marxist philosophy, this book explores the influence of green politics on Marxism, examines the new politics emerging from these movements, and shows how red-green alliances can transform the political landscape. (v7,#4)

Benton, Ted, "Biology and social theory in the environmental debate." Pages 28-50 in Redclift, M., and Benton, Ted, eds., Social Theory and the Global Environment. London: Routledge, 1994.

Benton, Ted, Review of Eckersley, Robyn, Environmentalism and Political Theory: Towards an Ecocentric Approach. Environmental Values 2(1993):277-280.

Benton, Ted, "Why Are Sociologists Naturephobes?" Pages 133-145 in José López and Gary Potter, eds., After Postmodernism: An Introduction to Critical Realism, London: Athlone Press, 2001. Sociology has been responsible for fostering an anti-nature attitude which has significant implications for ecology and environmental ethics.

Benton, Ted, Natural Relations: Ecology, Animal Rights and Social Justice. New York: Routledge, 1993. 250 pages. \$ 17.95 paper. Debates about the moral status of animals are used to critique human rights discourse. Both humans and other species of animals are vulnerable to harm and require the same conditions for their well being, and the author develops a naturalistic, but anti-reductionist view of human nature. In a post-capitalist society, we need an ecological and socialist view of human rights. Benton is Reader in sociology at the University of Essex. (v5,#1) Reviewed by Eckersley, Robyn, "Natural Justice: From Abstract Rights to Contextualised Needs." Environmental Values 3(1994):161-172. (EV)

Benton, Ted., "Environmental Values and Human Purposes," *Environmental Values* 17(2008):201-220. Some writings by Alan Holland provide the starting point for an exploration of sources of environmental value in human social practices. It is argued that many practices both serve human purposes and also provide a setting for the emergence of environmental value. Such practices are ones in which activity is embedded in, and so both strongly constrained and enabled by, its conditions and media. Capitalist 'modernisation' has tended to erode these practices and associated values in favour of external purposes

and instrumental values, especially in the farmed countryside. In the face of this, and partly on grounds of social justice, a re-valuation of urban open spaces is advocated.

Benton, Ted. "Why Are Sociologists Nature-phobes?" *After Postmodernism: An Introduction to Critical Theory*, Jose Lopewz and Gary Potter, eds. London: Athlone, 2001: 133-45.

Benzoni, Francisco, "Rolston's Theological Ethic," Environmental Ethics 18(1996):339-352. The centerpiece of Holmes Rolston, III's environmental ethic is his objective value theory. It is ultimately grounded not in the Cartesian duality between subject and object, but in the divine. It is not his value theory, but rather his anthropology that is the weak link in an ethic in which he attempts to weave together the natural, human, and divine spheres. With a richer, more fully developed theological anthropology, Rolston could more deeply penetrate and critique those aspects of the present ways of being-in-the-world that are environmentally destructive. Benzoni is a doctoral student at the University of Chicago. (EE)

Benzoni, Francisco. "Creatures as Creative: Callicott and Whitehead on Creaturely Value." Environmental Ethics 28(2006):37-56. Alfred North Whitehead's metaphysics provides a means for overcoming the dualism embedded in J. Baird Callicott's "postmodern" axiology. Indeed, the lessons Callicott draws from the new physics and ecology imply Whitehead's position. While Callicott holds that subjectivity and valuing require consciousness, Whitehead argues that subjectivity and valuing characterize all metaphysically basic entities, conscious and non-conscious. Removing the constraint that valuing requires consciousness is a slight shift, but it makes all the difference. By jettisoning this constraint, we can develop a robust account of intrinsic value that overcomes Callicott's duality, while retaining his insights that valuing requires a valuer and fluent energy is more fundamental than discrete entities. (EE)

Berdal, Knut G. "Risk To What?" Pages 39-45 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Berg, A., Tjernberg, M., "Common and Rare Swedish Vertebrates- Distribution and Habitat Preferences", Biodiversity and Conservation 5(No.1, 1996):101- . (v7,#1)

Berg, Annukka, Review of Tim Jackson, ed., *The Earthscan Reader in Sustainable Consumption*, Environmental Values 16(2007):408-410.

Berg, Scott and Cantrell, Rick, "Sustainable Forestry Initiative: Toward a Higher Standard" Journal of Forestry. 97(no. 11, Nov 01 1999):33- . The American Forest and Paper Association's Sustainable Forestry Initiative program offers building blocks to sustainable forestry in the United States and around the world. (v10,#4)

Bergen, LK; Carr, MH, "Establishing Marine Reserves: How Can Science Best Inform Policy?", Environment 45(no.2, 2003):8-19.

Berger, Anthony R. "Rapid Landscape Changes, Their Causes, and How They Affect Human History and Culture." *The Northern Review* Number 28 (Winter 2008): 15-26. Many landscape changes can readily be seen within a human lifetime, and rapid changes have often occurred: volcanic eruptions, coastal erosion, climate change, floods, fires, earthquakes. Paleo-environmental science has revealed prior rapid landscape changes, sometimes in the memories of indigenous peoples. How people reacted to such changes might influence the way we think today, providing perspectives helping to cope with environmental change in the coming years. Berger is in environment and development at Sir Wilfred Grenfell College, Memorial University of Newfoundland and Labrador. This paper is published in a special collection of proceedings from the conference "Rapid Landscape Change and Human Response in

the Arctic and Subarctic," Whitehorse, Yukon (2005).

Berger, Antony R., Dark Nature in Classic Chinese Thought. Victoria, BC: Centre for Studies in Religion and Society, University of Victoria, 1999. 78 pages. ISBN 1-55058-205-4. Contact: CSRS, University of Victoria, Box 1700 Stn CSC, Victoria BC V8W 2Y2, Canada. E-mail: csrs@uvic.ca. How the founders of Daoism (Taoism) and Confucianism experienced and acknowledged natural catastrophes, river floods, channel switching, earthquakes, landslides, and sea-level rise. Many natural processes cause harm to humans and to ecosystems. Nature has two sides: nature supports life, but natural forces are not always benevolent to the well-being of either humans or ecosystems. This darker side of nature has been overlooked by environmental philosophers.

Some Chinese thinkers took the anthropocentric view that bad things in nature were the consequences of bad human actions. They saw the world as fundamentally harmonious, as long as people followed the correct rituals and codes of behavior (rather like some modern environmentalists). Other Chinese thinkers held that harm was part of nature's processes and is to be accepted as part of that pattern. On a human scale, these may cause pain and sorrow; on a cosmic scale, they are only the flow of the Dao (Tao). "There is a challenge, which in my view has not yet been fully met, to develop a way of living and thinking, naturalistic or not, that recognizes fully that nature has for all life forms both a benevolent and a harmful dimension" (p. 46). Berger is an earth scientist. (v.11,#1)

Berger, Antony R., Dark Nature in Classic Chinese Thought. Victoria, BC: Centre for Studies in Religion and Society, University of Victoria, 1999. 78 pages. ISBN 1-55058-205-4. Contact: CSRS, University of Victoria, Box 1700 Stn CSC, Victoria BC V8W 2Y2, Canada. E-mail: csrs@uvic.ca. How the founders of Daoism (Taoism) and Confucianism experienced and acknowledged natural catastrophes, river floods, channel switching, earthquakes, landslides, and sea-level rise. Many natural processes cause harm to humans and to ecosystems. Nature has two sides: nature supports life, but natural forces are not always benevolent to the well-being of either humans or ecosystems. This darker side of nature has been overlooked by environmental philosophers.

Some Chinese thinkers took the anthropocentric view that bad things in nature were the consequences of bad human actions. They saw the world as fundamentally harmonious, as long as people followed the correct rituals and codes of behavior (rather like some modern environmentalists). Other Chinese thinkers held that harm was part of nature's processes and is to be accepted as part of that pattern. On a human scale, these may cause pain and sorrow; on a cosmic scale, they are only the flow of the Dao (Tao). "There is a challenge, which in my view has not yet been fully met, to develop a way of living and thinking, naturalistic or not, that recognizes fully that nature has for all life forms both a benevolent and a harmful dimension" (p. 46). Berger is an earth scientist. (v10,#4)

Berger, Carol. "Canada's Once Pristine North Tries to Curb Paper Mills' Waste." The Christian Science Monitor, vol. 88, 17 Oct. 1996, p. 1, 8.

Berger, Dnyani, J., Wildlife Extension: Participatory Conservation by the Maasi of Kenya. Nairobi: African Centre for Technology Studies. ISBN 9966-41-068-6. Community initiative in conservation on Maasai group ranches near Amboseli and Tsavo West Parks, with the resolution of people/wildlife conflicts. Also analyzes the history of wildlife conservation and development in Kenya's rangelands. (v6,#3)

Berger, Ida E. "The Demographics of Recycling and the Structure of Environmental Behavior," Environment and Behavior 29(no.4 1997):515. (v8,#3)

Berger, J, "Is It Acceptable to Let a Species Go Extinct in a National Park?," Conservation Biology 17(no.5, 2003):1451-1454. (v.14, #4)

Berger, J, "The Last Mile: How to Sustain Long-Distance Migration in Mammals", Conservation Biology 18 (no.2, 2004): 320-331.

Berger, Joel, Anne Holyman, and William Weber, "Perturbation of Vast Ecosystems in the Absence of Adequate Science: Alaska's Arctic Refuge," Conservation Biology 15(no.2, 2001 Apr 01): 539- (v.12,#3)

Berger, Joel and Carol Cunningham, "Active Intervention and Conservation: Africa's Pachyderm Problem," Science 263(1994):1241-1242. Few conservation programs have succeeded where the animal has valuable body parts that can be poached. The ban on elephant ivory may be working, though causing dissension in Africa, where countries with abundant elephants want to sell legal ivory, to support conservation. Africa's most endangered pachyderms are the rhinoceroses, in 25 years reduced from 65,000 to 2,500, a loss of 97%. Only one unfenced population of over more than 100 animals exists, in Namibia. Namibia, Zimbabwe, and Swaziland are using a controversial dehorning, where the horn is sawed off and the animal returned to the wild. Does the dehorning deter poachers? Can hornless mothers defend calves from predators? Berger and Cunningham think that the answer may be no, on balance, in both cases, but both questions are hard to answer, partly because horned and dehorned animals mix; there is evidence on both sides.

Predators may not turn to rhinoceros calves until there is extended drought and other prey are in shorter supply. It might be better to move the rhinos to fenced areas. On the science and advocacy issue, Berger and Cunningham, a husband and wife team, had returned to Namibia when this article was published and a month later found that their research permits were not renewed by U. S. agencies and their money frozen by the Namibian government, apparently because their research yielded results that cast doubts on the wisdom of an established official policy. Their research has been supported by what looks like a Who's Who in government and NGO conservation agencies. See editorial by Peter F. Brussard in Society for Conservation Biology Newsletter, vol. 1, issue 2, May 1994. (v5,#2)

Berger, Joel, and Cunningham, Carol, "Is Rhino Dehorning Scientifically Prudent?" Pachyderm 21(1996):60-68. (v8,#1)

Berger, Joel, Swenson, Jon E., and Persson, Inga-Lill, "Recolonizing Carnivores and Naive Prey: Conservation Lesson from Pleistocene Extinctions," Science 291(2001):1036-1039. Prey species, such as moose in Yellowstone, who have never encountered a predator such as a wolf, are at first naive, but they learn quite quickly to be wary of such new predators. Data from the Yellowstone wolf restoration. Within one season they are quite alert to the new dangers and within one generation, Wyoming moose with no previous experience of wolves for over a century are as alert as their Alaska cousins. Also Scandinavian data. This allays worries about prey species when carnivores are restored. Furthermore, such quick learning casts the "blitzkrieg hypothesis" about humans entering North America and rapidly killing naive prey species in doubt. Berger is in biology, University of Nevada, Reno. Swenson is in biology, Agricultural University of Norway. Persson is in zoology, University of Oslo. (EE v.12,#1)

Berger, Joel, Ferguson, J.W.H. "Population Constraints Associated with the Use of Black Rhinos as an Umbrella Species for Desert Herbivores," Conservation Biology 11(no.1, 1997):69. (v8,#2)

Berger, John J., ed., Environmental Restoration: Science and Strategies for Restoring the Earth (Washington, DC: Island Press, 1990). \$19.95. 398 pages. (v2,#1)

Berger, Joseph, "Next Subway Stop, the Wilderness," New York Times, October 6, 2004, p. A27. New York City has 48 preserves of tidal marsh, shoreline, woodlands, creeks, kettle ponds with much wildlife, some of the reserves almost as pristine as when the Europeans first arrived. Some of them are even designated "forever wild." But they are less known to New Yorkers than they should be. (v.14, #4)

Bergesen, Helge Ole, Parmann, Georg, eds., Green Globe Yearbook of International Co-operation on Environment and Development 1996. New York: Oxford University Press, 1996. 358 pp. \$59.95. This Yearbook's main objective is to demonstrate how far the international community has come in solving specific environment and development problems, what the main obstacles are to effective international solutions, and what needs to be done to overcome such barriers. (v7,#4)

Bergesen, Helge Ole and others, eds., Green Globe Yearbook 1992. New York: Oxford University Press, 1992. 304 pages. \$ 45.00. The politics of international management. Ten articles in analysis of ozone depletion, climate change, endangered species, hazardous wastes, biodiversity, population control, environmental law, sustainable energy development. The second half of the book is reference data of various kinds. (v3,#3)

Berghoefer, Uta, Ricardo Rozzi, and Kurt Jax. "Local versus Global Knowledge: Diverse Perspectives on Nature in the Cape Horn Biosphere Reserve." *Environmental Ethics* 30(2008):273-294. A case study of socio-ecological research conducted in Puerto Williams, Chile reveals that persons belonging to different sociocultural groups in Cape Horn have a diversity of perspectives and relationships with nature. For example, a strong sense of home and belonging was expressed by the indigenous Yahgan community and by old residents, mostly descendents of early twentieth-century colonizers. However, people identified with resource use did not include positive answers for a sense of home. The concept of common land presented marked contrasts among respondents. Those identified with a cultivating type of relationship favored private property over public land. For respondents identified with an embedded type of relationship, freedom of movement was one of their most essential values. Some respondents identified with resource use and those identified with intellectual and aesthetic relationships with nature also valued common land. The approach used in this study transforms polarized and dichotomous notions into gradients of perspectives related to different degrees of local and global ecological and cultural environments. The resulting hybrid vision of perspectives on nature may be helpful in times of global change, where both local and global scales contribute to identify specific problematic asymmetries as well as opportunities for communication among different sociocultural groups. (EE)

Berglund, Eeva, Knowing Nature, Knowing Science: An Ethnography of Local Environmental Activism. Cambridge, UK: The White Horse Press, 1997. Three different groups of civil activists protesting against infrastructure installations, and their understanding of science. The role of science is ambivalent. Post-Chernobyl Germany, cultures of protest, environmental conflict, and shifting boundaries of nature and culture. Berglund is in geography at the University of California, Berkeley. (v9,#2)

Berglund, Eeva. Review of Flyvbjerg, Rationality and Power: Democracy in Practice. Environmental Values 9(2000):250.

Bergman, B. J., "The Great Indoors," Sierra 83 (no. 2, March/April 1988): 82-83, 106-109. Wilderness experience in the mall. Yes, it's here. At the Ontario Megamall, 40 miles east of that other land of enchantment, Hollywood, you can (for an admission price of \$ 9.95) "Step Inside the Great Outdoors," for the "American Wilderness Experience." "Go Wild in the Mall! Now Open," proclaims a billboard. There is a real sparrow hawk, and you can do a "half-million mile hike," though pregnant women and children are advised not to do too much. There is a "Wild Ride Theater," with simulator, like a roller coaster, with the wilderness passing by. There is a Redwood Forest Ecosystem (simulated), then real bobcats sleeping under a make-believe pine tree. And more. (v9,#2)

Bergman, Roger, "Theocentric or Anthropocentric? Catholic Teaching on the Environment: A View from the Great Plains." Pages 204-228 in Lawler, Michael G., and Risch, Gail S., eds., Practical Theology: Perspectives from the Plains. Omaha: Creighton University Press, 2000. (v.12,#2)

Bergmann, Sigurd, *Creation Set Free: The Spirit as Liberator of Nature*. Grand Rapids, MI: Wm. B. Eerdmans, 2006. In view of the destruction of the sources of life, ecology is no longer a marginal issue. Bergmann rethinks theology in light of the global environmental crisis, with a dialogue between previous ecological theologies and church father Gregory of Nazianzus. Through the neglected topics of sociality, motion, suffering, and the Spirit, Bergmann develops Gregory's thought on the liberation of creation. He also connects ecological issues and patristic theology with contemporary liberation theology, concerned to reaffirm the cosmos as something involved in redemption rather than merely a stage for human salvation.

Bergon, Frank, ed., *The Wilderness Reader*. Reno: University of Nevada Press, 1980, 1994. 384 pages. \$ 13.95. Some two dozen readings from nature writers of the past, such as George Catlin, Henry David Thoreau, John Wesley Powell, Theodore Roosevelt, John Borroughs, Aldo Leopold, Rachel Carson.

Berghaller, Hannes. Review of: Yuce (Yüce), Nilgün and Peter Plöger, eds., *Die Vielfalt der Wechselwirkung. Eine transdisziplinäre Exkursion im Umfeld der Evolutionären Kulturökologie*. Freiburg and Munich: Karl Aber Verlag, 2003. *Environmental Values* 13(2004):546-547.

Beringer, Almut. *The Moral Ideas of Care and Respect: A Hermeneutic Inquiry into Adolescents' Environmental Ethics and Moral Functioning*. Ph.D. dissertation in Natural Resources at the University of Michigan, 1992. William B. Stapp and Martin J. Packer were principal advisors. An interpretive-hermeneutic study of what it means to be moral toward nature. Discontent with contemporary environmental philosophy, leads Beringer to an inductive approach, based on real-life moral experiences. Environmental ethics needs to be rooted in the psychology of people to be applicable. Do people have the psychological capacities to put into practice what philosophers recommend? In an empirical study, 31 high school juniors comment on the ethical dimensions of environmental issues, and their responses are analyzed to answer the question. (v6,#3)

Berkeley, Bill, "Race, Tribe, and Power in the Heart of Africa," *World Policy Journal* 18 (no. 1, Spring, 2001):79-97. "This is an essay about evil. Its setting is Africa." "The bad guys in Africa are black and white, and shades in between. These stories are a measure of how much Africans have in common with the rest of mankind, not how much they differ. ... Today there is genuine cultural diversity in the gallery of twentieth century demonology, the late arrival of black fascism providing the ultimate testimony that political sin, as with all other kinds of sin and virtue, knows no color." And even more discouraging for wildlife conservation in Africa. Abridged from a forthcoming book: *The Graves Are Not Yet Full: Race, Tribe and Power in the Heart of Africa* (Basic Books, 2001). Berkeley is a journalist, with assignments for the *New York Times*. (v.12,#3)

Berkeley, Bill. "The 'New' South Africa: Violence Works," *World Policy Journal* 13(no.4 1996):73. (v8,#1)

Berkes, F, "Rethinking Community-Based Conservation," *Conservation Biology* 18(no.3, 2004):621-630. (v. 15, # 3)

Berkes, Fikret, "Religious Traditions and Biodiversity," *Encyclopedia of Biodiversity* 5: 109-120. Religious traditions have little to say specifically about biodiversity, but they provide the values, worldviews, or environmental ethics that shape the way in which different societies interact with biological diversity and nature in general. In this sense, religion can be part of the problem or part of the solution. Anthropologist Eugene Anderson observes that all traditional societies that have succeeded in keeping resources productive over time have done so in part through religious or ritual representation of resource management. The key point, he says, is not religion per se, but using emotionally powerful

cultural symbols to maintain a sense of sacred respect. (v.11,#4)

Berkes, Fikret, ed., Common Property Resources: Ecology and Community-Based Sustainable Development. London: Belhaven Press, 1992. (v9,#2)

Berkes, Fikret and Folke, Carl, eds., Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience. Cambridge: Cambridge University Press, 1999. Berkes is at the University of Manitoba. Folke is at the Beijer International Institute of Ecological Economics, Stockholm. (v.13, #3)

Berkes, Fikret. Sacred Ecology: Traditional Knowledge and Resource Management. Reviewed by Thomas Heyd. Environmental Ethics 22(2000):419-422.

Berkson, J., and Harrison, A. L., "An Integrative Capstone Course for the Conservation Biology Curriculum," Conservation Biology 15(no.5, 2001): 1461-63. (v.13,#2)

Berleant, A., Review of "The Aesthetics of Environment." Environmental Values 3(1994):173-182. (EV)

Berleant, Arnold, ed., Environment and the Arts: Perspectives on Environmental Aesthetics. Aldershot: Ashgate, 2002. Reviewed by Robert Fudge, Environmental Values 13(2004):121-123. (EV)

Berleant, Arnold, The Aesthetics of Environment. Philadelphia: Temple University Press, 1992. The meaning and influence of environmental perception on human life. The foremost characteristic of environmental perception is the quality of engagement. Berleant is professor of philosophy at Long Island University, C. W. Post Campus. (v3,#4)

Berleant, Arnold, and Carlson, Allen, eds., special issue, Environmental Aesthetics, of The Journal of Aesthetics and Art Criticism 56, no. 2, Spring 1998. Stimulating discussions in a steadily developing field of aesthetics. Frequent themes are experience of nature as more engaged than is usual in the arts, its multi-sensory nature, the character of disinterestedness, environmental aesthetics and environmental ethics, the place of the scenic in a more comprehensive aesthetic, and the role of science in aesthetic appreciation of nature. Contains:

--Saito, Yuriko, "The Aesthetics of Unscenic Nature"

--Godlovitch, Stan, "Evaluating Nature Aesthetically"

--Foster, Cheryl, "The Narrative and the Ambient in Environmental Aesthetics"

--Brady, Emily, "Imagination and the Aesthetic Appreciation of Nature"

--Eaton, Marcia Muelder, "Fact and Fiction in the Aesthetic Experience of Nature"

--Rolston, III, Holmes, "Aesthetic Experience in Forests"

--Fisher, John Andrew, "What the Hills Are Alive With: In Defense of the Sounds of Nature"

--Schauman, Sally, "The Garden and the Red Barn: The Pervasive Pastoral and Its Environmental Consequences"

--Melchionne, Kevin, "Living in Glass Houses: Domesticity, Interior Decoration, and Environmental Aesthetics"

--Sandrisser, Barbara, "Cultivating Commonplaces: Sophisticated Vernacularism in Japan."

Berleant, Arnold, The Aesthetics of Environment, Reviewed by Yrjö Sepänmaa in Environmental Ethics 16(1994):437-439.

Berleant, Arnold, ed., Environment and the Arts: Perspectives on Environmental Aesthetics Aldershot, Hants, UK: Ashgate Publishing Ltd., 2002. Contains:

- Berleant, Arnold, Chapter 1. "Introduction: Art, Environment and the Shaping of Experience," pages 1-21.
- Hepburn, Ronald W., Chapter 2. "Data and Theory in Aesthetics: Philosophical Understanding and Misunderstanding," pages 23-38.
- Sepänmaa, Yrjö, Chapter 3. "The Two Aesthetic Cultures: The Great Analogy of Art and the Environment," pages 39-46.
- Haapala, Arto, Chapter 4. "Art and Nature: The Interplay of Works of Art and Natural Phenomena," pages 47-60.
- Carlson, Allen, Chapter 5. "Nature Appreciation and the Question of Aesthetic Relevance," pages 61-74.
- Lehari, Kaia, Chapter 6. "Embodied Metaphors," pages 75-87. "A person's physical involvement in nature is the deepest layer of the environmental condition and the source of its meanings."
- vonBonsdorff (von Bonsdorff), Pauline, Chapter 7. "Urban Richness and the Art of Building," pages 89-101.
- Melchionne, Kevin, Chapter 8. "Front Yards," pages 103-111.
- Brady, Emily, Chapter 9. "Aesthetics, Ethics and the Natural Environment," pages 113-126.
- Rolston, III, Holmes, Chapter 10. "From Beauty to Duty: Aesthetics of Nature and Environmental Ethics," pages 127-141.
- Berleant, Arnold, Chapter 11. "Embodied Music," pages 143-155.
- Sandrisser, Barbara, Chapter 12. "Dot.com Dot.edu: Technology and Environmental Aesthetics in Japan," pages 157-169.
- Saito, Yuriko, Chapter 13. "Environmental Directions for Aesthetics and the Arts," pages 171-185.

Berleant, Arnold. *Aesthetics and Environment: Variations on a Theme*. Aldershot: Ashgate, 2005. Papers and talks given by Berleant over the past 25 years. Berleant's presents a participatory model: "In this view, the environment is understood as a field of forces continuous with the organism, a field in which there is reciprocal action of organism on environment and environment on organism, and in which there is no sharp demarcation between them" (p. 9).

Berleant, Arnold. Living in the Landscape: Toward an Aesthetics of Environment. Lawrence, Kansas: University Press of Kansas, 1997. 176pp. \$25 cloth. Berleant explores new ways of thinking about how we live--and might live--in the landscapes that enfold us. "A significant contribution in a field that is only now coming into prominence" -- Allen Carlson. Berleant is known for his earlier The Aesthetics of Environment and is professor emeritus of philosophy at Long Island University. (v8,#1)

Bermond, Bob, "Consciousness or the Art of Foul Play," Journal of Agricultural and Environmental Ethics 10(1997/1998):227-247. ABSTRACT. The psychological literature about consciousness has been analyzed. It is argued that:

- 1) Only the higher symbolic cognitive powers like the ability to keep secrets, knowledge of self or self-consciousness, a long-term view on the future, the ability to determine long-term goals, and to freely plan future behavior, add positive fitness-value to consciousness. Without these higher intellectual abilities consciousness will have only negative fitness value and no positive one. The intellectual powers mentioned may therefore be considered as prerequisites for consciousness. Consciousness may therefore only be expected in those animal species that show these capacities in their behavior. So far these capacities have only been described for the anthropoid apes and humans. For the time being, they are therefore the only species in which consciousness may be expected.
- 2) Consciousness is not synchronous with real time. Human consciousness is, in as well in the perception of stimuli as in the experience of free will to act, most times running after the facts.
- 3) Consciousness has to be viewed as an instinct that has been developed late in evolution. It is partially based upon primarily innate neural circuits, fulfilling specialized cognitive functions by which information is interpreted and inferences are made, in a more or less automatic way.

4) Most information processing concerning daily decisions, is done by parallel nonconsciously functioning neural modules using 'sloppy logic', and only the end-product of these modules can be pushed forwards to consciousness. For this reason consciousness will, most times, lack the necessary information to come to the correct inferences about the evaluations on which the decision is based. Therefore, only rarely will people have insight into their cognitive processes or the real sources of their behavior. When asked why they behaved as they did, they will produce confabulations. However, people's erroneous reports are not capricious, but regular and systematic in such a way that they will fit the pre-existing ideas and beliefs. The contents of these reports are therefore not based upon introspection, but, most times, on (sub)culturally accepted ideas.

KEY WORDS: Consciousness, fitness-value and foul play. (JAEE)

Bernauer, Thomas, Moser, Peter. "Reducing Pollution of the River Rhine: The Influence of International Cooperation," The Journal of Environment and Development 5(no.4, 1996):389. (v8,#2)

Bernauer, Thomas. "The International Financing of Environmental Protection: Lessons from Efforts to Protect the River Rhine against Chloride Pollution," Environmental Politics 4(no.3, Fall 1995):369- . (v6,#4)

Bernhardt, E.S. et al (15 others), "Synthesizing U.S. River Restoration Efforts," Science 308(29 April 2005):636-637. There is increasing evidence that the degradation of waters is at an all-time high (despite the Clean Water Acts). More than one-third of the rivers in the United States are impaired or polluted, and freshwater withdrawals in some regions are so extreme that some major rivers no longer flow to the sea year round. Extinction rates for water fauna are five times that for terrestrial fauna. But stream and river recovery can work, though it tends to be fragmented and disorganized. It can also be a highly profitable business. The lead author is in natural resources and environment, University of Maryland.

Bernknopf, Richard L., Brookshire, David S., Scoller, David R. "Estimating the Social Value of Geologic Map Information: A Regulatory Application," Journal of Environmental Economics and Management 32(1997):284.

Bernson, Vibeke, The Framework Convention on Climate Change: Analyzing the Role of Epistemic Communities and of Problem Uncertainty in the Outcome of the Negotiations. Lund, Sweden: Lunds Universitet, Statsvetenskapliga Institutionen. A master's degree in International Cooperation and Administration on Negotiation. In English. 57 pages. Contact Kemikalieinspektionen, Box 1384, 171 27 Solna, Sweden. Phone 08/730 57 00. The Framework Convention on Climate Change, at the Earth Summit at Rio in 1992, is ineffectual. This results from the negotiation process by which it was prepared, and this is analyzed, using regime theory and the roles of the epistemic communities involved, such as natural scientists, their scientific organizations, economists, and national governments, all of which can have different belief systems and behave differently in the face of uncertainties. (v7,#2)

Bernstein, Ellen, The Splendor of Creation: A Biblical Ecology, Pilgrim Press, May 2005

Bernstein, Ellen, *The Splendor of Creation: A Biblical Ecology*. New York: Pilgrim Press, 2005. Focused on the biblical story of the creation of the world, a reading for an ecological age. Bernstein is founder of Shomrei Adamah, the first Jewish environmental organization.

Bernstein, Ellen, ed., Ecology and the Jewish Spirit: Where Nature and the Sacred Meet. Woodstock, Vermont: Jewish Lights Publishing, 1998. 37 essays. 288 pages. Hardcover \$ 24.00. (v9,#1)

Bernstein, Mark. Review of *Animal Pragmatism: Rethinking Human-Nonhuman Relationships*. Edited by Erin McKenna and Andrew Light. Environmental Ethics 28(2006):107-110. (EE)

Bernstein, Steven, The Compromise of Liberal Environmentalism. New York: Columbia University Press, 2001. "Liberal environmentalism" predicates environmental protection on the promotion and maintenance of a liberal economic order, legitimated at the UNCED Rio Summit. Accepting this position, revising classical accounts over the last three decades, has significant implications for our ability to address global environmental problems. (v.13,#4)

Berreby, David, "Twists and Turns in Chimp AIDS Research," and "Unneeded Lab Chimpanzees Face Hazy Future," New York Times, February 4, 1997, p. A1, C8. Surplus chimps. US biomedical researchers hold about 1,800 chimpanzees that are largely not needed in research, about 200 of them infected with H.I.V. It was once thought that the infected chimps would soon die and could serve as models for human research, but this proved largely wrong, although, many years later, a few chimps do seem to be catching the disease. Others were used by the Air Force four decades ago to establish that humans could live in space. The chimps can live 50-60 years. Costs and care of the chimps is increasingly an issue, and younger researchers less and less comfortable with using them in research, for ethical reasons. Frederick Coulston and his Coulston Foundation control 650 of the animals and seek to do continued research, amid growing controversy. (v8,#3)

Berrens, R. P. , Jenkins Smith, H., and Bohara, A. K., "Further Investigation of Voluntary Contribution Contingent Valuation: Fair Share, Time of Contribution, and Respondent Uncertainty," Journal of Environmental Economics and Management 44(no.1, 2002): 144-68. (v.13,#4)

Berry, A. H. and Hessel, H., "The Effect of the Wildland Urban Interface on Prescribed Burning Costs in the Pacific Northwestern United States," Journal of Forestry 102(no. 6, 2004): 33-37(5). (v.14, #4)

Berry, Alison H; Hessel, Hayley, "The Effect of the Wildland-Urban Interface on Prescribed Burning Costs in the Pacific Northwestern United States", Journal of Forestry 102(no.6, September 2004):33-37(5).

Berry, Gregory R., "Organizing Against Multinational Corporate Power in Cancer Alley: The Activist Community as Primary Stakeholder", Organization and Environment, 16, (No. 1, 2003): 3-33. An examination of how a small, oppressed and seemingly powerless community in Louisiana persevered to defeat the strategic plans of a multinational chemical company that was supported by local and state government elites. The evolving construct of environmental justice played a significant part of this battle as community groups formed coalitions with local, state, and national agents and organizations to challenge the decision to site a hazardous facility. Lawsuits resulted in costs, lengthy delays, and uncertainty for the corporation, leading Shintech to abandon its original site of choice. Implications of the study are discussed for stakeholder theory, environmental justice scholars and community advocacy groups. Gregory is based at Texas Wesleyan University where he works on organizational theory, specialising in the social, political and economic interactions of firms and communities.

Berry, Joyce K. and John C. Gordon, eds., Environmental Leadership: Developing Effective Skills and Styles. Washington, DC: Island Press, 1993. Paper, \$ 19.95. 320 pages. The authors argue for an approach that has been used at Yale School of Forestry and Environmental Studies with much success. What characteristics and contexts of leadership are unique to the conservation field? (v4,#2)

Berry, Kate A, "Water Along the Border; An Introduction to 'Water Issues in the U.S.-Mexico Borderlands'," Natural Resources Journal 40(no.4, Fall 2000):755-. (v.12,#4)

Berry, R. J., God's Book of Works. London: T. & T. Clark, 2003. Reviewed by Michael Reiss. Environmental Values 13(2004):138-138. (EV)

Berry, R. J., "Environmental Ethics--From Eden to Rio--and Back Again?" Faith and Thought, April 1998, No. 23. Faith and Thought is published by The Victoria Institute, Croydon, Surrey, UK. ISSN 0955-2790. A prominent British ecologist, geneticist, and conservative Christian reflects on the Biblical concept of nature and humans in nature (Eden), contemporary movements in environmental conservation, surrounding and resulting from Rio, and wonders whether we are not returning to a concept of humans as trustees of creation (aka managers in secular circles). Christians should be making up their minds about environmental issues and sharing them with others, taking the lead and witnessing to the glories in God's creation. Photographs of Earth seen from space have become icons, awakening people to the environment and its fragility. We are living in a finite, not infinite, world and this is all we have. (v.9,#3)

Berry, R. J. "Sam", "Is a Global Environmental Ethic Attainable?" Science and Spirit 7 (no. 4, Winter 1996):6-7. Berry, a geneticist at University College, London, served on a committee to write a Code of Environmental Practice for the Economic Summit of Nations, a secular group, as well as on a Church of England group to prepare a statement of environmental stewardship. He found that the principles of both groups were almost the same. He also serves with an IUCN group, the Ethics Working Group, and finds their principles similar. This leads him to think that a world ethic for sustainable living may be possible. (v7,#4)

Berry, R. J. ("Sam"), God's Book of Works: The Nature and Theology of Nature. London: T&T Clark. New York: Continuum, 2003. Gifford Lectures at the University of Glasgow, 1997-1998. Representative chapters: Design and Deity, Theology of DNA, Green Religion, Green Science, Running out of World, Governments and Greens, Convergence and Stewardship, Awe and Wonders, Science and the Cross.

"The underlying theme of everything in this book is the relation of God to his creation. In examining this relationship, I have had to assume the existence of God. If he does not exist, this obviously rules out any interaction and condemns my enterprise; natural theology (and the theology of nature) will be no more than a misleading vapour.

My approach has been to explore the credibility and anticipated results (or the coherence) of the relationship in as rigorous a way as possible, and thence face the decision whether this leaves us with any firm results on which to ground a natural theology, never mind an understanding of God himself. In adopting this approach, I am following the methodology of natural science rather than theology. I am setting out to test a hypothesis" (p. 234)

"Stewardship is a rational conclusion from a study of the natural world and its misuse; when awe is added to stewardship it provides a motive for action as well as an occasion for enjoyment. Awe can be regarded as an empowerment of stewardship. ... If we couple awe to stewardship, we have a powerful engine for creation care."

Berry is professor of genetics (emeritus) at University College, London, and a past president of the British Ecological Society.

Berry, R. J., "Sam", "Creation and the Environment," Science and Christian Belief 7 (1995): 21-43. Debates about creation and evolution have distracted attention from the proper understanding of the environment as God's creation, for which we are responsible to God. This has left the way open for a plethora of odd religious ideas, which in turn have raised suspicions about orthodox Christian interpretations of the environment and distracted from the obligations of stewardship laid by God on his people. This essay reviews some of the deficiencies and divergences of creation doctrine, beginning from the implicit teaching of scripture that God created the world ex nihilo, that nature is not divine, and that it has been redeemed by Christ's work. The consequence of living in God's image in God's world is that we are stewards, accountable to God for our creation-care. The working-out of this doctrine is explored in terms of the more important distortions of our relationship to the world (syncretism, New Age teachings, Gaia, creation spirituality, deep ecology) and the weakness of our current perceptions. The conclusion is that traditional teachings about responsible stewardship need to be asserted and emphasized by Christians,

and that these form the basis of environmental care for Christian and non-believer alike. Berry is professor of genetics at University College London, formerly president of the British Ecological Society, of the Linnean Society, and the European Ecological Federation. (v6,#2)

Berry, R. J., ed., The Care of Creation. Downers Grove, IL: InterVarsity Press, 2000. 192 pages. Paper, \$ 18. "Sam" Berry is professor Genetics at the University College, London, formerly president of the British Ecological Society, of the Linnean Society, and the Euyropean Ecological Federation. (EE v.12,#1)

Berry, R. J. (Sam), ed., Environmental Dilemmas: Ethics and Decisions (London: Chapman and Hall, 1993), 271 pages. Hardcover, £ 29.95. Case studies in environmental ethics. Andrew Brennan (Philosophy, University of Western Australia) has the opening article, "Environmental Decision-Making." See next paragraph. Frank Golley (Ecology, University of Georgia) has an article, "Environmental Attitudes in North America." Wolfgang Haber: "Environmental Attitudes in Germany." Case studies by other authors, all British: air quality ("History and Ethics of Clean Air", nuclear power, agriculture, farm animals, wetland conservation, Scottish nature conservation, economics of pollution control, industry and government policy formation. With an emphasis on the practical factors that had to be weighed in when decisions were made in these areas. Sam Berry is professor of genetics at University College, London, past President of the Linnean Society and the British Ecological Society and currently president of the European Ecological Federation. (v4,#1)

Berry, R. J., "Creation and the Environment," Science and Christian Belief 7 (no. 1, 1995):21-43.

Berry, R. J., "Christianity and the Environment: Escapist Mysticism or Responsible Stewardship," Science and Christian Belief 3, no. 1 (1991):3-18. Christianity, properly understood, leads to a responsible stewardship of the environment, not to flagrant abuse or escapist mysticism. It converges with and provides an undergirding to secular thinking as expressed by the Brundtland Commission on sustainable development and the Economic Summit Nations on environmental ethics. But Christianity goes further in urging an awe for creation. Christians have a positive contribution to make and ought to be bolder in their witness. Berry is professor of genetics at University College, London, president of the European Ecological Federation, and past-president of the British Ecological Society and the Linnean Society. (v4,#2)

Berry, R. J., ed., Environmental Dilemmas. London: Chapman and Hall, forthcoming 1992. Contains Andrew Brennan, "Environmental Decisions." More details later. (v2,#4)

Berry, Thomas and Thomas Clarke, edited by Anne Lonergan and Stephen Dunn, Befriending the Earth: A Theology of Reconciliation between Humans and the Earth. 158 pages, paper \$ 7.95. Two Catholic priests discuss the role of religion in the ecological movement. Religion has failed to address the despoiling of Earth, which is the greatest crisis in the history of the planet. Mystic, CT: Twenty-Third Publications, 1991. (v2,#4)

Berry, Thomas, The Great Work: Our Way into the Future. New York: Bell Tower, 1999. 256 pages. \$23. Technological civilization and the need for humans to move from being a disrupting force on Earth to a benign presence. Creation as a source of wonder and delight rather than a commodity for our personal use. Berry is a cultural historian and theologian, now living in North Carolina. (v.10,#3)

Berry, Thomas, C.P. and Thomas Clarke, S.J. Befriending the Earth: A Theology of Reconciliation Between Humans and the Earth. Ed. Stephen Dunn, C.P. and Anne Lonergan. Mystic CT: Twenty-Third Publications, 1991.

Berry, Thomas. The Dream of the Earth. Reviewed in Environmental Ethics 12(1990):87-89.

Berry, Wendell, What are People For? San Francisco: North Point Press, 1990. With a concluding essay on "Nature as Measure" (of the success of agriculture. Other essays: "A Few Words in Favor of Edward Abbey" and "God and Country" (Christianity and ecology). (v1,#4)

Berry, Wendell, Sex, Economy, Freedom and Community. New York: Pantheon (Random House), 1993. \$ 20.00. With essays on conservation and local economy, how conservation is good work, contrasted with most agriculture today, which is bad work, and a rousing treatment of how ecologists have misused the Bible. Berry is a poet, essayist, novelist, farmer, with an appointment at the University of Kentucky. (v4,#4)

Berry, Wendell, Fidelity: Five Stories. Pantheon. 200 pages. \$ 20. Stories about the way the beloved community brings people through tragedy into celebration and joy, and stories about the way wilderness becomes a place of renewal and rebirth in which we rediscover humanity. (v4,#1)

Berry Wendell. What Are People For? San Francisco: North Point Press, 1990.

Berry, Wendell. "The Death of the Rural Community." The Ecologist 29(no. 3, May 1999):183- .

Berry, Wendell. The Gift of Good Land. San Francisco: North Point Press, 1981.

Berry, Wendell. The Unsettling of America: Culture and Agriculture. San Francisco: North Point Press, 1977.

Berry, Wendell. Home Economics. San Francisco: North Point Press, 1987.

Berry, Wendell. Another Turn of the Crank. Washington, DC: Counterpoint, 1995. \$ 18.00 109 pages. The title reflects Berry's feelings about how long he has been arguing his case against expansionist capitalism's social and environmental effects, now some 30 years, and how idiosyncratic his case appears to some. Essays on economics, medicine, the meaning of family, agriculture, forestry, education, and the state of American democracy. Small communities and the places they occupy are threatened by the construction of a global economy. Because such an economy makes it possible for the products of any region to be undersold by the product of another region, it makes the moderate, stewardly use of arable land unlikely. Private people, farm families, cannot afford to work this way. As a result, growing food, managing fuel and manufacturing all will be done by large corporations. And these, Berry says, are not interested in the good health--economic or natural or human--of any place on earth. Berry teaches English at the University of Kentucky and is also a farmer there. (v7, #3)

Berry, Wendell. "The New Politics of Community." The Ecologist 29(no. 3, May 1999):229- . (v.11,#1)

Bertholdbond (Berthold-Bond), Daniel. "The Ethics of `Place': Reflections on Bioregionalism." Environmental Ethics 22(2000):5-24. The idea of "place" has become a topic of growing interest in environmental ethics literature. I explore a variety of issues surrounding the conceptualization of "place" in bioregional theory. I show that there is a necessary vagueness in bioregional definitions of region or place because these concepts elude any purely objective, geographically literal categorization. I argue that this elusiveness is in fact a great merit because it calls attention to a more essential "subjective" and experiential geography of place. I use a reading of Aldo Leopold's Sand County Almanac as an example of the value of a non-literalistic geography for the understanding of place. (EE)

Bertollo, P, "Landscape Evolution and Health in Northeastern Italy: A Multi-Dimensional Methodological Approach," Environments 30(no.2, 2002): 63-78.

Besley, J. and Shanahan, J., "Skepticism About Media Effects Concerning the Environment: Examining Lomborg's Hypotheses," Society and Natural Resources 17(no. 10, 2004): 861-880(20). (v.14, #4)

Besley, John; Shanahan, James, "Skepticism About Media Effects Concerning the Environment: Examining Lomborg's Hypotheses", Society and Natural Resources 17(no.10, Nov-Dec 2004):861-880(20).

Bess, Michael, The Light-Green Society: Ecology and Technological Modernity in France, 1960-2000. Chicago: University of Chicago Press, 2003. Reviewed by Kerry H. Whiteside in Environmental Values 14(2005):138-140.

Best, C, "America's Private Forests: Challenges for Conservation," Journal of Forestry 100(no.3, 2002):14-19. (v.13, #3)

Best, Kirsty, "Interfacing the Environment: Networked Screens and the Ethics of Visual Consumption," Ethics and the Environment 9(no. 2, 2004):65-85. The screen continues to be the primary generator of visual imagery in contemporary culture, including of the natural world. This paper examines the screen as visual interface in the construction and consumption of physical environments. Screens are increasingly incorporated in our daily habits and imbricated into our lives, especially as mediating technologies are embedded into the surfaces of our physical surroundings, shaping and molding our interactions with and perceptions of those environments.

As screens become increasingly portable and digitized, they further modify our relationships with environments, projecting multiple images and imagery which fracture and layer visual consumption. And as screens become ubiquitous in urban environments, they network into maps of information control and consumption. We need to fully understand these processes of screen-mediated representation and interaction in order to be able to comment on the ethics of contemporary practices of visually consuming physical environments. Best is in communications, University of Ottawa, Canada. (E&E)

Best, Steve. Review of David Rothenberg and Marta Ulvaeus, eds. The New Earth Reader: The Best of Terra Nova. Environmental Ethics 25(2003):105-108. (EE)

Best, Steven and Anthony J. Nocella II, eds., Igniting a Revolution: Voices in Defense of the Earth. Oakland, CA: AK Press, 2006. Revolutionary environmentalism. Some fifty contributors. Sections on history of revolutionary environmentalism, sustainability and consumption, religion and spirituality, primitivism and the critique of civilization, repression and resistance, direct action and beyond, social movements and alliance politics, radical ecology. Appendix: Liberation Front Communiques. Foreword by Bron Taylor.

Betcher, Sharon V., "Groundswell: An Ecofeminist Pneumatology of Sanctuary," Ecotheology No 7 (July 1999):22-39.

Betty, L. Stafford, "Making Sense of Animal Pain: An Environmental Theodicy," Faith and Philosophy 9 (no. 1, January, 1992):65-82. No present theodicy, including John Hick's, makes adequate sense of animal pain. Hick fails when he enlists animal pain exclusively in the service of human soul growth. Frederick Ferré correctly points out that this solution is too anthropocentric. A more adequate theodicy avoids this mistake by showing that pain, from amoebas to humans, is crucial not only to the betterment of souls but to their very origination, a process beginning long before humans evolved on the planet. Creation is the process by which God is multiplying God's own experience, and this process necessarily requires eons of time, necessarily starts with the lowest forms of life, and necessarily entails pain and

suffering. The resulting good justifies all the howls and lamentation of the planet from its inception. Betty is at California State University, Bakersfield. (v3,#2)

Between the Species. PO Box 254, Berkeley, California 94701. The leading journal focusing on the ethical issues in the human treatment of animals. It regularly publishes the papers of the Society for the Study of Ethics and Animals. Articles frequently deal with the relationship between animal liberation and environmental ethics, as well as the status of animals in environmental policy. (Katz, Bibl # 2)

Betz, Hans-Georg, "The Post-Modern Challenge; From Marx to Nietzsche in the West-German Alternative and Green Movement," History of European Ideas 11(1989):815-830.

Beuter, John H; Alig, Ralph J, "Forestland Values", Journal of Forestry 102 (no.8, December 2004):4-8(5).

Bevill, R.I. and Louda, S.M., "Comparisons of Related Rare and Common Species in the Study of Plant Rarity." Conservation Biology: The Journal of the Society for Conservation Biology 13(No.3, June 1999):493- . (v10,#4)

Bevington, Douglas. Review of Paul M. Wood, "Biodiversity and Democracy: Rethinking Society and Nature", Organization and Environment, 15, (No. 2, 2002): 220-22. Bevington is a doctoral student in environmental sociology at the University of California, Santa Cruz. (v.13, #3)

Bewell, Alan, Wordsworth and the Enlightenment: Nature, Man, and Society in the Experimental Poetry. New Haven: Yale University Press, 1989.

Beyond 40 Percent: Record-Setting Recycling and Composting Programs (Corvelo, CA: Island Press, 1991). 270 pages. \$ 39.95 cloth, \$ 25.00 paper. (v2,#2)

Beyond the Mythic West, prepared by the Western Governor's Association. Salt Lake City, UT: Gibbs Smith, 1990. \$ 29.95. Pictures by some of the best photographers in the U. S. West today and essays by Stewart Udall, former Arizona Congressman, Charles Wilkinson, University of Colorado Law School, William Kittredge, a rancher turned writer and English professor, and others. (v1,#4)

Bezuidenhout, LC 1991. Betekenis van die natuur in God se antwoord aan Job (Job 38-39). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 81-91. (Africa)

Bhagat, Shantilal P., Your Health and the Environment: A Christian Perspective. A Study/Action Guide for Congregations. New York: Eco-Justice Working Group, National Council of Churches of Christ in the U.S.A, 1998. 65 pages. (Copies from Environmental Justice Resources, National Council of Churches, P O. Box 968, Elkhart, IN 46515). Biblical and theological perspectives on health. Living with high-risk synthetic chemicals. Drinking water. Air pollution. Food contamination. Cancer. Children's health and the environment. Women's health and the environment. Environmental racism and health. Healing ourselves and the Earth. Bhagat is in the Church of the Brethren, active in National Council eco-justice concerns, with wide experience in the UN and overseas. (v.10,#1)

Bhattacharjee, Yudhijit. "A Sluggish Response to Humanity's Biggest Mass Poisoning." *Science* Vol. 315, no. 5819 (23 March 2007): 1659-61. In India, in the region of Chandalathi, a series of wells were drilled to provide water, since the surface water had become increasingly polluted and in short supply. However, the well water proved to have high levels of naturally occurring arsenic, and more than 40 million people live in areas where such drilled wells have elevated levels of arsenic. In neighboring

Bangladesh, over 82 million people are potentially affected. Drinking well water results in disease and death. The Indian government's response has been slow and uncertain. Filters are an option, but filters are not well maintained. Drilling deeper wells produces clean water, but is expensive. Cleaning up the surface water is another option, and also is expensive. When such arsenic-laden aquifer water reaches the surface in springs and is exposed to air for a few days, the metal binds to iron oxides and other compounds and precipitates out of the water, but this does not happen in an enclosed tube well.

Biao, Xie, Xiaorong, Wang, Zhuhong, Ding, and Yaping, Yang, "Critical impact assessment of organic agriculture," Journal of Agricultural and Environmental Ethics 16(2003):297-311. Organic agriculture has set for itself the goals of minimizing all forms of pollution and maintaining sustainability of the farming system. By striving for these goals, organic farming meets the demands of an increasing number of consumers who are critical of conventional production methods. This paper gives an overview of the present state of the art in the different issues. Organic farming is suited to improve soil fertility and nutrient management markedly on the farm level; regarding biodiversity, comparison studies show that organic farming has more positive effects on biodiversity conservation. KEY WORDS: biodiversity, environmentally friendly production, nutrient management, organic agriculture, product quality, soil fertility. (JAEE)

Biber, E, "The Application of the Endangered Species Act to the Protection of Freshwater Mussels: A Case Study," Environmental Law 32(no.1, 2002):91-174. (v.13, #3)

Biber Kiemm, S., and T. Cottier, eds., Rights to Plant Genetic Resources and Traditional Knowledge: Basic Issues and Perspectives. Oxford: Oxford University Press, 2006. The means, instruments and institutions to create incentives to promote conservation and sustainable use of traditional knowledge and plant genetic resources for food and agriculture, in the framework of the world trade order. The option to create specific sui generis intellectual property rights of the TRIPS agreement, ways to support the maintenance of information that cannot be allocated to specific authors. Biber-Kiemm is at the University of Basel. Cottier is with the World Trade Institute, Switzerland.

Biehl, Janet and Staudenmaier, Peter, Ecofascism: Lessons from the German Experience. San Francisco: AK Press, 1995. 73 pages. \$ 7.00 paper. There are two essays: Staudenmaier, "Fascist Ideology: The 'Green Wing' of the Nazi Party and its Historical Antecedents"; Biehl, "'Ecology' and the Modernization of Fascism in the German Ultra-Right." The authors, as social ecologists in the tradition of Murray Bookchin, find ecological crises to be rooted in social injustice and oppression, rather than in anthropocentric attitudes as such. Ecological holisms emphasizing the oneness of human beings with nature have been and are being combined with reactionary "blood and soil" fascism, racism, xenophobia, and anti-immigrationism. We should appreciate how ecology can be misused, and to prevent such misuse we should understand ecological crises in political contexts, rather than trying to understand society as determined by scientific ecology. (v7,#4)

Biehl, Janet, and Staudenmaier, Peter, Ecofascism: Lessons From the German Experience (San Francisco, AK Press, 1995), Reviewed by Claudia Card in Ethics and the Environment 1(no.2, 1996):201-204. (E&E)

Biel, Alice Wondrak, "The Bearer Has Permission: A Brief History of Research Permitting in Yellowstone National Park", Yellowstone Science 12 (no. 3, Summer 2004):5-20. With a discussion of bio-prospecting in the Park. After the use of a microbe from the hot springs, Thermus aquaticus, in developing the Polymerase Chain Reaction (PCR) process, instrumental in DNA sequencing, and worth millions of dollars and a Nobel Prize, the Park has been considering requiring benefit-sharing agreements. These are authorized by the National Parks Omnibus Management of 1998, and are on the horizon, though few such agreements have as yet been put in place. (v. 15, # 3)

Biel, Anders, and Garling, Tommy. "The Role of Uncertainty in Resource Dilemmas," Journal of Environmental Psychology, vol. 15, no. 3 (September 1995): 221-33. Resource dilemmas entail a conflict between self-interests and the welfare of a group or society at large. Individuals with a pro-social orientation may act in the interest of the collective, but there are complications due to uncertainty. As the consequences are perceived to be uncertain, increasing uncertainty will be cooperation less consistent. Biel and Garling are in psychology, Göteborg University, Göteborg, Sweden. (v7, #3)

Biel, Anders. Review of Nottingham, Eat Your Genes: How Genetically Modified Food is Entering Our Diet. Environmental Values 9(2000):249.

Bierlein, Lawrence W. "Transportation Regulations Applicable to Environmentally Hazardous Substances." Journal of Environmental Law & Practice 3(May 1996):30. The U.S. Department of Transportation's program to ensure safety in the transportation of hazardous substances is summarized and analyzed. (v7,#2)

Bierman, Frank, "'Common Concern of Humankind': The Emergence of a New Concept of International Environmental Law," Archiv des Völkerrechts 34(1996):426-481.

Biermann, Frank, "The Case for a World Environment Organization," Environment 42(no. 9, Nov. 1, 2000):22- . Some people argue that a centralized international organization is essential to improve the creation and implementation of more effective environmental policies. Will this type of system end the fragmentation among various existing agencies and treaties that deal with the environment? (v.12,#2)

Biggs, H. C., and Potgieter, A.L.F., "Overview of the Fire Management Policy of the Kruger National Park," Koedoe: Research Journal, South African Parks 42/1, 1999, pages 101-110. Fire management in Kruger has been controversial. Alternative proposed are: a lightning-driven system (the present policy), patch mosaic burning, and range condition burning. Tests of the latter two in parts of the Park will be tested for 20 years, and results evaluated. A recurrent problem is that decisions have to be made with insufficient evidence. Biggs and Potgieter are ecologists at Kruger. (v.10,#3)

Biggsby, Hugh, "Forest Valuation in New Zealand", Journal of Forestry 102(no.8, December 2004):32-38(7).

Bigwood, Carol, Earth Muse: Feminism, Nature, Art. Philadelphia: Temple University Press, 1993. 357 pages. Sample chapters: "Deconstructing the Culture/Nature Dichotomy," and "Ecological Be(coming) in the World-Earth Home." A feminized deep ecology, based on the work of Martin Heidegger. (v3,#4)

Bilimoria, Purusottama, Environmental Ethics (Geelong, Victoria, Australia: Deakin University, 1992). 219 pages. The introductory essay is "The Moral Enfranchisement of Nature: A Short Introduction to Environmental Ethics," the first thirty pages of the book. There is also included a study by Jock McCulloch on "Hiroshima and the Problem of Nuclear War: A Case Study." The latter part of the book is reprinted readings from Arne Naess, Paul Taylor, Hans Jonas, and Robert Elliot, also documentary readings relevant to Hiroshima and nuclear winter. This book was produced as class materials for use at Deakin University in a class entitled "Ethics and Society," but is appropriate for wider use. Contact Purusottama Bilimoria, Faculty of Humanities, Deakin University, Geelong, Victoria 3217, Australia. (v3,#4)

Binder, Renee and Burnett, G. W., "Ngugi Wa Thiong'o and the Search for a Populist Landscape Aesthetic." Environmental Values 3(1994):47-59. This essay examines how Ngugi wa Thiong'o, east Africa's most prominent writer, treats the landscape as a fundamental social phenomenon in two of his

most important novels, A Grain of Wheat and Petals of Blood. Basing his ideas in an ecological theory of landscape aesthetics resembling one recently developed in America, Ngugi understands that ability to control and manipulate a landscape defines a society. Nostalgia for the landscape lost to colonialism and to the corrupting and alienating influences of international capitalism needs to be replaced by its progressive evaluation as it is reshaped by collective action for a new future. Alienation from, and loss of responsibility for, the land may be a major factor contributing to Africa's environmental problems. Ngugi's position casts doubt on professional land management's ultimate ability to influence the shape of the landscape in the face of the collective social will. KEYWORDS: Ngugi wa Thiong'o, landscape aesthetics, development, Kenya. Binder is at Sumter National Forest, S.C. Burnett is with the Dept. of Parks, Recreation and Tourism Management, Clemson University, S.C. (EV)

Bingham, Bruce B., Noon, Barry R. "Mitigation of Habitat 'Take': Application to Habitat Conservation Planning," Conservation Biology 11(no.1, 1997):127. (v8,#2)

Binimelis, Rosa, "Coexistence of Plants and Coexistence of Farmers: Is an Individual Choice Possible?" *Journal of Agricultural and Environmental Ethics* 21(2008):437-457. The introduction of genetically modified organisms (GMOs) in Europe has been characterized by controversy. In 2002, the European Union introduced the concept of "coexistence" as a compromise solution that, through the establishment of science-based technical measures, should allow the market to operate freely while reducing policy conflicts on GMOs. However, the concept remains highly contested and the technical measures difficult to apply. This paper presents qualitative research on the conceptualization and implementation of the coexistence framework in two regions of Spain (Catalonia and Aragon), where 42% and 55% of maize was GM in 2006, respectively. In this context, the concept of coexistence and its proposed implementation both fail to resolve previous conflicts and actually work to generate new ones through the individualization of choice and impacts. Considerations of the social conditions in which the technology and the management measures are implemented were not taken into account. This resulted in the promotion of biotechnological agriculture over other alternatives.

Binimelis is at the Institute of Environmental Science and Technology (ICTA), Autonomous University of Barcelona, Spain.

Binkley, Clark S.; Raper, Charles F.; and Washburn, Courtland L. "Institutional Ownership of US Timberland: History, Rationale, and Implications for Forest Management." Journal of Forestry 94, no.9 (1996): 21. (v7, #3)

Binkley, Clark S.; Aronow, Mary Ellen; Washburn, Courtland L.; New, David, "Global Perspectives on Intensively Managed Plantations: Implications for the Pacific Northwest," Journal of Forestry 103(no.2, March 2005):61-64(4).

Binney, Stephen E.; Mason, Robert; and Detweiler, John H. "Credibility, Public Trust, and the Transport of Radioactive Waste Through Local Communities." Environment and Behavior 28, no.3 (1996): 283. (v7, #3)

Binns, Tony, ed., People and Environment in Africa New York: John Wiley, 1995. Major anthology of 24 articles, divided into General Issues, and then sections on North, East, and Central Africa, West Africa, and Southern Africa. Binns is a geographer at the University of Sussex. (v6,#3)

Binswanger, Hans Christoph, "The Challenge of Faust," Science 281(31 July 1998):640-641. "Human progress entails curbing nature ... [this may have] unforeseen consequences because nature reacts according to its own laws, which humans can never entirely predict. ... Perhaps Faust, or modern man, may never ... achieve a moment so lovely that he would want to hold on to it forever. But if we strive to develop a more respectful relationship with nature, we may very well come closer to creating just such a

moment." Binswanger is emeritus in economics, University of St. Gallen, Switzerland. (v.9,#3)

Biodiversity and Conservation, Volume 9, No. 8, August 2000, is a special issue: "Concepts of Nature: The Social Context and Ethical Implications of Ecology." The guest editors are Nigel S. Cooper and Michael J. Samways. Entries are listed separately. (v.11,#4).

Biodiversity and Conservation, volume 9 no. 8, August 2000 is a special issue: "Concepts of Nature: The Social Context and Ethical Implications of Ecology." Entries listed separately. (v.13,#1)

Biodiversity Project, Ethics for a Small Planet. Madison, WI: Biodiversity Project, 2003. A communications handbook on the ethical and theological reasons for protecting biodiversity. www.biodiversityproject.org

Biodiversity Project, The, Ethics for a Small Planet: A Communications Handbook on the Ethical and Theological Reasons for Protecting Biodiversity. Madison, WI: The Biodiversity Project, 2002. ISBN 0-615-12258-2. (Biodiversity Project, 214 N. Henry Street, Suite 201, Madison, WI 53703. 608/250-9876. Website: www.biodiversityproject.org. A handbook for study groups, conservation organizations, churches. Short, summary articles by such authors as Jane Elder, Bob Perschel, Peter W. Bakken, Marian Farrior, Michael P. Nelson, Robb Cowrie, Daniel Swartz, Peter Forbes, Dieter T. Hessel, and others. Ways to value nature, environmental ethics, future generations, biodiversity, land ethics, the wise use movement, using media, anti-conservation myths, environmental justice, and others. Resources.

Biological Conservation 112 (nos. 1-2), 2003, is a special issue on the Cape Floristic Province, South Africa, and conservation issues and management plans there.

Biondo, Brenda. "Tough Terrain for Organic Cotton Growers." The Christian Science Monitor, vol. 88, 5 Nov. 1996, p. 14.

BioScience, November 1989, vol. 39, no. 10. The whole issue is devoted to the fire impact on Yellowstone. Authors of the seven lead articles and editorials include some two dozen persons intimately involved in the fires. Articles deal with the fires and fire policy, the historical background, issues raised by the fires in landscape ecology, with fires and stream ecosystems, with fires, drought and large mammals, and with interpreting the fires to the public. (v1,#2)

BioScience, November 1995, vol. 45, no. 10, is a theme issue on systematics and the biodiversity crisis, the role of systematic biology in identifying, classifying, and conserving biological diversity. (v7,#1)

BioScience, Science and Biodiversity Policy Supplement, 1995. A special supplement on national strategy on biological diversity, public understanding of biodiversity, and studies of the Everglades, the Pacific Northwest, and Yellowstone. About two dozen contributors. Sample articles: Jerry Franklin, "Scientists in Wonderland": Monica G. Turner, Robert H. Gardner, and Robert V. O'Neill, "Ecological Dynamics and Broad Scales."

Birch, Bruce C. and Larry Rasmussen. The Predicament of the Prosperous. Philadelphia: Westminster Press, 1978.

Birch, Charles, and John B. Cobb, Jr. The Liberation of Life: From the Cell to the Community. Cambridge: Cambridge Univ. Press, 1981.

Birch, Charles, William Eakin, Jay McDaniel, eds., Liberating Life: Contemporary Approaches to Ecological Theology. Maryknoll, NY: Orbis Books, 1990. 325 pages. Paper \$18.95. Traces an emerging

consensus among theologians from differing backgrounds and with differing perspectives: "an anthropocentric ethic, understood as an emphasis on human well-being at the expense of the earth and other living beings, must be replaced by an ethic of respect for life and environment." Contributors include Sally McFague, Thomas Berry, John B. Cobb, Jr., Tom Regan. (v2,#1) (v1,#4)

Birch, Charles, and John B. Cobb, Jr. The Liberation of Life: From the Cell to the Community. Reviewed in Environmental Ethics 5(1983):91-93.

Birch, Charles, William Eakin, and Jay B. McDaniel, eds. Liberating Life: Contemporary Approaches to Ecological Theology. Maryknoll NY: Orbis Books, 1990; Introduction; essays by Ingemar Hedstrom, Jong-Sun Noh, Lois K. Daly, Harvey Sindima.

Birch, Charles. *Science and Soul*. West Conshohocken, PA: Templeton Foundation Press, 2008. Birch, a famous Australian ecologist, reminiscences about persons influential in his career many famous ecologists, evolutionary biologists, and philosophers of religion and develops his philosophy of life that he calls process pansubjectivism, panentheism. "Process thought does not see any line in the sand where mentality begins. Hence, there is no zero-mentality at any level of the evolutionary sequence of actual entities" (p. 165). In the course of this he addresses environmental ethics and values in nature.

Birch, Thomas H. "Moral Considerability and Universal Consideration." Environmental Ethics 15(1993):313-32. One of the central, abiding, and unresolved questions in environmental ethics has focused on the criterion for moral considerability or practical respect. In this essay, I call that question itself into question and argue that the search for this criterion should be abandoned because (1) it presupposes the ethical legitimacy of the Western project of planetary domination, (2) the philosophical methods that are and should be used to address the question properly involve giving consideration in a root sense to everything, (3) the history of the question suggests that it must be kept open, and (4) our deontic experience, the original source of ethical obligations, requires approaching all others, of all sorts, with a mindfulness that is clean of any a priori criterion of respect and positive value. The good work that has been done on the question should be reconceived as having established rules for the normal, daily consideration of various kinds of others. Giving consideration in the root sense should be separated from giving high regard or positive value to what is considered. Overall, in this essay I argue that universal consideration--giving attention to others of all sorts, with the goal of ascertaining what, if any, direct ethical obligations arise from relating with them--should be adopted as one of the central constitutive principles of practical reasonableness. Birch is in the Department of philosophy, University of Montana, Missoula, MT. (EE)

Birch, Thomas H. "The Incarceration of Wildness: Wilderness Areas as Prisons." Environmental Ethics 12(1990):3-26. Even with the very best intentions, Western culture's approach to wilderness and wildness, the otherness of nature, tends to be one of imperialistic domination and appropriation. Nevertheless, in spite of Western culture's attempt to gain total control over nature by imprisoning wildness in wilderness areas, which are meant to be merely controlled "simulations" of wildness, a real wildness, a real otherness, can still be found in wilderness reserves. This wildness can serve as the literal ground for the subversion of the imperium, and consequently as the basis for the practical establishment of and residence in what Wendell Berry has called the "landscape of harmony." Here all land becomes wild sacred space that humans consciously come to reinhabit. In this subversive potential lies the most fundamental justification for the legal establishment of wilderness reserves. Birch is in the Department of philosophy, University of Montana, Missoula, MT. (EE)

Birch, Thomas H. Review of The Natural Alien. By Neil Evernden. Environmental Ethics 12(1990):283-87.

Birch, Thomas H., "The Incarceration of Wildness: Wilderness Areas as Prisons," Environmental Ethics 12(1990):3-26. This important paper may signal a new research direction in environmental ethics. Birch presents a literary/philosophical/political analysis of the other, of "wildness," and of the social deception in Western culture about wilderness and environmentalism. The creation of wilderness preserves is a continuation of domination, unless it is understood as the maintenance of the experience of wild otherness. Wherever the wild occurs, it is a pocket of resistance to the imperial domination of anthropocentric Western culture. Because this paper represents a revolt against analytic argumentation as the method of environmental ethics, it tends to be vague; e.g., the practical conclusion---preserve wilderness anyway---seems to contradict the theme. But this is a provocative speculation into the nature of wilderness and environmental policy. (Katz, Bibl # 2)

Bird, D., Bird, R. and Parker, C., "Aboriginal Burning Regimes and Hunting Strategies in Australia's Western Desert," Human Ecology 33(no. 4, August 2005): 443-464.

Bird, E. A. R., "The Social Construction of Nature: Theoretical Approaches in the History of Environmental Problems," Environmental Review 11(no. 4, 1987):255-264. (v.10,#1)

Bird, Elizabeth Ann R., "The Social Construction of Nature: Theoretical Approaches to the History of Environmental Problems." Environmental Review 11 (1987): 255-264. Important and provocative argument concerning the social construction of ecological laws which describe nature. Ecology does not provide us with an accurate representation of nature, but rather a socially constructed experience based on negotiations among the scientific community. This view has enormous implications for environmental ethics: it questions the idea that a "natural world" can be preserved. (Katz, Bibl # 2)

Bird, Stephanie J. "The Role of Science Professionals in Teaching Responsible Research Conduct," Bioscience 46(no.10, 1996):783. (v7,#4)

Birdsall, Nancy, Kelley, Allen C., and Sinding, Steven W., eds., Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World. New York: Oxford University Press, 2001. Rapid population growth hinders economic development (the Malthusian claim), contrary to the recently rather more popular claim that increasing numbers with increasing technology increases the productivity base. Rapid population growth is generally adverse to economic development. But a number of nations have managed to escape the demography-poverty trap. The anthology contains relatively little on linkages between population and environmental degradation, and little on the politics of family planning, particularly assistance from the United States, which is lately under siege. Reviewed by Jeffrey D. Sachs, "Rapid Population Growth Saps Development," Science 297(19 July 2002):341.

Birdsong, B. C., "Adjudicating Sustainability: New Zealand's Environment Court," Ecology Law Quarterly 29(no.1, 2002): 1-70. (v.13,#4)

Birke, L., Feminism, animals and science: The naming of the shrew. Philadelphia: Open University Press, 1994.

Birkeland, Charles, "Ratcheting Down the Coral Reefs", BioScience 54(no.11, November 2004):1021-1027(7). Coral reefs are continuing to deteriorate around the world, despite millions of dollars worth of government effort per year, the commitment of more than 450 nongovernmental organizations, and a long list of successful accomplishments. Researchers and managers must become more aware of positive feedback, including the self-reinforcing ecological, technological, economic, cultural and conceptual processes that accelerate the degradation of coral reefs. Much of the research on coral reef damage has focused on its proximal causes (e. g., global warming, increased atmospheric carbon dioxide, overfishing, pollution, sedimentation, and disease) rather than its ultimate causes, the increasing human population and

associated economic demands. To stop the deterioration of coral reef ecosystems, management must be proactive, terminating the self-reinforcing processes of coral reef degradation rather than perpetually restoring reefs or resource stocks. This can be accomplished only by clarifying the entire economic picture to instill more responsible behavior in the public.

Birkeland, Janis, "Beyond Economic Man: A Commentary," Environmental Ethics 18(1996):335-336. The book by Marianne A. Feber and Julie A. Nelson, Beyond Economic Man: Feminist Theory and Economics (Chicago: University of Chicago Press, 1993) is a preliminary attempt to address the gender, ethnic, and color blindness that ecological economics has thus far failed adequately to address. Much of the text, however, is implicitly human-centered. (EE)

Birkeland, Janis. "The Relevance of Ecofeminism to the Environmental Professions." The Environmental Professional 17 (no. 1, 1995): 55- . (v6,#1)

Birkeland, Janis. "Neutralizing Gender," Environmental Ethics 17(1995):443-444. A one-page comment. Ecofeminist insights have tended to be recast in a degendered framework. This transformation raises an important question: could a neutered ecofeminism retain its transformative potential? Birkeland is at the Centre of Environmental Philosophy, Planning and Design, University of Canberra, Australia. (EE)

Birnbacher, D., Odpowiedzialność za przyszłe pokolenia / A Responsibility for Future Generations (a translation from German Verantwortung für zukünftige Generationen), Oficyna Naukowa (Scientific Publishers), Warszawa, 1999. (v.13,#1)

Birnbacher, D., Odpowiedzialność za przyszłe pokolenia / A Responsibility for Future Generations (a translation from German Verantwortung für zukünftige Generationen), Oficyna Naukowa (Scientific Publishers), Warszawa, 1999.

Birnbacher, Dieter, ed., Ökologie und Ethik (Stuttgart: Philipp Reclam, 1988). A reprint of an anthology first published in 1980. One of the few works on environmental philosophy available in Germany. Contains mostly translations of articles originally in English. (v2,#1)

Birnbacher, Dieter, Verantwortung für zukünftige Generationen (Stuttgart: Philipp Reclam, 1988). Responsibilities to Future Generations. (v2,#1)

Birnbacher, Dieter, "Ethical Principles Versus Guiding Principles in Environmental Ethics." Philosophica 39 (1987): 59-76. Important distinction is made between ethical justifications for environmentalism (which require a rigorous theoretical proof) and guiding principles for practical action (which require intuitive effectiveness). Birnbacher supports "sentientism" as an ethical principle, but he upholds "biocentrism" as a practical guide to action, as in Albert Schweitzer's "reverence for all life."

Birnbacher, Dieter, ed., Ökophilosophie. Ditzingen, Germany: Philipp Reclam jun. Stuttgart, Reclams Universal-Bibliothek, 1997. A German anthology in environmental ethics, featuring translations of articles originally in English. Bill Devall, "The Deep Ecology Movement"; Timothy L. S. Sprigge, "Are There Intrinsic Values in Nature"; Paul W. Taylor, "The Ethics of Respect for Nature"; Robin Attfield, "Biocentrism, Moral Standing and Moral Significance"; David Ehrenfeld, "The Arrogance of Humanism"; Nicholas Resher, "Why Preserve Endangered Species?"; Alan Randall, on economics as an approach to environmental policy; Dieter Birnbacher, on nature; Holmes Rolston, "Can and Ought We to Follow Nature?" Birnbacher teaches philosophy at the University of Dusseldorf. (v8,#2)

Birnbacher, Dieter. "A Priority Rule for Environmental Ethics." Environmental Ethics 4(1982):3-16. Adapting a terminology introduced by Brian Barry, I make a distinction between want-regarding and ideal-regarding principles and apply it to the norms and criteria put forward in environmental ethics. I

argue that priority should be given to want-regarding principles over ideal-regarding ones because the former are universalizable while the latter are not, universalizable being understood in the sense of appealing to value premises for which universal assent can be secured. This sense is different both from R. M. Hare's metaethical concept of universalizability and J. L. Mackie's "three stages of universalisation." Birnbacher is in the department of philosophy, Universitat Essen, Essen, Germany. (EE)

Birnie, P. W., Boyle, A.E., eds. Basic Documents on International Law and the Environment. New York: Oxford University Press, 1996. 704 pp. \$78.40 cloth, \$30.40 paper. A collection that includes all the major treaties and other legal instruments relevant to the protection of the environment in international law. Topics covered include the codification and development of international environmental law, marine pollution, the protection of the atmosphere, nuclear risks, control of hazardous substances, and international watercourses. (v7,#4)

Birnie, Patricia and Boyle, Alan, Review of Gavouneli, Maria, International Law and the Environment, Environmental Values 3(1994):88. (EV)

Biro, Andrew, "Towards a Denaturalized Ecological Politics," Polity 35 (no. 2, 2002):195-212. Argues for reconceptualizing ecological politics for a postmodern era, a "denaturalization" of ecological politics that avoids both the overly romanticized view of nature that is present in some environmental discourses and the radical skepticism of anti-foundationalist critiques of "nature." Postmodern, exemplified here by the social theory of Jean Baudrillard, can be shown to rely on naturalism to sustain its normative critique. Ecocentrism, on the other hand, must make some allowances for the ways in which our understanding of nature is socially constructed. A way around this apparent impasse of postmodern ecological politics. This paper results from a Ph.D. dissertation at York University, 2000. Biro is in political ecology, Acadia University, Canada.

Biro, Andrew. Review of Jonathan Hughes. Ecology and Historical Materialism. Environmental Ethics 25(2003):109-110. (EE)

Biro, Andrew. *Denaturalizing Ecological Politics: Alienation from Nature from Rousseau to the Frankfurt School and Beyond*. Toronto: University of Toronto Press, 2005. Biro begins with a critique of deep ecology—which supposedly prioritizes nature over culture. He then explicates structuralist and poststructuralist social theorists who claim that nature is solely an effect of social human social structures. Biro then discusses Rousseau, Marx, Adorno, and Marcuse to develop a starting point for a denaturalized rethinking of ecological politics. He argues that an adequate understanding of human ecology must see human beings not as biologically separate from nature but as historically differentiated through their self-conscious transformation of the natural environment. After we grasp the complexities of how nature and the social are intertwined, we can work toward a liberatory human ecology by disentangling social relations and processes that serve to reinforce relations of domination.

Biro, Andrew. Review of The Land That Could Be: Environmentalism and Democracy in the Twenty-first Century. By William A. Shutkin. Environmental Ethics 24(2002):93-96. (EE)

Biro, Andrew. *Denaturalizing Ecological Politics: Alienation from Nature from Rousseau to the Frankfurt School and Beyond*. Toronto: University of Toronto Press, 2005. Biro begins with a critique of deep ecology—which supposedly prioritizes nature over culture. He then explicates structuralist and poststructuralist social theorists who claim that nature is solely an effect of social human social structures. Biro then discusses Rousseau, Marx, Adorno, and Marcuse to develop a starting point for a denaturalized rethinking of ecological politics. He argues that an adequate understanding of human ecology must see human beings not as biologically separate from nature but as historically differentiated through their self-

conscious transformation of the natural environment. After we grasp the complexities of how nature and the social are intertwined, we can work toward a liberatory human ecology by disentangling social relations and processes that serve to reinforce relations of domination.

Bishop, Kevin, Phillips, Adrian, and Warren, Lynda. "Protected Forever? Factors Shaping the Future of Protected Areas Policy," Land Use Policy 12(no.4, Oct. 1995):291- . (v6,#4)

Bishop, Peter, The Greening of Psychology: The Vegetable World in Myth, Dream, and Healing. Dallas, TX: Spring Publications, 1990. Paper. 237 pages. "When we neglect the classical notion of a vegetable soul, with its deep downwardness, the very roots of our lives wither. By exploring the green level of the psyche, this book radically changes our usual notions of what is consciousness and who we are." (v3,#3)

Bisong, Susan, "The WTO Panel Decision on the U.S. Shrimp Embargo: Another Ruling against U.S. Enforcement of Species Protection in Trade," Natural Resources Journal 40(no.3, Sumr 2000):699- . (EE v.12,#1)

Bissell, Steven J. Review of The Value of Life: Biological Diversity and Human Society. By Stephen R. Kellert. Environmental Ethics 21(1999):213-216.

Bissell, Steven J., reviews Armstrong and Botzler, Environmental Ethics, Oelschlaeger, After Earth Day, and Regan, Earthbound in Conservation Biology 7(3):739-739. Bissell is in environmental education at the Colorado Division of Wildlife. (v4,#4)

Bissell, Steven J. Review of Kinship to Mastery: Biophilia in Human Evolution and Development. By Stephen R. Kellert. Environmental Ethics 21(1999):213-216.

Bissell, Steven. J., Review of Ted Kerasote, Bloodties: Nature, Culture, and the Hunt. Environmental Ethics 19(1997):441-444. (EE)

Bissell, Steven. J., Review of Matt Cartmill, A View to a Death in the Morning: Hunting and Nature through History. Environmental Ethics 19(1997):441-444. (EE)

Bittman, Mark, "Today's Fish: Straight From the Farm," New York Times (9/18/96): B1. Fish farming: Now like Livestock Production. Many believe that the fish they eat once swam free. To be sure, fish continue to be caught in nets and lines, but the number of fish raised on farms has doubled in the last decade. About 10% of the fish sold today in the U.S. was farm-raised, and 50% of the shrimp comes from farms. Salmon, hybridized striped bass, sturgeon, catfish, and trout are most likely to be farm raised. Tuna, cod, flounder, or swordfish are not. Some of the farmed fish are "made-to-order designer products" "fine-tuned to appeal to the restaurant trade and home consumer." Salmon farmers increase fat content to make salmon extra fatty (as sushi chefs prefer); they withhold fat to make salmon extra lean (for smoked fish); and they add fatty acids to improve the nutritional value of the fish. They augment the feed with pigments to give it the brilliant orange color consumers expect. Striped bass farmers control the amount and type of oil in the feed to adjust the level of fishiness. Fish farmers even use antibiotics and other drugs to treat illness. There are also concerns about water pollution from aquaculture. Norway, the pioneer of salmon farming, has closed fjords to swimming because of high concentrations of fish wastes. (v8,#2)

Bixler, Robert D., Floyd, Myron F. "Nature is Scary, Disgusting, and Uncomfortable," Environment and Behavior 29(no.4 1997):443. (v8,#3)

Bjorndal, Karen A. ed. Biology and Conservation of Sea Turtles: Revised Edition. Washington, D.C.:

Smithsonian Institution Press, 1995. 584 pp. \$29.95. This updated edition reflects significant advances in sea turtle research. A new section summarizes developments and primary literature for fourteen areas of sea turtle biology and conservation. (v8,#3)

Bjornstad, David J., and Kahn, James R., The Continent Valuation of Environmental Resources. (Cheltenham: Edward Elgar, 1996). Reviewed by K.G. Willis. Environmental Values 6(1997):243-244.

Black, Brian Clyde, Petrolia: The Landscape of Pennsylvania's Oil Boom, 1859-1873, 1996, University of Kansas, Ph.D. thesis in environmental history. 425 pages. The tapping of the first commercial oil well in 1859 and the ensuing boom in western Pennsylvania was a revolution in land use--an ecological revolution--that rationalized a method of exploiting the environment and developing resources that was unprecedented. This was a watershed in American attitudes toward future modes of industrial development. The early oil industry helped to shape the ethics with which the broader culture defined acceptable use of natural resources. Americans were given a commodity of such significance that it overwhelmed the meaning of a place and made it worth sacrificing. The advisor was Donald Worster. (v.10,#1)

Black, Michael. Review of *Fishy Business: Salmon, Biology, and the Social Construction of Nature*. By Rik Scarce. Environmental Ethics 23(2001):431-432. (EE)

Black, R., Book Review: "Castles, S. and Davidson, A. Citizenship and migration: globalization and the politics of belonging," Progress in Human Geography 26(no.3, 2002):407-408. (v.13, #3)

Blackburn, Simon, *The Oxford Dictionary of Philosophy*. Oxford: Oxford University Press, 1996. Contains the following definition: "Environmental ethics: Most ethics deals with problems of human desires and needs.... The central problem specific to thinking about the environment, is the independent value to place on such things as preservation of species, or protection of the wilderness. Such protection can be supported as a means to ordinary human ends.... But many want to claim a non-utilitarian, absolute value for the existence of wild things and wild places; it is in their very independence of human lives that their value consists. They put us in our proper place, and failure to appreciate this value is not only an aesthetic failure but one of due humility and reverence, a moral disability. The problem is one of expressing this value, and mobilizing it against utilitarian arguments.... See also nature, sublime."

Blackburn, Tim M., Gaston, Kevin. "A Sideways Look at Patterns in Species Richness, or Why There Are So Few Species Outside the Tropics," Biodiversity Letters 3(1996):44.

Blackman, Allen and Harrington, Winston, "The Use of Economic Incentives in Developing Countries: Lessons From," The Journal Of Environment And Development 9 (No. 1, Mar 01 2000): 5- . (v.11,#2)

Blackman, D. E., Humphreys, P. N., and Todd, P.. eds., Animal welfare and the law. New York: Cambridge University Press, 1989.

Blacksell, Mark, "Review of: Hoskins, W. G. 1955: The making of the English landscape.," Progress in Human Geography 29(no.1, February 2005):95-96(2).

Blaikie, Piers, The Political Economy of Soil Erosion in Developing Countries. London: Longman, 1985. Affluent individuals and large corporations drive an unequal access to natural resources and force millions of persons further to degrade their environments, often on marginal landscapes.

Blakeley, Donald, "Neo-Confucian Cosmology, Virtue Ethics, and Environmental Philosophy," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 37-49. This paper explores the

extent to which the Confucian concept of ren (humaneness) has application in ways that are comparable to contemporary versions of environmental virtue ethics. I argue that the accounts of self-cultivation that are developed in major texts of the Confucian tradition have important direct implications for environmental thinking that even the Neo-Confucians do not seriously entertain. Blakeley is in the Department of Philosophy, California State University, Fresno. (v.13,#2)

Blakeslee, Sandra, "Drought Unearths a Buried Treasure," New York Times, November 2, 2004. Page D1. Due to protracted drought, Glen Canyon is on its way back, viewable in much of its former glory. Glen Canyon was flooded by the Glen Canyon Dam on the Colorado River in 1963, after a long and unsuccessful fight by David Brower and the Sierra Club to block the dam. Over the next 17 years, water backed up for 186 miles, forming Lake Powell. But since 1999, the lake has lost more than sixty percent of its water. The change may be permanent, since water demands on the reservoir are greater than the annual flow, unless there were to come several hundred year flows in succession. (v.14, #4)

Blakney, S, "Aboriginal Forestry in New Brunswick: Conflicting Paradigms," Environments 31(no.1, 2003):61-78. (v.14, #4)

Blaney, Alicia Swaine, Environmental Conservation at Multiple Landscape Scales: An Analysis of the Ethical Past, Present, and Future. M.A. thesis, Colorado State University, summer 2006. Environmental ethics is on the forefront of contemporary ethical thought, but its language is problematic, with different parties meaning different things by similar words, often giving rise to conflict and confusion, even by those who share values in common. We do not have available a universal environmental ethic, but there are convictions broadly shared. Ethics is functional at different levels and goes into a webwork of belief. Further issues arise with institutional divisions of the landscape into private and public, rural lands, park lands, national forest lands, wilderness, often producing fragmentation rather than a comprehensive ethic. If this philosophical confusion is to be overcome, and if land is to be appropriately respected, then there must be a new ethic, one that is "loosely naturalized." Such an ethic will begin with the broad assumption that nature exists and has intrinsic value but that an inclusive ethic will move into the cultural realm where subjective interactions at multiple levels are better able to discover and appropriately respect the objective realities in the natural world.

Blank, GB; Parker, DS; Bode, SM, "Multiple Benefits of Large, Undeveloped Tracts in Urban Landscapes: A North Carolina Example," Journal of Forestry 100(no.3, 2002):27-33. (v.13, #3)

Blatter, Joachim, Ingram, Helen, "States, Markets and Beyond: Governance of Transboundary Water Resources," Natural Resources Journal 40(no. 2, Spring 2000):439- . (v.12,#2)

Blatz, Charles V., "Ethics, Ecology and Development: Styles of Ethics and Styles of Agriculture", Journal of Agricultural and Environmental Ethics 5(1992):59-86. This paper proposes to test the ethical acceptability of four styles of agricultural resource management: (1) contemporary industrial integrated systems agriculture, (2) modern industrial input dependent agriculture, (3) continuous traditional agriculture, and (4) non-continuous traditional agriculture. Blatz is in philosophy at the University of Toledo, Ohio.

Blatz, Charles V. Agricultural Ethics. Reviewed by Mora Campbell in Journal of Agricultural and Environmental Ethics 8(1995):93f. (JAEE)

Blatz, Charles V., "It is Morally Permissible to Manipulate the Genome of Domestic Hogs", Journal of Agricultural and Environmental Ethics 4(1991):166-176. In a debate: Question: Should we manipulate the genome of domestic hogs?

Blaustein, A. R., Belden, L. K., Olson, D. H., Green, D. M., Root, T. L. and Kiesecker, J. M., "Amphibian Breeding and Climate Change," Conservation Biology 15(no.6, 2001): 1804-09. (v.13,#2)

Blichfeldt, George, "An Insight into the Ethical Arguments [against Whaling]," Pages 12-16 in Blichfeldt, Georg, ed., 11 Essays on Whale and Man (Lofoten, Norway: High North Alliance, 2nd ed., 1994). The scientific conclusions about the sustainability of whales will not support a ban on harvesting whales of certain kinds. So activists switch increasingly to ethical arguments, when the science will not give them the conclusions they want. And other articles on whether whales have rights, intelligence in whales, and interests at stake in the whaling controversy. (v.13,#2)

Bliese, John R. E. "Richard M. Weaver, Russell Kirk, and the Environment." Modern Age 38 (1996): 148-58. Conservatives typically ignore environmental concerns, but Russell Kirk and Richard Weaver are prominent traditionalist conservatives who have addressed environmental issues. They reject materialism and argue that what civilization now needs most of all is the practice of self-restraint. They are perfectly willing to have fewer things in return for a healthy environment. They have a fundamental attitude of pious respect for nature as creation. Society is intergenerational and we have an obligation to sustainability. A traditionalist conservative should be horrified at what humans are now doing to the planet. "A traditionalist conservative should be an environmentalist and be foremost among all those who are trying to preserve our temporal home: our earth and all its wonder and all its splendor" (p. 157). Bliese teaches Communication Studies at Texas Tech University. (v7, #3)

Bliese, John R. E. "Traditionalist Conservatism and Environmental Ethics." Environmental Ethics 19(1997):135-151. Environmentalism is usually thought to be a liberal political position, but the two primary schools of thought within the conservative intellectual movement support environmentalism as well. The free market perspective has received considerable attention for its potential contributions to environmental protection, but the traditionalist perspective has not. I consider several important principles of traditionalist conservatism. The traditionalists are not materialists and are highly critical of our consumer culture. They reject ideology and stress piety toward nature, the intergenerational character of society, and prudence in political and social action. These basic principles are a solid foundation for environmentalism. Bliese is in the Department of Communication Studies, Texas Tech University, Lubbock, TX. (EE)

Bliese, John R. E. The Greening of Conservative America. Reviewed in Environmental Ethics 25(2003):221-222. (EE)

Blignaut, Peter Erle, Framework for a Socio-Resource Zoning Management Policy for the Conservation and Sustainable Utilisation of the Mountainous Areas of South Africa. University of Cape Town, Department of Environmental and Geographical Science, Ph.D. Dissertation, April 1994. The mountainous environments of South Africa are being steadily degraded due to undesirable agricultural activities, over-burning, erosion, invasive vegetation, afforestation, natural resource exploitation, infrastructural developments and a general attitude that mountains comprise 'waste land' that presently has little conservation status. Environmental management for the sustainable use of mountains is urgently required. Blignaut is a land surveyor and town and regional planner. Address: Blignaut and Rommelaere, P. O. Box 334, Parow 7500, South Africa. (v6,#3)

Bloch, Konrad. "Carnivores, Herbivores, and Omnivores." In Blondes in Venetian Paintings, the Nine-Banded Armadillo, and Other Essays in Biochemistry, pp. 228-241. New Haven: Yale University Press, 1994. The genetic basis of obligate carnivores. Cats, wolves, foxes, raccoons, raptors are obligate carnivores, and must eat flesh. Two carnivores, the giant panda and the black bear have become herbivores, the panda eats only bamboo. Domesticated dogs are not obligate carnivores, although their wild ancestors were. Not too much is known about the genetic basis or obligate carnivores, except for the

domestic cat. Four deficiencies are known. Cats lacking taurine and vitamin A, obtained in meat, will go blind from retinal deterioration. Omnivores and herbivores can synthesize taurine, though there is some evidence that taurine deficiency in primates produces less than optimum growth. Bloch is a Nobel laureate biochemist, formerly at Harvard. (v6,#3)

Block, G, "Trade and Environment in the Western Hemisphere: Expanding the North American Agreement on Environmental Cooperation into the Americas," Environmental Law 33(no.3, 2003):501-546. (v.14, #4)

Blockstein, David E., "Integrated Science for Ecosystem Management: An Achievable Imperative." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 13, June 1999):682-691. (v10,#4)

Blom, Allard, "An estimate of the costs of an effective system of protected areas in the Niger Delta - Congo Basin Forest Region", Biodiversity and Conservation 13(no.14, December 2004):2661-2678(18).

Blomberg, Les, "Clearing the Air: Fourteen Ways to Quiet the Skies," Utne Reader, May-June 2000, pp. 78-79. Blomberg is executive director of Noise Pollution Clearinghouse, which maintains a library and network at www.nonoise.org. A jet plane at takeoff produces 100 decibels of sound, which is 10 million times louder than a normal conversation, and millions of Americans are affected. Seventy percent of Americans live within twenty miles of a major airport. And the skies could be much quieter. (v.11,#2)

Blomquist, William; Schlager, Edella, "Political Pitfalls of Integrated Watershed Management," Society and Natural Resources 18(no.2, February):101-117(17).

Blondeau, Robert, Review of Michael E. Soulé and Gary Lease, eds. Reinventing Nature? Responses to Postmodern Deconstruction. Environmental Ethics 19(1997):109-108. (EE)

Blondel, Jacques. "The Design of Mediterranean Landscapes: A Millennial Story of Humans and Ecological Systems during the Historic Period." Human Ecology Vol. 34, no. 5 (2006): 713-29.

Bloom, David E. "International Public Opinion on the Environment." Science 269(1995):354-358. There is concern about the environment in both developing and developed countries; developing countries rate their environments as lower in quality than do developed nations. There is considerable willingness both in developing and developed nations to accept responsibility for environmental problems. The role of governments in addressing national problems and of strong international agencies in addressing transnational issues is recognized. (v6,#3)

Bloomer, Danette Landkammer, "Beyond Our Own Backyard: Considering the Legal Implications and Environmental Risks of Importing Spent Nuclear Fuel", Journal of Environmental Law and Litigation, 10(No.1, 1995):157-166.

Blossey, B., Skinner, L. C. and Taylor, J., "Impact and Management of Purple Loosestrife (Lythrum salicaria) in North America," Biodiversity and Conservation 10(no.10, 2001): 1787-807. (v.13,#2)

Bludhorn, Ingolfur, Review of Altner, G., Mettler-Meibom, B., Simonis, U.E. and Weizsäcker, E.U. v, eds. Jahrbuch Ökologie. Environmental Values 5(1996):90-91. (EV)

Bluehdorn, Ingolfur. Review of Karl-Werner Brand, ed., Nachhaltige Entwicklung. Eine Herausforderung an die Soziologie. Environmental Values 8(1999):406. (EV)

Blueprint for a Green Campus: The Campus Earth Summit Initiatives for Higher Education. Pittsburgh,

PA, USA: Heinz Family Foundation (3200 CNG Tower, 625 Liberty Avenue, 15222, USA), 1995. Available through Campus Green Vote, 1400 16th St., NW, Box 24, Washington, DC 20036; USA, 202-939-3338. Fax 202-797-6646. In February 1994 over 450 faculty, staff, and students from 22 nations, 6 continents, and all 50 U.S. states met at Yale University in a Campus Earth Summit. Here is their set of recommendations for higher education institutions around the globe to work for an environmentally sustainable future. With sections on ten recommendations: 1. Integrate Environmental Knowledge into All Relevant Disciplines. 2. Improve Undergraduate Environmental Studies Course Offerings. 3. Provide Opportunities for Students to Study Campus and Local Environmental Issues. 4. Conduct a Campus Environmental Audit. 5. Institute an Environmentally Responsible Purchasing Policy. 6. Reduce Campus Waste. 7. Maximize Campus Energy Efficiency. 8. Make Environmental Sustainability a Top Priority in Campus Land-Use, Transportation, and Building Planning. 9. Establish a Student Environmental Center. 10. Support Students who Seek Environmentally Responsible Careers.

Bluhdorn (Blühdorn), Ingolfur, Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm. London: Routledge, 2000. A post-modernist critique of green political theory. The author criticizes existing green political theory for wanting to change the world, rather than taking it as given and seeking to "green" it, attempting to work with, rather than against, the grain of modern market-based economy. The dynamics of development of modern society are going in an anti-ecological direction. Ecologically-committed thinkers are therefore naive and unrealistic in thinking they can alter this. Therefore they should abandon "castle-building" and get "sociologically real," that is, seek to accommodate and tailor the "ecological project" to the "reality" of advanced, market-based, high consumption society. Reviewed by John Barry, Environmental Values 13(2004):127-130. (EV)

Bluhdorn (Blühdorn), Ingolfur, Review of: Timothy Doyle and Doug McEachern, Environment and Politics (second edition); John Barry, Environment and Social Theory; and Vernon Pratt et al., Environment and Philosophy, Environmental Values 11(2002):97-102.

Bluhdorn (Blühdorn), Ingolfur, Review of: Rootes, Christopher, ed., Environmental Protest in Europe. Environmental Values 13(2004):550-552.

Bluhdorn, I., "Review of: Peter Waterman, Globalization, Social Movements and the New Internationalisms," Environmental Politics 12(no. 2, 2003): 158.

Bluhdorn, I., "Economics as if Community Matters: Narratives About Globalisation," Environmental Politics 12(no. 1, 2003): 246-252. (v 14, #3)

Blühdorn, Ingolfur, Review of D. Maxeiner and M. Miersch, Öko-Optimismus. Environmental Values 7:(1998):490.

Blühdorn, Ingolfur, Review of Meinberg, Eckhard, Homo Oecologicus. Environmental Values 6(1997):116-117.

Blühdorn, Ingolfur. Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm. London: Routledge, 2000. An extreme social constructivist. "The concept of the environmental crisis is dubious" (p. 14), but there is a "crisis of the eco-movement" (p. 30), which is now found to be socially constructed. But it is true that nature has been abolished, because it is no longer possible to believe in the existence of a realm of pure objective nature separated from and underlying culture. So we will need a post-ecologist politics. "Ecological thought ... has to become fully anthropocentric and turn into social theory" (p. 39). Nevertheless, Blühdorn concedes that most of the rainforest is gone and that there is great loss of biodiversity. Reviewed by Smith, Mick, "Negotiating Nature: Social Theory at its Limits?", Environmental Politics 11 (no. 2, 2002):181-186. (v.13,#4)

Blum, Deborah, The Monkey Wars. New York: Oxford University Press, 1995. 306 pp. \$ 25. Traces the history of the conflicts over primate experimentation and research. Blum seeks a middle ground where both human and animal lives count, and where we can honestly and calmly ponder the pain/gain equation, how much pain we are willing to inflict to reduce human pain. She finds, for instance, that there will probably be no vaccine for AIDS found without primate research. Blum is a science writer for the Sacramento Bee who received a Pulitzer Prize for an earlier series of newspaper articles on this subject. (v5,#4)

Blum, Elizabeth D. *Love Canal Revisited: Race, Class, and Gender in Environmental Activism*. Lawrence: University Press of Kansas, 2008. Blum argues that Love Canal shows how environmental activism opened up a window on broader social movements and highlighted a legacy rooted in race, class, and gender. She goes beyond headline people such as Lois Gibbs to show how marginalized black women fought to be heard, women who rejected feminism because of a perceived anti-family stance fought as activists for their rights, working class men found their wives in the front lines of activism instead of in the kitchen, and the white, middle class Ecumenical Task Force helped black residents negotiate legal obstacles for relocation and compensation.

Blumener, Earl, "Entrepreneurial Environmentalism: A New Approach for the New Millennium," Environmental Law 30 (No. 1, 2000): 1- . As the environmental movement enters the new millennium, it must confront an array of hurdles. Faced with political stalemate concerning environmental remedies and policy and shrinking public revenues and resources, Congressman Blumener suggests adoption of an entrepreneurial environmentalism strategy. Environmentalism in the coming millennium, according to Congressman Blumener, must provide comprehensive solutions, use "cheap and green" strategies, look to performance based regulations, and encourage economic incentives. (v.11,#4)

Blumenthal, Dana, "Interrelated Causes of Plant Invasion," Science 310(14 October 2005):243-244. Invasive plant species flourish because they land on disturbed sites, similar to those from which they came, but with more resources (such as fertilizer), they have a life-history strategy of making many seeds rather than protecting themselves for long-lives; they are released from their natural enemies (left back where they came from), meanwhile the natives still have their natural enemies to compete with. These factors compound to make invasives especially disruptive to natural systems. Blumenthal is with the USDA Agricultural Research Service Rangeland Research Unit, Fort Collins, CO.

Blumler, MA, "Review of: F. W. M. Vera, Grazing Ecology and Forest History," Environmental History 7(no.4, 2002): 687-688.

Blumm, Michael C., "Ancient Forests, Spotted Owls, and Modern Public Land Law," Boston College Environmental Affairs Law Review 18 (1991) 605-622. Blumm finds notable how effective citizen environmental groups have been in changing national values. They have succeeded in gaining court injunctions that induced Congress to supply increasing statutory protection for ancient forests. This moved the debate out of the control of the Northwest's congressional delegation and made it a national issue. Environmental groups have insisted that the courts enforce the laws, despite a U. S. Forest Service that had often been captured by the timber industry. The agency entrusted with conserving these forests frequently found its own data used against itself in courts. The question of who ought to manage the forest is unsettled. Congress has ultimate authority, but it hardly has the institutional capacity to manage four million acres of remaining old growth forest. Blumm is in law, Lewis and Clark College. (v5,#4)

Blumm, Michael C. "The End of Environment Law? Libertarian Property, Natural Law, and the Just Compensation Clause in the Federal Circuit." Environmental Law 25 (no. 1, 1995):171- . Florida Rock Industries and Loveladies Harbor, two recent cases from the Federal Circuit, represent a radical,

libertarian view of property and are not supported by either Supreme Court opinions or the history of American property law. (v6,#1)

Blumm, Michael C. "Salmon Law and Policy in 1995: A Brief Overview." Environmental Law 26, no.2 (1996): 651. (v7, #3)

Blumm, Michael C. "Seven Myths of Northwest Water Law and Associated Stories." Environmental Law 26, no.1 (1996): 141. Blumm debunks seven common myths that have long hampered a full understanding of water rights allocation in the Northwest. (v7, #3)

Boal, Frederick W. and David N. Livingstone, eds., The Behavioural Environment: Essays in Reflection, Application, and Re-evaluation. London and New York: Routledge, 1989. Hardbound, 337 pages.

Humans behave in their world according to the way they perceive it to be, and this is not always, perhaps not often, the way the world really is. "Decision-makers operating in an environment base their decisions on the environment as they perceive it, not as it is. The action resulting from their decision, on the other hand, is played out in a real environment" (p. 9). These "filtered worlds" (p. 290) are what the late William Kirk, longtime geographer at the Queen's University of Belfast called "the behavioral environment," and two of his colleagues have edited this collection of sixteen essays evaluating that idea. Kirk held that "the behavioral environment" specified the essence of geography and provided it with a unifying model. Geography arises where humans perceive natural systems, and that subjective gestalt, "the behavioral environment," shapes human actions in their worlds, with the real "phenomenal world" responding sometimes more sometimes less than as perceived. The authors here offer sophisticated appraisals of how this model has fared over the last forty years. Perception is important, but is it the essential concept of geography? Somehow, the entwined destinies of nature and culture does seem to be the domain of geography, which could make it a quite relevant science blending the subjective in human perception with the objective in landscapes. (v1,#3)

Boardman, Brigid M., "The Church and the Earth After Rio: Is Creation Safe with Christians?" Ecotheology No 1 (July 1996):107-108.

Boardman, Robert, ed., Canadian Environmental Policy: Ecosystems, Politics, and Process. New York: Oxford University Press, 1002. 335 pages. \$ 31.00 paper. Boardman is at Dalhousie University, Nova Scotia. (v3,#3)

Bocking, Stephen. "Fishing the Inland Seas: Great Lakes Research, Fisheries Management, and Environmental Policy in Ontario," Environmental History 2(1997):52.

Bocking, Stephen. "The Power Elite." Alternatives 23 (no.2, 1997): 14. The Bakun Dam will Flood 69,000 hectares of tropical forest, and displace thousands of people, to generate at great cost, electricity for which there is no immediate market. (v8,#2)

Bodansky, Daniel, "The Legitimacy of International Governance: A Coming Challenge for International Environmental Law," American Journal of International Law 93(1999):596-624. There is a perception that international environmental law is insufficiently democratic, also questions about public participation and expertise. Analysis and research is needed to understand how such factors as public participation, scientific expertise, and consent work in particular contexts to help legitimate international governance. Bodansky is professor of law, University of Washington. (EE v.12,#1)

Boehmer-Christiansen, S. and J. Skea, Acid Politics: Environmental and Energy Policies in Britain and Germany (London: Belhaven Press, 1990). Acid rain policies in Britain and West Germany as a key environmental issue of the North Sea region. (v1,#2)

Boehmer-Christiansen, Sonja, Review of Blowers, Andrew and David Lowry and Barry D. Solomon, The International Politics of Nuclear Waste. Environmental Values Vol.1 No.1(1992):78.

Boehmer-Christiansen, Sonja, Review of Berkhout, Frans, Radioactive Waste. Environmental Values Vol.1 No.1 (1992):78.

BoehmerChristiansen, S, "Science, Equity, and the War against Carbon," Science Technology and Human Values 28(no.1, 2003): 69-92.

Boening, Dean W. "Biotechnology and Environmental Pollution: Scientific and Ethical Reflections." Environmental Ethics 21(1999):111-112.

Boerner, Christopher, and Lambert, Thomas, Environmental Justice? St. Louis, MO: Center for the Study of American Business, Washington University, 1994. 30 pages. (v.9,#3)

Boersema, Jan J. "How to Prepare for the Unknown? On the Significance of Future Generations and Future Studies in Environmental Policy," Environmental Values 10(2001):35-58. The core question of this article is: how can we take account of the future and future generations if our knowledge of the future is so sparse? The importance of the future is discussed within the framework of our (linear) concept of time. After that it is argued that future generations do not constitute a new, let alone unique, element in the debate on the future. Two different routes to acquire knowledge about the future and prepare for the future are described. Both reflect facts and values of the present and the past instead of giving an accurate picture of the future. Finally the view is defended that future-focused activity should be based to a greater extent on durable principles. Some of these durable principles are presented and discussed.

KEYWORDS: Time, future, future generations, durable principles, environmental policy. Jan Boersema is at the Centre of Environmental Science, Leiden University, The Netherlands. (EV)

Boersema, Jan J. "Environmental Quality and the Quality of our Way of Life." Environmental Values 4(1995):97-108. Today, sustainable development is generally accepted as a guiding principle. The present relation societies have with the natural environment is considered as being not-sustainable. However this presupposes some idea about the quality of the environment and of activities affecting the environment and, as a consequence, of the quality of life. In this article I defend the proposition that the limited progress made with respect to the environment - despite all the good intentions - could be due to a potential conflict between 'quality' and sustainable development. In other words: our interpretation of the concept of 'quality' is not compatible with the aims of sustainability. Some consequences for research and policy of accepting this proposition are discussed. KEYWORDS: Quality, sustainable development, lifestyle. Boersma is at the Centre of Environmental Science, University of Leiden. (EV)

Boersma, PD; Kareiva, P; Fagan, WF; Clark, JA; Hoekstra, JM, "How Good Are Endangered Species Recovery Plans?" Bioscience 51(no. 8, 2001):643-650. (v.13,#1)

Boetzkes, Elisabeth A. and Janson Scott Robert. "Toward an Inclusive Health Ethic for Humans and Ecosystems." Ethics and the Environment 5(2000):143-152. ABSTRACT: Health care ethics has long been concerned with the ethical issues faced by the human individual, issues such as consent, bodily privacy, and autonomy. Since at least the 1970s, however, we have known that health is largely a function of factors extending beyond the individual. Some recent and laudable ethical work has begun to take seriously the social determinants of health. For instance, deciding what would be a just distribution of the social good of health care engages health ethics with social philosophy (e.g., Weston 1991). Raising the health profile of individuals likewise requires social reforms in employment, work hierarchy, early childhood care, and economic equality-all of which have been found to be important determinants of human health (e.g., Ontario 1991). Even the issues of consent and autonomy are currently being

contextualized, as the relevance of such factors as intimate relationships and power asymmetries is recognized (Sherwin 1992). Many researchers now acknowledge that the tendency to reduce health ethics issues to the individual is misleading. For instance, Henry T. Greely (1997) has argued that because most genetics research is, in fact, research about groups—families, the class of people with a particular disease, isolated communities, or ethnic groups, then groups are certainly an appropriate further object of ethical consideration. Furthermore, geneticist, epidemiologist, and ethicist Abby Lippman laments the (often unjustified) tendency to consider genetic contributions to ill health as more manageable, less intractable, than social contributions. (E&E)

Boff, Leonardo, Cry of the Earth, Cry of the Poor. Maryknoll, NY: Orbis Books, 1997. 242 pages. \$ 22.00. Focuses on the Amazon, the economic and metaphysical ties that bind the fate of the rainforests with that of the indigenous peoples there. Boff is a Brazilian theologian. (v.11,#1)

Boff, Leonardo, Cry of the Earth, Cry of the Poor. Maryknoll, NY: Orbis Books, 1997. 242 pages. \$ 22.00. Focuses on the Amazon, the economic and metaphysical ties that bind the fate of the rainforests with that of the indigenous peoples there. Boff is a Brazilian theologian. (v10,#4)

Boff, Leonardo, Cry of the Earth, Cry of the Poor. Maryknoll, NY: Orbis Books, 1997. Environmental degradation and poverty. By a Brazilian author. (v. 15, # 3)

Boff, Leonardo, Ecology and Liberation: A New Paradigm. Maryknoll, NY: Orbis, 1995. 187 pp. \$14.95. Boff calls for a new holistic and integrated theology, rooted in a global consciousness, and driven by a mystical experience of God. The catalyst for this new theology is the emerging ecological awareness in the wake of the environmental crisis and the challenge confronting liberation theology from the recent failures of the Marxist state. Boff is a Brazilian theologian. (v7,#4)

Boff, Leonardo. Ecology and Liberation: A New Paradigm. Translated by John Cumming. Maryknoll, NY: Orbis Books, 1995. Boff is a Brazilian theologian.

Bogaert, Jan, "Multifunctional Landscapes," Landscape Ecology 21 (no.3, April 2006): 465-467 (3).

Bohannon, John. "The Big Thaw Reaches Mongolia's Pristine North." *Science* Vol. 319, no. 5863 (1 February 2008): 567-68. Mongolia at high latitudes has been warming twice as fast as the global average, and unique ecosystems are being transformed. Four of the worst drought years on record occurred in the past decade. The landscape permafrost is melting, making the land spongy, and the land is drying out, although intense storms have grown more frequent. Wildfires are more likely. Mongolian herders find it increasingly difficult with too many animals on drier lands, making for an overgrazed steppe and leaving behind shrubby wasteland and sparse semi-desert. They face disaster.

Bohlen, Steven R., et al, Geology for a Changing World: A Science Strategy for the Geological Division of the U.S. Geological Survey, 2000-2010. Washington, DC: U. S. Geological Survey Circular 1172, 1998. Seven goals, the main thrust of which is that geological research needs to be directed toward solving social environmental problems (such as anticipating the results of climate variability, educating the nation about energy and mineral resources, or mitigating environmental hazards). Bohlen, Associate Chief Geologist for Science, headed the Science Strategy Team for the Geological Division of the U.S. Geological Survey. (v.10,#1)

Bohn, T. and Amundsen, P. A., "Ecological Interactions and Evolution: Forgotten Parts of Biodiversity?," BioScience 54(no. 9, 2004): 804-805(2). (v.14, #4)

Bohn, Thomas; Amundsen Per-Arne, "Ecological Interactions and Evolution: Forgotten Parts of

Biodiversity?, BioScience 54(no.9, 1 September 2004):804-805(2).

Boholm, Åsa, and Ragnar Löfstedt, Facility Siting: Power and Identity in Land Use Planning. London: Earthscan, 2004. Reviewed by Anna Davies in Environmental Values 14(2005):532-536.

Bohringer, Christoph, Rutherford, Thomas F. "Carbon Taxes with Exemptions in an Open Economy: A General Equilibrium Analysis of the German Tax Initiative," Journal of Environmental Economics and Management 32(1997):189.

Boime, Eric. "Environmental History, the Environmental Movement, and the Politics of Power." *History Compass* Vol. 6, no. 1 (2008): 297-313. While environmental history subsumes much more than the environmental movement, this movement remains standard, not to mention depressing, subject fodder in environmental history courses. Boime examines two emerging patterns in the historiography of environmental politics. The first is a vigorous focus on local, non-traditional, grassroots endeavors; these works spotlight unique and innovative coalitions that challenge the inevitability of class, race, and regional wedges. The second pattern examines the field's new cultural emphasis, particularly its concentration on hybrid landscapes and the explicit attack on preservationist ideology. Both patterns offer unique challenges to traditional depictions of the environmental movement as well as to each other.

Boime, Eric. "Environmental History, the Environmental Movement, and the Politics of Power." *History Compass* Vol. 6, no. 1 (2008): 297-313. While environmental history subsumes much more than the environmental movement, this movement remains standard, not to mention depressing, subject fodder in environmental history courses. Boime examines two emerging patterns in the historiography of environmental politics. The first is a vigorous focus on local, non-traditional, grassroots endeavors; these works spotlight unique and innovative coalitions that challenge the inevitability of class, race, and regional wedges. The second pattern examines the field's new cultural emphasis, particularly its concentration on hybrid landscapes and the explicit attack on preservationist ideology. Both patterns offer unique challenges to traditional depictions of the environmental movement as well as to each other.

Boland, Reed. "The Environment, Population, and Women's Human Rights," Environmental Law 27(no.4, 1997):1137- . (v9,#2)

Bolgiano, Chris. "Why Are Cougars Killing People?," Wild Earth 6(no.3, 1996):46. (v7,#4)
Bollig, Michael and Schulte, Anja, "Environmental Change and Pastoral Perceptions: Degradation and Indigenous Knowledge in Two African Pastoral Communities" Human Ecology 27(no. 3, Sept 01 1999):493- . (v10,#4)

Boman, Carol R. "Ethics and the Transactional Attorney: Confronting Reality in an Imperfect World." Natural Resources and Environment 10, no.4 (1996): 38. (v7, #3)

Bomberg, E., "The US Presidential Election: Implications for Environmental Policy," Environmental Politics 10(no. 2, 2001):115-121. (v.13,#1)

Bomberg, Elizabeth. "Greens in the European Parliament", Environmental Politics 5(no.2, 1996):324. (v7,#4)

Bonahue, Brian, "History, Work, and the Nature of Beauty: A Massachusetts Community Forest," Journal of Forestry 98(no.11, NOV 01 2000):36- . The Weston Town Forest is the setting for lessons about biodiversity, sustainable forestry, and the beauty of being actively engaged with the history of the forest. (EE v.12,#1)

Bonan, Gordon B. "Forests and Climate Change: Forcings, Feedbacks, and the Climate Benefits of Forests." *Science* Vol. 320, no. 5882 (13 June 2008): 1444-49. This paper is part of a themed issue of "The Future of Forests" with half a dozen perspectives on the futures of forests, their management, and the role in climate change.

Bond, E. J., Ethics and Human Well-Being: An Introduction to Moral Philosophy. Oxford: Blackwell Publishing Co., 1996. Animals appear in an extended footnote. "Rights and justice, which are inseparable, and all the conceptual apparatus that goes with them--reparation, desert, earned merit, punishment, requirement to respect the rights of others--make sense only in connection with persons, and if they seem to make sense with such animals as dogs, cats, and horses that is because of these animals' long association and close relationships with human beings, who may think of them and treat them as if they were persons. ... This is not to say we do not have a moral responsibility toward many species of non-human animals; for their care if they are domestic animals ... or for wild animals in captivity. It is also our responsibility to preserve the habitat of animals in the wild and not to wantonly destroy species after species..." (pp. 247-248). Bond is in philosophy at Queen's University, Kingston, Ontario. (v7,#4)

Bond, Ivan, "The Importance of Sport-Hunted African Elephants to CAMPFIRE in Zimbabwe," TRAFFIC Bulletin 14 (1994): 117-119. Hunting of elephants brought over \$9 million to Zimbabwe, distributed under the Communal Areas Management Program for Indigenous Resources (CAMPFIRE) to local peoples. Some 60 elephants were killed, in a population of 76,000 elephants, and five of these would have been destroyed in any case as problem animals. Hunters are mostly Americans, some Europeans. Local peoples have a much more positive attitude toward elephants when they see these benefits; they now discourage and report the poachers. CITES permits such hunting, but not the sale of elephant products, and this costs these rural communities about \$1 million annually. Pragmatists will love this, but the author does not examine the ethical impact, either on Zimbabweans, Americans, or elephants of having wealthy Americans lay out up to \$35,000 to put down a trophy elephant, with trickle-down benefits to poor Zimbabweans whose annual incomes are a small fraction of this. Bond is with World Wildlife Fund in Harare, Zimbabwe. (v6,#2)

Bonds, MH; Pompe, JJ, "Calculating Wetland Mitigation Banking Credits: Adjusting for Wetland Function and Location," Natural Resources Journal 43(no.4, 2003):961-978. (v. 15, # 3)

Bonenberg, M. M., Człowiek i Ziemia (Human and Earth), Polska Akademia Nauk (Polish Academy of Sciences Press), Kraków, 1999. (v.13,#1)

Bonenberg, M. M., Człowiek i Ziemia (Human and Earth), Polska Akademia Nauk (Polish Academy of Sciences Press), Kraków, 1999.

Bonenburg, Marek M., (Philosophy, Jagellonian University of Cracow), Etyka Środowiskowa: Założenia i Kierunki (= Environmental Ethics: Assumptions and Trends). In Polish. Cracow: Jagellonian University, Institute of Philosophy, 1992. 152 pages. Softcover. There is a brief English summary at the end. This is the first book on environmental ethics published in Poland and presents, in short chapters, the main trends in contemporary environmental ethics. Nine approaches to environmental ethics are analyzed, the approaches by Tom Regan, Robin Attfield, Paul Taylor, Aldo Leopold and J. Baird Callicott, Arne Naess, Holmes Rolston, James Lovelock, Edward Goldsmith, and Henryk Skolimowski. The author concentrates on the theoretical justifications of each ethical position and also on its practical consequences. On one side, there is a tendency to concentrate on human relations with nonhuman individuals; on the other there is a tendency to emphasize duties toward ecosystems. Sample chapter titles (translated from Polish): Chapter 1: The Basic Theses of Environmental Ethics. Chapter 2. The Theory of Respect for Nature of Paul Taylor. Chapter 6: Deep Ecology. Chapter 7: The Ecocentric

Theory of Holmes Rolston, III. (Thanks to Jan Wawrzyniak.) (v4,#1)

Bonevac, Daniel, Today's Moral Issues: Classic and Contemporary Perspectives. Mountain View, CA: Mayfield Publishing Co., 1992. Part II, on Utility, contains a section on "The Environment." Readings: Carl Sagan, "Pulling the Plug on Mother Earth"; Barry Commoner, "Economic Growth and Environmental Quality: How to Have Both"; William K. Reilly, "The Green Thumb of Capitalism: The Environmental Benefits of Sustainable Growth"; Gretchen Morgenson with Gale Eisenstodt, "Profits are for Rape and Pillage." (v3,#1)

Bonevac, Daniel, ed., Today's Moral Issues: Classic and Contemporary Perspectives. Mountain View, CA: Mayfield Publishing Co., 1992. With a section on the environment: Carl Sagan, "Pulling the Plug on Mother Earth"; Barry Commoner, "Economic Growth and Environmental Quality: How to Have Both"; William K. Reilly, "The Green Thumb of Capitalism: The Environmental Benefits of Sustainable Growth"; and Gretchen Morengenson with Gale Eisenstodt, "Profits Are for Rape and Pillage." Sagan: "Society is, to put it simply, fouling its nest." That sees Earth as "our nest," and that seems right, but is it "simply our nest," or is that put over-simply, since there are other residents of the nest? (v3,#3)

Bongaarts, John, "Population Policy Options in the Developing World," Science 263 (February 11, 1994):771-776. The population of the developing world is currently expanding at the unprecedented rate of more than 800 million per decade, and despite anticipated reductions in growth during the 21st century, its size is expected to increase from 4.3 billion today to 10.2 billion in 2100. Past efforts to curb this growth have almost exclusively focused on the implementation of family planning programs to provide contraceptive information, services, and supplies. These programs have been partially successful in reducing birth rates. Reproduction rates have declined, often impressively, and the use of contraception has risen, statistically, from 10% to 50%. Further investments in these programs will have an additional but limited impact on population growth; therefore, other policy options, in particular measures to reduce high demand for births and limit population momentum are needed. The problem is increasingly not the unwanted but the wanted child. A serious problem is "population momentum," the tendency of a population to increase dramatically even after birth rates are reduced to a replacement level (2 children per couple). Good summary reading anticipating the U. N. International Conference on Population and Development in Cairo in September 1994. Bongaarts is director of the Research Division, The Population Council, located at the UN Plaza, New York, New York. (v5,#1)

Bonhomme, B., "A Revolution in the Forests? Forest Conservation in Soviet Russia, 1917-1925," Environmental History 7(no.3, 2002): 411-34. (v.13,#4)

Bonifazi, Conrad. The Soul of The World. Reviewed in Environmental Ethics 3(1981):275-81.

Bonifazi, Conrad. Review of Technology-Humanism or Nihilism. By Gregory H. Davis. Environmental Ethics 6(1984):87-89.

Bonn, Aletta; Gaston, Kevin, "Capturing biodiversity: selecting priority areas for conservation using different criteria," Biodiversity and Conservation 14(no.5, May 2005):1083-1100(18).

Bonner, John Tyler, First Signals: The Evolution of Multicellular Development. Princeton, NJ: Princeton University Press, 2001. Bonner, well-known for his studies in the evolution of complexity, focuses on the origin of multicellular organisms, particularly the origins of the sending of signals between cells to make specialization and multicellular organisms possible--and thereby to open up astounding new possibility space for the evolution of biodiversity. Bonner is emeritus in biology, Princeton University. (v.12,#4)

Bonner, Raymond, At the Hand of Man: Peril and Hope for Africa's Wildlife. New York: Alfred A.

Knopf, 1993. 322 pages. \$ 24.00. Bonner thinks there has been much folly in Western led efforts at wildlife conservation in Africa. He is especially critical of the World Wildlife Fund (WWF) or World Wide Fund for Nature and the Africa Wildlife Fund. He thinks that these funds have used the ban on the ivory trade, for instance, to increase membership and donations, while a controlled sale of ivory would have been more effective at saving elephants. These funds have been too interested in the animals, and not interested enough in the Africa peoples, whose fortunes are tied to those of the animals. Bonner is a former New York Times correspondent. (v4,#2)

Bonnes, Mirila, Terence Lee and Mario Bonaiuto, Psychological Theories for Environmental Issues. Aldershot, UK: Ashgate Publishing Co., 2003. Reviewed by Birgitta Gatersleben, Environmental Values 13(2004):547-550.

Bonnicksen, Thomas M., America's Ancient Forests: From the Ice Age to the Age of Discovery. New York: John Wiley and Sons, 2000. How the North American forest landscape evolved over the past 18,000 years. A special feature of the book is its self-contained introduction to the early history of Native American peoples and their environment. The author draws on his roots in the Osage nation as well as historical research, and claims that the cultural practices of hunting, agriculture, and fire helped form the ancient forests. "This saga is not just about climate and trees. Native Americans were an integral part of America's forests. The forest and the people who lived there formed an inseparable whole that developed together over the millennia. ... Native Americans helped to create and sustain the ancient forests that Europeans found beautiful enough to set aside in national parks." (p. xi). Bonnicksen is in forest science, Texas A&M University. For vigorous dissent, see Vale, Thomas R., "The Myth of the Humanized Landscape" Natural Areas Journal 18(no. 3, 1998):231-236. (v.12,#4)

Bonnicksen, Thomas, "Fire Gods and Federal Policy," American Forests, July/August 1989, pp. 14-16, 66-68. Proposes fire standards, "standards of naturalness," intended to restrict the variability of fire regimes in national parks to ensure "safe and attractive" forests, an aggressive husbandry of the forests. Response in Robert D. Barbee et al., "Replies from the Fire Gods," American Forests, March/April 1990), pp. 34-35, 70. (v8,#3)

Bonnie, R; Schwartzman, S; Stier, SC; Siebert, SF, "Tropical Reforestation and Deforestation and the Kyoto Protocol", Conservation Biology 17(no.1, 2003):4-5.

Bonnie, Robert. "Safe Harbor for the Red-Cockaded Woodpecker," Journal of Forestry 95(no.4, 1997):17. (v8,#2)

Bontiankomah (Bonti-Ankomah), Sam, and Fox, Glenn, "Hamburgers and the Rainforest--A Review of Issues and Evidence," Journal of Agricultural and Environmental Ethics 10(1997/1998):153-182. ABSTRACT: This paper examines the relationship between North American beef consumption and deforestation in South and Central America. Some writers have argued that consumption of hamburgers in North America, particularly hamburgers consumed in fast food restaurants, contributes to the depletion of the rainforest in South and Central America. We survey the published policy literature on the causes of rainforest depletion in the region. We also review the published estimates of the rate and extent of clearing of rainforest that has occurred in South and Central America since 1970. Finally, we review the data on beef imports and consumption in Canada and the United States in a effort to assess the importance of South and Central America as suppliers of beef to the North American market. We conclude that the relationship between beef consumption in North America should not be considered an important cause of forest depletion in South and Central America. Domestic policies and market forces in the countries where rainforests are located are the leading causes of rainforest depletion in this region. This lesson seems to have been lost on some popular and even some textbook writers on this subject. KEY WORDS: Rainforest depletion, hamburger, fast food, Brazilian Amazon. (JAEE)

Boo, Elizabeth. Ecotourism: The Potentials and Pitfalls. 2 vols. Washington, DC: World Wildlife Fund, 1992. Especially Belize, Costa Rica, Dominica, Ecuador, and Mexico. Provisions must be made for protecting the "carrying capacity" of natural sites; local people must have a say in the management of ecotourism; and resources must be invested in access to and care of the amenities. But here is a cautious recommendation of ecotourism. (v6,#1)

Boody, George et al., "Multifunctional Agriculture in the United States", BioScience 55 (no.1, January 2005):27-38(12). We evaluated possible changes to current farming practices in two Minnesota watersheds to provide insight into how farm policy might affect environmental, social, and economic outcomes. Watershed residents helped develop four scenarios to evaluate alternative future trends in agricultural management and to project potential economic and environmental outcomes. We found that environmental and economic benefits can be attained through changes in agricultural land management without increasing public costs. The magnitude of these benefits depends on the magnitude of changes to agricultural practices. Environmental benefits include improved water quality, healthier fish, increased carbon sequestration, and decreased greenhouse gas emissions, while economic benefits include social capital formation, greater farm profitability, and avoided costs. Policy transitions that emphasize functions of agriculture in addition to food production are crucial for creating change. We suggest that redirecting farm payments by using alternative incentives could lead to substantial environmental changes at little or no extra cost to the taxpayer.

Boohar, RK, "Training Future Ethical Leaders of Science," Bioscience 53(no.8, 2003):692-693. (v.14, #4)

Bookchin, Murray, Remaking Society: Pathways to a Green Future. Boston: South End Press, 1990. Pp. 222. A recent and compact expression of Bookchin's central ideas. A leading environmentalist and social critic, Bookchin was inspired to write the book to answer the growing deep ecology trend in environmental philosophy and politics. The deep ecological emphasis on "biocentrism" ignores social theory; it is not humans that are the problem, but social classes and institutions of power which dominate and distort human life. Social institutions have to be remade: "the harmonization of nature cannot be achieved without the harmonization of human with human" (p. 171). Deep ecology is a mindless irrationalism or mysticism that denies the "the place of rationality in life" as the "product of a natural development." Humanity is an "agent for rendering evolution...fully self-conscious...[and]...as rational as possible in meeting non-human and human needs" (p. 204). The debate between the "social ecologists"---followers of Bookchin---and the "deep ecologists" is one of the most disturbing and contentious in the field of environmental philosophy. Bookchin's argument seems based on misunderstandings and extreme interpretations of isolated out-of-context statements. (Katz, Bibl # 2)

Bookchin, Murray, "Recovering Evolution: A Reply to Eckersley and Fox," Environmental Ethics 12(1990):253-274. Arguing that they have seriously misrepresented his views, Bookchin defends his "social ecology" from criticisms of two deep ecologists. The primary issue is the extent and desirability of the human control over nature. Bookchin argues for a "symbiotic relationship between human communities and the nonhuman ecocommunities in which they are located" (p. 259). But he also claims that it is not anthropocentric to diversify an ecological region for the betterment of human life, as long as the project is "very prudent, nonexploitative, and ecologically guided" (p. 272). (Katz, Bibl # 2)

Bookchin, Murray, Which Way for the Ecology Movement Edinburgh and San Francisco: AK Press, 1993. 75 pages. Bookchin is an anarchist who argues that although the problems are extreme, environmentalists have in general gotten the causal sequence backward. Mass poverty, starvation, dispossession, slums, and alienation is not the result of overpopulation, nor the cause of environmental degradation. Rather these crises of human dysfunction and environmental breakdown are the result of a

driving capitalism dependent on growth and consumerism. People have been shoved off the land all over the world by agribusiness. Environmentalists have not understood the true causal forces. Humans are capable of changing these institutional forces, but not until they are correctly understood. (v6,#4)

Bookchin, Murray, Remaking Society: Pathways to a Green Future. (Boston: South End Press, 1990. 204 pages. \$ 10 paper. Social ecologist Murray Bookchin explores the origins of the humans-over-nature hierarchy to find it originates in dominance hierarchies within human societies. These go back to the ascendance of elders in early human society and the dominance of warrior males over other men and nearly all women. It continues in the dominance of nation-states and multi-national corporations. Such hierarchies warp the creative powers of humanity in the service of power rather than of life. Bookchin's ideal is a rational, ecologically oriented society using its cultural achievements for its own benefit and for that of the natural world. Bookchin dislikes the atavistic mystical tendencies he sees emerging in ecofeminists, deep ecologists, and some members of Green political parties. Bookchin is director emeritus of the Institute for Social Ecology in Vermont. (v1,#3)

Bookchin, Murray. Which Way for the Ecology Movement?: (Edinburgh and San Francisco: AK Press, 1993). Reviewed by Richard Watson in Environmental Ethics 17(1995):437-439. (EE)

Bookchin, Murray. "Recovering Evolution: A Reply to Eckersley and Fox." Environmental Ethics 12(1990):253-74. Robyn Eckersley claims erroneously that I believe humanity is currently equipped to take over the "helm" of natural evolution. In addition, she provides a misleading treatment of my discussion of the relationship of first nature (biological evolution) and second nature (social evolution). I argue that her positivistic methodology is inappropriate in dealing with my processual approach and that her Manichaeic contrast between biocentrism and anthropocentrism virtually excludes any human intervention in the natural world. With regard to Warwick Fox's treatment of my writings, I argue that he deals with my views on society's relationship to nature in a simplistic, narrowly deterministic, and ahistorical manner. I fault both of my deep ecology critics for little or no knowledge of my writings. I conclude with an outline of a dialectical naturalism that treats nature as an evolutionary process--not simply as a scenic view--and places human and social evolution in a graded relationship with natural evolution. I emphasize that society and humanity can no longer be separated from natural evolution and that the kind of society we achieve will either foster the development of first nature or damage the planet beyond repair. Bookchin is at the Institute for Social Ecology, Plainfield, VT. (EE)

Bookchin, Murray. *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy*. Translator: Huan Qingzhi. (Jinan: Shandong University Press, 2007). (in Chinese)

Booker, M., "Review of: Chris J. Magoc, So Glorious a Landscape: Nature and the Environment in American History and Culture," Environmental History 7(no.3, 2002): 514. (v.13,#4)

Boone, Randall B., Kathleen A. Galvin, Philip K. Thorton, David M. Swift, and Michael B. Coughenour. "Cultivation and Conservation in Ngorongoro Conservation Area, Tanzania." *Human Ecology* Vol. 34, no. 6 (2006): 809-28.

Boone, Randall B., Kathleen A. Galvin, Philip K. Thorton, David M. Swift, and Michael B. Coughenour. "Cultivation and Conservation in Ngorongoro Conservation Area, Tanzania." *Human Ecology* Vol. 34, no. 6 (2006): 809-28. Ngorongoro Conservation Area, containing Ngorongoro Crater, one of the prime African wildlife habitats, as well as surrounding areas, is not a national park but designated as a conservation area to permit its use by Masai agro-pastoralists. This research examines the extent to which cultivation (in addition to grazing) impacts wildlife. There is no cultivation in the Crater, though there is some grazing. The authors conclude that the present cultivation patterns on surrounding lands (less than one percent of the area) is not overly detrimental to wildlife (or livestock) populations. But they express

concern that increased cultivation increases the Masai population, non-Masai peoples are immigrating into the area to take advantage of cultivation, and cultivation cannot increase proportionately to population increase without both stressing wildlife populations and making the people increasingly dependent on relief aid. Boone is in the Natural Resource Ecology Laboratory at Colorado State University.

Boonin, David. Review of Animal, Vegetable, or Woman? A Feminist Critique of Ethical Vegetarianism. By Kathryn Paxton George. Environmental Ethics 24(2002):429-432. (EE)

Boonin-Vail, David. "The Vegetarian Savage: Rousseau's Critique of Meat Eating." Environmental Ethics 15(1993):75-84. Contemporary defenders of philosophical vegetarianism are too often unaware of their historical predecessors. In this paper, I contribute to the rectification of this neglect by focusing on the case of Rousseau. In part one, I identify and articulate an argument against meat eating that is implicitly present in Rousseau's writings, although it is never explicitly developed. In part two, I consider and respond to two objections that might be made to the claim that this argument should be attributed to Rousseau. In part three, I consider how Rousseau's argument might fit into a general typology of recent discussions of vegetarianism, and argue that the eclectic nature that is revealed in doing so shows that the argument is worthy of further consideration. Boonin-Vail is in the Department of philosophy, Georgetown University, Washington, D. C. (EE)

Booth, Annie L., "Critical Questions in Environmental Philosophy," Philosophy and Geography 1 (1997): 255-273. Booth is assistant professor of environmental studies at the University of Northern British Columbia. (P&G)

Booth, Annie L., and Harvey M. Jacobs, "Ties That Bind: Native American Beliefs as a Foundation for Environmental Consciousness," Environmental Ethics 12(1990):27-43. A discussion of the basic themes of several American Indian views of nature, and the fit of these views into deep ecology, ecofeminism, and bioregionalism. Native American belief systems can be used as models for the development of an environmental consciousness. (Katz, Bibl # 2)

Booth, Annie L. "Does the Spirit Move You? Environmental Spirituality." Environmental Values 8(1999):89-105. ABSTRACT: This article looks at the idea of spirituality as it is discussed within ecophilosophical circles, particularly ecofeminism, bioregionalism, and deep ecology, as a means to improve human-nature interactions. The article also examines the use each ecophilosophy makes of a popular alternative to mainstream religion, that of Native American spiritualities, and problems inherent in adapting that alternative. KEYWORDS: Spirituality, ecospirituality, deep ecology, ecofeminism, bioregionalism, ecophilosophy. Annie L. Booth, Faculty of Natural Resources and Environmental Studies University of Northern British Columbia 3333 University Way Prince George, British Columbia V2N 4Z9, Canada. (EV)

Booth, Annie, Review of Fen Osler Hampson and Judith Reppy, eds., Earthly Goods, Environmental Change, and Social Justice. Environmental Ethics 20(1998):335-36.

Booth, Annie L., and Harvey L. Jacobs. "Ties that Bind: Native American Beliefs as a Foundation for Environmental Consciousness." Environmental Ethics 12(1990):27-43. In this article we examine the specific contributions Native American thought can make to the ongoing search for a Western ecological consciousness. We begin with a review of the influence of Native American beliefs on the different branches of the modern environmental movement and some initial comparisons of Western and Native American ways of seeing. We then review Native American thought on the natural world, highlighting beliefs in the need for reciprocity and balance, the world as a living being, and relationships with animals. We conclude that Native American ideas are important, can prove inspirational in the search for a modern environmental consciousness, and affirm the arguments of both deep ecologists and ecofeminists. Booth

and Jacobs are at the Institute for Environmental Studies, University of Wisconsin-Madison, Madison, WI. (EE)

Booth, Annie L., and Harvey M. Jacobs. Environmental Consciousness--Native American Worldviews and Sustainable Natural Resource Management: An Annotated Bibliography, no. 214. Chicago: Council of Planning Librarians, 1988. Booth is in environmental studies at the University of Northern British Columbia. (v8,#1)

Booth, Annie L. "Learning from Others: Ecophilosophy and Traditional Native American Women's Lives." Environmental Ethics 20(1998):81-99. I examine the roles of traditional Native American women with regard to their impact on maintaining appropriate spiritual, cultural, and physical relationships with the natural world and discuss lessons that ecophilosophers might find useful in reexamining their own spiritual, cultural, and physical relationships. Booth is in the Environmental Studies Program, University of Northern British Columbia, Prince George, B.C. (EE)

Booth, Annie L. Review of Ecofeminism and Globalization. Edited by Heather Eaton and Lois Ann Lorentzen. Environmental Ethics 27 (2005):317-318.

Booth, Annie L. Review of Beyond Mothering Earth: Ecological Citizenship and the Politics of Care. By Sherilyn MacGregor. Environmental Ethics 30(2008):109-110. (EE)

Booth, Annie. Review of Rosi Braidotti, Ewa Charkiewicz, Sabine Hausler, and Saskia Wieringa. Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis: (London: Zed Books, 1994). (EE)

Booth, Annie. Review of The New Biology: Discovering the Wisdom in Nature. By Robert Augros and George Stanciu. Environmental Ethics 11(1989):93-94.

Booth, Douglas E. "The Economics and Ethics of Old-Growth Forests." Environmental Ethics 14(1992):43-62. An intense debate is currently underway in the Pacific Northwest over whether remnant old-growth forests should be preserved or harvested. Old-growth forests can be viewed (1) as objects used instrumentally to serve human welfare or (2) as entities that possess value in themselves and are thus worthy of moral consideration. I compare the instrumental view suggested by economic analysis with the biocentric and ecocentric alternatives and suggest a reconciliation of these approaches in the context of old-growth preservation. Booth is at the College of Business Administration, Marquette University, Milwaukee University, Milwaukee, WI. (EE)

Booth, Douglas E. "Review Essay: The Consequences of the New Environmental Ethics for Economics," Review of Social Economy (1990) forthcoming. (v1,#2)

Booth, Douglas, Valuing Nature: The Decline and Preservation of Old Growth Forests. Lanham, MD: Rowman and Littlefield, 1993. 245 pages. \$ 22.95 paper. \$ 57.50 cloth. The shifting values in natural resources policy decision-making set the stage for a more focused debate on the ethical criteria that should be employed. The natural history of old-growth forests, aboriginal views of forests, valuing forests in the era of exploitation, the Endangered Species Act and old-growth forests. How should old-growth forests be valued? Booth is professor of economics at Marquette University. (v4,#3)

Booth, Douglas E., "Ethics and the Limits of Environmental Economics," Ecological Economics 9(1994):241-252. There are limits to the cost-benefit framework, given the acceptance of an ethic of environmental concern. Two approaches to environmental ethics are considered: one based on the view that humans are the focus of moral concern, the other holding that moral concern ought to be extended to

the nonhuman world. In the first case, cost-benefit analysis can legitimately be applied so long as those humans who suffer losses from environmental damage are adequately compensated. But even in human cases, the application of cost-benefit analysis is inconsistent with the moral considerability of humans in cases where damage is harmful to human health and also in cases where the natural environment is so highly valued that the compensation of damaged parties is infeasible. In the second case, cost-benefit analyses cannot legitimately be applied where nonhuman entities are morally considerable. Booth teaches economics at Marquette University. Any philosopher who thinks that economists do not do their philosophical homework should read the preceding three articles. (v5,#4)

Booth, Douglas E. "Preserving Old-Growth Forest Ecosystems: Valuation and Policy," Environmental Values 6(1997):31-48. ABSTRACT: If valuation processes are dualistic in the sense that ethical values are given priority over instrumental values, and if old-growth forests are considered to be valuable in their own right, then the cost-benefits approach to valuing old growth is inappropriate. If this is the case, then ethical standards must be used to determine whether preservation is the correct policy when human material needs and ecosystem preservation are in conflict. Such a standard is suggested and evaluated in the context of the policy debate over the preservation of spotted owl habitat in the Pacific Northwest region of the U.S. Economics Department, Marquette University, Milwaukee, WI 53233, USA. (EV)

Booth, Douglas E., Searching for Paradise: Economic Development and Environmental Change in the Intermountain West. Blue Ridge Summit, PA: Rowman and Littlefield, 2002. The current growth, especially residential sprawl, in the Intermountain West in the United States is rapidly and irreversibly degrading the environment, and undermining ecosystem health, biodiversity, and quality of life. Booth is at Marquette University.

Booth, Peter, Anarchism and the Environmental Crisis, Master's Thesis, Department of Philosophy, Lancaster University, September 1994.

Booth, Peter, Anarchism and the Environmental Crisis, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Booth, William, "Developers Wish Rare Fly Would Buzz Off," Washington Post (4/4/97) A1. Endangered fly creates controversy. The Delhi Sands flower-loving fly is the only fly on the U.S. endangered species list. In order to protect its rare habitat of inland dunes, the U.S. Fish and Wildlife Service is requiring officials in Southern California to move the footprint of a new hospital (at an alleged cost of \$4 million) and to rethink a planned massive industrial development (that is supposed to create 20,000 jobs over 5 years). Critics are characterizing the issue as "jobs versus flies" and casting aspersions at the fly and its habitat. The reporter describes the fly as "a creature that spends most of its life underground, living as a fat, clumsy, enigmatic maggot." Says a State Senator, "I'm for people, not for flies." The habitat, says another official, is "a bunch of dirt and weeds. I can't take a citizen out there without them becoming outraged." Some claim that the Fish and Wildlife Service was considering slowing interstate traffic through the dunes to a crawl during the fly's summer mating season, "lest at fly become a glop on an unsuspecting motorist's windshield." The entomologist responsible for getting the fly listed as endangered in 1993 says the fly "is spectacular . . . If you see one flying around you don't soon forget it." The fly is an inch long and is able to hover like a hummingbird above flowers using a long straw for a mouth to extract nectar. The geology and biology professor who wrote the recovery plan for the fly says "It's a fly you can love. It's beautiful. Nothing is too wonderful to be true in the world of insects." Females of the species telescope their bodies three inches into the sand to deposit a clutch of eggs. The Delhi Sands is the largest remaining sand dune system in the Los Angeles basin, a unique environment that supports not only the fly but also rare and precious flowers, pocket mice and butterflies. This case raises the issue of species egalitarianism and illustrates the argument strategies of both Endangered Species Act opponents and proponents. (v8,#1)

Bophuthatswana National Parks and Wildlife Management Board published a series of occasional papers (at least 16 of them) on policy, ethical, and management issues. Samples: Suping, Victor S (tribal chief of the Botswana) and Roger F. H. Collinson, "The Wildlife Conservation Traditions of the Botswana," Paper no. 2, January 1992; Collinson, Roger F. H., "National Parks: Extravagant or Essential?" Paper no. 6, May 1992; Davies, Richard J., David Grossman and Levy Rammutla, "Wildlife Use and Community Development in Bophuthatswana," Paper no. 13, November 1992; Stuart-Hill, Greg, and David Grossman, "Parks, Profits and Professionalism: An Overview of the Introduction of the Lion to the Pilanesberg National Park."

Borchert, Peter and Maria Jones, "The Environment Must Win: South Africa's Elections," Africa - Environment and Wildlife 2(no.2, March/April 1994):20-26. In South Africa, the need for social upliftment is crucial but many are concerned that the clamor for short-term reparation and economic success could exacerbate the environmental ills that already beset the land. Politicians must be encouraged to acknowledge that the promise of better times is irrevocably linked to a healthy environment. Most of the political parties have fairly well-articulated environmental policies, but this can prove little more than lip service, and South Africa is out of step with developed western nations that do pay serious attention to environmental problems. Some think that a preoccupation with environmental issues is the mark of a privileged few who put the welfare of animals over that of humans. In fact South Africa's biodiversity is one of its major assets.

Tourism is only part of the answer. At worst, ecotourism is an international hotel group putting up a pleasure palace on the edge of a game reserve, staffed with its international staff, and repatriating the profits taken from overseas tourists. At best, ecotourism is "purposeful travel to natural areas, to understand the cultural and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to local people" (Ecotourism Society). South Africa ought considerably to enlarge its share of the market in better ecotourism. However, the market is finite, the demand can be met with relatively small areas of more or less pristine ecosystems and is generally feasible in a few prime areas, and it is intrinsically unstable, evaporating in time of war, political instability, shifting exchange rates, disease epidemics, perceived personal dangers, and so forth. The larger answer is a spectrum of benefits from conserved natural resources that reach large numbers of ordinary people. Borchert is editor of Africa - Environment and Wildlife; Johns is a freelance journalist. (v6,#3)

Borchert, Peter, "Destination Africa: Turning a Dream into Reality," Africa - Environment and Wildlife 3(no. 3, May/June 1995):27-35. Travel and tourism is, by some measures, the world's largest industry, globally people spend more on tourism than they do for food. Africa offers unparalleled opportunities for tourism, especially its impoverished nations that seem to have little else to offer the world economy other than access to places of great natural beauty. But ecotourism is a mixed bag; done wrong it destroys the assets on which it is based, benefits the rich and not the poor, and escalates further consumption of fuel, water, and materials. Done right it can offer a rational and sustainable use of the continent's great assets in a manner that involves and is of benefit both to Africans and African wildlife. "Tourism is the way in which individuals can savour the unknown, acquire understanding and experience the world in its fullness. Furthermore, tourism stands out as a positive and ever-present factor in promoting mutual knowledge and understanding, and therefore peace and detente" (United Nations World Tourism Organisation, The Hague Declaration on Tourism, 1989). Borchert is editor of Africa - Environment and Wildlife. (v6,#3)

Bordelon, Mark. "California's Tiered Permitting Program for Treatment of Hazardous Wastes," Journal of Environmental Law & Practice 4(1997):59. (v8,#1)

Borenstein, Seth, "Study Finds Oceans in Crisis, but Fixable," Philadelphia Inquirer, June 5, 2003, A21.

The Pew Oceans Commission report, a three-year, \$ 5.5 million study, finds that the oceans bordering the U.S. are overfished, polluted, infested with invasive species, dotted with dead zones, and in a state of crisis, but they can be saved. Bringing the oceans' ecosystems back from the edge of collapse requires dramatic, controversial and expensive efforts to limit fishing, coastal development, and runoff from cities and farms.

Borgmann, Albert, "The Challenge of Nature," Chapter 22, pages 182-196, in Technology and the Character of Contemporary Life: A Philosophical Inquiry. Chicago: University of Chicago Press, 1984. "Nature in its wildness attains new and positive significance within the technological setting. ... Nature constitutes a singular challenge for technology in this country; especially nature in its pristine or wild state. In this latter sense, nature is in an obvious way the counterpart to technology. It is by definition a part of the world that has not been touched by the hand of technology. But though there is a clear distinction between wilderness and technology, it is much less clear why we should prevent technology from crossing the physical counterpart to that distinction and from penetrating the remaining wilderness areas. ... (p. 182)

Wilderness offers some experiences that technology does not. "In the wilderness, time and space are restored to us." "The wilderness is eminently deep." "In all these experiences of the wilderness we also experience ourselves in a new way" (pp. 191-192). "We can learn from the wilderness that pretechnological things are not mere forlorn remnants of an irretrievable order but attain a new splendor in the midst of technology. They teach us both to accept and to limit technology in a principled and sensible way. They allow us to be more fully human in offering us engagement, in calling forth a new maturity, and in demanding a rightful discipline" (pp. 195-196). Borgmann is in philosophy at the University of Montana, Missoula.

Borgmann, Albert. "Gender, Nature, and Fidelity," Ethics and the Environment 4(1999):131-142. Contemporary discussions of gender and nature are likely to suffer from two vexations, the conflict of constructivism and naturalism and the conflict of nativism and rationalism. As a solution to the first I propose postmodern realism and as a remedy for the second a notion of careful scholarship. With the solutions laid out, I will illustrate and test them by discussing friendship and fidelity within the scope of gender and nature. Borgmann is in philosophy at the University of Montana. (E&E)

Borgmann, Albert. *Real American Ethics: Taking Responsibility for our Country*. Chicago: University of Chicago Press, 2006. Borgmann discusses the institutions and tangible structures that Americans have built to create the United States and what kinds of life these make possible, as, for example, the Jeffersonian agrarian democracy. This backdrop that we have built is not neutral, passive, but is infused with moral content that shapes who we are and how we live. Today "ours is a decent country," but one with troubling features, particularly its waning support for values of equality, dignity and justice, and for traditional American concerns for the poor and the environment. Increasingly these values are displaced by the focus on production, consumption, and affluence. Moral malaise and indifference more and more mark U.S. society. "The ground of contemporary culture must be so compacted and barren that a rich and grounded moral vision has a hard time taking root and gaining public support." The urgent moral task is to recognize this relationship, take responsibility for it and ask what kind of life expresses our deepest shared values. Borgmann hopes to "widen the circle of well-being until it includes everyone in this country and on earth." Borgmann's book is reviewed by Dan Spencer, "What Consumes Us: The Deformation of American Values, *Christian Century* Vol. 124, no. 7 (April 3, 2007): 39-42.

Borja, Jordi, Castells, Manuel. The Local and the Global. Covelo, CA: Island Press, 1997. 320 pp. \$35 paper. Urban geographers examine the possibilities for establishing a dynamic and creative relationship between the local and the global that will enable cities to remain the focus of social organization, political

management and cultural expression. (v8,#2)

Borland, Maeve. Review of Robert Frodeman, Frodeman, Robert, ed., Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community. Journal of Agricultural and Environmental Ethics 14(2001):88-93. (JAEE)

Borman, Margaret, "Can Governments Encourage a Reduced Fish Harvest to Allow Global Stocks to Regenerate Their Numbers," Journal of Environmental Law And Litigation 15(no.1, 2000): 127-. (v.12,#3)

Bormann B.T.; Kiester A.R., "Options Forestry: Acting on Uncertainty," Journal of Forestry 102(no.4, June 2004):22-27(6). (v. 15, # 3)

Bormann, Bernard T., Richard W. Haynes, and Jon R. Martin. "Adaptive Management of Forest Ecosystems: Did Some Rubber Hit the Road?" *BioScience* Vol. 57, no. 2 (2007): 186-91. Although many scientists recommend adaptive management for large forest tracts, there is little evidence that its use has been effective at this scale. One exception is the 10-million-hectare Northwest Forest Plan, which explicitly included adaptive management in its design. Evidence from 10 years of implementation of the plan suggests that formalizing adaptive steps and committing to monitoring worked better than allocating land to adaptive management areas. Clearly, some of the problems in implementing any new strategy should have been expected and probably would have been avoided if the plan had called for even more focused feedback. But decisions made after monitoring results were analyzed have led to new management priorities, including new approaches to adaptive management. These decisions suggest that one adaptive management loop has been completed. A continued commitment to learning about and adapting practices and institutions will most likely be needed to improve performance in the future.

Bormann, F. Herbert and Stephen R. Kellert, eds., Ecology, Economics, Ethics: The Broken Circle. New Haven: Yale University Press, 1991. 233 pages. With contributions by F. Herbert Bormann; William A. Butler; Paul H. Connett; David Ehrenfeld, "The Management of Diversity: A Conservation Paradox"; Thomas Eisner; Malcolm Gillis; William Goldfarb; Wes Jackson, "Nature as the Measure for a Sustainable Agriculture"; Stephen R. Kellert; Gene E. Likens; Norman Myers, "Biodiversity and Global Security"; David Pimentel; Holmes Rolston, III, "Environmental Ethics: Values in and Duties to the Natural World"; and Edward O. Wilson, "Biodiversity, Prosperity, and Value." (v2,#4)

Bormann, Herb), "On Respect for Nature," NRCC News, Northern Rockies Conservation Cooperative (P. O. Box 2705, Jackson, WY 83001), Autumn 2000, no. 13, pp. 4-5. "The biogeochemistry of the forest ecosystem changes with disturbances like cutting or fire and ... the forest ecosystem restores its regulation of biogeochemistry as it repairs itself through growth. The most astounding thing is that this great waxing and waning of the forest and its control over biogeochemistry occurs through the interaction of the abiotic environment with thousands of species of plants, animals and microbes and that it is repeatable. Not only is it repeatable through millennia of modest local, regional, and global disturbances, but ecosystems also have the power of adjustment to new conditions, through evolution of component species and migrations of new species.

The complexity of it all is overwhelming. ... Despite our growing knowledge of the natural world, there is still a vast unknown component to the earth whose extent and effectiveness is supported every day as this green planet sails through forbidding space. We should respect, cherish and change with utmost caution this largely unknown natural world because it works as it is and we are totally dependent on its working." Bormann is emeritus, Yale School of Forestry and Environmental Studies, and celebrated for his designing of the small watershed technique for measurement and analysis of forest ecosystems. (v.11,#4)

Bornett, H.L.I., Guy, J. H., and Cain, P. J., "Impact of animal welfare on costs and viability of pig production in the UK," Journal of Agricultural and Environmental Ethics 16(2003):163-186. The European Union welfare standards for intensively kept pigs have steadily increased over the past few years and are proposed to continue in the future. The aim of this study was to determine the profitability of rearing pigs in a range of housing systems with different standards for pig welfare. Models were constructed to calculate the cost of pig rearing (6-95 kg) in a fully-slatted system (fulfilling minimum EU space requirements, Directive 91630/EEC); a partly-slatted system; a high-welfare, straw-based system (complying with the UK-based Royal Society for the Prevention of Cruelty to Animals, Freedom Food standards) and a free-range system. The results suggest that improved pig welfare can be achieved with a modest increase in cost. KEY WORDS: economics, pig housing, pigmeat, welfare. (JAEE)

Borrelli, Peter, ed. Crossroads: Environmental Priorities for the Future. Washington, D.C.: Island Press, 1988. Pp. xiv, 334. A popular analysis and assessment of the environmental movement in the United States, organized around a series of articles in The Amicus Journal (the magazine of the National Resources Defense Council); and a critical article by Barry Commoner, "The Environment," which originally appeared in The New Yorker (June 1987). Commoner argued that the environmental movement had not been successful in using the powers of government to control pollution or solve other environmental problems. Commoner's criticism led environmental activists to review the successes, the failures, and the outlook for environmental action. This is not a scholarly book, but it is a useful treatment of policy issues in the environmental movement. It contains a journalistic account of environmental philosophers by Peter Borrelli, "The Ecophilosophers," pp. 69-83. (Katz, Bibl # 2)

Borstelmann, John, "Land Exchanges: Sound Management Tool or Invitation to Speculation?," Wild Earth 10(no.3, Fall 2000):63- . (EE v.12,#1)

Borthwick, Bruce, "Disappearing Act: Why is the Dead Sea Dying," Christian Century 120 (no. 3, February 8, 2003):20-21. The Sea of Galilee, the Jordan River, and the Dead Sea are all threatened by increasing water withdrawals and increasing pollution, mostly by Israel but also by Jordan. The Dead Sea has reached its lowest level on record, repeatedly falling lower than the ever lowering "red lines," levels at which upstream water extraction should stop. The flow in and from the Jordan River since the 1960's has dropped 90 percent, and what does flow is almost sewage. In the 1850's, the mouth of the Jordan was 180 yards wide and three feet deep. Now it is a few meters wide, more a creek than a river. Plant and wildlife in and around the lake, the river, and the sea are adversely affected (the Dead Sea had no fish in it, but otherwise was not "dead"). There is much Israel and Jordan could do co-operatively, and initiatives were once underway, but have stalled in the present tensions.

Bosetti, V; Pearce, D, "A study of environmental conflict: the economic value of Grey Seals in southwest England," Biodiversity and Conservation 12(no.12, 2003):2361-2392. (v.14, #4)

Bosque-Pérez, Nilsa A., Michael O'Rourke, J.D. Wulfhorst, David M. Althoff, Caren S. Goldberg, Merrill Kaylani, Wayde Morse, Max Nielsen-Pincus, Jennifer Stephens, Leigh Winowiecki, and Sanford D. Eigenbrode. "Employing Philosophical Dialogue in Collaborative Science." BioScience Vol. 57, no. 1 (2007): 55-64. Integrated research across disciplines is required to address many of the pressing environmental problems facing human societies. Often the integration involves disparate disciplines, including those in the biological sciences, and demands collaboration from problem formulation through hypothesis development, data analysis, interpretation, and application. Such projects raise conceptual and methodological challenges that are new to many researchers in the biological sciences and to their collaborators in other disciplines. In this article, we develop the theme that many of these challenges are fundamentally philosophical, a dimension that has been largely overlooked in the extensive literature on cross-disciplinary research and education. We present a "toolbox for philosophical dialogue," consisting of a set of questions for self-examination that cross-disciplinary collaborators can use to identify and

address their philosophical disparities and commonalities. We provide a brief user's manual for this toolbox and evidence for its effectiveness in promoting successful integration across disciplines.

Bosselman, Fred P., Peterson, Craig A., McCarthy, Claire. Managing Tourism Growth: Issues and Applications. Covelo, CA: Island Press, 1999. 420 pp. \$40. Alternative legal and regulatory measures, management techniques, and incentives that target tourism growth at all levels: the quality of development, its amount and rate of growth, the locations in which it takes place. (v.10,#1)

Bosselman, Fred. "Four Land Ethics: Order, Reform, Responsibility, Opportunity." Environmental Law 24 (no. 4, 1994): 1439- . Aldo Leopold's hope that American thinking would converge toward a single land ethic is futile; instead Americans should accept that they have inherited four different land ethics, which are explained using King Arthur, David Ricardo, John Muir, and Scalia as prototypes. (v6,#1)

Bostock, S. S. C., "Review of: Stephen R. L. Clark, Biology and Christian Ethics; and Daniel A. Dombrowski, Not Even a Sparrow Falls: The Philosophy of Stephen R. L. Clark," Journal of Applied Philosophy 18(no.3, 2001): 312-13. (v.13,#2)

Bostock, Stephen St. C., Zoos and Animal Rights: The Ethics of Keeping Animals. London: Routledge, 1993. 227 pages. £ 35.00 cloth, £ 10.00 paper. Bostock unequivocally assigns rights to animals and rejects utilitarianism as a basis for animal protection. But such rights may be justifiably sacrificed if the benefits are compelling from a human-interest viewpoint. Zoo animals rights to well being prevents us from causing physical pain, death, or loss of freedom to them, and the first two are met in well-managed zoos. The third is a special challenge to zoos, but, in the end, "really good captivity is not, to all intents and purposes, captivity at all." Held captive animals can be allowed essentially to continue their natural lives; such animals are captive only in a technical sense and free in a morally important sense. With endangered species, it is better for individuals of critically endangered species to live in artificial environments than not to be born at all. Bostock is the education officer for Glasgow Zoo. (v4,#3).

Bostock, Stephen St. C., Review of Causey, Ann, Zoos and Animal Rights.Environmental Values 3(1994):276-277. (EV)

Bostock, Stephen St. C., Zoos and Animal Rights: The Ethics of Keeping Animals. London and New York: Routledge, 1993. Paper. 227 pages. Bostock is the education officer for Glasgow Zoo. (v4,#3)

Boston, Tim, Review of Roszak, Theodore, Mary E. Gomes, and Allen D. Kanner, eds. Ecopsychology: Restoring the Earth, Healing the Mind. Environmental Ethics 19(1997):101-103. (EE)

Bostrom, Magnus, "Environmental Organisations in New Forms of Political Participation: Ecological Modernisation and the Making of Voluntary Rules," Environmental Values 12(2003): 175-193. Environmental organisations have been active since the early 1960s in putting environmental issues on the political agenda and in strengthening the environmental consciousness of the public. The struggle has been successful in the sense that there is now a strong demand for practical solutions among all kinds of actors. It is, however, difficult for states and political actors to manage environmental problems by traditional forms and instruments, due to the complex character of the problems. Therefore, environmental organisations take their own initiatives to participate in policy-making by developing new forms, within new arenas, with the help of new instruments (voluntary rules or standards). Special attention is paid to the possibilities of identifying and developing constructive roles in relation to other actors and institutions as well as the capacity to organise standardisation projects and to mobilise and make use of power resources such as symbolic capital and knowledge. In order to interpret characteristics and implications (possibilities and limitations) of standardisation strategies, I draw on the ecological modernisation

perspective. Empirically, I refer to the role of Swedish environmental organisations in standardisation projects such as eco-labelling. (EV)

Botcheva, Liliana. "Focus and Effectiveness of Environmental Activism in Eastern Europe: A Comparative Study of Environmental Movements in Bulgaria, Hungary, Slovakia, and Romania," The Journal of Environment and Development 5(no.3, 1996):292. (v8,#2)

Botchway, F. Nii, "Land Ownership and Responsibility for the Mining Environment in Ghana." Natural Resources Journal 38(No. 4, Fall, 1998):509- . (v10,#4)

Botkin, Daniel B., Margriet F. Caswell, John E. Estes, Angelo A. Orio, eds. Changing the Global Environment: Perspectives on Human Involvement (Boston: Academic Press, 1998). A series of essays written by environmental, economic, and social scientists from around the world. Examines possible solutions suggested by remote sensing and the implementation of worldwide computer-based systems. A multi-disciplinary approach to the study of the total biosphere. The first three authors are at the University of California, Santa Barbara. Orio is in the department of environmental science, University of Venice, Italy. (v1,#1)

Botkin, Daniel B., Our Natural History: The Lessons of Lewis and Clark. New York: Berkeley Publishing Group, A Perigee Book, 1995. 300 pages. What Lewis and Clark found in geography, fauna, flora, compared with what is there today, an environmental history, with prospects for the future. botkin is at the Center for the Study of the Environment, Santa Barbara, also with the Program for Global Change, George Mason University, Fairfax, VA. (v.9,#3)

Botkin, Daniel, B., "The Naturalness of Biological Invasions," Western North American Naturalist 61(no. 3, 2001):261-266. "A serious conundrum exists about invasive species: Biological invasions are natural and necessary for the persistence of life on Earth, but some of the worse threats to biological diversity are from biological invasions. ... If species never invaded new territories, they would be extinguished by catastrophic events in their previous habitats. ... One can either preserve a 'natural' condition, or one can preserve natural processes, but not both. The preservation of natural processes requires change. ... Either preserve the natural processes and therefore preserve life over the long run, or preserve a single condition and either threaten the persistence of life or else substitute a great amount of human intervention for natural, dynamic processes." Botkin is in ecology at the University of California, Santa Barbara. (v.12,#3)

Botkin, Daniel B. No Man's Garden: Thoreau and a New Vision for Civilization and Nature. Covelo, CA: Island Press, 2000. 288 pages. Cloth \$24.95. Ecologist Daniel Botkin takes a new look at the life and writings of Thoreau to discover a model for reconciling the conflict between nature and civilization that lies at the heart of our environmental problems. He develops an account designed the assist in preserving the health of our biosphere that simultaneously allows for the further growth and development of civilization. (v.11,#4)

Botkin, Daniel B. Discordant Harmonies: A New Ecology for the Twenty-first Century, Oxford University Press, 1990. (v1,#2)

Botkin, Daniel B; Cummins, Kenneth W, "Clouds among the Ecological Visions", BioScience 55(no.1, January 2005):7-9(3).

Botkin, Daniel. No Man's Garden: Thoreau and a New Vision of Civilization and Nature. Washington, DC: Island Press, 2001. Review by Robert Chapman, Environmental Values 10(2001):541. (EV)

Botsford, Louis, et al., "The Management of Fisheries and Marine Ecosystems." Science 277(1997):509-515. See under theme issue, Science, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Botteron, Cynthia A., "India's 'Project Tiger' Reserves: The Interplay Between Ecological Knowledge and the Human Dimensions of Policymaking for Protected Habitats," Pages 136-161 in Dale, Virginia H., and Haeuber, Richard A., eds., Applying Ecological Principles to Land Management. New York: Springer-Verlag, 2001. (v.12,#4)

Botteron, Cynthia Ann, What the Study of Tiger Preservation in India Reveals about Science, Advocacy, and Policy Change, Ph.D. thesis, in political science, University of Texas-Austin, 2000. Investigates the legitimacy of the claim that imperialism was the motive and mode of transferring from one cultural context to another the "wilderness" version of "national parks" as a means of saving species and habitat, specifically with reference to tigers in India. The vast and powerful role played by the coalition of conservation scientists and international environmental organizations in creating and promoting this "ethic" has largely been ignored by policy theorists. These activities are here analyzed as is the impact on the development of science by its close association with environmental advocacy organizations. This "constructed" science was used to delegitimize alternative interpretations of the problem of species decline, habitat degradation, and the role and function of humans in the environment. The advisor was David Braybrooke. Botteron can be contacted at the Department of Political Science, Colorado State University, Fort Collins, CO 80523. E-mail: cynn@lamar.colostate.edu. (EE v.12,#1)

Botzler, Richard G., and Armstrong, Susan J., eds., Environmental Ethics: Divergence and Convergence, 2nd edition. New York: McGraw Hill, 1998. 600 pages. A second edition of one of the more popular anthologies. Based on feedback from the first edition, there are new sections on conflict resolution, biodiversity, environmental justice, environmental restoration, and genetic engineering, with deletions so as to make the text reasonably compact. 28 of 72 articles are new. Botzler is in wildlife science, Armstrong in philosophy at Humboldt State University, California. (v.8,#4)

Botzler, Richard, and Armstrong, Susan, eds. Environmental Ethics: Divergence and Convergence. 2nd ed. New York: McGraw-Hill, 1998. This second edition of a widely-used anthology expands the first edition (1993) with 26 new essays in a multi-disciplinary format with teaching aids. New topics are genetic engineering, ecological restoration, free market environmentalism, environmental justice, creation spirituality, and conflict resolution. (v9,#2)

Boudouris K. and Kalimtzis K., eds., Philosophy and Ecology, vol. I, 256 pages. Vol. II, 256 pages. Athens, Greece: Ionia Publications. 256 pages. Contributors seek the relevancy of Greek philosophy with respect to our present-day environmental crisis.

Vol. I: <http://www.hri.org/iagp/vol31.html>>> Vol. II: <http://www.hri.org/iagp/vol32.html>>>

Samples from Vol. I:

* John P. Anton, "Aristotle and Theophrastus on Ecology"

* Warwick Fox, "Deep ecology and Virtue Ethics"

* Keekok Lee, "Aristotle: Towards an Environmental Philosophy"

* Theodore Tsolis, "Nature and Decay: Stoic Determinism and its Ecological Connotations"

* Laura Westra, "The Significance of Freedom and Limit in Aristotle's Notion of the Good and the New Earth Charter"

Samples from Vol. II:

* Sven Arntzen, "Is Presocratic Philosophy of Nature a Source of Man-nature Dualism?"

* G. Boger, "Aristotle on the Intention and Extension of Person and the Focal Concern of Environmental Philosophy"

* Konstantine Boudouris, "The Moral, Political and Metaphysical Causes of the Ecological Crisis"

- * Warwick Fox, "Ethics and the Environment: Rethinking the Foundations of Value"
 - * Keekok Lee, "Anthropocentrism: Its Roots in Modern Western Philosophy and its Involvement with Modern Science/technology"
 - * Vitomir Mitevski, "Discovery of Harmony in Nature in Early Greek Philosophy"
 - * John O'Neill and Vernon Pratt, "Aristotelian Ethics and Post-Aristotelian Biology"
 - * Alexandar H. Zistakis, "Culture and Nature: How Culture Determines our Conception of Nature"
- And many more. (Thanks to Sven Arntzen, Telemark College, Norway.) (v.12,#3)

Boudouris, K., and Kalimtzis, K., eds. *Philosophy and Ecology*, vol. 1 & 2. Athens: Ionia Publications, 1999.

Boudreaux, Donald J., Meiners, Roger E. and Zywicki, Todd J., "Talk is Cheap: The Existence Value Fallacy," Environmental Law 29 (No. 4, 1999): 765- . Environmental law and policy has increasingly recognized the concept of "existence value" - the "nonuse value" that individuals derive solely from the knowledge that an environmental amenity exists and not from its use. Because of its nonuse nature, existence value cannot be calculated through market transactions, but can be ascertained only through contingent valuation studies that purport to provide hypothetical valuations. This article questions the conceptual importance of existence value and the validity of contingent valuation as a means for deriving existence value. (v.11,#2)

Boudreaux, Paul J, "Looking the Ogre in the Eye: Ten Tough Questions for the Antisprawl Movement," Tulane Environmental Law Journal 14(no.1, Wint 2000):171-. (v.12,#4)

Boulding, Kenneth E. Towards A New Economics: Critical Essays on Ecology, Distribution and Other Themes: (Aldershot: Edward Elgar, 1992). Reviewed by David Alden in Environmental Values 4(1995):86-87. (EV)

Boulter, Michael, Extinction: Evolution and the End of Man. London: Fourth Estate, 2002. Nature is a self-organizing system. If the system is disrupted, nature will do what it must to restore balance, and one of its tools is extinction. The science of life, and the chilling effect that humans have had on the planet. The world will adapt and survive; humanity most probably will not. Boulter is in paleobiology at the University of East London, author of the text Basic Paleontology. (v.13,#4)

Boulting, Noel E., "The Aesthetics of Nature," Philosophy in the Contemporary World 6(no. 3-4, Fall-Winter, 1999):21-34. Three paradigms for aesthetic experience of nature: (1) Specularism, seeing nature as a picture, (2) Scientific Exemplarism, grasping aesthetic experience through the categories of scientific enquiry, and (3) Perspectivalism, a more phenomenological relation between the experienced and the experience. After the historical development which fashioned Specularism's approach to aesthetics has been indicated and the ahistorical nature of Scientific Exemplarism has been explained, the relative strengths of these three paradigms are explored. The implication of the third are related to a possible spiritual view of nature. Boulting lives in Upchurch, Nr. Sittingbourne, Kent, UK. (v.11,#2)

Boulting, Noel. To Be or Not to Be Philosophical: A Triptree Inspector Decides. London: Minerva Press, 2001. Boulting gives his readers an introduction to philosophical inquiry by examining issues of environmental aesthetics and ecological ethics which arise in an actual public inquiry into the creation of a landfill site. (v.13,#4)

Bouma, Katherine, "Dam Removal Restores Cahaba River Marine Life," Mobile (Alabama) Register, November 22, 2004, p.5B. A dam, or something like a dam, a concrete plug with three foot culverts, and preventing fish travel upstream, has been removed from the Cahaba River, the (otherwise) longest free flowing river in Alabama. This permits the river regaining populations of fish, snails and other wildlife. The dam was once placed in the river by a coal company; when the Presbyterian Church bought the

property it encouraged the removal, which required the efforts and funding of a number of agencies. (v.14, #4)

Bouma-Prediger, Steven, "Creation Care and Character: The Nature and Necessity of the Ecological Virtues," Perspectives on Science and Christian Faith 50 (no. 1, March 1998):6-21. Virtue theory is a neglected but significant area of research in ecological ethics. What exactly is a virtue? Are there particular virtues that arise from a biblically informed Christian ecological ethic? Are they merely nice to have or are they necessary? Certain virtues--like frugality, humility, and wisdom--are indispensable if Christians are responsibly to fulfill their calling to be earthkeepers. Certain character traits are central to creation care. Bouma-Prediger is in the Department of Religion, Hope College, Holland, MI. (v9,#2)
Bouma-Prediger, Steven, For the Beauty of the Earth: A Christian Vision for Creation Care. Grand Rapids, MI: Eerdmans, 2001. Received a 2002 Award of Merit from Christianity Today. Scientific and biblical reasons for caring for the Earth.

Bouma-Prediger, Steven, "Is Christianity Responsible for the Ecological Crisis?" Christian Scholar's Review 25(1995):146-156. (v9,#2)

Bouma-Prediger, Steven, "Why Care for Creation?: From Prudence to Piety," Christian Scholar's Review 27(1998):277-297. "So why care for creation? For many reasons--many good reasons. Because our own existence is imperiled. Because we owe it to our children. Because an earth-friendly way of life is more joyful. Because various forms of oppression are of a piece. Because certain non-human creatures are entitled to our care. Because creation is valuable for its own sake. Because God says so. Because we are God's image-bearers. Because grace begets gratitude and gratitude care. Because, in sum, care for creation is integral to what it means to be a Christian--it is an important part of our piety, our spirituality, our collective way of being authentically Christian" (p. 296). (v9,#2)

Bouma-Prediger, Steven. The Greening of Theology: The Ecological Models of Rosemary Radford Ruether, Joseph Sittler, and Jurgen Moltmann. Atlanta: Scholars Press, 1996. 338pp. \$35.95 cloth, \$23.95 paper. Against the charge that the Christian tradition is ecologically bankrupt, the author demonstrates the intellectual and spiritual resources available within Christianity for addressing ecological issues. (v8,#2)

Bourassa, Steven C. The Aesthetics of Landscape. London: Belhaven Press, 1991. Landscape assessment, architecture, aesthetics of nature. Especially interested in developing a framework for landscape aesthetics that reaches beyond biology to incorporate the cultural component of landscapes. Aesthetic experience functions at three basic levels: biological, cultural, and personal. (v.8,#4) Reviewed by John Haldane, Environmental Values 3(1994):173-182.

Bourdeau, Philippe, Fasella, P.M., and Teller, A., ed., Environmental Ethics: Man's Relationship with Nature, Interaction with Science. Luxembourg: Commission of the European Communities, 1990. Papers from the Sixth Economic Summit Conference on Bioethics, Val Duchesse, Brussels, May 10-12, 1989, called by the Economic Summit Nations (G7). A Working Party was commissioned to produce a Code of Environmental Practice, with R. J. Berry as chair. The code can be found in R. J. Berry, ed., Environmental Dilemmas: Ethics and Decisions (London: Chapman and Hall, 1992), 253-62, essentially a stewardship ethic. The Bourdeau volume is not easy to obtain in the U.S.; only the libraries at Duke University and at the University of North Texas seem to have it. (v6,#2)

Bourland, Thomas R., and Stroup, Richard L. "Rent Payments as Incentives: Making Endangered Species Welcome on Private Lands." Journal of Forestry 94, no.4 (1996): 18. (v7, #3)

Bourne, Charles B. "The International Law Association's Contribution to International Water Resources Law", Natural Resources Journal 36(no.2, 1996):155.

Bousé, Derek, Wildlife Films. Philadelphia: University of Pennsylvania Press, 2000. 296 pages. \$ 22.50 paper. (EE v.12,#1)

Boutet, JC; Weishampel, JF, "Spatial pattern analysis of pre- and post-hurricane forest canopy structure in North Carolina, USA," Landscape Ecology 18(no.6, 2003):553-559. (v.14, #4)

Bouvier, Leon F., and Grant, Lindsey, How Many Americans? Population, Immigration, and the Environment. San Francisco: Sierra Club Books, 1994. 174 pages. \$ 12.00. (v.8,#4)

Bouvier, Leon F. and Lindsey Grant, How Many Americans? Population, Immigration, and the Environment. San Francisco: Sierra Club Books, 1995. 192 pages. \$ 12.00. The population of the United States has tripled within this century, and our overconsumption of resources is a leading cause of many international environmental problems including acid rain and global warming. Stabilizing the size of the American population is crucial, for our own sakes and the sake of the planet. Lowering immigration levels is necessary to achieve environmental sustainability. Bouvier is a demographer, former Vice-President of the Population Reference Bureau and an adjunct professor at Tulane University. (v8,#1)

Bowcutt, F., "Book Review: Science and Ecosystem Management in the National Parks. William L. Halvorson and Gary E. Davis, Eds. (Tucson: The University of Arizona Press, Tucson, 1996)," Human Ecology 31(no. 3, 2003): 491-494.

Bowden, Matthew W. "An Overview of the National Estuary Program", Natural Resources & Environment 11(no.2, 1996):35.

Bowers, C. A., Education, Cultural Myths, and the Ecological Crisis: Toward Deep Changes. Albany, NY: State University of New York Press, 1993. What our priorities should be in public school and university education as we face the environmental crisis. How our cultural beliefs contribute to the accelerating degradation of the environment as the most fundamental challenge we face. All other social and educational reforms must be assessed in terms of whether they mitigate or exacerbate the ecological crisis. Thought patterns formed in the past are reproduced through the metaphorical language used in the classroom, with the result that both conservative and liberal educators and their critics ignore the ecological crisis. Aldo Leopold, Wendell Berry, and Gregory Bateson suggest a more ecologically sustainable ideology. Bowers teaches education at Portland State University, Oregon. (v6,#2)

Bowers, C. A., Education, Cultural Myths, and the Ecological Crisis: Toward Deep Changes. Albany, NY: State University of New York Press, 1993. 232 pages. \$ 12.95 paper. "The cultural dimensions of the ecological crisis raise profound questions for educators who play such a key role in passing on the cultural templates to the next generation." Most teaching in U.S. schools and universities, whether liberal or conservative, promotes attitudes that lead to overconsumption and pollution. Most reform advocates do not see how there must be a "radical reform of the educational process." Bowers teaches at Portland State University and at the University of Oregon. (v4,#2)

Bowers, C. A. "The Case against John Dewey as an Environmental and Eco-Justice Philosopher." Environmental Ethics 25(2003):25-42. Environmentally oriented philosophers and educational theorists are now attempting to clarify how the ideas of John Dewey can be used as the basis for changing cultural practices that contribute to the ecological crisis. Although Dewey can be interpreted as a nonanthropocentric thinker and his method of experimental inquiry can be used in eco-management projects, Dewey should not be regarded as an environmental and eco-justice philosopher—and by extension, his followers should not be regarded in this light. (1) Dewey's emphasis on an experimental mode of inquiry did not take account of the knowledge systems of other cultures—particularly cultures

that are more ecologically centered. (2) Dewey's understanding of language prevented him from recognizing how the root metaphors (meta-cognitive schemata) he took for granted were also the basis, with several exceptions, of the Industrial Revolution. (3) Dewey's failure to understand the complex nature of tradition, including the different ways in which intergenerational knowledge is shared and renewed, makes it difficult for his followers to address a central eco-justice issue—which is to regenerate within diverse cultural communities the non-commodified forms of knowledge, skills, and relationships that enable individuals and communities to have a smaller ecological footprint. (EE)

Bowers, C. A. "The Conservative Misinterpretation of the Educational Ecological Crisis." Environmental Ethics 14(1992):101-27. Conservative educational critics (e.g., Allan Bloom, Mortimer Adler, and E. D. Hirsch, Jr.) have succeeded in framing the debate on the reform of education in a manner that ignores the questions that should be asked about how our most fundamental cultural assumptions are contributing to the ecological crisis. In this paper, I examine the deep cultural assumptions embedded in their reform proposals that further exacerbate the crisis, giving special attention to their view of rational empowerment, the progressive nature of change, and their anthropocentric view of the universe. I argue that their form of conservatism must be supplanted by the more biocentric conservatism of such thinkers as Aldo Leopold, Wendell Berry, and Gary Snyder. Bowers is at the College of Education, University of Oregon, Eugene, OR. (EE)

Bowers, C. A., The Culture of Denial: Why the Environmental Movement Needs a Strategy for Reforming Universities and Public Schools. Albany, NY: State University of New York Press, 1997. The flaws in contemporary education. The complicity of the educational establishment in supporting the social and economic institutions that have produced the environmental crisis. Education from the primary grades through the universities needs to be totally reformed to support new, ecologically sustainable societies. Bowers formerly taught at the University of Oregon and at Portland State University. (v8,#3)

Bowers, J, "Planning ahead the difficulties facing those wishing to live alternative and sustainable lives in the UK," Ecologist 32(no.1, 2002):39-41. (v.13, #3)

Bowie, G. Lee, Kathleen Higgins, Meredith W. Michaels, eds., Thirteen Questions in Ethics. Chicago: Harcourt Brace Jovanovich, 1992. Section 11 is, "What Should We Sacrifice for Animals and the Environment?" Readings: Alan Ginsberg, "Ballade of Poisons"; Tom Regan, "The Nature and Possibility of an Environmental Ethic"; Aldo Leopold, "The Land Ethic"; Peter Singer, "Not for Humans Only: The Place of Non-Humans in Environmental Issues"; Mark Sagoff, "Animal Liberation and Environmental Ethics: Bad Marriage, Quick Divorce"; Annette Baier, "For the Sake of Future Generations"; Marti Kheel, "The Liberation of Nature: A Circular Affair"; John Stuart Mill, "The Glories of Nature?" (v3,#1)

Bowie, G. Lee, Higgins, Kathleen M., and Michaels, Meredith W., eds., Thirteen Questions in Ethics and Social Philosophy, 2nd ed. Fort Worth: Harcourt Brace College Publishers, 1998. An anthology in 13 chapters, each a question. Chapter 11 is, "What Should We Sacrifice for Animals and the Environment?" Readings from Allen Ginsburg, Tom Regan, Peter Singer, Aldo Leopold, Mark Sagoff, Annette Baier, Marti Kheel, and John Stuart Mill. Bowie is at Mt. Holyoke College, Michaels at Hampshire College, and Higgins at the University of Texas at Austin. (v9,#1)

Bowie, Norman E., ed. Ethical Issues in Government. Reviewed in Environmental Ethics 4(1982):373-75.

Bowker, JM; Newman, DH; Warren, RJ; Henderson, DW, "Estimating the Economic Value of Lethal Versus Nonlethal Deer Control in Suburban Communities", Society and Natural Resources 16(no.2, 2003):143-158.

Bowker, John and Holm, Jean, eds., Attitudes to Nature. London: Pinter Publishers, New York: St.

Martins, 1994. Also: New York: Cassell/Continuum. 192 pages. \$ 18.95. (v.9,#4)

Bowler, I, "Review of: Brookfield, H., Exploring agrodiversity", Progress in Human Geography 27(no.1, 2003):123.

Bowler, I., "Book Review: Buller, H. and Hoggart, K. Agricultural Transformation, Food and Environment: Perspectives on European Rural Policy and Planning," Progress in Human Geography 26(no.5, 2002): 685. (v.13,#4)

Bowles, Ian A., Rice, R. E., Mittermeier, R. A., and da Foneca, G.A.B., "Logging and Tropical Forest Conservation," Science 280(1998):1899-1900. Environmental and development organizations have poured hundreds of millions of dollars into sustainable forestry, but these investments have produced few results. Outside plantations, less than 0.02 percent of the world's tropical forests are managed sustainably for timber. The major barrier to sustainable forestry's success is basic economics. Reaping a one-time harvest of ancient trees today is simply more profitable than managing for future harvests. The World Bank is the largest funder of forestry projects worldwide. In the face of a World Bank initiative to establish 500 million acres of sustainable forestry by 2005, scientific evidence is mounting that sustainable harvests may damage biodiversity more than standard logging practices. Summary and further details in Tangle, Laura, "Sustainable Logging Proves Unsupportable," U.S. News and World Report, June 29, 1998, pp. 63-64. (v9,#2)

Bowman, Douglas, Beyond the Modern Mind: The Spiritual and Ethical Challenge of the Environmental Crisis (New York: Pilgrim Press, 1990) \$ 10.95. Deep cultural-religious roots of the environmental crisis are explored. Spirit-Nature dualism is Earth-destructive. Mechanism, materialism, individualism, and patriarchalism reinforce the pattern. Bowman wants to recover the Christian creation-centered tradition in ways that connect with Trinitarian belief and follow Jesus in being "receptive, prophetic, compassionate." (v1,#4)

Bowman, M. B., "Legal Perspectives on Dam Removal," Bioscience 52(no.8, 2002): 739-42. (v.13,#4)

Bowman, Michael, and Catherine Redgwell, International Law and the Conservation of Biological Diversity. London ; Boston : Kluwer Law International, 1996. Contains: The nature, development and philosophical foundations of the biodiversity concept in international law / Michael Bowman -- The Rio Convention on Biological Diversity / Alan E. Boyle -- Sustainability, biodiversity and international law / Sam Johnston -- The contribution of existing agreements for the conservation of terrestrial species and habitats to the maintenance of biodiversity / Robin Churchill -- The conservation of marine ecosystems under international law / David Freestone -- The protection of the Antarctic environment and the ecosystem approach / Catherine Redgwell -- The role of ex situ measures in the conservation of biodiversity / Lynda M. Warren -- International regimes for the conservation and control of plant genetic resources / Gregory Rose -- Intellectual property rights and biodiversity / Ian Walden -- Biodiversity conservation in the United States / Kristina Gjerde -- The European Community and preservation of biological diversity / Patricia Birnie -- Developing countries, 'development' and the conservation of biological diversity / R. Jayakumar Nayar and David Mohan Ong -- Biodiversity and indigenous peoples / John Woodliffe -- Financial aid, biodiversity and international law / Sam Johnston.

Bowman, Michael, "The Nature, Development and Philosophical Foundations of the Biodiversity Concept in International Law," in Michael Bowman and Catherine Redgwell. eds., International Law and the Conservation of Biodiversity. London and the Hague: Kluwer International Law, 1996.

Boxer, Baruch. "US and China Talk Environment, Not Just Trade." The Christian Science Monitor 89 (9 July 1997): 19. (v8,#2)

Boyce, James K., Sunita Narain, and Elizabeth A. Stanton, eds. *Reclaiming Nature: Environmental Justice and Ecological Restoration*. London: Anthem Press, 2007. Contents include: (1) "The Blessing of the Commons: Small-Scale Fisheries, Community Property Rights, and Coastal Natural Assets" by John Kurien, (2) "Natural Resource Management and Poverty Alleviation in Mountain Areas" by Narpat S. Jodha, (3) "Harvesting the Rain: Fighting Ecological Poverty through Participatory Democracy" by Sunita Narain and Anil Agarwal, (4) "Net Benefits: The Ecological Restoration of Inland Fisheries in Bangladesh" by M. Mokhlesur Rahman and Stephen F. Minkin, (5) "Land Reform and Sustainable Development" by James K. Boyce, Peter Rosset, and Elizabeth A. Stanton, (6) "Extractive Reserves: Building Natural Assets in the Brazilian Amazon" by Anthony Hall, (7) "Mining Rights and Community Rights: Poverty amidst Wealth" by Karyn Keenan, José De Echave, and Ken Traynor, (8) "Natural Assets and Participatory Forest Management in West Africa" by Kojo Sebastian Amanor, (9) "Compensation for Environmental Services and Rural Communities: Lessons from the Americas" by Herman Rosa, Deborah Barry, Susan Kandel, and Leopoldo Dimas, (10) "Certification Systems as Tools for Natural Asset Building" by Michael E. Conroy, (11) "Wastes as Assets: Limits and Potentials" by Eugenio M. Gonzales, (12) "Community Rights and Wildlife Stewardship: Zimbabwe's CAMPFIRE Program" by James C. Murombedzi, (13) "International Environmental Justice: Building the Natural Assets of the World's Poor" by Krista Harper and S. Ravi Rajan, (14) "Environmental Justice: Reflections from the United States" by Manuel Pastor, (15) "Equitable Carbon Revenue Distribution Under an International Emissions Trading Regime" by Nathan E. Hultman and Daniel M. Kammen, and (16) "Greenhouse Justice: An Entitlement Framework for Managing the Global Atmospheric Commons" by Sunita Narain and Matthew Riddle.

Boyce, James K., Pastor Jr., Manuel, "Aid for Peace: Can International Financial Institutions Help Prevent Conflict," World Policy Journal 15(no.2, 1998), p. 42. (v.9,#4)

Boyce, James K., Sunita Narain, and Elizabeth A. Stanton, eds. *Reclaiming Nature: Environmental Justice and Ecological Restoration*. London: Anthem Press, 2007. Contents include: (1) "The Blessing of the Commons: Small-Scale Fisheries, Community Property Rights, and Coastal Natural Assets" by John Kurien, (2) "Natural Resource Management and Poverty Alleviation in Mountain Areas" by Narpat S. Jodha, (3) "Harvesting the Rain: Fighting Ecological Poverty through Participatory Democracy" by Sunita Narain and Anil Agarwal, (4) "Net Benefits: The Ecological Restoration of Inland Fisheries in Bangladesh" by M. Mokhlesur Rahman and Stephen F. Minkin, (5) "Land Reform and Sustainable Development" by James K. Boyce, Peter Rosset, and Elizabeth A. Stanton, (6) "Extractive Reserves: Building Natural Assets in the Brazilian Amazon" by Anthony Hall, (7) "Mining Rights and Community Rights: Poverty amidst Wealth" by Karyn Keenan, José De Echave, and Ken Traynor, (8) "Natural Assets and Participatory Forest Management in West Africa" by Kojo Sebastian Amanor, (9) "Compensation for Environmental Services and Rural Communities: Lessons from the Americas" by Herman Rosa, Deborah Barry, Susan Kandel, and Leopoldo Dimas, (10) "Certification Systems as Tools for Natural Asset Building" by Michael E. Conroy, (11) "Wastes as Assets: Limits and Potentials" by Eugenio M. Gonzales, (12) "Community Rights and Wildlife Stewardship: Zimbabwe's CAMPFIRE Program" by James C. Murombedzi, (13) "International Environmental Justice: Building the Natural Assets of the World's Poor" by Krista Harper and S. Ravi Rajan, (14) "Environmental Justice: Reflections from the United States" by Manuel Pastor, (15) "Equitable Carbon Revenue Distribution Under an International Emissions Trading Regime" by Nathan E. Hultman and Daniel M. Kammen, and (16) "Greenhouse Justice: An Entitlement Framework for Managing the Global Atmospheric Commons" by Sunita Narain and Matthew Riddle.

Boyce, Thomas E., Geller, E. Scott, "Encouraging College Students to Support Pro-Environment Behavior: Effects of Direct Versus Indirect Rewards," Environment and Behavior 33(no. 1, Jan. 1, 2001):107- . (v.12,#2)

Boyd, Freeman and Howard, Ian, Review of The Intimate Commodity, by Anthony Winson, Journal of Agricultural and Environmental Ethics 7(1994):237-240.

Boyd, Freeman, Review of Lehman, Hugh, Rationality and Ethics in Agriculture. Journal of Agricultural and Environmental Ethics 10(1997):89-92. (JAEE)

Boyd, Freeman, "Humane Slaughter of Poultry: The Case Against the Use of Electrical Stunning Devices", Journal of Agricultural and Environmental Ethics 7(1994):221-236. Is the use of electrical stunners adequately discharging our moral obligations with respect to the humane slaughter of poultry? Three separate lines of investigation show that we cannot give an unequivocal answer to this question. Five potentially humane methods of poultry slaughter are examined. Electrical stunning is found to be an acceptable method of rendering birds unconscious before slaughter. We lack sufficient evidence to claim that it is the most humane method currently available and that a proper stun is always achieved. Controversy surrounding the increased current flow and the impact of electrocution on carcass quality and operator safety will continue to cause resistance to the adoption of this method of poultry slaughter. The conclusion offers four recommendations that follow from the cumulative results of these investigations. Boyd lives in Meaford, Ontario.

Boyd, JA, "Hip Deep: A Survey of State Instream Flow Law from the Rocky Mountains to the Pacific Ocean," Natural Resources Journal 43(no.4, 2003):1151-1216. (v. 15, # 3)

Boyd, James, "What's Nature Worth? Using Indicators to Open the Black Box of Ecological Evaluation," Resources (Resources for the Future), Summer, 2004, Issue no. 154, pages 18-22. The value of nature is inherently complex; rarely is there a clear-cut, "right" answer to a question like which ecosystem is the most valuable. A central problem is that complex answers, including economic and ecological measures, are difficult to convey to the public. But unless they are clearly conveyed, the public is not convinced by scientists and economists. One line of solution is to use "indicators." Boyd is with Resources for the Future. (v. 15, # 3)

Boyd, W; Prudham, WS; Schurman, RA, "Industrial Dynamics and the Problem of Nature," Society and Natural Resources 14(no. 7, 2001):555-570. (v.13,#1)

Boydell, S. and Holzknicht, H., "Land-Caught in the Conflict Between Custom and Commercialism," Land Use Policy 20(no. 3, 2003): 203-207.

Boykoff, Maxwell T. "From convergence to contention: United States mass media representations of anthropogenic climate change science." *Transactions of the Institute of British Geographers* Vol. 32, no. 4 (2007): 477-89. This article focuses on connected factors that contribute to US media reporting on anthropogenic climate change science. It analyzes US newspapers and television shows from 1995 to 2006 as well as semi-structured interviews with climate scientists and environmental journalists. Through analyses of power and scale, the paper brings together issues of framing in journalism to questions of certainty/uncertainty in climate science. The paper examines how and why US media have represented conflict and contentions, despite an emergent consensus view regarding anthropogenic climate science.

Boylan, Michael, ed., Environmental Ethics. Upper Saddle River, NJ: Prentice-Hall, 2001. Sections on Worldview and Applied Ethics; Land Ethic, Deep Ecology, and Social Ecology; Ecofeminism; Religion and Aesthetics; Moral Basis for Environmentalism; Anthropocentric Justifications, Biocentric Justifications; Searching the Middle (between these two); Animal Rights; Biodiversity; Sustainable Development. Features (a) an original interview with a prominent person who faces the practical challenges of ethical issues in the environment daily, (b) a methodology for linking theory to action, (c) an awareness of gender issues, and (d) a method for students to follow to write an essay using the

information presented. Boylan is philosophy at Marymount University, Arlington, VA. (v.12,#4)

Boyle, A., M. Anderson, eds., Human Rights Approaches to Environmental Protection. Oxford, UK: Clarendon Press, 1996.

Boyle, Alan, and Anderson, Michael R., Human Rights Approaches to Environmental Protection. Oxford: Oxford University Press, 1996. Linkages between the environment and human rights. Advantages and disadvantages, complexities, limits of a rights-based approach. The legal status of environmental rights in both international and domestic law. Boyle is at the University of Edinburgh. Anderson is with the British Institute for International and Comparative Law, London. (v.11,#3)

Boyle, David, "Wall Street 2," The Ecologist 30(no. 9, Dec. 1, 2000):26- . The world economy today is worryingly similar to that of 1929?just before the catastrophic Wall Street Crash. Could it all happen again? (v.12,#2)

Boyle, T. C., A Friend of the Earth. New York: Viking, 2000. An eco-novel, portraying a future dystopia in which all the efforts of environmentalists accomplish nothing and the world succumbs to global warming. At the conclusion, the lead couple, broken and old, head for the blasted mountain forest to rebuild the wrecked house in which they had once lived. They watch the woods begin to come back, "the shoots of the new trees rising up out of the graveyard of the old, aspens shaking out their leaves with a sound like applause, willows thick along the streambeds." (v.11,#4)

Braasch, Gary. *Earth Under Fire: How Global Warming Is Changing the World*. Berkeley: University of California Press, 2007. Braasch is a photo-journalist who documents global warming in more than 100 before and after photographs around the world.

Braasch, Gary. *Earth Under Fire: How Global Warming Is Changing the World*. Berkeley: University of California Press, 2007.

Brace, Catherine; Bailey, Adrian R.; Harvey, David C., "Religion, place and space: a framework for investigating historical geographies of religious identities and communities," Progress in Human Geography 30 (no.1, February 2006): 28-43 (16).

Bracke, M. B. M., K. H. De Greef and H. Hopster, "Qualitative Stakeholder Analysis for the Development of Sustainable Monitoring Systems for Farm Animal Welfare," Journal of Agricultural and Environmental Ethics 18(2005):27-56. Evaluating animal welfare in the animal-product market chain is a key challenge to further improve the welfare of farm animals and information on the welfare of animals must, therefore, be assessed objectively, for instance, through monitoring. Interviews with Dutch stakeholder representatives were conducted to identify their perceptions about the monitoring of animal welfare. While producers tend to perceive welfare from a production point of view, consumers use visual images derived from traditional farming and from the animals natural environments. Scientists perceptions of animal welfare are affected by the need to measure welfare with quantifiable parameters. Retailers and governments (policy makers) have views of welfare that are derived from their relationships with producers, consumers, non-governmental organizations (NGOs), and scientists. All interviewed stakeholder representatives stated that animal welfare is important. Keywords animal welfare assessment - housing and management systems - monitoring - on-farm - stakeholder analysis. The authors are in animal science, Wageningen University and Research Centre, Lelystad, The Netherlands. (JAEE)

Bracke, M. B., J. H. M. Metz, A. A. Dijkhuizen, and B. M. Spruijt. "Development of a Decision Support System for Assessing Farm Animal Welfare in Relation to Husbandry Systems: Strategy and Prototype." Journal of Agricultural and Environmental Ethics 10(2001):321-337. Due to increasing empirical

information on farm animal welfare since the 1960s, the prospects for sound decisionmaking concerning welfare have improved. This paper describes a strategy to develop a decision-making aid, a decision support system, for assessment of farm animal welfare based on available scientific knowledge. Such a decision support system allows many factors to be taken into account. It is to be developed according to the Evolutionary Prototyping Method, in which an initial prototype is improved in reiterative updating cycles. This initial prototype has been constructed. It uses hierarchical representations to analyse scientific statements and statements describing the housing system. Welfare is assessed from what is known about the biological needs of the animals, using a welfare model in the form of a tree that contains these needs as welfare components. Each state of need is assessed using welfare relevant attributes of the housing system and weighting factors. Attributes are measurable properties of the housing system. Weighting factors are assigned according to heuristic rules based on the principle of weighting all components (attributes and needs) equally, unless there are strong reasons to do otherwise. Preliminary tests of the prototype indicate that it may be possible to perform assessment of farm-animal welfare in an explicit way and based on empirical findings. The procedure needs to be refined, but its prospects are promising. Keywords: animal welfare assessment, decision support system, pigs. The authors are at the DLO-Institute of Agricultural and Environmental Engineering Wageningen, The Netherlands. (JAEE)

Bracke, M. B. M., and H. Hopster, "Assessing the Importance of Natural Behavior for Animal Welfare," Journal of Agricultural and Environmental Ethics 19(2006):77-89. The concept of natural behavior is a key element in current Dutch policy-making on animal welfare. It emphasizes that animals need positive experiences, in addition to minimized suffering. This paper interprets the concept of natural behavior in the context of the scientific framework for welfare assessment. Natural behavior may be defined as behavior that animals have a tendency to exhibit under natural conditions, because these behaviors are pleasurable and promote biological functioning. Animal welfare is the quality of life as perceived by the animal. Animals have evolved cognitive-emotional systems ("welfare needs") to deal with a variable environment. Animals do not only have so-called physiological needs such as the need for food, water, and thermal comfort. They also need to exercise certain natural behaviors such as rooting or nest-building in pigs, and scratching or dust-bathing in poultry. All needs must be taken into account in order to assess overall welfare. The degree of need satisfaction and frustration can be assessed from scientific information about the intensity, duration, and incidence of (welfare) performance criteria such as measurements of behavior and/or (patho)physiology. Positive welfare value relates to how animals are inclined to behave under natural conditions, in preference tests, and in consumer-demand studies. Negative welfare value relates to stress, frustration, abnormal behavior, aggression, and reduced fitness. Examples are given to illustrate how the need to perform natural behaviors can be assessed following the general principles for welfare assessment, providing a first approximation of how different natural behaviors affect animal welfare. Keywords: Animal welfare - assessment methodology - model - natural behavior. The authors are with the Animal Sciences Group, Division Animal Resources Development, Wageningen University and Research Centre, Lelystad, The Netherlands. (JAEE)

Bradburd, Daniel A. "Toward an Understanding of the Economics of Pastoralism: The Balance of Exchange Between Pastoralists and Nonpastoralists in Western Iran, 1815-1975." Human Ecology Forum 24 (Winter 1996): 1. (v7, #3)

Braden, J.B. and S. Proost, eds. The Economic Theory of Environmental Policy in a Federal System. Review by Amitrajeet A. Batabyal, Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Braden, Kathleen. "On Saving the Wilderness: Why Christian Stewardship is Not Sufficient," Christian Scholars Review 28(No.2. 1998):254-269. The relationship between humanity and the earth is considered through three phases: the wild earth, the tamed earth, and the tended earth, as grounded in arguments for

an either biblically based dominion or a stewardship worldview. Braden suggests that stewardship alone is an insufficient ethic for preserving wilderness areas and wildlife because it calls for management of that which is inherently unmanageable by humans. Instead, a loving restraint of human action based on Matthew is demanded. (v.11,#2)

Braden, Kathleen. "Personal Reflections on the Fate of Wilderness Reserves in Russia." *International Journal of Wilderness* Vol. 14, no. 2 (2008): 39-43. From the article: "Nature is dying in Russia.... At this moment of greatest need, the network of Russian nature reserves that saves pockets of Eurasia's threatened species has fallen on hard times. Many reserves exist on paper only; most are under siege, and all are severely understaffed." Braden is in geography at Seattle Pacific University.

Bradford, George, How Deep is Deep Ecology? With an Essay-Review on Woman's Freedom. Ojai, CA: Times Change Press, 1989. P. ix, 84. This is an expanded version of an article originally appearing in the magazine *Fifth Estate*. It reviews the deep ecological philosophy of Arne Naess, George Sessions, and Bill Devall, and the practical program of Earth First! from the perspective of an anarchist social critique. Deep ecologists overlook the "interlocking, armored juggernaut" of "capital, technology, and the state" which is the real cause of environmental problems (p. 50). "Deep ecologists err when they see the pathological operationalism of industrial civilization as a species-generated problem rather than as one generated by social phenomena that must be studied in their own right" (p. 10). It is true that deep ecologists must put their arguments into a broader context of social philosophy and philosophy of technology; but this social criticism of deep ecology fails to understand the true structure of environmental problems: the separation of humanity from nature because of narrow anthropocentric thinking. (Katz, Bibl # 2)

Bradford, George. How Deep is Deep Ecology? Reviewed in Environmental Ethics 12(1990):371-74.

Bradford, George. Return of the Son of Deep Ecology. Reviewed in Environmental Ethics 12(1990):371-74.

Bradie, Michael, Thomas W. Attig, and Nicholas Rescher, eds., The Applied Turn in Contemporary Philosophy. Bowling Green: Applied Philosophy Program, Bowling Green State University, 1983. Pp. vii, 183. A collection of papers originally presented at a conference on Applied Philosophy. Two papers address issues in environmental ethics. Sara Ebenreck, "Philosophizing in the Marketplace of Washington D.C." (pp. 158-170), describes her work as a consultant for agricultural and environmental issues; this is a "how-to" guide rather than a philosophical argument. Iris Marion Young, "Justice and Hazardous Waste," examines an actual case of the establishment of a hazardous waste site in order to challenge current, Rawlsian, conceptions of justice. Justice requires more than fair distribution; it requires a principle of self-determination (pp. 171-183). (Katz, Bibl # 1)

Bradie, Michael, "The Moral Status of Animals in Eighteenth-Century British Philosophy." Pages 32-51 in Maienschein, Jane, and Ruse, Michael, eds., Biology and the Foundations of Ethics. New York: Cambridge University Press, 1999. Bradie is in philosophy, Bowling Green State University, Ohio. (v.12,#3)

Bradley, Ben, "The Value of Endangered Species," Journal of Value Inquiry 35(2001):43-58. There are three prevailing accounts of justifications for saving endangered species: (1) Robert Elliot argues that the last members of a species have greater intrinsic value. (2) Holmes Rolston, III, Alastair Gunn, and Nicholas Rescher argue that species themselves have intrinsic value. (3) Robin Attfield argues that eliminating a species has negative instrumental value. But all these attempted justifications are inadequate. Philosophers have failed to realize that intrinsic and instrumental value are not the only types of value at issue. If we recognize the existence of contributory value, along with Brentano's principle of

bonum variationis, we may be able to defend a preservationist account of endangered species. Bradley is in philosophy, Virginia Polytechnic Institute and State University. (v.13, #3)

Bradley, Ian, God Is Green: Ecology for Christians. New York: Doubleday Image Books, 1990. 118 pages. Paper. \$ 8.00. Chapter titles: God's concern for all creation: "The earth is the Lord's and the fullness thereof." The dance of creation: "The trees of the field shall clap their hands." The fall of nature: "The whole creation has been groaning in travail." The cosmic Christ: "Who is this that even the winds and sea obey him?" The role of human beings: "Thou hast given him dominion over the works of thy hands." An analysis of the biblical understanding of the goodness of creation and of human stewardship, suitable for use in churches. A sacred world is at the heart of Christian belief. Of all the world religions, Christianity has the greatest claim to be environmentalist because it professes that God is incarnate in the very stuff of nature. With practical suggestions for greening the churches. Bradley is a minister in the Church of Scotland and a member of the Green Party. (v5,#2)

Bradley, Ian, "How Green was Celtic Christianity?" Ecotheology No 4 (Jan 1998):58-69.

Bradley, Nina Leopold, "A Man For All Seasons," National Wildlife 36(no. 3, April/May, 1998):30-34. Leopold died fifty years ago, on April 21, 1948 (the anniversary falling on day before 1998 Earth Day). His daughter shares some memories of her father, among others his concern, curiosity, and the importance of keeping records. All five of Leopold's children became scientists, and Nina Leopold Bradley has spent the last two decades conducting ecological research at the 1,500 acre Leopold Memorial Reserve in Wisconsin. (v9,#1)

Bradley, Nina Leopold, "Aldo Leopold: On the Path Toward Unity of Knowledge" Wild Earth 9(no. 3, Fall 1999):11- . (v10,#4)

Bradley, Raymond and Stephen Duguid, eds., Environmental Ethics, vol. II. Simon Fraser University, Institute for the Humanities, Burnaby, BC V5A 1S6, Canada. 1989. 215 pages. \$ 12 Canadian. An anthology, the perspectives are varied, including the university, business, and government sectors, scientists, ecologists, philosophers, policy analysts and policy critics. (v1,#4)

Bradley, Raymond, and Stephen Duguid, Environmental Ethics, Volume II. Burnaby, B.C: Simon Fraser University Publications, 1989. Pp. 215. See entry under Hanson, Philip, ed., Environmental Ethics: Philosophical and Policy Perspectives. (Katz, Bibl # 2)

Bradley, Theresa. Fiscal Restructuring Programs: The Environmental Factor. Washington, D.C.: World Resource Institute, 1997. 50pp. \$14.95 paper. Concrete examples of how fiscal structures--taxes, public sector pricing, and subsidies--can be revised to generate environmental benefits, economic efficiencies, and government revenues simultaneously. In-depth case studies of Poland, India, and Mexico demonstrate the potential power of these reforms. (v8,#1)

Bradshaw, G. A., and Bekoff, Marc, "Integrating humans and nature: Reconciling the boundaries of science and society," TREE 15(no. 8, August, 2000):309-310. After many decades of separation, environmental and ecological sciences have formally undertaken an effort to reintegrate humans back into nature. Recent concern with the "human dimension" represents a significant departure from historic traditions where the human-nature boundary has formed the division between the natural and the social sciences. Now the interrelationships and interdependence between humans and nature constitute the primary drivers of much ecological research. Bradshaw is at the National Center for Ecological Analysis and Synthesis, Santa Barbara, CA. Bekoff is in biology, University of Colorado, Boulder. (v.11,#3)

Bradshaw, Isabel Gay A., "Not by Bread Alone: Symbolic Loss, Trauma, and Recovery in Elephant

Communities," Society and Animals 12/2
www.psyeta.org/sa/sa12.2/bradshaw.shtml

Bradstock, Andrew, "The Earth as a Common Treasury: The Diggers and the Land Question,"
Ecotheology No 1 (July 1996):35-41.

Bradstock, Ross A., Williams, Jann E., and Gill, A. Malcolm, eds., Flammable Australia: The Fire Regimes and Biodiversity of a Continent. Cambridge: Cambridge University Press, 2001. Fire is pivotal to the functioning of Australian ecosystems and affects the distribution and abundance of the continent's unique and highly diverse range of plants and animals. Conservation of this biodiversity requires an understanding of the action of fire on the landscape. Natural fire has waxed and waned over geological times on Australian landscapes, mostly associated with climatic changes, and going back into the Tertiary period and before (over 1 million years). "There is a notable increase in fire activity centered on 40 ka before present (BP) [40,000 years ago] which, in the absence of a major climate change in around this time, is considered to mostly likely indicate early Aboriginal burning. The impact on the vegetation was largely to accelerate existing trends rather than to cause a wholesale landscape change. It is difficult to separate the effects of climate change and human-induced burning subsequent to this time until the arrival of Europeans" (p.3). Bradstock is with the Biodiversity Research Group of the New South Wales Parks and Wildlife Service, Australia. (v.13, #3)

Brady, Bernard and Mark Neuzil, *A Spiritual Field Guide: Meditations for the Outdoors*. Grand Rapids, MI: Brazos Press, 2004 A field guide for people of faith who want to be more deeply in touch with God's good Earth and to attend to God's voice in nature. One needs to "pay attention" in and to nature. The outdoors can awaken sensibilities of dependence, gratitude, responsibility, hope, and purpose.

Brady, Emily, Aesthetics of the Natural Environment. Edinburgh: Edinburgh University Press, 2003. Reviewed by Patricia M. Matthews, Environmental Values 13(2004):401-403. (EV)

Brady, Emily, Review of: Warwick Fox (ed.), Ethics and the Built Environment, Environmental Values 11(2002):509-511.

Brady, Emily, "Don't Eat the Daisies: Disinterestedness and the Situated Aesthetic," Environmental Values 7(1998):97-114. In debates about nature conservation, aesthetic appreciation is typically understood in terms of valuing nature as an amenity, something that we value for the pleasure it provides. In this paper I argue that this position, what I call the hedonistic model, rests on a misunderstanding of aesthetic appreciation. To support this claim I put forward an alternative model based on disinterestedness, and I defend disinterestedness against mistaken interpretations of it. Properly understood, disinterestedness defines a standpoint which precludes self-interest and utility, and it does not entail a passive subject abstracted from who they are. This standpoint is compatible with a 'situated aesthetic' in which appreciation of aesthetic qualities is grounded in an embedded subject who is sensitive to the context and narrative of the object. The alternative model provides a conception of aesthetic value which distinguishes it from amenity value, and it also defines a non-instrumental approach that offers the opportunity for enhanced appreciation and attention to nature's value. KEYWORDS: Disinterestedness, aesthetic value, environmental aesthetics, natural beauty. Emily Brady is at Lancaster University, UK. (EV)

Brady, Emily, "Aesthetics in Practice: Valuing the Natural World," Environmental Values 15(2006): 277-291. Aesthetic value, often viewed as subjective and even trivial compared to other environmental values, is commonly given low priority in policy debates. In this paper I argue that the seriousness and importance of aesthetic value cannot be denied when we recognise the ways that aesthetic experience is already embedded in a range of human practices. The first area of human practice considered involves the

complex relationship between aesthetic experience and the development of an ethical attitude towards the environment. I then discuss how aesthetics has played a role in scientific study and the use of evaluative aesthetic concepts in science, such as variety and diversity. The final section shows the connection between the beneficial effects of aesthetic engagement with nature and the restorative value of nature for human well-being. (EV)

Brady, Emily. Review of Hepburn, Ronald W., The Reach of the Aesthetic: Collected Essays on Art and Nature. Aldershot and Burlington: Ashgate, 2001. Environmental Values 12(2003):128-131. (EV)

Brady, Emily. "Aesthetic Character and Aesthetic Integrity in Environmental Conservation." Aesthetics plays an important role in environmental conservation. In this paper, I pin down two key concepts for understanding this role, aesthetic character and aesthetic integrity. Aesthetic character describes the particularity of an environment based on its aesthetic and nonaesthetic qualities. In the first part, I give an account of aesthetic character through a discussion of its subjective and objective bases, and I argue for an awareness of the dynamic nature of this character. In the second part, I consider aesthetic character in a conservation context. I develop the diachronic concept of aesthetic integrity to guide decisions about how to manage change to aesthetic character. My argument is illustrated with a case study of the proposal for a superquarry on the remote isle of Harris in Scotland. Environmental Ethics 24(2002):75-91. (EE)

Braidotti, Rosi, Charkiewicz Ewa, Hausler, Sabine, and Wieringa, Saskia. Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis: (London: Zed Books, 1994). Reviewed by Annie Booth in Environmental Ethics 17(1995):441. (EE)

Braidotti, Rosi, Ewa Charkiewicz, Sabine Hausler, and Saskia Wieringa. Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis. London: Zed Books, 1994. 220 pages. An effort to explore the interconnections between the themes of women, the environment, and sustainable development. (v6,#4)

Braidotti, Rosi; Charkiewicz, Ewa; Hausler, Sabine; and Wieringa, Saskia. Women, the Environment, and Sustainable Development Worldwide. London: Zed Books, 1994. (v7, #3)

Braks, Andrew David, Aristotle's Primary Substance: The Bio-Platonic Motivations Behind Metaphysics Z and H. Colorado State University, Philosophy M.A. thesis, fall 1997. Aristotle stood in the legacy of Plato, but had much more interest in biology. His thought developed and for him, in the Metaphysics, primary substances are species forms. They define concrete individual substances, although in Aristotle's earlier thought in the Categories substances are primarily individuals. But Aristotle is unable to entertain ideas similar to modern evolutionary ideas. His biological species-forms are essentially unchanging and perpetually instantiated by a never-failing succession of living individuals. (v.8,#4)

Brams, Steven J., and Taylor, Alan D. Fair Division: From Cake-Cutting to Dispute Resolution. New York: Cambridge University Press. 1996. Mathematics and algorithms for conflict resolution, such that all parties are maximally satisfied. With two persons, it is easy. Cutting a cake, you cut, I choose. With three persons and more variables, it is harder. With multiple parties and many variables, there are still procedures. All parties list in secret all the disputed items and rank order them. A mediator can use a procedure called "adjusted winner," and Brams and Taylor demonstrate mathematically that any allocation resulting will be both maximally equitable and what they call "envy free," that is, disputants will be maximally satisfied that they got the best outcome they could under the circumstances. The procedure has been used in divorce settlements, in business disputes, and retrospectively on the 1978 Camp David agreement between Egypt and Israel. A major difficulty is that scheming parties can anticipate the other parties' rankings and skew the results. There are many possibilities for the resolution of environmental disputes. Brams is in political science at New York University. Taylor is a

mathematician at Union College, Schenectady, NY.

Bramwell, Anna, Ecology in the 20th Century: A History. New Haven: Yale University Press, 1989. Pp. xii, 292. A work of intellectual, political, and environmental history. Bramwell argues that the roots of contemporary environmental politics---the "green" movement---derived from developments in two sciences at the end of the nineteenth century: holistic biology and the economics of non-renewable and scarce resources. Of particular interest is the shift from the right to the left side of the political spectrum. (Katz, Bibl # 2)

Bramwell, Anna, The Fading of the Greens: The Decline of Environmental Politics in the West. New Haven: Yale University Press, 1994. 216 pages. \$ 25. Greens have had a major political impact, but they do not win any elections. How green consciousness became skewed in political practice, preventing the greens from attracting the support they needed, largely due to the dominance of the German greens and their atypical characteristics. The green frontier now lies with international organizations, not political parties. Bramwell administers environmental strategy in eastern Europe for the Organization for Economic Co-operation and Development, Paris. (v5,#3)

Bramwell, Anna. Ecology in the 20th Century (New Haven: Yale University Press, 1989). An intellectual and political history of the ecology movement in the twentieth century. The first thorough study of the origins and background of the "green" politics that has in recent years carved out a significant political constituency. Ecologism is a political category in its own right. (v1,#1)

Branch, Michael P., and Philippon, Daniel J., eds. The Height of Our Mountains: Nature Writing from Virginia's Blue Ridge Mountains and Shenandoah Valley. Baltimore, MD: Johns Hopkins University Press, 1998. Seventy writers beginning in 1607 and ending with contemporary writers such as Annie Dillard, Roger Tory Peterson and Edwin Way Teale. (v9,#1)

Brand, Karl-Werner, ed. Nachhaltige Entwicklung. Eine Herausforderung an die Soziologie. Reviewed by Ingolfur Bluehdorn Environmental Values 8(1999):406. (EV)

Brandenburg, Andrea M., Carroll, Matthew S. "Your Place or Mine?: The Effect of Place Creation on Environmental Values and Landscape Meanings," Society & Natural Resources 8(no.5 Sept. 1995):381- . (v6,#4)

Brandon, Katrina, Redford, Kent H., Sanderson, Steven E., eds. Parks in Peril: People, Politics, and Protected Areas. Washington, D.C.: Island Press, 1998. \$50 cloth, \$30 paper. 400 pp. (v9,#2)

Brandon, Robert N., Adaptation and Environment. Princeton: Princeton University Press, 1990. 232 pages. \$ 29.95. A theoretical study that focuses on the crucial role of environment in the process of adaptation, hoping to make evolution by natural selection more empirically testable. (v1,#4)

Brandt, Anthony, "Not in my Backyard," Audubon 99(no. 5, Sept.-Oct. 1997):58-62, 86-87, 102-103. The suburbanization of wildlife. Wildlife is rapidly encroaching on America's suburbs, and vice versa. How are we to tolerate the hometown proliferation of predators and prey? This includes not only deer and birds, but bears and cougars. Animals can become inconvenient. The real test comes when wildlife affects you and your property. Brandt lives on Long Island and has watched the deer populations become larger and more troublesome. (v8,#3)

Brandt, J., "The Landscape Of Landscape Ecologists," Landscape Ecology 15 (No. 3, Apr 01 2000): 181- . (v.11,#2)

Brandt, Richard, "Soviet Environment Slips Down the Agenda," Science, January 3, 1992. Environmentalism is strong in the new republics, but most people are more worried about sausages than pollution. The former Soviet Republic contains some of the worst environmental disasters known on Earth (as well as some of the most pristine regions remaining. People are muting their conservation concerns and protests against pollution and environmental degradation to give economic reform a chance. An October conference involving U. S. and Soviet scientists was titled, "The Social, Political, and Cultural Dimensions of the Environmental Crisis in the U.S. and the U.S.S.R. (v3,#1)

Branigin, William, "Immigration Policy Dispute Rocks Sierra Club," Washington Post (3/7/98): A2. Immigration's effect on U.S. population provokes Sierra Club debate. The official Sierra Club policy is to take no position on U.S. immigration levels. This has caused a faction in the Club to launch a referendum attempting to force club leadership to adopt a policy calling for ending U.S. population growth by means of birth control and a reduction in net immigration. Club director Carl Pope believes that although "overpopulation is, without question, a fundamental cause of the world's ills," he also believes that "these are fundamentally global problems; immigration is merely a local symptom." Furthermore, Pope argues that adopting such a policy would lead to the perception that the Club is assisting people with racist motivations. Supporters of the position favoring immigration reduction included Lester Brown and E.O. Wilson. One activist claims the issue is "a question of being environmentally correct versus being politically correct." U.S. population now stands at 269 million, and legal and illegal immigration add about 1.2 million people a year. When U.S.-born children of recent immigrants are included in the equation, immigration accounts for more than half of today's population growth. Mainly because of high fertility rates of immigrant women, the Census Bureau has sharply revised its projections of U.S. population by the middle of the next century. Instead of leveling off at 300 million, the estimate is now that the population will reach 400 million by 2050 and keep growing. Immigration-control activists assert that this estimate is too low because it is based on levels of immigration significantly lower than current numbers. They believe that 500 million is a more likely projection. The immigration reduction referendum was defeated by Club membership. (v9,#2)

Brashares, J. S. and Sam, M. K., "How Much is Enough? Estimating the Minimum Sampling Required for Effective Monitoring of African Reserves," Biodiversity and Conservation 14(no. 11, October 2005): 2709-2722.

Brashares, Justin et al, "Bushmeat Hunting, Wildlife Declines, and Fish Supply in West Africa," Science 306 (12 November 2004):1180-1198. Bushmeat hunting is a multi-billion dollar trade in the tropics. In Ghana, the bushmeat trade is now greatly increased due to the shortage of fish, a dietary staple in the region. The fish are in short supply for local peoples due to increased commercial fishing, much of it illegal pirate fishing. Brashares in the Conservation Biology Group, Department of Zoology, Cambridge University. (v.14, #4)

Bratton, S. Power. "Christianity and Human Demographic Change: Towards a Diagnostic Ethic," Biodiversity and Conservation 4(no.8, NOV. 1995):869- . (v6,#4)

Bratton, Susan Power, and Hinz, Shawn, "Ethical responses to commercial fisheries decline in the republic of Ireland," Ethics and the Environment 7(no. 1, 2002):54-91. An open-ended questionnaire elicited concepts of virtue and duty, and ethical language and priorities from commercial fishers and residents of ports in the Republic of Ireland. Respondents came from viable and stressed fisheries and from nontraditional and traditional natural resources communities (including one in Gaeltacht). In reporting the characteristics of a "good" fisher, viable fisheries emphasized virtues such as work ethic, respect for the crew, and respect for the sea. The responses from stressed fisheries materialized virtue, and decreased emphasis on interpersonal relationships while increasing emphasis on owning a large vessel, investing, and being greedy. Most noble actions primarily concerned rescues and sharing equipment and

time in difficult circumstances. Worst actions concerned physical damage to gear, persons, or to the marine environment. Respondents personified the sea, and used similar vocabulary to express care for people and for marine organisms. Although respondents from all communities thought over-fishing and illegal fishing were threats to the fishery, respondents from viable fisheries were more likely to believe they could take personal conservation action to protect the fishery, while those from stressed fisheries despaired of personal protective action and believed that nothing could be done, or that excluding the foreign fleets was necessary for Irish fisheries to recover. European Community policies often conflict with the norms of traditional, artisanal fishers. (E&E)

Bratton, Susan Power. "The Original Desert Solitaire: Early Christian Monasticism and Wilderness." Environmental Ethics 10(1988):31-53. Roderick Nash's conclusion in Wilderness and the American Mind that St. Francis "stood alone in a posture of humility and respect before the natural world" is not supported by thorough analysis of monastic literature. Rather St. Francis stands at the end of a thousand-year monastic tradition. Investigation of the "histories" and sayings of the desert fathers produces frequent references to the environment, particularly to wildlife. In stories about lions, wolves, antelopes, and other animals, the monks sometimes exercise spiritual powers over the animals, but frequently the relationship is reciprocal: the monks provide for the animals and the animals provide for the monks. This literature personifies wild animals and portrays them as possessing Christian virtues. The desert monk is portrayed as the "new Adam" living at peace with creation. Some of the literature is anti-urban, with the city treated as a place of sin, the desert a place of purification. The wilderness functions much as a monk's cell, providing freedom from worldly concerns and a solitary place for prayer and contemplation. The monks' relationship to the desert is evidence of their spiritual progress. (EE) Interesting review of the historical sources and stories of the early Christian fathers and their relationship to wilderness as a place of spiritual enlightenment. (Katz, Bibl # 2) Bratton is at the Institute of Ecology, University of Georgia, Athens, GA.

Bratton, Susan Power, "Thinking Like a Mackerel: Rachel Carson's Under the Sea-Wind as a Source for a Trans-ecotonal Sea Ethic," Ethics and the Environment 9(no. 1, 2004):1-22. In contrast to "the land ethic," Rachel Carson's Under the Sea-Wind suggests a trans-ecotonal sea ethic, which understands human's perception as inhibited by ecotones, such as shorelines and the ocean surface, and suggests four foundational concepts: 1.) Humans are not fully adapted to life in the oceans. 2.) Humans need to understand the scale and complexity of ocean ecosystems. 3.) Humans disrupt ocean ecosystems by overharvesting their productivity, and modifying ecosystem processes and linkages, such as migrations. 4.) Human imagination and rational scientific investigation can traverse the ecotones, allowing us to more fully value ocean life and processes. Bratton is in environmental studies, Baylor University, Waco, TX. (E&E)

Bratton, Susan Power. "Loving Nature: Eros or Agape?" Environmental Ethics 14(1992):3-25. Christian ethics are usually based on a theology of love. In the case of Christian relationships to nature, Christian environmental writers have either suggested eros as a primary source for Christian love, without dealing with traditional Christian arguments against eros, or have assumed agape (spiritual love or sacrificial love) is the appropriate mode, without defining how agape should function in human relationships with the nonhuman portion of the universe. I demonstrate that God's love for nature has the same form and characteristics as God's love for human beings, and that because agape is self-giving, it is preferable to eros in relationships with the environment. Agape concerning nature (1) is spontaneous and unmotivated, (2) is indifferent to value, (3) creates value, (4) initiates relationships with the divine, (5) recognizes individuality, (6) provides freedom, and (7) produces action and suffering. Agape might best be defined, not as Platonic ascent above the world, but as completely self-giving engagement with the world. Human love for nature is often limited by a human inability to accept love, including divine love, from nature. Flowing from God, agape cannot require reciprocity; yet, agape understands what "the other" has to give

and can offer it complete valuation. Agape is the ideal form of human interaction with nature, because agape does not require equal status or ability, or common goals or needs. Love between humans and members of the land (or sea) community can be sacrificial, and should be distinguished by a loss of self-regard and a willingness to suffer. Further philosophical and theological discussion of the role of reciprocity and sacrifice in love for nature is highly desirable. Bratton is in the department of Natural Sciences, Messiah College, Grantham, PA. (EE)

Bratton, Susan Power. Review of Beauty of the Lord. By Richard Cartwright Austin. Environmental Ethics 11(1989):277-80.

Bratton, Susan Power. "Luc Ferry's Critique of Deep Ecology, Nazi Nature Protection Laws, and Environmental Anti-Semitism," Ethics and the Environment 4(1999):3-22. Neo-Humanist Luc Ferry (1995) has compared deep ecology's declarations of intrinsic value in nature to the Third Reich's nature protection laws, which prohibit maltreatment of animals having "worth in themselves." Ferry's questionable approach fails to document the relationship between Nazi environmentalism and Nazi racism. German high art and mass media historically presented nature as dualistic, and portrayed Untermenschen as unnatural or inorganic. Nazi propaganda excluded Jews from nature, and identified traditional Jews as cruel to animals. Ferry's idealization of Humanism under-reports the pervasiveness of anti-Semitism in European thought, including the French Enlightenment. Bratton is at Whitworth College. (E&E)

Bratton, Susan Power, "Christianity and the Irish Landscape in Lady Augusta Gregory's A Book of Saints and Wonders," Ecotheology No 7 (July 1999):81-97.

Bratton, Susan Power. Review of The Spirit of the Earth. By John Hart. Environmental Ethics 7(1985):283-85.

Bratton, Susan Power. Review of The Dream of the Earth. By Thomas Berry. Environmental Ethics 12(1990):87-89.

Bratton, Susan P., "Teaching Environmental Ethics from a Theological Perspective," Religious Education 85(1)(1990):25-33. Bratton teaches philosophy at the University of North Texas, Denton.

Bratton, Susan Power. Six Billion and More: Human Population Regulation and Christian Ethics. Louisville, KY: Westminster/ John Knox Press, 1992

Bratton, Susan Power. Review of Loving Nature: Ecological Integrity and Christian Responsibility. By James A. Nash. Environmental Ethics 15(1993):93-96.

Bratton, Susan Power. "The Ecotheology of James Watt." Environmental Ethics 5(1983):225-36. The popular press has claimed that (former) Secretary of the Interior James Watt bases his philosophy of environmental management on his religious views as a charismatic Christian. An examination of Watt's published statements indicates: (1) his philosophy of environmental management stems largely from economic and political considerations; (2) he has a relatively simple ecotheology based on concepts such as God providing creation as a blessing for mankind, and mankind having a stewardship responsibility to use resources to provide for people; (3) his ecotheology does not incorporate any characteristically charismatic ideas; and (4) his ecotheology does not strongly parallel that of conservative Christian theologians who have written on environmental issues. This analysis suggests that for the new "Christian politic" as a whole, there is a danger of confusing the scriptural with the cultural and political in the area of environmental ethics. If a Christian ecotheology is going to be used for environmental decision making, it should be developed fully and represent scripture accurately and completely. Bratton is at the

Institute of Ecology, University of Georgia, Athens, GA. (EE)

Bratton, Susan Power. "National Park Management and Values." Environmental Ethics 7(1985):117-33. Throughout the history of the U.S. national park system, park advocates and managers have changed both acquisition priorities and internal management policies. The park movement began with the establishment of large, spectacular natural areas, primarily in the West. As the movement developed there was more emphasis on the biological, on recreation, and on parks near population centers. Gradually, scenic wonders and uniqueness have become less necessary to designation and the types of sites eligible have diversified. Early managers treated the parks as relatively unchanging, threatened by little other than human vandalism. Initially managers removed "bad" animals, such as wolves, and suppressed disturbances, such as fire. Modern management values processes as well as objects and recognizes change and disturbance as integral to park maintenance. A conversion to an ecosystem mode of management does not answer all questions concerning values, however, and may present some disadvantages, such as a tendency to treat nature as a series of functions and energy equations, thus weakening aesthetic values. Bratton is at the Institute of Ecology, University of Georgia, Athens, GA. (EE)

Bratton, Susan Power. "Lopsided Justice and Eco-Realities for Women." CTNS (Center for Theology and Natural Science) Bulletin 16, no. 2 (Spring 1996): 18-27. Women's overall low status in the public sphere has limited their environmental representation. Environmental strategies must improve women's ability to participate in political and economic decision-making. We need some careful thinking by both women and men concerning ways in which we can develop more woman-inclusive environmental strategies. Bratton teaches in science, technology, and culture at Whitworth College, Spokane, Washington. (v7, #3)

Bratton, Susan Power, Six Billion and More: Human Population Regulation and Christian Ethics. Philadelphia: Westminster/John Knox Press, 1992. 225 pages. paper. Chapter titles: The Crowded Cosmos; Why Populations Rise and Fall; Abraham's Seed: The Bible and Reproduction; Black Death and the New Jerusalem; The Stolen Blessing: Population and the Environment; Shoving Children out of Lifeboats; The "Declining" Developed Nations; The Exploding Third World; Population Regulation and Justice; Coercion and Abortion in Population Management. Bratton is professor of biology at Messiah College, Grantham, PA. (v3,#1). Reviewed by John B. Cobb, Jr., in Environmental Ethics 16(1994):103-106.

Bratton, Susan Power. "Christian Ecotheology and the Old Testament." Environmental Ethics 6(1984):195-209. Because of its theocentric nature and the dispersion of relevant passages, the Old Testament presentation of creation theology is frequently misunderstood. I investigate the works of modern Old Testament scholars, particularly Walther Eichrodt, Gerhard von Rad, and Claus Westermann, in regard to the theology of creation. Using principles of analysis suggested by Gerhard Hasel, I discuss how the Old Testament portrays God as acting in both the original creation and post-Genesis events. The role of God as creator is not independent of other major Old Testament themes, such as God the savior. God's care for creation continues as does his blessing. Bratton is at the Institute of Ecology, University of Georgia, Athens, GA. (EE)

Bratton, Susan Power, 1993. Christianity, Wilderness, and Wildlife: The Original Desert Solitaire. Scranton, PA: University of Scranton Press. (v4,#1)

Bratton, Susan Power. *Environmental Values in Christian Art*. Albany: State University of New York Press, 2008. In environmental studies, a common claim is that Christianity brought a transcendent God outside of nature and a hostility to nature. Bratton claims, to the contrary, that nature is included in the vision of Christian redemption. She examines Christian art and architecture from early third-century

Rome to seventeenth-century Netherlands for the role nonhumans play in this art and how Christian art represents the ownership and management of natural resources. Bratton is in environmental studies at Baylor University.

Braun, B., "Environmental issues: writing a more than human urban geography," Progress in Human Geography 29(no. 5, 2005): 635-650.

Braun, Bruce, Castree, Noel, eds., Remaking Reality: Nature at the Millennium. New York: Routledge, 1998.

The construction of nature and the nature of construction, analytical and political tools for building survivable futures. Science, social constructivism, and nature. Sample contents:

-Katz, Cindi, "Whose nature, whose culture?: Private productions of space and the 'preservation' of nature."

-Keil, Roger, and Graham, John, "Reasserting nature: Constructing urban environments after Fordism."

-McCarthy, James, "Environmentalism, wise use and the nature of accumulation in the rural West."

-Demeritt, David, "Science, social constructivism and nature."

-Smith, Neil, "Nature at the millennium: Production and re-enchantment." (v.13,#4)

Braun, Elisabeth. Portraits in Conservation: Eastern and Southern Africa. Ojai, California: The WILD Foundation, Nov. 1995. \$28. Studies of individual men and women who have dedicated themselves to conservation in Africa. Leading conservationists such as the Krauses, who began the Cheetah Conservation Fund in Namibia, or Michael Werikhe, who has mobilized a grass-roots movement to save the rhino from poachers. Descriptions of village-based projects and the individuals involved in them reveal an evolving conservation philosophy. (v7,#4)

Braun, Judy A., and David Wood, Environmental Education in the Schools: Creating a Program that Works. Troy, Ohio: North American Association for Environmental Education (NAAEE) (Box 400, Troy, OH 45373, USA), 1994. ISBN 1-884008-08-9. Environmental education, including ethics, with children and youth, in the field or in elementary and secondary schools. Thousands of ideas. Originally prepared for the U.S Peace Corps. (v6,#2)

Brax, J, "Zoning the Oceans: Using the National Marine Sanctuaries Act and the Antiquities Act to Establish Marine Protection Areas and Marine Reserves in America," Ecology Law Quarterly 29(no.1, 2002): 79-129. (v.13,#4)

Bray, David Barton. "Peasant Organizations and 'The Permanent Reconstruction of Nature': Grassroots Sustainable Development in Rural Mexico," The Journal of Environment and Development 4, no. 2 (Summer 1995): 185- . (v6,#4)

Bray, DB; Sanchez, JLP; Murphy, EC, "Social Dimensions of Organic Coffee Production in Mexico: Lessons for Eco-Labeling Initiatives," Society and Natural Resources 15(no.5, 2002):429-446. (v.13, #3)

Bray, Katrina, Review of Kempton, Willett, Boster, James S., Hartley, Jennifer A., Environmental Values in American Culture. Environmental Values 5(1996):274-276. (EV)

Brecher, Jeremy, Costello, Tim, and Smith, Brendan, Globalization from Below: The Power of Solidarity. Cambridge, MA: South End Press, 2000. Will the growth of broad grassroots protest movements succeed in entering the political lists and transform the corporate-led global agenda?

Brechin, Steven R. Planting Trees in the Developing World. Baltimore, Maryland: The Johns Hopkins University Press, 1997. 280pp. \$48.50. Brechin draws upon organizational sociology to explain why three

internationaal organizations--the World Bank, the Forestry Department of the Food and Agriculture Organizations, and CARE, USA--perform so differently while promoting rural development forestry projects in Africa, Asia, and Latin America. (v8,#1)

Breckenridge, Lee P., "Nonprofit Environmental Organizations and the Restructuring of Institutions for Ecosystem Management," Ecology Law Quarterly 25(No.4, 1999):692-. (v.10,#2)

Bredahl, Maury, Philip C. Abbott, and Michael R. Reed, eds. Competitiveness in International Food Markets. Boulder, CO: Westview Press, 1993. 343 pages. \$45.00. (v5,#2)

Breed, Allen, "Blocking of waterways prompts ownership debate," The Charleston Post and Courier (5/31/98): B7. Who owns the waterways? With millions turning to nature for recreation and as developers move deeper into the woods to build second homes, conflicts between private property rights and river access and use are increasing. In Arkansas, a farmer has strung barbed wire across a creek known for its excellent smallmouth-bass fishery. In Colorado, a landowner's plan to build a low bridge across the Taylor river seems an attempt to force travelers to trespass on shore. A New York State Court of Appeals has ruled that a private landowner holds the exclusive fishery rights on the Salmon River near Syracuse, even though the fish were stocked by the state. Laws vary from state to state and may depend on the stream. In some states, you can float a "privately owned" stream but trespass if you push off the bottom or anchor your boat. Some landowners' titles contain "kings grants" to exclusive rights to the flowing water. River users point to the Magna Carta as a basis for the public's right to use rivers. In the 13th Century, the exclusion of the public from England's forests and streams helped prompt the Magna Carta, which includes the right to a free fishery and the liberty of navigation. (v9,#2)

Bregman, J. I. "Environmental Laws and Regulations As Project Stoppers", Journal of Environmental Law & Practice 4(no.3, 1996):33. How to use environmental requirements to stop projects--or to prevent this from happening. (v7,#4)

Brehm, Joan; Eisenhauer, Brian, "Environmental Concern in the Mormon Culture Region," Society and Natural Resources 19 (no.5, May-June 2006): 393-410 (18).

Brende, Eric. *Better Off: Flipping the Switch on Technology*. New York: Harper Collins, 2004. Brende, a graduate student at MIT, moved in to a "Minimite" (aka Mennonite) community to ask: "Was there some baseline of minimal machinery needed for humane convenience, comfort, and sociability - a line below which physical labor was too demanding and above which machines began to create their own demands?"

Brenkert, George G., "The Environment, The Moralists, the Corporation and Its Culture," Business Ethics Quarterly 5(1995):675-697. Business has its own special "ethics," which relates not simply to the internal nature of the corporation but also to the corporate (free market) system. Given this special ethics, business cannot in general be environmentally responsible in the manner that classical moralists demand. More far-reaching changes are needed.

Brennan, Andrew, Review of Norton, Bryan, Towards Unity among Environmentalists. Environmental Values Vol.2 No.3(1993):271.

Brennan, Andrew, "Environmental Awareness and Liberal Education," British Journal of Educational Studies 39(1991):270-296. There is "potential in environmental studies for the renewal of the educational process." Humans think and orient themselves in the world using "frameworks of ideas." "We can think of the goal of education for eco-literacy as posing a challenge to be met in more or less grand ways. In a minimal way, we can think of exploiting the frameworks familiar to students in the various academic disciplines in order to provide them with some degree of environmental awareness." "A grander proposal

for making eco-literacy more widespread [is that] we can perhaps best break way from modes of thought that draw on only one or two frameworks by providing transdisciplinary units and degree programs which encourage multi-framework thinking. Examples of these include degree programmes in human ecology, drawing upon the disciplines of various sciences as well as philosophy, politics and international law. If we can produce enough graduates to whom such thinking is natural, then there is some chance that a wider range of responses to our environmental problems will be forthcoming." Brennan was formerly in philosophy at the University of Stirling; he is now at the University of Western Australia, Perth. (v2,#1)

Brennan, Andrew, "Beyond the Social Contract", in M. Redclift and G. Woodgate, eds., The Sociology of the Environment. Edward Elgar, 1994. A reprint of chapter 12 of Brennan's Thinking About Nature.

Brennan, Andrew, ed., The Ethics of the Environment, in The International Research Library of Philosophy. 500 pages. Hardcover. \$ 134.95. Aldershot, Hampshire, U.K.: Dartmouth Publishing Co., forthcoming, spring 1994. U.S. Distributor: Ashgate Publishing Co., Old Post Road, Brookfield, VT 05036. Brennan is professor of philosophy, University of Western Australia. More on this in due course. (v4,#2)

Brennan, Andrew, "Poverty, Puritanism and Environmental Conflict," Environmental Values 7(1998): 305-331. The paper proposes two ideas: (1) The wilderness preservation movement has failed to identify key elements involved in situations of environmental conflict. (2) The same movement seems unaware of its location within a tradition which is both elitist and Puritan. Holmes Rolston's recent work on the apparent conflict between feeding people and saving nature appears to exemplify the two points. With respect to point (1), Rolston's treatment fails to address the institutional and structural features which set the agenda for individual human lives. The human ecology of environmental destruction cannot ignore the role of corporate actors such as banks, national governments, transnational corporations, trade unions and so on. These agents interact with each other in various ways and also have an internal structure - perhaps akin to Arthur Koestler's conception of the holarchy - which enables people working within them to avoid taking responsibility for policies that have damaging environmental consequences. As far as thesis (2) is concerned, Rolston's work shares common features with Arne Naess's deep ecology and Aldo Leopold's land ethic. All of these writers draw, perhaps unconsciously, on a tradition of sporting elitism associated with the Great White Hunter. One variety of this tradition combines elitism with a form of Puritanism. KEYWORDS: environmental conflict, Puritanism, poverty, elitism, human ecology, Rolston. Andrew Brennan is at The University of Western Australia. Perth. (EV)

Brennan, Andrew, "Ethics, Welfare and Money", N. Johnston, ed., Animals in Science Conference Proceedings, Melbourne: Monash University, 1995. (v7,#4)

Brennan, Andrew, "Reconsidering Deep Ecology", in Witoszek, Nina, ed. Rethinking Deep Ecology. Oslo: Centre for Development and the Environment, 1996 ISBN 82-90391-31-5. (v7,#4)

Brennan, Andrew, "Steps Towards a Greener University: The First Report of the Green University Task Force," December 1990. A University of Stirling report on making that university's campus green in operational and academic terms. Brennan is the principal author. (v2,#1)

Brennan, Andrew, "Incontinence, Self-Deception, Shallow Analysis, Myth-making, and Economic Rationality: Their Bearing on Environmental Policy." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Brennan, Andrew, Thinking About Nature: An Investigation of Nature, Value and Ecology. Athens, GA: The University of Georgia Press, 1988. PP. xiii, 235. This is a careful argument in defense of what the

author terms "ecological humanism." Ecological humanism is an environmental holism based on an ecological re-interpretation of human nature, without questionable metaphysical assumptions or value claims about systems, collections, or aggregates. In the first half of the book, Brennan discusses epistemological frameworks, the philosophy of science, reduction and holism, functions, and ecological theory, to arrive at the apparently simple core idea: "what something is and does depends in part on where it is" (p. 117). This "ecological" perspective reveals that objects are constituted by a combination of their internal properties and their external relationships.

Ecological theory thus permits a thoroughgoing critique of contemporary moral theory. Utilitarianism, Kantianism, and contract theory all ignore "the ecological facts of life." They assume that value or good can be defined in some abstract way without a regard to context: ecological, natural, social, political, and economic (p. 174, and Chaps. 11 and 12). Ecological humanism creates a theory of value and a system of ethics based on the way humans actually live in a natural and social world: "it involves the recognition that all human life is lived within some natural context and that it is in terms of that context that the identities of very different human lives are forged" (p. 184). The strength of this book is the blending of several disciplines of philosophy and science. Brennan shows by his practice that environmental philosophy is not a marginal enterprise, but a necessary component of any meaningful epistemology, metaphysics, or ethics. In the process, he offers solutions to several puzzles about human and natural value that have plagued environmental ethics. The book ends with an excellent summary of practical policy proposals. (Katz, Bibl # 2)
Reviewed in Environmental Ethics 11(1989):259-67.

Brennan, Andrew A., "Ecological Theory and Value in Nature," Philosophical Inquiry 8, nos. 1-2 (Winter-Spring 1986):66-95. Certain current ecological theories do not support the Deep Ecologist intuition that ecosystems are "superindividual organisms." Brennan thus suggests that a community theory of ecosystemic structure "will most plausibly capture the moral insights urged by deep ecologists." (p. 89). (Katz, Bibl # 1)

Brennan, Andrew, "Environmental Decision-Making," in R.J. Berry volume, Environmental Dilemmas: Ethics and Decisions (London: Chapman and Hall, 1993), 271 pages. A widespread, puzzling phenomenon underlies our inability to tackle environmental issues. This is the plight of those who are "incontinent" in Aristotle's term. Recent philosophy recognizes self-deception and bad faith as a widespread human failing. We are a long way, in governments, public agencies, and corporations, from full honesty in our debates on the environment. To make progress in tackling our increasingly desperate environmental plight we have to make strenuous efforts to overcome our myth-making and ready acceptance of partial, shallow versions of the truth. Many of those who regard themselves as morally deep fall foul of such shallowness. Brennan reaches in net result a blend of pessimism and qualified optimism. We are always going to be prone to self-deception and incontinence, deep seated and largely unchanging aspects of human life, but there is nothing equally inevitable about shallow and mythic thinking. These failings can be identified now and guarded against. (v4,#1)

Brennan, Andrew and Lo, Yeuk-Sze, "Environmental Ethics," in Stanford Encyclopedia of Philosophy. Online at <http://plato.stanford.edu/entries/ethics-environmental/>
Introductory article, suitable for use with students. Environmental ethics is the discipline that studies the moral relationship of human beings to, and also the value and moral status of, the environment and its nonhuman contents. This entry covers (1) the challenge of environmental ethics to the anthropocentrism (i.e. human-centeredness) embedded in traditional western ethical thinking; (2) the early development of the discipline in the 1960's and 1970's, (3) the connection of deep ecology, feminist environmental ethics, and social ecology to politics, (4) the attempt to apply traditional ethical theories, including consequentialism, deontology, and virtue ethics, to support contemporary environmental concerns, and (5) the focus of environmental literature on wilderness, and possible future developments of the discipline. Brennan is at the University of Western Australia, Perth. (v.13, #3)

Brennan, Andrew, "Ethics, Ecology, and Economics," Biodiversity and Conservation 4(1995):798-811. Also in Cooper, Nigel and Carling, R.C.J., eds., Ecologists and Ethical Judgments. London: Chapman and Hall, 1996. The general structure of an environmental philosophy. There can be many such philosophies, and those with their roots in economic theory have been extensively studied recently. Specific examples include the work of David Pearce and Robert Goodin. Economics-based philosophies can founder on the issue of externalities and a misplaced attempt to provide a comprehensive approach to valuing nature as a bundle of goods and services. It is dangerously easy to slide from considering nature as a standing reserve of processes and objects that have the potential to satisfy human desires to the idea that it is nothing more than that. In general, the consequentialist basis of economics limits its usefulness in contributing to informed environmental decisions. But there is room for a sensitive use of institutional environmental economics as a partial guide for our reflections and choices. Any such development should take on board the existence of a plurality of perspectives on fundamental issues and the pluralism of values that can be found within moral theory itself. Brennan is in philosophy at the University of Western Australia, Perth.

Brennan, Andrew, "Moral Pluralism and the Environment." Environmental Values Vol.1 No.1(1992):15-34. ABSTRACT: Cost-benefit analysis makes the assumption that everything from consumer goods to endangered species may in principle be given a value by which its worth can be compared with that of anything else, even though the actual measurement of such value may be difficult in practice. The assumption is shown to fail, even in simple cases, and the analysis to be incapable of taking into account the transformative value of new experiences. Several kinds of value are identified, by no means all commensurable with one another--a situation with which both economics and contemporary ethical theory must come to terms. A radical moral pluralism is recommended as in no way incompatible with the requirements of rationality, which allows that the business of living decently involves many kinds of principles and various sorts of responsibilities. In environmental ethics, pluralism offers the hope of reconciling various rival theories even if none of them is universally applicable. KEYWORDS: Cost-benefit analysis, pluralism, preferences, rationality, transformative values. Philosophy Department, University of Western Australia, Nedlands, Perth, WA 6009 Australia.

Brennan, Andrew, "Environmental Ethics," in Routledge Encyclopedia of Philosophy, 10 vols, ed, Edward Craig (London: Routledge, 1998) in vol. 3, pp. 333-336. Brennan is in philosophy, University of Western Australia, Perth. (v.13,#1)

Brennan, Andrew, ed., The Ethics of the Environment. Aldershot, Hampshire, U.K.: Dartmouth Publishing Co., 1995. 583 pages. U. S. Distributor: Ashgate Publishing Co., Old Post Road, Brookfield, VT 05036. 802/276-3162. Hardcover, \$ 149.95. Unlike most other anthologies, this collection is aimed at the research level rather than the introductory one. Brennan has written an introduction which summarizes the intellectual and philosophical problems facing environmental philosophy and supplies a select bibliography. The collection, which looks like a hefty legal volume, is designed mainly for library purchase, and is part of a larger series: The International Research Library of Philosophy. Though expensive, it provides a complete introduction to the original academic literature. Academics may wish to request their librarians to get it. In keeping with the policy of the series, papers are included only if they originally appeared in academic journals. One useful feature of the volume is that the papers are not re-typeset but reprinted as photocopied in their original form, unabridged and including the original journal pagination. Another feature is that essays are grouped together so that subsequent ones comment directly on earlier ones. As a result readers can follow an emerging dialogue. The volume contains 33 papers organized in the following sections: Intrinsic Value and Moral Standing, with papers by P. Taylor, G. H. Paske, A. Brennan, J. O'Neill. Species, Ecosystems and Interests, with papers by H. Rolston, G. Varner and H. Cahen. Deep Ecology and Radical Environmentalism, with papers by A. Naess, F. Mathews, P. Reed, T. Birch, R. Guha and D. M. Johns. Ecology and Feminism, with papers by V. Plumwood, J. Cheney, K. Warren and A. K. Salleh. Are Humans Part of Nature or Separate From It?,

with papers by H. Rolston, M. Smith, A. Gunn, J. B. Callicott. Policy Dilemmas and Pluralism, with papers by M. Sagoff, K. Shrader-Frechette, B. Norton, C. D. Stone, J. B. Callicott and A. Brennan. Brennan teaches philosophy at the University of Western Australia. (v6,#4)

Brennan, Andrew, "Environmental Literacy and Educational Ideal." Environmental Values 3(1994):3-16. Environmental literacy is not encouraged by discipline-based education. Discipline-based education is damaging not only because it breaks the link between experience and theory but also because it encourages learners to believe that complex practical problems can be solved using the resources of just one or two specialist disciplines or frameworks of thought. It is argued that discipline-based education has been extremely successful, and its very success is a factor which explains some of our poor thinking about environmental problems. These problems are highly complex, and it is important for learners to discover the limitations of particularly important in the case of economics. An education which emphasizes the limitations of specialist approaches to complex problems can also be used to help overcome the depersonalizing effect of bureaucracies. KEYWORDS: Environmental literacy, frameworks, education, ecology, Dewey, Freire, economics, liberal education, Hirst, bureaucracy. Brennan is with Dept. of Philosophy, University of Western Australia, Perth. (EV)

Brennan, Andrew, "Environmental Ethics," in Craig, Edward, ed., Routledge Encyclopedia of Philosophy, 10 vols. (London: Routledge, 1998), in vol. 3, pages 333-336. Also available on CD. This competent article introducing the field in this major, ten-volume encyclopedia, effectively replacing the old five-volume Edwards Encyclopedia of Philosophy is a welcome addition to the literature, and recognizes that environmental ethics has become an established discipline within philosophy. Brennan is in philosophy at the University of Western Australia, Perth. (The set is expensive, about £2,000 with the CD, so your college and university librarians may need some encouragement to purchase it.)

Brennan, Andrew, "The Moral Standing of Natural Objects," Environmental Ethics 6(1984):35-56. Perhaps the most significant paper in recent years. Brennan offers an original candidate for the source of "moral considerability" or "intrinsic value" in natural entities: natural entities lack an "intrinsic function"; they were not designed for a purpose. It is that lack of design which distinguishes them from man-made artifacts. Brennan uses this concept to show the difference in moral attitude towards natural objects and art objects. The end of this essay begins to tackle some of the problems of holism, but the work is left undone: do whole groups, such as families or ecosystems, lack an intrinsic function? If so, then these deserve moral consideration over and above the individuals that comprise them. (Katz, Bibl # 1)

Brennan, Andrew, "Animal Ethics: Time for a New Approach?" in Baker R. M. et al., Animals and Science in the Twenty-first Century: New Technologies and Challenges, Melbourne: ANZCCART, 1995, pages 85-93. (v7,#4)

Brennan, Andrew, Review of Steven Vogel, Against Nature: The Concept of Nature in Critical Theory. Environmental Ethics 20(1998):207-10.

Brennan, Andrew. Review of Politics of Nature: How to Bring the Sciences into Democracy. By Bruno Latour. Environmental Ethics 28(2006):221-224. (EE)

Brennan, Andrew. "Ethics, Ecology and Economics," Biodiversity and Conservation 4(no.8, Nov. 1995):798- . (v6,#4)

Brennan, Andrew. "The Moral Standing of Natural Objects." Environmental Ethics 6(1984):35-56. Human beings are, as far as we know, the only animals to have moral concerns and to adopt moralities, but it would be a mistake to be misled by this fact into thinking that humans are also the only proper objects of moral consideration. I argue that we ought to allow even nonliving things a significant moral

status, thus denying the conclusion of much contemporary moral thinking. First, I consider the possibility of giving moral consideration to nonliving things. Second, I put forward grounds which justify this extension of morality beyond its conventional boundaries. Third, I argue that natural objects have a status different from a special class of artifacts--works of art. Fourth, I discuss the notion of interest, and fifth I look briefly at the status of natural systems and at ways we might link the proposed extension of moral considerability with the rest of our moral thinking. Brennan is at the Philosophy Dept., University of Stirling, Stirling, Scotland, UK. (EE)

Brennan, Andrew. University of Stirling, Scotland, has collaborated with Sean Smith of St. Andrews University, Scotland, to produce a comprehensive 45 page bibliography of the last twenty years of environmental ethics. Three separate publications are: Anthony Ellis, Ethics for Environmentalists; Andrew Brennan, Environmental Philosophy; and Andrew Brennan, Bibliography of Recent Work in Environmental Ethics. They are available from The Centre for Philosophy and Public Affairs, University of St. Andrews, KY16 9AL, Scotland. (v1,#1)

Brennan, Jason, "Dominating Nature," *Environmental Values* 16(2007): 513-528. Something is wrong with the desire to dominate nature. In this paper, I explain both the causes and solution to anti-environmental attitudes within the framework of Hegel's master-slave dialectic. I argue that the master-slave dialectic (interpreted as a metaphor, rather than literally) can provide reasons against taking an attitude of domination, and instead gives reasons to seek to be worthy of respect from nature, though nature cannot, of course, respect us. I then discuss what the social and economic conditions of moving to a post-domination philosophy appear to be. Brennan is in political science, Brown University, Providence, Rhode Island.

Brennan, M. A., Luloff, A. E. and Finley, J. C., "Building Sustainable Communities in Forested Regions," Society and Natural Resources 18(no. 9, October 2005): 779-789.

Brennan, Teresa, Globalization and its Terrors. New York: Routledge, 2003. An exposé of the false promises of globalization. The reckless pursuit of shareholder value is jeopardizing an environment whose diversity and abundance accumulated over millennia. The traumas inflicted by globalization, from cancer rates to road deaths, from extreme weather patterns to the poisoning of oceans.

Breuilly, Elizabeth and Martin Palmer, ed., Christianity and Ecology, 118 pages. In a series; the others are: Batchelor, Martine, and Kerry Brown, ed., Buddhism and Ecology, 114 pages. Ranchor Prime, Hinduism and Ecology, 118 pages. Khalid, Fazlun with Joanne O'Brien, ed., 111 pages. Rose, Aubrey, ed., Judaism and Ecology, 142 pages. The editors in each case include a variety of perspectives from that tradition (Prime is a single author, but interviews various persons). All in paper. London: Cassell Publishers Limited, for the World Wide Fund for Nature, 1992. \$ 5.99 each. A review of the series is in CTNS (Center for Theology and Natural Sciences) Bulletin 16 (no. 3, Summer, 1996):18-19.

Breuilly, Elizabeth and Martin Palmer, eds. Christianity and Ecology. London and New York: Cassel, 1992. 128 pages. (v4,#3)

Brewer, C, "Cultivating Conservation Literacy: "Trickle-Down" Education Is Not Enough," Conservation Biology 15(no.5, 2001): 1203-05. (v.13,#2)

Brewer, Garry D. "Science to Serve the Common Good," Environment 39(no.6, 1997):25. A recent report on the salmon problem in the Pacific Northwest highlights the kinds of new approaches needed to enable society better to deal with environmental problems. (v8,#3)

Brey, Philip, "Space-Shaping Technologies and the Geographical Disembedding of Place," Philosophy and Geography 3 (1998): 239-263. Brey is assistant professor in the department of philosophy at Twente

University. (P&G)

Brick, P., "The Greening of Political Science: Growth Pains and New Directions," Perspectives on Politics 2(no. 2, 2004):337-346. Environmental politics is often characterized, incorrectly, as an "advocacy field." when it is typically much more "objective."

Brick, Phil. "Determined Opposition: The Wise Use Movement Challenges Environmentalism," Environment 37(no.8, Oct. 1995):16- . The success of the Wise Use movement articulates the need for environmental activists to reassess their strategies as the nation's political and social climate changes. (v6,#4)

Brick, Philip, Snow, Donald, Van de Wetering, Sarah, eds. Across the Great Divide: Explorations in Collaborative Conservation and the American West. 256 pages. Cloth \$50. Paper \$25. Collaborative conservation as a new approach to environmental problem solving. (v.11,#4)

Brick, Philip D., Cawley, R. McGregor, eds. A Wolf in the Garden: The Land Rights Movement and the New Environmental Debate. Review by Gary E. Varner, Environmental Ethics 20(1998):441-43.

Brick, Philip, and Cawley, R. McGregor, eds. The Land Rights Movement and the Renewal of the American Environmental Movement. Lanham, MD: Rowman & Littlefield, 1996. \$ 62.50., cloth; \$ 24, paper. Land tenure and environmental policy, especially in the Western United States. (v7, #3)

Bricker, Jennie L., and David E. Filippi, "Endangered Species Act Enforcement and Western Water Law," Environmental Law 30(no.4, 2000): 735-. Ms. Bricker and Mr. Filippi examine the intersection between the federal Endangered Species Act and western state water law. While the federal fish agencies are calling on water users to contribute a "proportionate share" of their water rights to meet instream flow needs for listed fish populations, the authors contend that a more precise, predictable, and fair approach is one that adheres to the basic principles of the prior appropriation doctrine. (v.12,#3)

Bricker, Jennie, "Wheelchair Accessibility in Wilderness Areas: The Nexus Between the ADA and the Wilderness Act", Environmental Law, 25(No.4, 1995):1243- . Bricker explores the interaction of the Americans with Disabilities Act and the Wilderness Act to determine whether wilderness areas can be made more accessible to individuals with disabilities while simultaneously protecting "wilderness character" in those areas. She concludes that greater access is allowable under the Wilderness Act, though not reflected adequately in currently proposed ADA regulations. (v7,#1)

Bridges, Olga, Bridges, J.W. Losing Hope: The Environment and Health in Russia. Brookfield, VT: Ashgate, 1996. 288 pp. \$69.95.

Bridges, Olga, Bridges, J.W. Losing Hope: The Environment and Health in Russia. Brookfield, VT: Ashgate, 1996. 288 pp. \$69.95.

Bridges, Olga, Bridges, J.W. Loosing Hope: The Environment and Health in Russia. 288 pp. \$68.95. Brookfield, Vt.: Ashgate, 1996. An account of the various environmental factors that have resulted in the appalling deterioration of public health in Russia over the past 5-8 years and of the political, legal, technical and economic measures being taken to remedy the situation. (v8,#2)

Bridgman, Howard, Global Air Pollution: Problems for the 1990's. Columbia University Press, 1991. 288 pages. \$ 20.00 paper, \$ 59.00 cloth. Also Belhaven Press in the United Kingdom. Scientific principles in relation to social, political, and economic issues. (v2,#3)

Bridgman, Howard, Warner, Robin, Dodson, John. Urban Biophysical Environments. New York: Oxford University Press, 1996. 166pp. \$22.95. An assessment of current and emerging environmental problems from a physical point of view. The authors take a multi-disciplinary approach to understanding and managing the impact of cities on the atmosphere, climate, surface water, and groundwater, soil, flora, and fauna, and ecosystems of Australia. (v8,#1)

Briese, D. T. "Biological Control of Weeds and Fire Management in Protected Natural Areas: Are They Compatible Strategies." Biological Conservation 77, no.2 (1996): 135. (v7, #3)

Briggle, Adam. Review of Inventing Nature: Ecological Restoration by Public Experiments. By Matthias Gross. Environmental Ethics 27 (2005):333-334.

Briggs, James, "Ski Resorts and National Forests: Rethinking Forest Service Management Practices for Recreational Use," Boston College Environmental Affairs Law Review 28(no.1, 2000 Fall): 79-. (v.12,#3)

Briggs, John C. "Tropical Diversity and Conservation." Conservation Biology 10, no.3 (1996): 713. (v7, #3)

Briggs, John M. et al., "An Ecosystem in Transition: Causes and Consequences of the Conversion of Mesic Grassland to Shrubland," BioScience 55(no.3, March 2005):243-255(13). Woody plant expansion is one of the greatest contemporary threats to mesic grasslands of the central United States. In this article, we synthesize more than 20 years of research to elucidate the causes and consequences of the ongoing transition of C4-dominated grasslands to savanna-like ecosystems codominated by grasses and woody plants. This transition is contingent on fire-free intervals, which provide the opportunity for recruitment both of new individuals and of additional shrub and tree species into this grassland. Once shrubs establish, their cover increases regardless of fire frequency, and infrequent fires accelerate the spread of some shrub species. This process has resulted in a new dynamic state of shrub-grass coexistence in the mesic grasslands of North America. Important consequences of this shift in plant life-form abundance include alterations in plant productivity, species diversity, and carbon storage. Without drastic measures such as mechanical removal of shrubs, it is unlikely that management of fire and grazing regimes alone will be sufficient to restore historic grass dominance in these ecosystems.

Briggs, Robert. "Wild Thoughts: A Deconstructive Environmental Ethics?" Environmental Ethics 23(2001):115-134. Although environmental ethics has become more familiar and comfortable with the work of postmodernism, "deconstruction" in particular continues to be depicted as "destructive" and "nihilistic." A close examination of some specific works of deconstruction, however, shows that, far from denying responsibilities to the environment, deconstruction seeks to affirm a radical obligation toward the "other." Because this possibility is habitually ruled out by denunciations of deconstruction's imputed relativism, I begin with a dramatized account of the possible reception of deconstruction within environmental ethics in order to stage the ethical implications of modes of criticism. I then discuss specific parallels between the work of deconstruction and that of environmental ethics, and suggest that a deconstructive spirit is at the heart of environmental philosophy's recent and most important work on the question of "universal consideration." (EE)

Bright, A. D., Barro, S. C., and Burtz, R. T., "Public Attitudes toward Ecological Restoration in the Chicago Metropolitan Region," Society and Natural Resources 15(no.9, 2002): 763-86. (v.13,#4)

Bright, M., "Review of: John Benson, Environmental Ethics: An Introduction with Readings," Environmental Politics 12(no. 1, 2003): 285. (v 14, #3)

Brink, Ellen. "Pork, Politics, and Pollution," The Animals' Agenda 17(no.3,1997):31. A detailed look at the increasingly rancid business of hog factory farming. (v8,#3)

Brinkmann, Klaus, ed., Ethics: The Proceedings of the Twentieth World Congress of Philosophy, vol. 1 (Bowling Green Ohio: Philosophy Documentation Center, 1999). Note the extent to which environmental ethics is quite well represented in this, the first of twelve World Congress volumes. Contains:

--Attfield, Robin, "Depth, Trusteeship, and Redistribution," pages 159-168. I review some themes of Naess's "The Shallow and the Deep, Long-Range Ecology Movements" article and Routley's "Is There a Need for a New, An Environmental Ethic" presentation at the 1973 World Congress. Naess's affiliation to the Deep Ecology Movement deserves acclaim, theoretic entanglements notwithstanding. Routley advocated a new ethic because no Judaeo-Christian ethical tradition could cope with widespread environmental intuitions. However, the ethical tradition of stewardship can satisfy such concerns. It is compatible with environmental values, need not be managerial, and can assume a secular form. But the related responsibilities vary with wealth and power, and structural change is necessary to empower people currently unable to uphold it. Attfield is in philosophy at the University of Wales, Cardiff.

--Rolston, Holmes, III, "Nature and Culture in Environmental Ethics," Pages 151-158. The pivotal claim in environmental ethics is that humans in their cultures are out of sustainable relationships to the natural environments compromising the landscapes on which these cultures are superimposed. But bringing such culture into more intelligent relationships with the natural world requires not so much "naturalizing culture" as discriminating recognition of the radical differences between nature and culture, on the basis of which a dialectical ethic of complementarity may be possible. How far nature can and ought be managed and be transformed into humanized nature, resulting in "the end of nature," is a provocative question. Environmental ethics ought also to seek nature as an end in itself. Rolston is in philosophy at Colorado State University.

--Passmore, John, "Philosophy and Ecology," pages 141-150. There was a time when ecological problems were of no interest to philosophy. Now, these issues have raised philosophical problems in several areas. In moral philosophy, one question is what moral obligations, if any, we have to future generations, and another is how far we have moral obligations relating to the treatment and the preservation of plants, animals and atmospheres. In political philosophy, the issue is the range of such concepts as rights and justice, and whether or not they are limited to human relationships. As to the metaphysical question, we have to ask whether there is something about human beings which entitles us to consider them as being supernatural and whether we can think of Nature as an entity of which each human being constitutes a part. Passmore is in the Historical Studies Department, Australian National University, Canberra.

--Häyry, Matt and Takala, Tuija, "Biotechnology and the Environment: From Moral Objections to Ethical Analysis," pages 169-178. Rights can be founded in a variety of ethical systems--e.g. on natural law, on the duties postulated by deontological ethics, and on the consequences of our actions. The concept of risk we will outline supports a theory of rights which provides at least individual human beings with the entitlement not to be harmed by the environmental impacts of biotechnology. The analysis can, we believe, also be extended to the rights of animals as well as ecosystems, both of which can be harmed by human actions. We argue that further examination of these harms and rights would be the best way to proceed from emotional moral objections to truly ethical analyses in the context of biotechnology and the environment. Häyry and Takala are in philosophy, University of Helsinki.

--Skirbekk, Gunnar, "Discourse-Ethical Gradualism: Beyond Anthropocentrism and Biocentrism?," pages 95-106. My question is the following: to what extent is ethical anthropocentrism tenable? In a "discourse ethical" perspective I will consider some case-oriented arguments in favor of a paradigmatically unique ethical standing for humans and some arguments in favor of an ethical gradualism between humans and other mammals and between humans and nature, ending with a conclusion in favor of a fair treatment of all moral subjects, human and non-human. Skirbekk is in philosophy, University of Bergen, Norway. (v.10,#3)

Brito, Daniel, "Lack of Adequate Taxonomic Knowledge May Hinder Endemic Mammal Conservation in the Brazilian Atlantic Forest," Biodiversity and Conservation 13(2004):2135-2144. The Atlantic Forest in Brazil is a biodiversity hotspot, and we do not know taxonomically even the charismatic megafauna in it. New species are discovered, described and taxonomically rearranged at an astounding rate. Brito is a Brazilian ecologist, Universidade Federal de Minas Gerais.

Brittan, Jr., Gordon G., "Wind, energy, landscape: reconciling nature and technology," Philosophy and Geography 4 (No. 2, 2001): 169-184. Despite the fact that they are in most respects environmentally benign, electricity-generating wind turbines frequently encounter a great deal of resistance. Much of this resistance is aesthetic in character; wind turbines somehow do not "fit" in the landscape. On one (classical) view, landscapes are beautiful to the extent that they are "scenic", well-balanced compositions. But wind turbines introduce a discordant note, they are out of "scale". On another (ecological) view, landscapes are beautiful if their various elements form a stable and integrated organic whole. But wind turbines are difficult to integrate into the biotic community; at least in certain respects, they are like "weeds". Moreover, there is a reason why the 100-meter, three bladed wind turbines now favored by the industry cannot very well be accommodated to any landscape view. They are, as Albert Borgmann would put it, characteristic of contemporary technology, distanced "devices" for the production of a commodity rather than "things" with which one can engage. It follows that the only way in which the aesthetic resistance to wind turbines can be overcome is to make them more "thing-like". One such "thing-like" turbine is discussed. Brittan is Regent's Professor of Philosophy at Montana State University. (P&G)

Brittan, Jr., Gordon G., "The Secrets of Antelope," Erkenntnis 51(1999):59-77. Daniel Dennett claims, in Consciousness Explained: "Antelope, in their herds, have no secrets and no way of getting any. So an antelope is probably no more capable of hatching a secret plan than it is capable of counting to a hundred or enjoying the colors of a sunset." Brittan replies: "I am not at all sure what the qualification 'in their herds' is supposed to entail. Otherwise, it is simply false that antelope (at least the American antelope or pronghorns) have no secrets, as I can attest on the basis of watching them very carefully over the past 25 years." A doe, for example, keeps it secret where her fawns is hidden. When he is not watching antelope, figuring out their secrets, Brittan is professor of philosophy at Montana State University. This is a theme issue of Erkenntnis on "Animal Minds." (v10,#4)

Britten, Hugh B., Peter F. Brussard, and Dennis D. Murphy, "The Pending Extinction of the Uncompahgre Fritillary Butterfly," Conservation Biology 8(1994):86-94. Found only on two Colorado alpine peaks, the species has low genetic variability, and persistent drought conditions in the 1980's have brought further decline. Human disturbance has been a factor, but probably not the critical factor. See comment in issues section below. Britten is in biology at Montana State University, Brussard is in biology at the University of Nevada-Reno, and Murphy is at the Center for Conservation Biology at Stanford University. (v5,#1)

Broad, Robin and John Cavanagh. Plundering Paradise: People, Power and the Struggle for the Environment in the Philippines. Berkeley: University of California Press, 1994. 197 pages. \$25.00. The Philippine Islands are one of the most advanced scenes of ecological degradation in the tropical world today. The causes are a global economy, foreign interests that use Filipino elites for their own interests. Operating through one of the most repressive political and military systems in Asia, they have generated mass poverty on a scale that is a major contributor to the downward environmental spiral. Yet grass-roots environmental protest movements have arisen, social movements emerging involving mass-based organizations of the political left, church activists, environmentalists, and NGOs. Northern environmentalists need to realize that environmental degradation in the tropics is primarily rooted in social exploitation, and that the exploited are a major source of hope and potential alliance for those who care both about conservation and people. A readable account of local activism and development in the post-Marcos, post-Cold-War nation. (v5,#2)

Broberg, L., "Conserving Ecosystems Locally: a Role for Ecologists in Land-Use Planning," Bioscience 53(no. 7, 2003): 670-673.

Broberg, Leonard E. "Will Management of Vulnerable Species Protect Biodiversity?" Journal of Forestry 97(no.7, July 1999):12- . Uses of wildlife species designations based on the imperilment criteria set forth in the proposed forest planning regulations of the Forest Service may not protect upland old-growth ponderosa pine ecosystems in Idaho, Montana, and Washington. (v.11,#1)

Brock, Gillian, "Future Generations, Natural Resources, and Property Rights," Ethics and the Environment 3(1998):119-130. In an important recent article, "Contemporary Property Rights, Lockean Provisos, and the Interests of Future Generations," Clark Wolf argues that sometimes the interests of future generations should take precedence over the claims of current property rights holders. Wolf's arguments concentrate on the genesis and nature of defensible property rights in various natural resources, and on the conditions under which morally unacceptable harm is caused to others.

In this paper I explore two central sets of issues. First, I investigate how the argument holds up when labor is involved in discovering, developing or preparing natural resources for appropriation. I consider some persuasive reasons why one might think Wolf's arguments lose force in such cases. I also indicate how to accommodate these concerns without diminishing the force of Wolf's main arguments. Second, I show how either the examples Wolf uses do not support the conclusion he is pressing, or the argument has extremely far-reaching implications. I argue that either of these conclusions is problematic for Wolf's argument as thus far developed. Brock is in philosophy, University of Auckland, Auckland, New Zealand. (E&E)

Brock, W., and Xepapadeas, A., "Optimal Ecosystem Management when Species Compete for Limiting Resources," Journal of Environmental Economics and Management 44(no.2, 2002): 189-220. (v.13,#4)

Brockelman, Paul T., Cosmology and Creation: The Spiritual Significance of Contemporary Cosmology. New York: Oxford University Press, 1999. Written because "I felt that we needed to renew our spiritual sense of reverence for nature as intrinsically valuable in itself and not merely extrinsically valuable in so far as it provides 'resources' which in a utilitarian manner we can turn into 'useful' products for the consumer industrial societies." (p. xi). Brockelman is University Professor of Religious Studies and Professor of Philosophy at the University of New Hampshire. (v.14, #4)

Brockway, Sandi, ed., Microcosm USA: Possibilities for a New Progressive Era. Cambria, California: Macrocosm USA, Inc., 1993. 432 pages. \$ 24.95. 5,000 listings of organizations, periodicals, media, directories, guides. 3,000 persons. Dozens of short articles on the gamut of environmental concerns. (v4,#4)

Broder, John M., "Cleaner Los Angeles Air? Don't Hold Your Breath," New York Times, November 14, 2004, p. 16. Smog is down, but probably not for long. Some unusual weather has brought rare good news to the nation's most polluted city. (v.14, #4)

Brody, S. D., "Examining the Role of Resource-Based Industries in Ecosystem Approaches to Management: An Evaluation of Comprehensive Plans in Florida," Society and Natural Resources 16(no. 7, 2003): 625-642.

Bromley, D., ed. Making the Commons Work: Theory, Practice, and Policy. San Francisco: ICS Press, 1992. (v8,#3)

Bromley, Daniel W., Environment and Economy: Property Rights and Public Policy. Oxford, UK,

Blackwell, 1991. (v9,#2)

Bromley, Daniel W., *Sufficient Reason: Volitional Pragmatism and the Meaning of Economic Institutions*. Reviewed by Bryan Norton, *Environmental Values* 16(2007):125-129.

Bromley, David W., and Paavola, Jouni, eds., Economics, Ethics and Environmental Policy: Contested Choices. Oxford: Blackwell, forthcoming. (v.12,#4)

Brook, Isis, and Brady, Emily, "Topiary: Ethics and aesthetics," Ethics and the Environment 8(no. 1, 2003):127-143. We discuss ethical and aesthetic questions in relation to the gardening practice of topiary. We begin by considering the ethical concerns arising from the uneasiness some appreciators might feel when experiencing topiary as a manipulation or contortion of natural processes. We then turn to ways in which topiary might cause an 'aesthetic affront' through the humanizing effects of sentimentality and falsification of nature (most often found in representational rather than abstract topiary). Our contention is that successful topiary emerges through a dynamic and positive relationship between topiarist and tree, where the gardener works with nature's forms instead of in strong opposition to them. Appreciation of successful topiary, we shall argue, is marked by an experience of both the tree as a living thing and the artifice which has shaped it. The authors are at Lancaster University, UK. (E&E)

Brook, Isis, Review of: Smith, Mick, An Ethics of Place: Radical Ecology, Postmodernity, and Social Theory. Albany: State University of New York Press, 2001. Environmental Values 12(2003):542-543. (EV)

Brook, Isis, Review of: Arnold Berleant, Aesthetics and Environment: Variations on a Theme, Environmental Values 15(2006):534-535.

Brook, Isis, "Can Merleau-Ponty's Notion of 'Flesh' Inform or even Transform Environmental Thinking?" Environmental Values 14(2005): 353-362. Reference to Merleau-Ponty's ideas surfaces in environmental thinking from time to time. This paper examines whether, and in what way, his ideas could be helpful to that thinking. In order to arrive at a conclusion I examine in detail and attempt to clarify the notions of "Flesh" and "Earth" in order to see if they can carry the meanings that commentators sometimes attribute to them. With a clearer outline of what he was saying in place, I suggest that the new ontology that Merleau-Ponty introduces could help to transform environmental thinking, but that careful argumentation is required to show this. Brook is in environment, philosophy, and public policy, Lancaster University, UK. (EV)

Brook, Isis, "Wildness in the English Garden Tradition: A Reassessment of the Picturesque from Environmental Philosophy," *Ethics and the Environment* 13(no. 1, 2008):105-119. The picturesque is usually interpreted as an admiration of 'picture-like,' and thus inauthentic, nature. In contrast, this paper sets out an interpretation that is more in accord with the contemporary love of wildness. This paper will briefly cover some garden history in order to contextualize the discussion and proceed by reassessing the picturesque through the eighteenth century works of Price and Watelet. It will then identify six themes in their work (variety, intricacy, engagement, time, chance, and transition) and show that, far from forcing a 'picture-like' stereotype on nature, the picturesque guided the way for a new appreciation of wildness—one that resonates with contemporary environmental philosophy. Isis Brook is senior lecturer in ethics at the Centre for Professional Ethics, University of Central Lancashire, UK

Brooke, James, "Bigger and Bolder Population of Bears Incites Fear in Japan," New York Times, November 7, 2004, p. 15. More than 90 persons have been injured since April by a newly aggressive population of bears in northern Japan. The bear population has been expanding in numbers in a region with a shrinking human population, but a record number of typhoons has ruined the acorn harvest, other

food supplies are also not available, and the hungry bears have turned to finding food in the villages. (v.14, #4)

Brooke, James, "U.S. Hopes to Buy Picture-Perfect Slice of the West," New York Times, August 25, 1998, A1, A14. Baca Ranch Purchase. Biggest in a quarter century. The U.S. Forest Service and the U.S. Congress have moved closer to buying 95,000 acres of land in New Mexico, a ranch so emblematic of the U.S. West that it has served as a backdrop for Marlboro and Stetson hat ads. It is also the largest such tract of land near major cities, in this case Albuquerque and Santa Fe. The ranch is surrounded by Santa Fe National Forest. The ranch has 7,000 elk and 3,000 cows. (v.9,#3)

Brooke, James, "In the Balance, the Future of a Lake," New York Times (9/22/97): A10. Should Lake Powell be drained? Lake Powell is a 100-miles long lake that straddles the Utah/Arizona border and is formed by the Glen Canyon Dam on the Colorado River. When David Brower, a grandfather of the modern American environmental movement, proposed last year to drain Lake Power, few people took him seriously. Brower has felt guilty for 40 years for dropping opposition to the Glen Canyon Dam as a tradeoff that helped prevent construction of a dam that would have flooded Dinosaur National Monument in Colorado. With unanimous support from the Sierra Club Board of Directors and with backing from a Utah environmental group, the proposal to drain the nation's second largest artificial lake is now getting significant public attention. Utah politicians held Congressional hearings on the proposal in an attempt to embarrass its proponents.

The arguments against removing the dam are strong: Four million people use electricity generated from the dam; the dam provides flood control; the surrounding recreation area is the second most popular camping spot in the nation; 400,000 boats are launched on the lake ever year; draining the lake would create a massive environmental mess including odor from millions of rotting fish and a bathtub ring around the redrock shoreline. Those in favor of restoring Glen Canyon argue that the lake causes an 8 percent loss of water through evaporation and seepage into the ground (water whose value is estimated to be \$360 million a year). They point out that dams do not last forever and that eventually the lake will fill with silt. (An engineer who manages the dam claims that dredging will be needed to clear the turbine intake pipes in about 500 years.) The cold water that flows from the 500-foot deep lake, at 47 degrees, is also endangering several warm-water species of fish.

A restored Glen Canyon would support significant recreation and employment opportunities. While many find the lake quite beautiful, Edward Abbey once wrote that "the difference between the present reservoir, with its silent sterile shores and debris-choked side canyons, and the original Glen Canyon, is the difference between death and life. Glen Canyon was alive. Lake Powell is a graveyard." A former commissioner of the Federal Bureau of Reclamation (which built and operates the dam) argues that "Building a dam is the same as constructing a nuclear plant; you get immediate benefits, but you also get huge long-term costs. And a dam, just like a nuclear plant, can leave a legacy of environmental destruction that can take generations to correct." Although drainage of Lake Powell is unlikely, Congress has already agreed to pay to remove two dams on the Elwha River in Washington State to restore a salmon fishery. For other stories see Daniel P. Beard, "Dams Aren't Forever," New York Times (10/6/97): A17. Brad Knickerbocker, "Turning Man-Made Creations Back to Nature," Christian Science Monitor 89 (26 September 1997): 1, 5. (v8,#3)

Brooke, John Hedley. Review of Rolston, Genes, Genesis and God: Values and their Origins in Natural and Human History. Environmental Values 9(2000):401.

Brookes, Graham, and Peter Barfoot, "GM Crops: The Global Economic and Environmental Impact--The First Nine Years 1996-2004," AgBioForum 8(nos. 2& 3, 2005):187-196. GM crops have been regularly commercially planted for about a decade. This study finds great economic benefits, largely from reduced pesticide use, since the GM crops are resistant to pests and do not need so much pesticide. This also results in reduced use of fossil fuels, reduced carbon dioxide emissions, and more carbon sequestered in

the soil (since there is less need for plowing). The study also finds a much reduced environmental footprint, since the reduced pesticide use means less pesticide spilling off the fields into the rivers, less adverse effects on birds and other wildlife. GM crops tend to keep the nearby ecosystems healthier than was formerly the case with heavy pesticide use. The authors are with PG Economics Ltd., Dorchester, UK.

Brooks, Daniel R. and Deborah A. McLennan, Parascript: Parasites and the Language of Evolution. Washington, DC: Smithsonian Institution Press, 1993. 450 pages. \$ 25.00 paper. The relationship between parasite and host is homologous to that between animal and plant. The many traditional generalizations about parasite evolution are myths, unsupported by data. "Parasites are not the degenerate, overspecialized, host-dependent creatures ... envisioned by the proponents of orthogenesis. They are instead successful, innovative creatures" (p. 181). "Parasites are still an enigma. But ... they need no longer carry an evolutionary stigma" (p. 209). The authors are in the department of zoology at the University of Toronto. (v4,#2)

Brooks, L. Anthea and VanDeveer, Stacy D., eds., Saving the Seas: Values, Scientists, and International Governance. College Park, MD: Maryland Sea Grant, 1997. 480 pages. \$ 30.00. Maryland Sea Grant, 0112 Skinner Hall, University of Maryland, College Park, MD: 20742. Tel. 301/405-6376. Fax 301/314-9581. Eighteen essays by scholars in the area of marine and environmental management. Focus is on the world's coastal seas, where there is intense competition for resources, as well as for harbors, fisheries, shipping, and defense, also culturally important places and traditional ways of life. (v.8,#4)

Brooks, Nancy, Sethi, Rajiv. "The Distribution of Pollution: Community Characteristics and Exposure to Air Toxics," Journal of Environmental Economics and Management 32(1997):233.

Brooks, Paul. Speaking for Nature. Reviewed in Environmental Ethics 3(1981):371-73.

Brooks, Richard O., "A New Agenda for Modern Environmental Law," Journal of Environmental Law and Litigation 6(1991):1-38. (v7,#2)

Brooks, T. M. et al, "Habitat Loss and Extinction in the Hotspots of Biodiversity," Conservation Biology 16(no.4, 2002): 909-23. (v.13,#4)

Brooks, T; Balmford, A; Burgess, N; Fjeldsa, J; Hansen, LA; Moore, J; Rahbek, C; Williams, P, "Toward a Blueprint for Conservation in Africa," Bioscience 51(no. 8, 2001):613-624. (v.13,#1)

Brooks, Thomas M.; da Fonseca, Gustavo A. B.; Rodrigues, Ana S. L., "Protected Areas and Species," Conservation Biology 18(no.3, 2004):616-618. (v. 15, # 3)

Brookshire, DS; Burness, HS; Chermak, JM; Krause, K, "Western Urban Water Demand", Natural Resources Journal 42(no.4, 2002):873-898.

Brookshire, James. "The Litigator's Role in Federal Regulatory Takings Litigation: The Search for Balance." Journal of Environmental Law and Practice 3(no.4, Jan. 1996):15. An inquiry into the fundamental power balance struck between the majority and the individual in takings litigation. (v7,#1)

Broom D. M. and Johnson K. G., Stress and Animal Welfare. New York: Chapman & Hall, 1993.

Broom, D.M., "A Usable Definition of Animal Welfare", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. A definition of the welfare of an animal which can be used in scientific studies, legislation and other practical work is: the welfare of an individual is its state as regards its

attempts to cope with its environment. A variety of measurements can be used to pinpoint the individual's state on a continuum from very good to very poor welfare. Welfare can be poor because the individual is having difficulty in coping or because of failure to cope. Poor welfare includes stress, which is defined as an environmental effect on an individual which overtaxes its control systems and thus reduces its fitness or appears likely to do so. It also includes situations in which behavioural, physiological or immunological measures indicate that coping is difficult even if biological fitness is not reduced. Suffering is an important aspect of poor welfare. While much of poor welfare involves suffering, examples are given of situations in which welfare is poor in the absence of suffering. If suffering occurs in addition to injury or immunosuppression, then welfare is even poorer. Scientific studies of welfare should include direct measures of poor welfare as well as measures of the strengths of preferences and aversions. Measurements should be carried out in an objective way and moral judgments about what is tolerable should be made afterwards. Broom is in the Department of Clinical Veterinary Medicine, Cambridge University, Madingley Road, Cambridge CB3 0ES, United Kingdom.

Brose, P., Schuler, T., van Lear, D. and Berst, J., "Bringing Fire Back: The Changing Regimes of the Appalachian Mixed-Oak Forests," Journal of Forestry 99(no.11, 2001): 30-35. (v.13,#2)

Brosius, J. Peter, Anna Lowenhaupt Tsing, and Charles Zerner, eds. *Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management*. Walnut Creek, CA: AltiMira Press, 2005. The environmentalists in this collection offer an in-depth analysis and call to advocacy for community-based natural resource management (CBNRM). Their overview of this transnational movement reveals important links between environmental management and social justice agendas for sustainable use of resources by local communities. In this volume, leaders who have been instrumental in creating and shaping CBNRM describe their model programs; the countermapping movement and collective claims to land and resources; legal strategies for gaining rights to resources and territories; biodiversity conservation and land stabilization priorities; and environmental justice and minority rights.

Brosius, J. Peter, "Indigenous Peoples and Protected Areas at the World Parks Congress," Conservation Biology 18(no.3, 2004):609-612. (v. 15, # 3)

Brosimmer, F. J., "Lawrence, Geoffrey, Vaughan Higgs, and Steward Lockie, eds. Environment, Society and Natural Resource Management: Theoretical Perspectives from Australasia and the Americas," Society and Natural Resources 15(no.7, 2002): 656-60. (v.13,#4)

Brotons, L; Monkkonen, M; Huhta, E; Nikula, A; Rajasarkka, A, "Effects of landscape structure and forest reserve location on old-growth forest bird species in Northern Finland," Landscape Ecology 18(no.4, 2003):377-393. (v.14, #4)

Broussard, Shorna R., Stephen B. Jones, and Connie A. Flanagan, "Forest Stewardship Education: Fostering Positive Attitudes in Urban Youth," Journal Of Forestry 99(no.1, 2001 Jan 01): 37-. Philadelphia students who participated in a forestry-based environmental education program were more knowledgeable about forestry and gained a great understanding of forest management, shifting their attitudes in favor of harvesting trees sustainably. (v.12,#3)

Brouwer, Roy, Review of K.M. Jakobsson and A.K. Dragun, Contingent Valuation and Endangered Species, Environmental Values 7(1998):494.

Brouwer, Roy, Neil Powe, R. Kerry Turner, Ian J. Bateman, and Ian H. Langford. "Public Attitudes to Contingent Valuation and Public Consultation." Environmental Values 8(1999):325-347. ABSTRACT: The use of cost-benefit analysis (CBA) in environmental decision-making and the contingent valuation (CV) technique as input into traditional CBA to elicit environmental values in monetary terms has

stimulated an extensive debate. Critics have questioned the appropriateness of both the method and the technique. Some alternative suggestions for the elicitation of environmental values are based on a social process of deliberation. However, just like traditional economic theory, these alternative approaches may be questioned on their implicit value judgements regarding the legitimacy of the social-political organisation of the process of value elicitation. Instead of making assumptions a priori, research efforts should be focused on the processes by which actual public attitudes and preferences towards the environment can best be elicited and fed into environmental or other public policy decision-making. In the study presented in this paper, support was found for both the individual WTP based approach and a participatory social deliberation approach to inform the environmental decision-making process, suggesting that a combination of both approaches is most appropriate. KEYWORDS: Contingent environmental valuation, focus groups, public consultation, public deliberation. Roy Brouwer, Neil Powe, R. Kerry Turner, Ian J. Bateman, and Ian H. Langford, Centre for Social and Economic Research on the Global Environment (CSERGE), School of Environmental Sciences, University of East Anglia, Norwich, NR4 7TJ, UK. (Corresponding author) (EV)

Browder, Greg and Ortolano, Leonard, "The Evolution of an International Water Resources Management Regime in the Mekong River Basin," Natural Resources Journal 40(no.3, Sumr 2000):499- . (EE v.12,#1)

Browder, JO; Pedlowski, MA; Summers, PM, "Land Use Patterns in the Brazilian Amazon: Comparative Farm-Level Evidence from Rondonia", Human Ecology 32 (no.2, 2004): 197-224(28).

Brower, A; Reedy, C; YelinKefer, J, "Consensus versus Conservation in the Upper Colorado River Basin Recovery Implementation Program," Conservation Biology 15(no. 4, 2001):1001-1007. (v.13,#1)

Brower, David, with Steve Chapple, Let the Mountains Talk, Let the Rivers Run: A Call to Those Who Would Save the Earth. New York: Harper Collins West, 1995. 196 pages. \$20. Brower recalls half a century of activism, outlines crucial contemporary battles--saving Siberia's forests, revamping bureaucratic environmental organizations, and building supercars--and passionately points the way to a green 21st century. Highly endorsed by President Jimmy Carter and Harvard biologist Edward O. Wilson. (v6,#2)

Brower, David, For Earth's Sake: The Life and Times of David Brower (Salt Lake City, UT: Gibbs Smith, 1990). \$ 24.95. 556 pages. (v2,#1)

Brower, Kenneth, One Earth. San Francisco: Collins, 1990. \$ 39.95. Photographs recording the environmental impact of human activities, including men, women, and children around the world working and fighting to save a bit of Earth. (v1,#4)

Browers, Michaelle L. "Jefferson's Land Ethic: Environmentalist Ideas in Notes on the State of Virginia." Environmental Ethics 21(1999):43-57. I articulate what I refer to as Jefferson's "land ethic," drawing primarily from his Notes on the State of Virginia. In the first section, I discuss Jefferson's conception of the intimate relationship between the natural and political constitution of America and his vindication of both. In the second section, I examine the centrality of the environment in Jefferson's political vision for America: a land-based republicanism. In the third section, I elaborate Jefferson's view as to the proper relationship between human beings and their environment by focusing on the form of nature to which he believes human beings most intimately relate: one's estate. Jefferson's understanding of the land draws from John Locke's theory of property, but whereas Locke's concept of property is closely associated with the economic values that facilitate human destruction of the environment, Jefferson's environmentalism focuses on the other side of the relation: the ways in which a particular nature--a climate, one's landholding, the New World in general--can influence human nature and politics. (EE)

Brown, Beverly A. In Timber Country: Working People's Stories of Environmental Conflict and Urban Flight. Philadelphia: Temple University Press, 1995. 300 pages. \$18.95 paper. \$49.95 paper. Mostly poor and lower-middle class income people, they do belong to a large and crucial segment who are often presented as scapegoats or stereotypes: the liberal's "rednecks" and industry's and the right wings "silent majority." These are the people of the Rogue Valley in Southwest Oregon, where there is a volatile clash of logging and environmental interests, and with an influx of wealthy suburbanites from California. Brown is an independent scholar and activist. (v6,#1)

Brown, Charles S., and Ted Toadvine, eds., Eco-Phenomenology: Back to the Earth Itself. Albany, NY: State University of New York Press, 2003. Reviewed by Frank Schalow. Ethics and the Environment 13(2004):269-271. (EV)

Brown, Charles S., and Ted Toadvine, eds. *Nature's Edge: Boundary Explorations in Ecological Theory and Practice*. Albany: State University of New York Press, 2007. Contents include: (1) "Boundaries and Darwin: Bridging the Great Divide" by Max Oelschlaeger, (2) "Lamarck Redux: Temporal Scale as the Key to the Boundary Between the Human and Natural Worlds" by J. Baird Callicott, (3) "The Ethical Boundaries of Animal Biotechnology: Descartes, Spinoza, and Darwin" by Strachan Donnelley, (4) "Cutting Nature at the Seams: Beyond Species Boundaries in a World of Diversity" by Jon Jensen, (5) "Respect for Experience as a Way Into the Problem of Moral Boundaries" by Charles S. Brown, (6) "Boundarylessness: Introducing a Systems Heuristic for Conceptualizing Complexity" by Beth Dempster, (7) "Boundaries on the Edge" by Irene J. Klaver, (8) "Remapping Land Use: Remote Sensing, Institutional Approaches, and Landscape Boundaries" by Firooza Pavri, (9) "Boundaries, Communities, and Politics" by Anna L. Peterson, (10) "The Moral Economy and Politics of Water in the Arid American West" by T. Clay Arnold, (11) "The Need for a Taxonomy of Boundaries" by Wes Jackson and Jerry Glover, (12) "How to do Things with Food: A Plea for Multiple Ontologies" by Bruce Hirsch, and (13) "Culture and Cultivation: Prolegomena to a Philosophy of Agriculture" by Ted Toadvine.

Brown, Charles, and Ted Toadvine, eds., Eco-Phenomenology: Back to the Earth Itself. Albany: State University of New York Press, 2003. Explores the intersection of phenomenology with environmental philosophy, examining the contributions of Husserl, Heidegger, Merleau-Ponty, and Levinas, and proposing new phenomenological approaches to the natural world. Contributors include Charles S. Brown, Erazim Kohak, Lester Embree, John Llewelyn, Michael E. Zimmerman, Monika Langer, Don E. Marietta, Jr., Ted Toadvine, Irene J. Klaver, Christian Diehm, Edward S. Casey, and David Wood.

Brown, Charles S., and Ted Toadvine, eds. *Nature's Edge: Boundary Explorations in Ecological Theory and Practice*. Albany: State University of New York Press, 2007. Contents include: (1) "Boundaries and Darwin: Bridging the Great Divide" by Max Oelschlaeger, (2) "Lamarck Redux: Temporal Scale as the Key to the Boundary Between the Human and Natural Worlds" by J. Baird Callicott, (3) "The Ethical Boundaries of Animal Biotechnology: Descartes, Spinoza, and Darwin" by Strachan Donnelley, (4) "Cutting Nature at the Seams: Beyond Species Boundaries in a World of Diversity" by Jon Jensen, (5) "Respect for Experience as a Way Into the Problem of Moral Boundaries" by Charles S. Brown, (6) "Boundarylessness: Introducing a Systems Heuristic for Conceptualizing Complexity" by Beth Dempster, (7) "Boundaries on the Edge" by Irene J. Klaver, (8) "Remapping Land Use: Remote Sensing, Institutional Approaches, and Landscape Boundaries" by Firooza Pavri, (9) "Boundaries, Communities, and Politics" by Anna L. Peterson, (10) "The Moral Economy and Politics of Water in the Arid American West" by T. Clay Arnold, (11) "The Need for a Taxonomy of Boundaries" by Wes Jackson and Jerry Glover, (12) "How to do Things with Food: A Plea for Multiple Ontologies" by Bruce Hirsch, and (13) "Culture and Cultivation: Prolegomena to a Philosophy of Agriculture" by Ted Toadvine.

Brown, Chip, Good Morning Midnight: Life and Death in the Wild. New York: Riverhead Books (Penguin Group), 2004. The remarkable life and haunting death of Guy Waterman. Waterman was from

a prominent family, a gifted speech writer, and a New England outdoorsman and mountaineer of some renown. After fighting depression, one afternoon in the winter of 2000, having discussed his plans in detail with his wife, he walked away from her and their home. He took a familiar path up into the mountains of New Hampshire, sat down and died by freezing, alone with the ice, rocks, and wind. (v. 15, # 3)

Brown, Don, and Cohn Lemons, eds. Sustainable Development: Science, Ethics and Public Policy. Dordrecht: Kluwer Academic Publishers, 1995. Chapter authors include: Don Brown, John Lemons, Rudolf Heredia, Dale Jamieson, Clive Spash, Larry Canter, Konrad Ott, Carl Cranor and Kristin Shrader-Frechette. (v6,#3)

Brown, Donald A. "Ethics, Science, and Environmental Regulation." Environmental Ethics 9(1987):331-49. Because complex environmental problems are relegated to scientific experts, the ethical questions that are embedded in these problems are often hidden or distorted in scientific and administrative methodology and communication. The administrative process requires that facts and values be separated. Those values that cannot simply be ignored are usually translated into technical economic language and settled in terms of economic costs and benefits. Calls for regulatory reform--i.e., to reduce or eliminate environmental regulation create additional pressures on analysts that encourage them to focus on quantitative questions at the expense of qualitative ones. Distortion can also result from the use of standard risk assessment procedures and from the improper placement of burden of proof on government agencies. The greatest problem, nevertheless, is the narrow scientific training of technical experts which frequently leaves them unprepared to deal with the ethical and value issues in environmental public policy. Brown is in the department of Environmental Resources, Harrisburg, PA. (EE)

Brown, Donald A. "Environmental Ethics and Public Policy." Environmental Ethics 26(2004):111-112. (EE)

Brown, Donald A., "Ethics, Science, and Environmental Regulation," Environmental Ethics 9(1987):331-349. A good overview and analysis of the problems encountered by policymakers in environmental regulation and reform. The central conceptual problem is the separation of facts and values; the main practical problem is the lack of ethical training by the scientific experts involved in the decisionmaking process. (Katz, Bibl # 1)

Brown, Donald A., compiler, Proceedings of Interdisciplinary Conference held at the United Nations on the Ethical Dimensions of the United Nations Program on Environment and Development, Agenda 21. Camp Hill, PA: Earth Ethics Research Group, 1994. The conference was held January 13-14, 1994. 392 pages. Some thirty papers, typically short, always focused on the issues raised in Agenda 21, and often on the text of that document. Samples: Rodrigo G. Barahona, "Ethical Questions Embedded in Biodiversity Provisions of Agenda 21"; Thomas Heyd, "Agenda 21 and the Limits of Technological Rationality"; Naresh C. Singh, "Ethical Questions Embedded in the Nuclear Waste Disposal Provisions of Agenda 21"; and many more. Contact Donald A. Brown, 2915 Beverly Road, Camp Hill, PA 17011. Fax: 717-787-9379. Phone 717-787-9368. (v5,#3)

Brown, Donald A., John Lemons, and Gary E. Varner. "Congress, Consistency, and Environmental Law." Environmental Ethics 12(1990):311-27. In passing the National Environmental Policy Act of 1969 (NEPA), Congress committed the nation to an ethical principle of living in "productive and enjoyable harmony" with the natural environment. Thus understood, NEPA can be given either (1) a technology-forcing interpretation or (2) an intelligent decision-making interpretation. We argue that in its subsequent decision to site a high-level nuclear waste repository at Yucca Mountain, Nevada, Congress acted inconsistently with this principle under either interpretation. We conclude that for the foreseeable future,

the only way to handle the nation's nuclear wastes consistent with the environmental goal enunciated in NEPA is to leave them in temporary surface storage facilities, prohibit the licensing of any new nuclear power plants, and take all appropriate steps to reduce the nuclear weapons industry. Brown is in the department of Environmental Resources, Harrisburg, PA. Lemons is in the department of Life Sciences, University of New England, Biddeford, ME. Varner is in the philosophy department, Texas A & M University, College Station, TX. (EE)

Brown, Donald, A., American Heat: Ethical Problems with the United States' Response to Global Warming. Blue Ridge Summit, PA: Rowman and Littlefield, 2002. The U.S., once a leader in environmental policy, has often become the major barrier to protecting the world environment. An ethical focus on global environment matters is the key to achieving a globally acceptable solution. Brown is senior counsel on Sustainable Development for the Pennsylvania Department of Environmental Resources. (v.13,#1)

Brown, E.D., Churchill, Robin R., eds. The U.N. Convention on the Law of the Sea: Impact and Implementation. Honolulu: University of Hawaii Sea Grant College Program, 1988. (v8,#3)

Brown, Elizabeth Cowan, "The "Wholly Separate" Truth: Did the Yellowstone Wolf Reintroduction Violate Section 10 (j) of the Endangered Species Act," Boston College Environmental Affairs Law Review 27 (No. 3, 2000 Spring): 425- . (v.11,#4)

Brown, G. G., P. Reed, and C. C. Harris, "Testing a Place-Based Theory for Environmental Evaluation: An Alaska Case Study," Applied Geography 22(2002):49-76. Do people value landscapes more if their evaluation is based on a sense of place, especially if the landscape is near where they live? A study of the Chugach National Forest in Alaska. Ecosystem values are not uniformly distributed across the landscape, that is, not spatially random, and some spatial relationships exist between selected ecosystem values and point of residence (community). Brown is in Environmental Science, Alaska Pacific University. Reed is with USDA Forest Service, Chugach National Forest, Anchorage, AK. Harris is in Resource Recreation and Tourism, University of Idaho, Moscow, ID.

Brown, Gregory, and Reed, Patrick, "Validation of a Forest Values Typology for Use in National Forest Planning," Forest Science 46(no. 2, 2000):240-247. Public values for national forest lands are assumed to underlie preferences for actual forest use and to define the content for management. In a survey of Alaska residents, (1) respondents were able to identify with 13 distinct forest values based on a modified forest value topology developed by Holmes Rolston and James Coufal. (2) No obvious findings indicated that the 13 value types could be simplified. (3) Small, but statistically significant correlations were found between these values and attitudes toward logging and mining. (4) Forest values are modestly predictive of preferences for specific forest planning decisions. Brown is in Environmental Science, Alaska Pacific University, Anchorage. Reed is with Chugach National Forest, Anchorage. (v.13, #3)

Brown, James H., McDonald, William. "Historical and Cultural Perspectives on Grazing: Reply to Dudley," Conservation Biology 11(no.1, 1997):270. (v8,#2)

Brown, James H. Macroecology. Chicago: University of Chicago Press, 1995. 270 pp. \$42.50 cloth, \$15.95 paper. Brown proposes a radical new research agenda designed to broaden the scope of ecology so that it can address questions on much larger spatial and temporal scales. Much ecological research is narrowly focused and experimental, providing detailed information that cannot be used to generalize from one ecological community or time period to another. Brown draws on data from many disciplines to create a much broader picture with greater potential for generalization.

Brown, Jennifer, ed., Environmental Threats: Perception, Analysis and Management. London: Belhaven

Press, 1989. 160 pages. Cloth. £ 39.00. Eight essays by British social theorists who study risk. Some of the arguments: Lay or public risk attitudes are as important and valuable as those who are experts. Expert risk assessment is a doubtful way to handle environmental threats that are highly uncertain. Technical experts ought to be more sensitive to the underlying uncertainties in risk assessment. Different social risk perceptions underlying the Sellafield controversy over nuclear risk. Social risks associated with biotechnology. The public is not irrational in its aversion to many environmental and technological risks; rather, there is a plurality of rationalities applicable to risk. Different types of uncertainties beset quantitative risk assessment and allow for various evaluations of environmental threats. "One of the most important contemporary volumes on the social aspects of risk" (Kristin Shrader-Frechette). (v4,#4)

Brown Jr., George E. "Environmental Science Under Siege in the U.S. Congress," Environment 39 (1997): 12. The prominent role given to skeptical science during the 104th Congress's reassessments of U.S. environmental regulation raises profound questions about the value of peer review and the role science and scientists play in the formulation of public policy. (v8,#1)

Brown, Kathryn S. "Do Disease Cycles Follow Changes in Weather?," Bioscience 46(no.7, 1996):479. Researchers ponder global warming's effect on the carriers of human illness. (v7,#4)

Brown, Kathryn S. "Life on the Molecular Farm." Bioscience 46(no.2, Feb.1996):80. Transgenic plants are extending the range of chemical production possibilities in agriculture. (v7,#1)

Brown, Kathryn, S., "Bright Future--or Brief Flare--For Renewable Energy," Science 285(1999):678-680. Solar, wind, and other forms of renewable energy are making surprising gains as some U.S. states open their power markets to competition. But with fossil fuel prices near all-time lows, experts are split on whether alternative energy can maintain its momentum. In a series of articles on "Powering the Next Century" in this issue of Science. Also a number of articles and boxes on fuel-efficient and low CO₂ automobiles. (v.10,#3)

Brown, Kelly M. Cummings, Ronald Terrebonne, Peter, "Scrap Tire Disposal: Three Principles for Policy Choice," Natural Resources Journal 41(no.1, Wint 2001):9-. (v.12,#4)

Brown, L, "New year's revolution why the need for an economy that respects the environment has never been more urgent," Ecologist 32(no.1, 2002):26-31. (v.13, #3)

Brown, Les, Conservation and Practical Morality: Challenges to Education and Reform. New York: St. Martin's Press, 1988. Pp. ix, 222. An argument against the need for a nonanthropocentric environmental ethic. "The only objects in the moral sphere are human beings and sentient animals" (p. 71). Conservation can be defended on the level of a basic practical morality that considers the promotion of the common good, with an emphasis on the quality of life. Compared to most recent works in environmental philosophy, Brown's book seems reactionary. (Katz, Bibl # 2)

Brown, Lester R. et al., State of the World 1994. A Worldwatch Institute Report on Progress toward a Sustainable Society. New York: W. W. Norton, 1994. 288 pages. \$ 11.95. The annual guide in the latest edition, with annual editions regularly used in over 1,000 colleges and universities. (v4,#3)

Brown, Lester R. et al, State of the World 1994. Washington, DC: Worldwatch Institute, 1994. Paper. \$ 10.95. Updated annually, this remains one of the most reliable introductory guides to the world's resources and how they are being used. Used in over 1,000 college and university classes in the United States. (v4,#4)

Brown, Lester R., "Wind Energy Demand Booming: Cost Dropping Below Conventional Sources Marks

Key Milestone in U.S. Shift to Renewable Energy," www.earthpolicy.org/Updates/2006/Update52.htm. During the fall of 2005, climbing natural gas prices pulled conventional electricity costs above those of wind-generated electricity in some areas. Examples in Texas and Colorado. In contrast to the East, where people dislike the turbines aesthetically, in the West, with its wide open spaces, ranchers often welcome the turbines, which can add up to \$21,000 a year in additional income, and still run cattle on the land. A decade from now, there may be thousands of ranchers who will be earning more selling electricity than they do selling cattle.

Brown, Lester R., "U.S. Population Reaches 300 Million, Heading for 400 Million, No Cause for Celebration.

<http://www.earth-policy.org/Updates/2006/Update59.htm>

with escalating appetites as well as escalating numbers. U.S. population growth contrasts with the situation in other industrial countries such as France, the UK, Germany, Italy, and Japan, where populations are either essentially stable or declining.

Brown, Lester R. et al. State of the World 1996. Washington, D.C.: Worldwatch Institute, 1997. \$11.95 paper. This is the Worldwatch Institute Report on progress toward a sustainable society and is updated annually. Appearing in 27 languages this has become the world's most widely used public policy analysis in any field. (v8,#2)

Brown, Lester R. et al., Vital Signs, 1993: The Trends that Are Shaping our Future. New York: W. W. Norton, 1993. 144 pages. \$ 10.95. Facts and figures on major environmental and other trends that affect public health and welfare. (v4,#3)

Brown, Lester. *Plan B: Rescuing a Planet under Stress and a Civilization in Trouble*. New York: W.W. Norton, 2006.

Brown, N., Climate Change: A Threat to Peace. London: Research Institute for the Study of Conflict and Terrorism, 1994.

Brown, Neville, The Impact of Climate Change: Some Indications from History, AD 250-1250. OCEES Research Paper No. 3. Oxford: Oxford Centre for the Environment, Ethics and Society, Mansfield College, 1995. 59 pp. The effects of climate change on human history over the past 2,000 years. Recent developments in the interpretation of ice cores, pollen records and glacial movements, together with the possibility of interpolation using the climatic models now being used to predict the consequences of global warming, have greatly increased the data available for climate and history studies. Nevertheless reconstructions of how climate changes affected the movements of peoples remain speculative. Brown is both a meteorologist and a historian. (v8,#1)

Brown, Noel J., and Pierre Quibler, eds., Ethics and Agenda 21: Moral Implications of a Global Consensus. New York: United Nations Publications, United Nations Environment Programme, 1994. Paper. 187 pages. ISBN 92-1-100526-4. Available from United Nations Publications, Sales Section, Room DC2-853, Dept. 041D, New York, NY 10017. Phone 800/253-9646. Fax 212/963-3489. Ethical evaluation of the UN strategy document from the United Nations Conference on Environment and Development (Rio Earth Summit). Short, invited commentaries by J. Baird Callicott, Ross McCluney, Hazel Henderson, Holmes Rolston, III, David Rothenberg, Dieter T. Hessel, Jose Dualok Rojas, Larry L. Rasmussen, John Lemons and Eleanor Saboski, Kristin Shrader-Frechette, Eric Katz, Peter Adriance, Samdhong Rinpoche, Sallie McFague, Mohammed T. Medhi, Bradley Shavit Artson. (v5,#1)

Brown, Peter G., "Greenhouse Economics: Think Before You Count," The Report from the Institute for Philosophy and Public Policy, vol. 10, no.3/4, Summer/Fall 1990. "There are some things that are not, and

should not be, discounted. No one asks, 'What is the optimal rate of shredding for the U. S. Constitution?'" (v2,#2)

Brown, Peter G., "Climate Change and the Planetary Trust," Energy Policy, March 1992, pp. 208-222. Three models of responsibility with respect to climate change: (1) maximizing the present discounted value of consumption; (2) climate change through the lens of the tragedy of the commons; these two are found to rest on implausible assumptions. (3) A model based on a fiduciary trust is more credible, and does not require overly burdensome policies. Brown is Director of Environmental Programs, School of Public Affairs, University of Maryland.

Brown, Peter, Ethics, Economics and International Relations. New York: Columbia University Press, 2000. Locke's general theory of natural rights and his concept of trusteeship, as an alternative framework for international relations in the modern world. Duties governments have toward other governments and peoples of the world, and the dilemmas they face. (v.13,#4)

Brown, Phil and Edwin J. Mikkelsen, No Safe Place: Toxic Waste, Leukemia, and Community Action (Berkeley: University of California Press, 1990). \$24.95. 260 pages. Focuses on Woburn, a community outside Boston, a bleak story of the dynamics of a citizens' struggle against corporate malfeasance. The authors are associated with Harvard Medical School. (v2,#1)

Brown, Rachel. "Righting Ecofeminist Ethics: The Scope and Use of Moral Entitlement." Environmental Ethics 26(2004):247-265. Rights have been criticized as incorporating features that are antithetical to ecofeminism: rights are allegedly inherently adversarial; they are based on a conception of the person that fails to reflect women's experience, biased in an illegitimate way toward humans rather than nonhumans, overly formal, and incapable of admitting the importance of emotion in ethics. Such criticisms are founded in misunderstandings of the ways in which rights operate and may be met by an adequate theory of rights. The notions of entitlement and immunity that flow from a conception of rights have great use and potential in environmental ethics. Nonetheless, our understanding of moral rights must be revised in order to realize this potential. The usual attribution of moral rights is structurally arbitrary because obligations arising from others' rights are unjustifiably distinguished from other sorts of obligations for which the same sorts of justificatory bases obtain. Once this arbitrariness is recognized, there remains little reason not to extend a continuous framework of entitlement toward nonhuman animals and nature more generally. Reassessing moral rights according to a basic principle of respect delivers an integrated account of our moral obligations toward one another, and a satisfactory basis from which to account for our diverse obligations toward nonhuman animals and the environment. (EE)

Brown, Stuart M., Jr. "On Self-Consciousness and the Rights of Nonhuman Animals and Nature." Environmental Ethics 2(1980):95. (EE)

Brown, William P., The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible. Grand Rapids, MI: Eerdmans, 1999. How in the divine drama of the creation, redemption, and consummation of the world, nature, or the earth in its fullness, was understood as a participant in its own right, with its own moral claims.

Brownlee, Christen. "Toxin Buster: New Technique Makes Cottonseeds Edible." *Science News* Vol. 170, no. 22, Nov. 15, 2006, p. 339. Scientists have engineered cotton plants to produce seeds that are missing a poisonous compound that had previously rendered them inedible. With the amount of cotton currently planted, much of it grown in developing nations, such modified cottonseeds could fill the daily protein needs of about 500 million people, researchers say. The work was done at Texas A&M.

Brubaker, Elizabeth. Property Rights in the Defence of Nature. Toronto: Earthscan, 1995. (v9,#2)

Brubaker, Pamela K., Rebecca Todd Peters, and Laura A. Stivers. *Justice in a Global Economy: Strategies for Home, Community and World*. Louisville: Westminster/John Knox, 2007. Michael Northcott, Ted Peters, Sallie McFague and others lead theological reassessment thinking about climate change and global warming.

Bruce, David, and Pickering, David, "Ecology and Ecumenism in Europe: A Way Forward," *Ecotheology* No 5/6 (Jul 98 / Jan 99):9-21.

Bruce, Donald M., "A Social Contract for Biotechnology: Shared Visions for Risky Technologies?" *Journal of Agricultural and Environmental Ethics* 15(no. 3, 2002):279-289. Future technological developments concerning food, agriculture, and the environment face a gulf of social legitimation from a skeptical public and media, in the wake of the crises of BSE, GM food, and foot and mouth disease in the UK (House of Lords, 2000). Key ethical issues were ignored by the bioindustry, regulators, and the Government, leaving a legacy of distrust. The paper examines agricultural biotechnology in terms of a social contract, whose conditions would have to be fulfilled to gain acceptance of novel applications. Various current and future GM applications are evaluated against these conditions. Success would depend critically on how far a shared vision can be found with the public. To re-establish trust, significant changes are identified in the planning and pursuit of biotechnology. KEY WORDS: accountability, biotechnology, consultation, consumer perceptions, control, environmental risk, ethics, genetic modification, GM animals, GM food, GM crops, nutraceuticals. policy. power, risk. safety, shared vision, social contract, trust, values. Bruce is with the Society, Religion and Technology Project, Church of Scotland, Edinburgh. (JAEE)

Bruce, Donald, "Finding a Balance over Precaution," *Journal of Agricultural and Environmental Ethics* 15(no. 1, 2002):7-16. Three interpretations of the precautionary principle are identified, namely "soft," "hard," and outright rejection. The EC Communication of February 2000 is largely a response to the latter, to provide a legitimation in trade-related WTO disputes. This context leads to an over stress on scientific closure. This is critiqued as idealistic in respect of resolving long term uncertainties inherent in the GM food issue. While offering some useful guidelines in risk management, the EC report seriously fails to take into account the ethical and societal dimension of risk. These are crucial both in determining when precautionary principle is invoked and the action to be taken. The EC view leans too much to a scientific rationalist risk perspective. However, the "Green" interpretation of the precautionary principle as a reversal of the burden of proof is also criticized as inconsistent both with the nature of technology and with the nature of reality as seen in a Christian perspective. Biblical insights on risk reveal a balance of intervention and conservation in a world where risk is inherent. The notion of risk as a social contract reveals that ethical and societal issues have a crucial role to play in applying the precautionary principle. KEY WORDS: Christianity, EC, Green, precautionary principle, risk assessment, social contract, WTO. Bruce is with the Society, Religion and Technology Project, Church of Scotland. (JAEE)

Bruce, Donald, and Bruce, Ann, eds., *Engineering Genesis: The Ethics of Genetic Engineering in Non-human Species*. London: Earthscan Publications, 1998. 337 pages. £12.99. A study by the Working Group of the Society, Religion and Technology Project, Church of Scotland. Chapter 1. Explaining Genetic Engineering and its Uses. Chapter 2. Case Studies. Chapter 3. Ethics under the Microscope. Chapter 4. Genetic Engineering and Animal Welfare. Chapter 5. Animal Ethics and Human Benefit. Chapter 6. Transgenic Food. Chapter 7. Letting Out the Genie: Environmental Risk and Regulation. Chapter 8. Patenting Life. Chapter 9. Genetic Engineering and Developing Countries. Chapter 10. The Social Context of Genetic Engineering. Chapter 11. Final Reflections. Donald Bruce is the Scientific Director, Society, Religion and Technology Project, Church of Scotland, Edinburgh. Ann Bruce was formerly an animal breeding specialist in the agricultural industry. Other contributors include: Michael Northcott, in Christian ethics, University of Edinburgh; Mike Appleby, lecturer in animal welfare,

University of Edinburgh. (v.10,#1)

Bruce, J.; Hoesung, Lee; and Haites, E. Climate Change 1995--Economic and Social Dimensions of Climate Change. New York: Cambridge University Press, 1996. 608 pages. \$74.95 cloth, \$29.95 paper. This is the contribution of Working Group III to the Second Assessment Report of the Intergovernmental Panel on Climate Change. This work addresses the costs of climate change, both in terms of society and equity issues, and the economic burden of combating adverse climate change. (v7, #3)

Bruch, Carl, Coker, Wole, and VanArsdale, Chris, Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa. Washington, DC: Environmental Law Institute, 2000. (1616 P Street, N.W., Suite 200, Washington, DC 20036. 202/939-3800. Fax: 202/939-3868. E-mail: law@eli.org.) \$ 15. Many African countries, often with fairly recent constitutions, have explicit constitutional provisions guaranteeing a clean, healthy environment capable of sustaining human life. But enforcement is a problem, and opportunity. Three different traditions: common law, civil law, and Islamic law. Constitutional freedoms that facilitate environmental rights, such as freedom of association, access to information, and opportunities for public participation. Case studies. "Constitutional environmental provisions, including procedural guarantees, offer some of the best tools for environmental advocates."

Brueggemann, Walter. The Land: Place as Gift, Promise and Challenge in Biblical Faith. Philadelphia: Fortress Press, 1977.

Brueggemann, Robert, *Sprawl: A Compact History*. Chicago: University of Chicago Press, 2005. Sprawl is urban development, a largely beneficial expression of human desires that transcend geography and history. Sprawl should not be feared or cast in a negative light. Brueggemann is in urban planning at the University of Illinois at Chicago.

Bruggeman, Walter, Using God's Resources Wisely: Isaiah and Urban Possibility. Louisville, KY: Westminster/John Knox Press, 1993. 89 pages, paper. Six studies in the prophet Isaiah, addressed to a growing awareness of the environmental crisis and how it relates to social relations especially in urban settings. Isaiah's prophecies are an artistic-theological history of the city of Jerusalem a case study of urban environmental crisis that resulted from a lost sense of covenantal neighborliness. There are alarming parallels in today's urban crises. Ecological degradation, consumerism, and resource depletion are essentially urban problems, and urban power, anxiety, and greed reach into non-urban places to destroy the rural and wild places, as well as to undermine the city's own life support. Bruggeman teaches Old Testament at Columbia Theological Seminary, Decatur, Georgia. (v5,#4)

Brugiere, David; Sakom, Denis; Gautier-hion, Annie, "The conservation significance of the proposed Mbaere-Bodingue national park, Central African Republic, with special emphasis on its primate community," Biodiversity and Conservation 14(no.2, February 2005):505-522(18).

Bulle, RJ, "Habermas and Green Political Thought: Two Roads Converging," Environmental Politics 11(no.4, 2002): 1-20.

Bulle, Robert J. Review of Ingolfur Bluhdorn, "Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm", Organization and Environment, 15, (No. 4, 2002): 493-498. Bulle is an assistant professor of environmental policy at Drexel University, Philadelphia.

Bulle, Robert J., Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective. Cambridge, MA: MIT Press, 2000. Empirical and theoretical research assessing the effectiveness of U.S. environmental groups. Critical theory--in particular the work of Jürgen Habermas--can expand the understanding of environmental degradation and the political actions necessary to deal

with it. A pragmatic and a moral argument for broad-based democracy as a prerequisite to achieving ecological sustainability. (v.13,#1)

Brulle, Robert J. Review of Brian Doherty, Ideas and Actions in the Green Movement", Organization and Environment, 16, (No. 2, 2003): 258-61. Brulle is an assistant professor of environmental policy at Drexel University, Philadelphia.

Brulle, Robert J., Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective. Cambridge, MA: MIT Press, 2000. A wide-ranging analysis of environmentally oriented social movements in the U.S., examining their limited effectiveness in realizing their often diverse goals. Environmental movements have often been elitist and must adopt democratic rather than oligarchic institutional structures and develop together an "environmental metanarrative" that can speak effectively in power politics. Often uses the perspective of Habermas. (v.13,#4)

Brummitt, N; Lughadha, EN, "Biodiversity: Where's Hot and Where's Not," Conservation Biology 17(no.5, 2003):1442-1448. (v.14, #4)

Brune, Martin, Brüne-Cohrs, Ute, and McGrew, William C., "Psychiatric Treatment for Great Apes," Science 306(17 December 2004):2039. A letter to the editor. Captive great apes, especially chimpanzees, suffer from psychiatric disorders homologous to human psychopathology; such conditions are in principle treatable; and our closest relatives in the animal kingdom deserve proper psychiatric treatment. Brüne is at the Center for Psychiatry, Psychotherapy, and Psychosomatics, University of Bochum, Germany.

Brune, Tom. "Oregon Mudslides Prompt Renewed Debate on Land Use." The Christian Science Monitor, vol. 89, 27 Dec. 1996, p. 4.

Brune, Tom. "Washington's War of The Owls Heads Toward a Compromise." The Christian Science Monitor, vol. 88, 19 Nov. 1996, p. 3.

Brunell, Valerie and Ralph Swain, eds., Wilderness Ranger Cookbook. Helena, Montana: Falcon Press, 1990. Paper. 110 pages. \$ 7.95. A collection of backcountry recipes by U.S. Forest Service wilderness rangers, with each recipe accompanied with a philosophical reflection about the meaning of wilderness by one of these rangers. "Wilderness is more than lines on a map. It is also an attitude. This attitude reflects the thought that the earth and its community of life exist for its own sake, as opposed to being for the benefit of man. Wilderness gives us the opportunity to reflect on the role of humankind as a part of the community of life, rather than as a conqueror of nature." Patricia Cohen, Pecos, NM, with her recipe for "Cous-cous and Veggies." Available from San Juan National Forest Association, P. O. Box 2261, Durango, CO 81302. Phone 303/385-1210. (v4,#4)

Bruner, Michael and Oelschlaeger, Max, "Rhetoric, Environmentalism and Environmental Ethics". Environmental Ethics 16(1994):377-396. The growth of environmental ethics as an academic discipline has not been accompanied by any cultural movement toward sustainability. Indices of ecological degradation steadily increase, and many of the legislative gains made during the 1970s have been lost during the Reagan-Bush anti-environmental revolution. This situation gives rise to questions about the efficacy of ecophilosophical discourse. We argue (1) that these setbacks reflect, on the one hand, the skillful use of rhetorical tools by anti-environmental factions and, on the other, the indifference (even hostility) of the ecophilosophical community toward rhetoric, (2) that since the linguistic turn in philosophy, no rigid line of demarcation can be maintained between rhetoric and philosophy, and (3) that rhetoric offers resources to the ecophilosophical community that increase its potential to effect change in society. Bruner is with the Dept. of Communication Studies, University of North Texas, Denton. Oelschlaeger is with the Dept. of Philosophy, University of North Texas, Denton. (EE)

Brunk, Conrad G., Lawrence Haworth, and Brenda Lee, Value Assumptions in Risk Assessment: A Case Study of the Alachlor Controversy. Waterloo, Ontario: Wilfred Laurier University Press, 1991. Increasing reliance by public policymakers on scientific advisors is motivated in part by an assumption that such advice can be value-free. This study, based on the alachlor pesticide case, shows that risk assessors were divided by the fact that they held differing values, not by differences concerning the purely empirical aspects of the risk assessment. The authors concludes that risk assessment is as much a normative as it is a scientific enterprise. (Thanks to Peter Miller). (v2,#4)

Brunk, Conrad, Lawrence Haworth, and Brenda Lee, "Is Scientific Assessment of Risk Possible? Value Assumptions in the Canadian Alachlor Controversy," Dialogue (Canadian Philosophical Review), 30 (no. 3, Summer 1991):235-248. The issue is devoted to applied ethics. (v3,#1)

Brunnee, Jutta, Nolkaemper, Andre. "Between the Forests and the Trees--An Emerging International Forest Law," Environmental Conservation 23(no.4 1996):307. (v8,#3)

Brunner, David L., Will Miller, and Nan Stockholm, eds. Corporations and the Environment. Reviewed in Environmental Ethics 6(1984):363-65.

Brunner, Ronald D., Clark, Tim W. "A Practice-Based Approach to Ecosystem Management,"Conservation Biology 11(no.1, 1997):48. (v8,#2)

Brunnermeier, SB; Cohen, MA, "Determinants of environmental innovation in US manufacturing industries," Journal of Environmental Economics and Management 45(no.2, 2003):278-293.

Brunnermeier, SB; Levinson, A, "Examining the Evidence on Environmental Regulations and Industry Location," Journal of Environment and Development 13(no.1, 2004):6-41. (v. 15, # 3)

Brunnschweiler, C.N., and E.H. Bulte. "Linking Natural Resources to Slow Growth and More Conflict." *Science* Vol. 320, no. 5876 (2 May 2008): 616-17. Although an abundance of natural resources was generally perceived as advantageous to development until the 1980s, in the 1990s natural resources were often considered a curse. Resource-rich economies often suffer from weak or autocratic leadership, failing institutions, exploitation by wealthier developed states, greedy leaders and rebels, but Brunnschweiler and Bulte claim that natural resources do not necessarily spell doom for development.

Bruno, John F., Stachowicz, John J., and Bertness, Mark D., "Inclusion of facilitation into ecological theory," Trends in Ecology and Evolution (TREE) 18(no. 3, 2003):119-125. A controversial push to focus on positive ecological interactions rather than competition and predation has ignited a debate among ecologists. A new group of ecologists argue that much of modern ecological theory stems from a misleading fixation on the roles of competition, predation, and externally imposed stress in shaping natural communities. Missing from core concepts, they argue, is the growing realization that species can interact in positive ways--a process called facilitation--with major consequences for community structure. See also: Shouse, Ben, "Conflict over Cooperation," Science 299(31 January 2003):644-646.

Bruno, Kenny and Karliner, Joshua, Earth Summit. biz: The Corporate Takeover of Sustainable Development. Oakland, CA: Foodfirst Books, Institute for Food and Development Policy, 2002. www.foodfirst.org. Phone 510-654-4400. How transnational corporations have coopted the rhetoric of social and environmental responsibility. But there are principles and structures within the United Nations with some potential to counter the World Trade Organization. Alas, however, with the unveiling of the Global Compact in 2000, the U.N. has given corporations the chance to declare their declaration to social and environmental responsibility without actually being held accountable for their actions. (v.13,#4)

Brunson, Mark W., Yarrow, Deborah T., Kuhns, Michael R. "Nonindustrial Private Forest Owners and Ecosystem Management: Can They Work Together?" Journal of Forestry 94(Jun. 1996):14. (v7,#2)

Brusca, RC, "Review of: Desert Ecology: An Introduction to Life in the Arid Southwest by John Sowell," Natural Resources Journal 42(no.3, 2002): 686-687.

Brush, Stephen B., Stabinsky, Doreen, eds. Valuing Local Knowledge: Indigenous People and Intellectual Property Rights. Washington: Island Press, 1996. Cultural or indigenous knowledge should be treated as a form of intellectual property, which enables such peoples to gain financially from sharing unique and useful knowledge, in order to increase economic return from biological resources maintained by peasants and tribal people. Brush is in community studies and development at the University of California, Davis. Stabinsky is in environmental studies at California State University-Sacramento. (v8,#2)

Brush, Stephen B. "Valuing Crop Genetic Resources," The Journal of Environment and Development 5(no.4, 1996):416. (v8,#2)

Brussard, Peter F., Dennis D. Murphy, and C. Richard Tracy. "Cattle and Conservation Biology--Another View." Conservation Biology 8 (1994): 919-921. More on a debate in this journal (September 1994, by Reed Noss, editor, and others) on cattle on public lands and the extent of their ecological degradation, mixed here with questions about the extent of advocacy legitimate to conservation biologists. The Society for Conservation Biology "differs from environmental advocacy groups because it promotes science rather than any partisan agenda. If the Society becomes too strident in advocating specific political prescriptions to preserve ecological systems, it may gamble away more than its credibility. It risks losing the opportunity to apply that mission within the broadest possible community of interests. The September 1994 issue of Conservation Biology takes us dangerously close to that state of affairs. ... We obviously can also contribute as activists, but this should be done outside our society." An interesting editorial quite suitable for use in classroom discussions of science and advocacy. Brussard, President of the Society for Conservation Biology, is in biology at the University of Nevada/Reno; Murphy, President-Elect, is in biology at Stanford University, and Tracy is in biology at Colorado State University. (v6,#1)

Brussard, Peter F., and John C. Tull. "Conservation Biology and Four Types of Advocacy." Conservation Biology Vol. 21, no. 1 (2007): 21-4. The four types are (1) professional advocacy, (2) advocacy for science, (3) advocacy for ecosystem services, and (4) advocacy for the natural world.

Bryant, B., and Mohai, P., eds., Race and the Incidence of Environmental Hazards: A Time for Discourse. Boulder, CO: Westview Press, 1992. (v9,#2)

Bryant, Dirk A. Beyond the Frontier: The Last Wild Forests. Washington, D.C.: World Resource Institute, 1997. 25pp. \$14.95 paper. The dramatic decline of original pristine forest and the status of the large remaining tracts. Full-page, full-color maps ranks country by country the perilous state of the world's forests today and provide systematic, easily comparable forestry profiles for Oceania, Asia, Europe and Russia, South America, North and Central America and Africa. The work also analyzes threats to the world's remaining forest areas and explains how to reverse these trends. (v8,#1)

Bryant, R. L., "False Prophets? Mutant NGOs and Philippine Environmentalism," Society and Natural Resources 15(no.7, 2002): 629-40. (v.13,#4)

Bryant, Raymond, and Bailey, Sinead, Third World Political Ecology. New York: Routledge, 1997. (v.9,#3)

Bryant, Raymond L. *Nongovernmental Organizations in Environmental Struggles*. New Haven: Yale University Press, 2005.

Bryant, Tannetje and Akers, Keith, "Environmental Controls in Vietnam." Environmental Law 29(no. 1, 1999):133- . This article examines the post-1992 Vietnamese legislative attempts to protect the environment. It outlines the policy background and governmental administrative framework, gives a detailed analysis of the environmental impact evaluation procedures, analyzes various compliance mechanisms, describes preventative mechanisms of a nonlegal kind, and evaluates the legislation using various legal and nonlegal criteria. (v.11,#1)

Bryce, Robert, "Nuclear Waste's Last Stand: Apache Land," The Christian Science Monitor 86 (2 September 1994): 6-7. (v5,#3)

Bryson, Chris. "How Safe Are Nuclear-powered Space Missions?" The Christian Science Monitor, vol. 89, 17 Dec. 1996, p. 12.

Buarque, Cristovam, Review of Zadek, Simon The End of Economics: Ethics and the Disorder of Progress. Environmental Values 3(1994):273. (EV)

Buarque, Cristovam, The End of Economics: Ethics and the Disorder of Progress. London: Zed Books, 1993. £ 29.95 cloth, £ 12.95 paper. Economics aspiration to neutrality has faded, it inadequately figures environmental costs, its utilitarian spectacles blind it to qualitative distinctions of value. A new economics needs to embody an analytic framework that has an explicit ethical posture. The 'telos' implied within the dominant view of development is essentially a Western construct and does not articulate the vision or meet the needs of the majority of people in the South; traditional views are cyclic, not developmental. (v5,#3)

Bube, Richard H. "Is 'Man' Unique?", Perspectives on Science and Christian Faith 48(no.4,1996):250. (v7,#4)

Buccioni, Eva M., Review of Michael J. Reiss and Roger Straughan, Improving Nature? The Science and Ethics of Genetic Engineering. Cambridge, UK: Cambridge University Press, 1996, Journal of Agricultural and Environmental Ethics 11(1998):54-55.

Buccioni, Eva M. Review of Michael J. Reiss and Roger Straughan, Improving Nature? The Science and Ethics of Genetic Engineering, Journal of Agricultural and Environmental Ethics 11(1999):49-55. (JAEE)

Buchanan, Allen E. Ethics, Efficiency, and the Market. Reviewed in Environmental Ethics 8(1986):275-76.

Buchanan, Allen. "Judging the Past: The Case of the Human Radiation Experiments." The Hastings Center Report 26(May 1996):25. Our reluctance to measure the morality of past practices is more than a nagging problem for moral theorists. The legitimacy of retrospective moral judgment has fundamental implications for how practices and institutions should be viewed, and judged, now. (v7,#2)

Buchanan, James M. Ethics and Economic Progress. Norman: University of Oklahoma Press, 1994. 168 pages. \$19.95. From a lecture series at the University of Oklahoma. The Nobel Prize-winning economist and professor at George Mason University gives a non-technical examination of the ethics-economics nexus, and argues that moral constraints exert important economic effects, such as, the "Puritan" work and saving ethics, the relevance of moral values to economic well-being. Buchanan defends Adam

Smith's widely dismissed distinction between productive and nonproductive labor. (v5,#2)

Buchanan, Patrick, The Great Betrayal: How American Sovereignty and Social Justice Are Being Sacrificed to the Gods of the Global Economy. Little, Brown. Reviewed by Cobb, John B., Jr., in "Against Free Trade: A Meeting of Opposites," Christian Century 115 (no. 29, October 28, 1998):999-1002. Cobb is against free trade because of what it does to third-world labor and the environment; Buchanan is against free trade because it undermines American justice and national sovereignty. But liberal and conservative meet surprisingly. "The real divisions of our time are not between left and right but between nations and the globalist delusion." "America's wealthiest 1 percent, which controlled 21 percent of America's wealth in 1949, now [1995] controls 40 percent. ... Top CEO salaries--44 times the average wage of a worker in 1965--have soared to 212 times." Is there a way to combine economic nationalism and a wider loyalty to Earth and all its people? (v.9,#4)

Buchanan, Rob, "A Natural Death," Outside, vol, 25, no. 6, June 2000, pages 106-114, 152-155. Guy Waterman and his wife authored four books on ethics and conservation of New England wilderness. On February 25, 2000, the coldest day of the year, Waterman, hiked to the top of his favorite peak, Mt. Lafayette (Vermont), and laid down to die by freezing. His body was recovered days later. Gripped by pessimism, Waterman became convinced that the "illusion of wildness is as crucial as wildness itself." (v.11,#2)

Buchholz, Rogene A., "Corporate Responsibility and the Good Society: From Economics to Ecology," Business Horizons (Indiana University Graduate School of Business) 34, no. 4 (1991):19-31. The economic paradigm will continue its dominance as long as human beings consider themselves to be the center of life on earth. (v4,#2)

Buchholz, Rogene A., Principles of Environmental Management: The Greening of Business. Englewood Cliffs, NJ: Prentice-Hall, 1993. Paper. 433 pages. Part I provides background material on the historical development of environmental concerns, principles of ecology, environmental ethics, and public policy. Part II studies major environmental problems: global warming, air pollution, water pollution, pesticides and toxics, waste disposal, deforestation and species decimation, and coastal erosion and wetlands destruction. Part III analyzes strategies for business and strategies for society. Buchholz is in the College of Business Administration, Loyola University of New Orleans. (v3,#3)

Buchmann, Steve, and Nabhan, Gary Paul, The Forgotten Pollinators. Washington, DC: Island Press, 1996. More than 60 kinds of bird and mammal pollinators are known to be endangered and no one has any idea how many insect pollinators are vulnerable to extinction. Honey bees are a doubtful substitute; there are now far fewer honeybees in the U.S. than at any time since World War II, owing to infestations with exotic diseases and pests that are not easily controlled. Within a few years pollinators other than honeybees will be needed to provide \$ 4 billion to \$ 6 billion of annual crop pollination service to America's farmers. (v7,#1)

Buck, Susan J. The Global Commons: An Introduction. Washington, D.C.: Island Press, 1998. \$50 cloth, \$25 paper. 240 pp. (v9,#2)

Buckingham-Hatfield, S., Evans, B. Environmental Planning and Sustainability. Chichester, U.K.: John Wiley and Sons, 1996. 196 pp. £ 35, cloth. The authors argue that national environmental planning is reactive, ad hoc, and hence they call for a wider-ranging refocusing, so that environmental planning can be based on reliable and consistent data collection, equitable public participation, and well-debated understanding of sustainability. They also argue that the challenge offered by the U.N. through its Agenda 21 program and by European policies should result in a rethinking, not only concerned with how we plan to achieve environmental sustainability, but also about the contexts in which we should do so.

(v8,#2)

Buckley, Claire, compiler, Case Studies in Environmental Management in Central and Eastern Europe, Casebook Series Volume II, International Network for Environmental Management (INEM), with the support of the German Federal Foundation for the Environment, Deutsche Bundesstiftung Umwelt. October 1999. 144 pp., paper. ISBN 1 874719 20 9. \$ 30.00, As Central and Eastern European countries queue up to become members of a widely expanded European Union (EU), the question of how their environmental laws and performance can become consistent with current standards has become of paramount importance. Forecasts are largely gloomy, with some commentators suggesting that it will take decades for full compliance to be achieved. This casebook presents the experiences of fourteen companies in integrating environmental considerations into these emerging economies. Contact: Samantha Self, Greenleaf Publishing, Aizlewood Business Centre, Aizlewood's Mill, Sheffield S3 8GG, UK. E-mail: greenleaf@worldscope.co.uk
<http://www.greenleaf-publishing.com>. (v.10,#3)

Buckley, G. P., ed., Biological Habitat Reconstruction. Belhaven, 1989. \$52.50. (v3,#1)

Buckley, Ralf et al, eds., Nature-Based Tourism, Environment and Land Management. New York: Oxford University Press, 2004.

Buckley, Ralf, ed., Environmental Impacts of Ecotourism. New York: Oxford University Press, 2004. Buckley is at Griffith University, Australia.

Buckley, RP, "The Rich Borrow and the Poor Repay: The Fatal Flaw in International Finance", World Policy Journal 19(no.4, 2003):59-65.

Budd, Malcolm, "The Aesthetics of Nature," Proceedings of the Aristotelian Society 100(2000):137-157. I begin by demonstrating the inadequacy of the idea that the aesthetic appreciation of nature should be understood as the appreciation of nature as if it were art. This leads to a consideration of three theses: (i) from the aesthetic point of view natural items should be appreciated under concepts of the natural things or phenomena they are, (ii) what aesthetic properties a natural item really possesses is determined by the right categories of nature to experience the item as falling under, and (iii) (the doctrine of positive aesthetics with respect to nature) the natural world untouched by humanity is essentially aesthetically good. I indicate an unclarity in (i) and identify difficulties facing (ii). I distinguish various versions of (iii), reject certain of these, and fault a number of arguments in support of (iii). I conclude that the idea of the aesthetic value of a natural item is such that it endows the aesthetic appreciation of nature with a freedom and relativity denied to the appreciation of art and renders (iii) problematic. With criticisms of Allen Carlson and Holmes Rolston. (v.13,#4)

Budd, Malcolm, "Delight in the Natural World: Kant on the Aesthetic Appreciation of Nature," British Journal of Aesthetics 38(1998):Part I:1-18. Part II:117-126. Part III: 233-250. A tripartite examination of Kant's theory of the aesthetic appreciation of nature. Part I. Beginning with an exposition of Kant's notion of an aesthetic judgment and his classification of noncompound aesthetic judgments, it expounds his theory of beauty, rejects his identification of the distinctive pleasures of the beautiful, rejects his account of a judgment of dependent beauty about a natural object, identifies a gap in his classification of aesthetic judgments about natural items and faults his thoughts about the possibility or impossibility of an ideal of beauty for things of a particular natural kind.

Part II. This part elucidates and defends Kant's claim that a pure judgment of taste does not, of itself, generate an interest, before considering, and rejecting as unconvincing, Kant's arguments for his views that (i) someone who takes an immediate interest in natural beauty can do so only in virtue of possessing the basis of a morally good disposition, (ii) someone who reflects on nature's beauty will

inevitably take an immediate interest in natural beauty, and (iii) each person ought to take such an interest.

Part III. This part expounds Kant's conception of a judgment of the sublime in nature, elucidates his accounts of the mathematically and the dynamically sublime, rejects his account of the emotion of the sublime and presents an alternative. Budd is in philosophy at University College London. (v.13,#4)

Budd, Malcolm, The Aesthetic Appreciation of Nature. Oxford: Oxford University Press, 2003. Budd is at University College, London.

Budd, Malcolm, "The Aesthetic Appreciation of Nature," British Journal of Aesthetics 36(1996):207-222. Budd is in philosophy, University College, London.

Buddhist Perspectives on the Earth Charter. No editor given. Cambridge, MA: Boston Research Center for the 21st Century, November 1977. 91 pages. \$3. Contributions by Grace Burford, David W. Chappell, Susan Darlington, Rita M. Gross, Yoichi Kawada, Stephanie Kaza, Sallie B. King, Steven Rockefeller, and Donald K. Swearer. The Boston Research Center for the 21st Century is an international peace institute founded in 1993 by Daisaku Ikeda, a Buddhist peace activist and President of Soka Gakkai International, an association of Buddhist organizations in 128 countries. Address: 396 Harvard Street, Cambridge, MA 02138-3924. Phone 617/491-1090. Fax 617/491-1169. (v9,#2)

Budiansky, Stephen, Nature's Keepers: The New Science of Nature Management. Free Press, 1995. Nature doesn't take care of itself, but needs some management. Wild nature is "a fake" not only now but has been a fake for centuries; there is nothing but human modified nature, "the work of civilized man" (p. 3) "Nature lovers ... have deceived themselves about the true character of their beloved" (p. 5). Even ecologists now realize that nature does not take care of itself well (pp. 6-7). "Perhaps the best model for us to follow is that of the gardener, who ... handles nature with respect but without self-abnegation. He brings the full scope of human aptitudes to bear on the landscape, aesthetic, scientific, utilitarian, even moral; he knows that what he is fashioning his creativity and wisdom; but he knows in the end that the effort is a joint one" (p. 250). Critics of Budiansky are complaining that he uses evidence selectively and often fails to give a balanced representation of those he cites, for example, using Donald Worster as an advocate of balance in nature (p. 17), when Worster in fact argues much the opposite. Budiansky is a senior writer at U.S. News and World Report. (v7,#2)

Budiansky, Stephen, "Killing with Kindness," U.S. News and World Report 121(no. 21, Nov. 25, 1996):48-49. Preserving wildlife has been a moral and practical disaster for the developing world. The paradoxical solution: Use it or lose it. Tourism is no answer. Elephants, for instance, are the darling of the West and enemy number 1 to Africans. (v7,#4)

Budiansky, Stephen, "The Doomsday Myths," U.S. News and World Report, December 13, 1993. By exaggerating environmental dangers, activists have undermined their credibility, and triggered an anti-environmental backlash. None of the global environmental issues now under attack is a hoax. But by overstating evidence, by presenting hypotheses as certainties, and predictions as facts to create a sense of urgency, scientist-activists have overplayed their hand. Myth One: Fifty thousand species a year are being lost to extinction. Myth Two: Forth million acres of tropic rain forest are destroyed each year. Myth Three: The ozone hole is spreading. Myth Four: No serious scientist doubt predictions of global warming. Budiansky is a senior writer at U.S. News and World Report. (v5,#1)

Budiansky, Stephen, "A Special Relationship: The Coevolution of Human Beings and Domesticated Animals," Journal of the American Veterinary Medical Association 204 (no. 3, February 1994):365-368. Domestication represents a coevolved relationship, analogous with many other mutualistic partnerships in nature, in which loss of defensive and self-sufficient behaviors in a species is more than compensated for

by the gain of food, protection, or shelter afforded by close association with another species. This is supported by recent scientific studies, and this undermines the idea that domestication of animals is tantamount to their subjugation or exploitation. Some species--dogs, cats, cattle, house mice, Norway rats, even gourds--have survived by their association with humans. The fittest strategy of the future may be a system of more cooperative, interdependent relationships between such somewhat tamed animals and humans, not an emphasis on those wild and free, untainted by human touch. Lions have been outcompeted by house cats. (v5,#1)

Budiansky, Stephen, The Covenant of the Wild: Why Animals Chose Domestication. New York: Wm. Morrow, 1992. \$ 18. A commentary on the relationship of humans to animals and on humankind's place in the natural world. (v3,#3)

Budyko, M. I. and Yu. A. Izrael, Anthropogenic Climatic Change. Tuscon: University of Arizona Press, 1990. A Soviet view. (v1,#2)

Buege, Douglas J., "The Ecologically Noble Savage Revisited," Environmental Ethics 18(1996):88. The stereotype of the 'ecologically noble savage' is still prevalent in European-American discourses. I examine the empirical justifications offered for this stereotype, concluding that we lack sound empirical grounds for believing in 'ecological nobility.' I argue that the stereotype should be abandoned because it has negative consequences for native peoples. Instead of accepting questionable stereotypes, philosophers and others should focus on the lives of particular peoples in order to understand their philosophies as well as the relationships that they maintain with their homelands. Buege is a philosopher in West Allis, WI and has taught at the University of Wisconsin--Stevens Point. (EE)

Buege, Douglas, "Epistemic Responsibility and the Natural: Toward a Feminist Epistemology for Environmental Philosophy," APA (American Philosophical Association) Newsletter on Feminism and Philosophy 91(1992):73-78.

Buege, Douglas J., "An Ecologically-informed Ontology for Environmental Ethics," Biology and Philosophy 12(1997):1-20. Since the inception of their subject as a distinct area of study in philosophy, environmental ethicists have quarreled over the choice of entities with which an environmental ethic should be concerned. A dichotomous ontology has arisen with the ethical atomists, e.g. Singer and Taylor, arguing for moral consideration of individual organisms and the holists, e.g. Rolston and Callicott, focussing on moral consideration of systems. This dichotomous view is ecologically misinformed and should be abandoned. In this paper, I argue that the organization of the natural world, as viewed by some ecologists and evolutionary biologists, is structured on various levels that are not reducible to one another. This "hierarchical" view, expressed by Salthe and Eldredge, provides the most complete and accurate ontology for environmental ethics. Buege completed a Ph.D. in environmental ethics at the University of Minnesota, Minneapolis, fall 1993, entitled Intrinsic Value, Organic Unity and Environmental Philosophy: Grounding our Values, critiquing existing theories and developing new theories of ontology and intrinsic value with a view to grounding public policy issues. The dissertation advisor was Arthur Caplan, and Karen Warren, of Macalaster College, St. Paul, was a chief mentor. He is now an independent scholar, West Allis, WI. (v8,#3)

Buell, Lawrence. *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*. Malden, MA: Blackwell Publishing, 2005. "Ecocriticism is an umbrella term ... used to refer to the environmentally oriented study of literature and (less often) the arts more generally, and to the theories that underlie such critical practice" (p. 138). Buell traces the ecocritical movement back to its roots in the 1970s to its proliferation and diversification today. He shows how ecocriticism has moved from the genres of nature writing and nature poetry to all of literary history and discourse, and he addresses issues such as the ecocriticism move from nature preservation to environmental justice, the

meaning of place in a globalizing world, and the interaction of ecocritical aesthetic, ethical, and political concerns. Buell concludes by arguing that the discourses of the environment will become a permanent part of literary and cultural studies.

Buell, Lawrence. *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*. Malden, MA: Blackwell Publishing, 2005. "Ecocriticism is an umbrella term ... used to refer to the environmentally oriented study of literature and (less often) the arts more generally, and to the theories that underlie such critical practice" (p. 138). Buell traces the ecocritical movement back to its roots in the 1970s to its proliferation and diversification today. He shows how ecocriticism has moved from the genres of nature writing and nature poetry to all of literary history and discourse, and he addresses issues such as the ecocriticism move from nature preservation to environmental justice, the meaning of place in a globalizing world, and the interaction of ecocritical aesthetic, ethical, and political concerns. Buell concludes by arguing that the discourses of the environment will become a permanent part of literary and cultural studies.

Bugallo, Alicia Irene, "Las ideas de naturaleza en la Ecología Profunda y sus implicancias prácticas (The ideas of nature in Deep Ecology and their practical implications," *Ludus Vitalis*, vol. X, no. 17, first semester 2002) In Spanish. A review of Norwegian ecosopher Arne Naess' distinction between 'deep' and 'shallow' ecology, and the philosophical roots of this in Spinozan pantheism, Gandhian nonviolence and Mahayana Buddhism. Nature as an interrelated whole and deep ecology as a tool for enabling systematic discussion of total views, of how norms and consequences interact. The movement has an inseparable ecopolitical aspect.

Later proposals of the movement Platform (since Naess-Sessions in 1984) stressed the eight principles of the platform constituting a methodological way from ultimate premises to the level of decisions in concrete situations. Alicia Bugallo is at Universidad Tecnológica Nacional, Buenos Aires, Argentina. Web page: ludusvitalis.org.mx.

Bugallo, Alicia Irene, ¿Antropocentrismo débil en las nuevas prácticas de conservación? ('Weak Anthropocentrism in New Conservation Practices?'. Acts of the "Ibero-American Congress on Ethics and Political Philosophy" Alcalá de Henares, 16-20 September 2002, Spain. CD-ROM forthcoming. In Spanish.) Following Norton's idea of weak anthropocentrism, referred to by other authors as wise or humble anthropocentrism, the article describes the evolution of a conflict in the Argentinian part of the Yunga's Forest

system, caused by the construction of a gas duct. The conflict includes several agents, namely the native communities, private companies, governmental and non-governmental entities. Bugallo stresses the recent approval by the UNESCO of a Biosphere Reserve in the area, after the proposal made by a scientific team.

Bugallo, Alicia Irene, Los cambios conceptuales sobre conservación y su influencia en la gestión de Reservas de Biosfera (Conceptual Changes in Conservation and their Influence on Biosphere Reserves Management), Boletín Electrónico de Reservas de la Biosfera, de América Latina y el Caribe. No 2 setiembre 2001, in Spanish. www.unesco.org.uy/mab/boletin. Bugallo analyzes some changes in the conceptual framework of conserving nature and its bearing on changing ideas of Biosphere Reserves, changes in ideas about core and buffer areas, and the failure appropriately to integrate preservation and human development in Latin American and the Caribbean. She is in philosophy at the Universidad Tecnológica Nacional, Buenos Aires, bugallo@mail.retina.ar. (v.13,#1)

Bugallo, Alicia Irene, "Abordajes de la problemática ambiental en la Argentina, desde la perspectiva de la ética y la filosofía ambiental," *International Society for Environmental Ethics Newsletter* 19, no.1, Winter 2008, pp. 5-8. English translation: "Approaches to the Environmental Problem in Argentina from the Perspective of Environmental Ethics and Philosophy," pp. 8-11. Bugallo is a Ph.D. Philosophy candidate, University of Buenos Aires, Argentina. She works as a Professor at the National Technological

University, Buenos Aires, and as an Adjunct Professor at El Salvador University, San Miguel, Argentina.
Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

Bugnion, Veronique, Reiner, David M., "A Game of Climate Chicken: Can EPA Regulate Greenhouse Gases Before the U.S. Senate Ratifies the Kyoto Protocol?" Environmental Law 30(no. 3, 2000):491- .
Bugnion and Reiner explore the various scientific, political, and legal debates regarding the action necessary to reverse the negative effects of global warming. They also discuss the United States Environmental Protection Agency's (EPA) ability to use provisions of the Clean Air Act (CAA) to promulgate and implement emissions standards addressed by the Kyoto Protocol. Finally, the authors conclude that, although EPA's authority to implement such standards is unclear, Congress could amend the CAA to explicitly authorize EPA to promulgate standards for limiting greenhouse gas emissions.
(v.12,#2)

Buhl, Lawrence, Environmental Imagination, 1995. (v7,#2)

Buhrmann, J., "Review of: Hofrichter, Richard, ed. Reclaiming Environmental Debate: The Politics of Health in a Toxic Culture," Society and Natural Resources 14(no.10, 2001): 927-28. (v.13,#2)

Buhrs, T., "From Diffusion to Defusion: The Roots and Effects of Environmental Innovation in New Zealand," Environmental Politics 12(no.3, 2003):83-101. (v.14, #4)

Buhrs, Ton, and Bartlett, Robert V., "Strategic Thinking and the Environment: Planning the Future in New Zealand," Environmental Politics (Summer 1997):72-. (v.8,#4)

Buhrs, Ton, "Green Planning in Australia and Canada: Dead or Alive?" Environmental Politics 9(no. 2, Summer 2000):102- . (v.12,#2)

Bührs, Ton and Robert V. Bartlett, Environmental Policy in New Zealand: The Politics and Clean and Green? New York: Oxford University Press, 1993. (v5,#4)

Buij, R., Singleton, I., Krakauer, E. and Vanschaik, C. P., "Rapid Assessment of Orangutan Density," Biological Conservation 114(no. 1, 2003): 103-113.

Buijs, Arjen; Pedroli, Bas; Luginbuhl, Yves, "From Hiking Through Farmland to Farming in a Leisure Landscape: Changing Social Perceptions of the European Landscape," Landscape Ecology 21 (no.3, April 2006): 375-389 (15).

Buitendag, J 1986. Die skepping as gelykenis: 'n beoordeling van die skeppingsleer van Karl Barth in die lig van die appél van die ekologiese krisis. Hervormde Teologiese Studies 42:4, 674-95. (Africa)

Buitendag, J 1991. Teologie en ekologie. In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 1-8. (Africa)

Buitendag, J 1988. En nou bly Skepper, skepsel en skepping - hierdie drie: 'n teologiese profiel van die ekologiese debat. Hervormde Teologiese Studies 44, 295-313. (Africa)

Buitendag, J 1986. Creation and ecology: a systematic inquiry into the theological understanding of theology. D.D. University of Pretoria. (Africa)

Bulbeck, Chilla. Facing the Wild: Ecotourism, Conservation and Animal Encounters. London: Earthscan, 2005. Bulbeck discusses why people travel to see animals, the authenticity of such experiences, and what changes in behavior follow, especially with regard to conservation. She argues for a "respectful

stewardship” of a “hybrid nature.”

Bulkeley, Harriet, and Mol, Arthur P.J., "Participation and Environmental Governance: Consensus, Ambivalence and Debate," Environmental Values 12(2003): 143-154. During the past four decades the governance of environmental problems - the definition of issues and their political and practical resolution - has evolved to include a wider range of stakeholders in more extensive open discussions. In the introduction to this issue of Environmental Values on 'Environment, Policy and Participation', we outline some features of these recent developments in participatory environmental governance, indicate some key questions that arise, and give an overview of the collection papers in this special issue. (EV)

Bulkley, Kelly. "The Quest for Transformational Experience." Environmental Ethics 13(1991) 151-63.

Michael E. Zimmerman claims that the fundamental source of our society's destructive environmental practices is our "dualistic consciousness," our tendency to see ourselves as essentially separate from the rest of the world; he argues that only by means of the transformational experience of nondualistic consciousness can we develop a more life-enhancing environmental ethic. I suggest that dreams and dream interpretation may provide exactly this sort of experience. Dreams present us with powerful challenges to the ordinary categories and structures of our daily lives, and they reveal in numinous, transformational images how we are ultimately members of a web of being that includes all life. I offer Victor Turner's concept of *communitas* as a means of clarifying and unifying the issues Zimmerman and I are discussing. In conclusion I sketch out some of the practical applications of these ideas to the task of improving our society's treatment of the environment. Bulkley is a Ph.D. student at the Divinity School of the University of Chicago, Chicago, IL. (EE)

Bull, A.T., "Biotechnology for Environmental Quality: Closing the Circles", Biodiversity and Conservation 5(No.1, 1996):1- . (v7,#1)

Bullard, Robert D., ed., Confronting Environmental Racism: Voices from the Grassroots. Boston, MA: South End Press (116 Saint Botolph St., Boston, MA 02115), 1993. A book by and about people of color fighting America's environmental racism, from the Indian reservations to the inner cities. "Whether by conscious design or institutional neglect, communities of color face some of the worst environmental destruction in the nation. Now activists of color have begun to challenge both the industrial polluters and the often indifferent mainstream environmental movement. Groups have sprung up from Maine to Louisiana to Alaska." This book tells their story. (v4,#3)

Bullard, Robert D., ed., The Quest for Environmental Justice: Human Rights and the Politics of Pollution. San Francisco: Sierra Club Books, 2005.

Bullard, Robert D., Dumping in Dixie: Race, Class, and Environmental Quality. Boulder, CO: Westview Press, 1994, 2nd edition. 192 pages. \$ 19.95 paper. To be poor, working class, or a member of a minority group in the U.S. often means being subjected to a disproportionate share of the country's environmental problems. How five African-American communities, empowered by the civil rights movement, link environmentalism with social justice. The second edition updates this struggle. Bullard is a sociologist at the University of California, Riverside. (v5,#1)

Bullard, Robert D., ed. The Quest for Environmental Justice: Human Rights and the Politics of Pollution. San Francisco: Sierra Club Books, 2005. Contents include: (1) "Environmental Justice in the Twenty-first Century" by Robert D. Bullard, (2) "Neighborhoods 'Zoned' for Garbage" by Robert D. Bullard, (3) "Woman Warriors of Color on the Front Line" by Robert D. Bullard and Damu Smith, (4) "Living and Dying in Louisiana's 'Cancer Alley'" by Beverly Wright, (5) "Environmental Inequity in Metropolitan Los Angeles" by Manuel Pastor Jr., James L. Sadd, and Rachel Morello-Frosch, (6) "Toxic Racism on a New Jersey Waterfront" by Olga Pomar, (7) "Anatomy of the Urban Parks Movement: Equal Justice, Democracy, and Livability in Los Angeles" by Robert García and Erica S. Flores, (7) "Resource Wars

against Native Peoples” by Al Gedicks, (9) *Tierra y Vida: Chicano Environmental Justice Struggles in the Southwest*” by Devon G. Peña, (10) “Environmental Reparations” by Robin Morris Collin and Robert Collin, (11) “Vieques: The Land, the People, the Struggle, the Future” by Déborah Berman Santana, (12) “Alienation and Militancy in the Niger Delta: Petroleum, Politics, and Democracy in Nigeria” by Oronto Douglas, Dimieari von Kemedi, Ike Okonta, and Michael J. Watts, (13) “Environmental Racism and Neoliberal Disorder in South Africa” by David K. McDonald, and (14) “Addressing Global Poverty, Pollution, and Human Rights” by Robert D. Bullard, Glenn S. Johnson, and Angel O. Torres.

Bullard, Robert D., ed. *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco: Sierra Club Books, 2005. Contents include: (1) “Environmental Justice in the Twenty-first Century” by Robert D. Bullard, (2) “Neighborhoods ‘Zoned’ for Garbage” by Robert D. Bullard, (3) “Woman Warriors of Color on the Front Line” by Robert D. Bullard and Damu Smith, (4) “Living and Dying in Louisiana’s ‘Cancer Alley’” by Beverly Wright, (5) “Environmental Inequity in Metropolitan Los Angeles” by Manuel Pastor Jr., James L. Sadd, and Rachel Morello-Frosch, (6) “Toxic Racism on a New Jersey Waterfront” by Olga Pomar, (7) “Anatomy of the Urban Parks Movement: Equal Justice, Democracy, and Livability in Los Angeles” by Robert García and Erica S. Flores, (7) “Resource Wars against Native Peoples” by Al Gedicks, (9) *Tierra y Vida: Chicano Environmental Justice Struggles in the Southwest*” by Devon G. Peña, (10) “Environmental Reparations” by Robin Morris Collin and Robert Collin, (11) “Vieques: The Land, the People, the Struggle, the Future” by Déborah Berman Santana, (12) “Alienation and Militancy in the Niger Delta: Petroleum, Politics, and Democracy in Nigeria” by Oronto Douglas, Dimieari von Kemedi, Ike Okonta, and Michael J. Watts, (13) “Environmental Racism and Neoliberal Disorder in South Africa” by David K. McDonald, and (14) “Addressing Global Poverty, Pollution, and Human Rights” by Robert D. Bullard, Glenn S. Johnson, and Angel O. Torres.

Bullard, Robert D., [People of Color Environmental Groups: Directory](#), 1992. 81 pages. There are over 200 such groups in the United States, described here. Contact: Robert D. Bullard, Department of Sociology, University of California, Riverside, CA 92521. Phone 714/787-5444. (v3,#1)

Bullers, Susan, "Environmental Stressors, Perceived Control, and Health: The Case of Residents Near Large-Scale Hog Farms in Eastern North Carolina," [Human Ecology](#) 33(no.1, February 2005):1-16(16).

Bulliet, Richard W. *Hunters, Herders, and Hamburgers: The Past and Future of Human-Animal Relationships*. New York: Columbia University Press, 2005. Bulliet explores four stages in the history the human-animal relationship—separation, predomesticity, domesticity, and postdomesticity. He begins with the question of when and why humans began to consider themselves distinct from other species and concludes with the human use of species as raw materials for various animal-product industries. He discusses changing philosophical, religious, and aesthetic viewpoints, as well as different ways various cultures have reinforced, symbolized, and rationalized their relations with animals.

Bulliet, Richard W. *Hunters, Herders, and Hamburgers: The Past and Future of Human-Animal Relationships*. New York: Columbia University Press, 2005. Bulliet explores four stages in the history the human-animal relationship—separation, predomesticity, domesticity, and postdomesticity. He begins with the question of when and why humans began to consider themselves distinct from other species and concludes with the human use of species as raw materials for various animal-product industries. He discusses changing philosophical, religious, and aesthetic viewpoints, as well as different ways various cultures have reinforced, symbolized, and rationalized their relations with animals.

Bullock, J.M., Pakeman, R.J. "Grazing of Lowland Heath in England: Management Methods and Their Effects on Heathland Vegetation," [Biological Conservation](#) 79(1997):1.

Bulte, E. H. and van Kooten, G. C., "State Intervention to Protect Endangered Species: Why History and

Bad Luck Matter," Conservation Biology 15(no.6, 2001): 1799-803. (v.13,#2)

Bulte, Erwin and Van Kooten, G. C., "Economic Science, Endangered Species, and Biodiversity Loss," Conservation Biology 14(2000):113-119. Although economist increasingly attempt to justify preservation of biological assets on economic grounds, we argue that this might be a dangerous approach to take. Economics will not always justify the saving of species. Studies in harvesting tropical rainforests, and the minke whale. Ultimately it may be necessary to reexamine the ethical foundations for conservation of nature and biodiversity, including the economist's use of utilitarianism. The safe minimum standard may be useful in practice. Bulte is in economics, Tilburg University, The Netherlands. Van Kooten is in agricultural economics, University of British Columbia, Vancouver. (v.11,#3)

Bunce, Alan. "Urban Oasis Guides Visitors Through the Forest and the Trees." The Christian Science Monitor, vol. 80, 17 Dec. 1996. p. 15.

Bunce, M, "Agriculture and environmental sustainability in the countryside," Land Use Policy 19(no.2, 2002):190- . (v.13, #3)

Bunker, Stephen G. "Raw Material and the Global Economy: Oversights and Distortions in Industrial Ecology." Society and Natural Resources 9, no.4 (1996): 419. (v7, #3)

Bunting, Robert. The Pacific RainCoast: Environment and Culture in an American Eden, 1778-1900. Lawrence, KS: University Press of Kansas, 1997. An inquiry into the relationship between culture and the natural world of the Douglas-fir bioregion in the Pacific Northwest. Bunting blends narrative and analysis to show two very different methods of managing land and water, and their consequences.

Bunyard, Peter, "Fiddling while the climate burns.," The Ecologist 30 (No. 2, 2000 Apr 01): 48- . Bunyard reveals the likely changes in climate if we do not change our ways. (v.11,#4)

Bunyard, Peter, "Crisis? What crisis?," The Ecologist 30(no.7, OCT 01 2000):56- . According to an ex-founder of Greenpeace, the Amazon rainforest has never been in better shape. Peter Bunyard exposes this dangerous greenwash for what it is. (EE v.12,#1)

Bunyard, Peter, "Climate debate heats up," The Ecologist 30(no.7, OCT 01 2000):48- . Science editor Peter Bunyard looks at an important new report on responses to climate change in the UK. (EE v.12,#1)

Bunyard, Peter. "Industrial Agriculture--Driving Climate Change," The Ecologist 26(no.6, 1996):290. Climate change is happening--that's official. Nonetheless, most agronomists argue that human societies can weather the storm without drastic changes to industrialized patterns of farming. Such claims, however, overestimate industry's contribution to climate change and underplay the impact of modern agriculture on climate. By degrading soils and changing patterns of land use, agriculture is disrupting the ability of climate to recover from the perturbations caused by greenhouse gas emissions. The change in rainfall patterns that accompany land degradation, especially in the drylands, is leading to increased water stress and, consequently, towards conditions where terrestrial vegetation may be losing its powers to modulate climate and thus prevent runaway global warming. (v8,#2)

Burch, David, and Rickson, Roy E., eds. Globalization and Agri-Food Restructuring: Perspectives from the Australasia Region. Brookfield, VT: Ashgate, 1996. 366pp. \$76.95 hardback. Contains 18 original papers which focus on the causes of agricultural transformation in the Australasia region, including the social and environmental impacts that result when transnational corporations restructure agrifood systems at the local, the regional, and the national and global level. (v8,#1)

Burch, Robert, "On the Ethical Determination of Geography: A Kantian Prolegomenon," Philosophy and Geography 1 (1997): 15-47. Burch is associate professor of philosophy at the University of Alberta. (P&G)

Burchell, Jon. "No to the European Union (EU): Miljopartiet's Success in the 1995 European Parliament Elections in Sweden", Environmental Politics 5(no.2, 1996):332. (v7,#4)

Burde, John, and Michael Legg, "Wilderness and Natural Areas in Eastern North America," International Journal of Wilderness 3(no. 1, 1997):14-17. (v8,#2)

Burdge, Rabel J., "Introduction: Cultural Diversity in Natural Resource Use", Society and Natural Resources, 9(No.1, 1996):1- .

Burdge, Rabel J. "Introduction: Cultural Diversity in Natural Resource Use: Changing Definitions by Different Racial and Ethnic Categories", Society & Natural Resources 9(no.6, 1996):561. (v7,#4)

Burdge, Rabel J. "Introduction: Cultural Diversity in Natural Resource Use Case Studies in Cultural Definitions of Resource Sustainability." Society and Natural Resources 9, no.4 (1996): 337. (v7, #3)

Burdick, Alan, *Out of Eden: An Odyssey of Ecological Invasion*. New York: Farrar, Straus and Giroux, 2005.

Burdick, Alan, "The Truth about Invasive Species," Discover 26(no. 5, May 2005):35-41. "How to stop worrying and learn to love ecological intruders." "Alien species do pose a threat. But their real crime isn't against nature; it's against us and our self-serving ideas of what nature is supposed to be" (p. 36). "Invasion is not a zero-sum game, with invaders replacing natives at a one-to-one (or a one-to-two, or more) ratio. Rather, and with critical exceptions, it is a sum-sum game, in which ecosystems can accept more and more species" (p. 38). "Alien" species are not "invaders," we should drop that vocabulary. They are "introduced," and "ours," we brought them with us, like corn and cattle. The increase biodiversity. "By and large, most [introduced] species have no visible impact. They blend in. They live happily among us--on our lawns, under our homes--and we, it seems, live happily among them," "Invasions don't weaken ecosystems--they simply transform them into different ecosystems" (p. 40). They are nature too, still very much with us. Burdick seems to have unlimited capacity to enjoy his weedy world.

Burg, J, "The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism" by Adam Rome, Journal of Environment and Development 11(no.1, 2002):110-111. (v.13, #3)

Burg, J, "The World Summit on Sustainable Development: Empty Talk or Call to Action?", Journal of Environment and Development 12(no.1, 2003):111-120.

Burgat, Florence, "Non-violence towards Animals in the Thinking of Gandhi: The Problem of Animal Husbandry," Journal of Agricultural and Environmental Ethics 17(2004):223-248. The question of the imperatives induced by the Gandhian concept of non-violence towards animals is an issue that has been neglected by specialists on the thinking of the Mahatma. The aim of this article is to highlight the systematic - and significant - character of this particular aspect of his views on non-violence. The first part introduces the theoretical foundations of the duty of non-violence towards animals in general. Gandhi's critical interpretation of cow-protection, advocated by Hinduism, leads to a general reflection on the duty of non-violence towards animals, the cow being transformed into the representative of all "dumb

creation." The approach adopted by Gandhi to solving the problem of cow-protection focuses on its practical dimensions and is based primarily on reforming animal husbandry. What limits should be imposed on the exploitation of farm animals within the framework of non-violence? Gandhi devoted nearly 30 years to elaborating an animal husbandry system that would be both economically viable and in conformity with the universal ethical principles he drew from religions (especially Hinduism). The interdiction to kill is absolute, since Gandhi not only rejects the breeding of farm animals for the purposes of butchery but also the slaughtering of animals that are no longer capable of providing the services required of them. He therefore concentrated his efforts on drawing up a scheme to reorganize this activity on a national scale while taking into consideration these constraints, which are less contradictory than they may seem to be at first sight. Reviewing the age-old activity of animal husbandry in the light of non-violence is clearly based on the specific nature of Hindu traditions. However, it goes far beyond cultural or religious relativism, since it is also founded on universal ethical principles. Keywords: ethics, farm animals, Gandhi, non-violence. The author is at INRA-TSV 65, Boulevard de Brandebourg, 94205 Ivry-sur-Seine, France. (JAEE)

Burger, J., Niles, L., Clark, K.E. "Importance of Beach, Mudflat and Marsh Habitats to Migrant Shorebirds on Delaware Bay," Biological Conservation 79(no.2/3 1997):283.

Burger, Joanna, Ostrom, Elinor, Norgaard, Richard B., Policansky, David, and Goldstein, Bernard D., eds. Protecting the Commons: A Framework for Resource Management in the Americas. Covelo, CA: Island Press, 2000. 328 pages. Cloth \$60. Paper \$30. Commons issues and policies. (v.11,#4)

Burger, Joanna. Oil Spills. New Brunswick, NJ: Rutgers University Press, 1997. 208pp. \$29.95 cloth. The first book to survey the history of oil spills, the problems they create, the types of clean-ups and their efficacy, the legal, social, economic, and ecological consequences of oil spills, their long-term impacts on the wildlife and people who survive them, and the alternatives to oil and its transport. (v7,#4)

Burgess, Andrew J. Review of Energy Ethics: A Christian Response. Edited by Dieter T. Hessel. Environmental Ethics 3(1981):189-91.

Burgess, Bonnie B., Fate of the Wild: The Endangered Species Act and the Future of Biodiversity. Athens, GA: University of Georgia Press, 2001. An analysis of the legislative stalemate surrounding the Endangered Species Act. Burgess is a public education at the National Zoo. (EE v.12,#1)

Burgess, Jacqui. Review of A. Light and J.M. Smith, eds., Philosophy and Geography 1: Space, Place and Environmental Ethics. Environmental Values 8(1999):526. (EV)

Burgess-Jackson, Keith, Review of James Serpell, In the Company of Animals: A Study of Human-Animal Relationships, Ethics and the Environment 3(1998):105-110.

Burghardt, G. M., Review of Cavalieri, Paola, and Singer, Peter, eds., The Great Ape Project: Equality beyond Humanity, in Society and Animals 5(1997):83-86. The Great Ape Project is a speciesist project because of its emphasis on great apes. (v.8,#4)

Burgi, Matthias; Hersperger, Anna; Schneeberger, Nina, "Driving forces of landscape change - current and new directions", Landscape Ecology 19(no.8, January 2005):857-868(12).--Burkhardt, Jeffrey, Gary Comstock, Peter G. Hartel, and Paul B. Thompson. Agricultural Ethics, CAST Issue Paper Number 29, February 2005. Council on Agricultural Science and Technology, Ames, IA, 12 pp.

Burgmann, Verity, "The Social Responsibility of Labour versus the Environmental Impact of Property Capital: The Australian Green Bans Movement," Environmental Politics 9(no. 2, Summer 2000):78- .

(v.12,#2)

Burguet, R., and J. Sempere, "Trade Liberalization, Environmental Policy, and Welfare," Journal of Environmental Economics and Management 46(no. 1, 2003): 25-37.

Burke, BE, "Hardin Revisited A Critical Look at Perception and the Logic of the Commons," Human Ecology 29(no.4, 2001):449-476. (v.13, #3)

Burke, Justin. "Germany's Green Sprout Into Third Force." The Christian Science Monitor, July 6, 1995, p. 6. (v6,#2)

Burkett, Paul., "The Value Problem in Ecological Economics: Lessons from the Physiocrats and Marx", Organization and Environment, 16, (No. 2, 2003):137-67. Examines the disputed ecological economics question of whether nature is a direct source and/or substance of value. One group of protagonists ascribes value directly to natural resources and argues that monetary exchange values (prices and profits) largely or fully represent the values extracted from nature, whilst another group focuses on nature as an objective condition or basis for value defined as psychic income or "enjoyment of life". The paper applies Marx's critique of the Physiocrats to this contemporary debate, suggesting that both groups of ecological economists do not adequately consider the relations between use value and capitalist valuation. Burkett is in economics at Indiana State University, Terre Haute. (v 14, # 3)

Burkhardt, Jeffrey, Gary Comstock, Peter G. Hartel, and Paul B. Thompson, "Agricultural Ethics," CAST Issue Paper Number 29, February 2005. Ames, IA: Council on Agricultural Science and Technology, 2005.

Burkhardt, Jeffrey, "Crisis, Argument, and Agriculture", Journal of Agricultural Ethics 1(1988):123-138. This paper analyzes the use of "social crisis" as applied to the state of modern agriculture and, by extension, other "crises" such as those in legitimation and morality. The crisis we may be facing with respect to agriculture is more properly understood as a sociopolitical crisis that has broader implications than simply the loss of farms or traditional farming values. Burkhardt is in ethics and policy studies in agriculture and natural resources at the University of Florida, Gainesville.

Burkhardt, Jeffrey, "The Morality Behind Sustainability", Journal of Agricultural Ethics 2(1989):113-128. This article discusses the arguments that can be advanced for sustaining anything and initially concludes that our obligations to future generations entail sustaining more than just sufficient food production or an adequate resource base. Indeed, a tradition of care and community must underlie whatever agricultural and resource strategies we are to develop under the rubric of sustainability. Burkhardt is in ethics and policy studies in agriculture and natural resources at the University of Florida, Gainesville.

Burkholder, R, "Review of: Kimberly A. Smith. Wendell Berry and the Agrarian Tradition: A Common Grace", Environmental History 9 (no.1, 2004): 151-152.

Burkholder, R., "Review of: Michael A. Bryson, Visions of the Land: Science, Literature, and the American Environment From the Era of Exploration To the Age of Ecology," Environmental History 8(no. 3, 2003): 501-502.

Burks, D. C., ed., Place of the Wild: A Wildlands Anthology. Washington, DC: Island Press, forthcoming, 1994. Contains Max Oelschlaeger, "The Idea of Wilderness as a Deep Ecological Ethic," which develops six aspects of E. O. Wilson's claim that the idea of wilderness grounds a conservation ethic. (v5,#3)

Burley, CH, "Responses to Appeals, Litigation, and Forest Policy: Appeals and Litigation: A View from Industry", Journal of Forestry 102 (no.2, 2004): 49-50(2).

Burnett, G. W., and Kamuyu wa Kang'ethe, "Wilderness and the Bantu Mind." Environmental Ethics 16(1994):145-160. In the West, it is widely believed that, since Africans lack an emotional experience with romanticism and transcendentalism, they do not possess the philosophical prerequisites necessary to protect wilderness. However, the West's disdain for African systems of thought has precluded examination of customary African views of wilderness. Examination of ethnographic reports on Kenya's Highland Bantu reveals a complex view of phenomena that the West generally associates with wilderness. For the Bantu, wilderness is an extension of human living space, and through concerted social action rather than individual initiative, it is, or at least can be, dominated by society. Wildlife is unnatural and alienated from human society, which is natural. Because wilderness is, consequently, understood to be fearsome and hostile, it is not a place that can provide inspiration or self-actualization. Almost all forests have a special spiritual relationship with humankind, and some trees have a special relationship with God. Although traditional Bantu thought is contrary to a concept of wilderness as conserved, managed space filled with tourists and recreators, it does embrace a concept of wilderness as wildlands. The Bantu have gone to considerable length to develop an approach to wilderness that minimizes individual contact while requiring association with wilderness as a social activity. Population growth and want of vocational opportunities continue to thrust Highland Bantu into wilderness as a fundamental and traditional survival technique. Burnett is in Parks, Recreation and Tourism, Clemson, SC; Kang'ethe is in sociology and religion, Cardinal Stritch College, Milwaukee, and formerly of Nairobi, Kenya. (EE)

Burnett, G. W. and Lisa M. Butler Harrington, "Early National Park Adoption in Sub-Saharan Africa," Society and Natural Resources 7(1994):155-168. National parks are widely thought to have begun in Yellowstone National Park in the U.S. in 1872 and to have spread around the world from that inspiration. But parks were adopted early in southern Africa and spread rapidly through much of sub-Saharan Africa. The earliest preservation activities were oriented toward watershed protection and erosion control in fynbos areas. The game reserve orientation of some parks originated later. Burnett is in recreation and tourism at Clemson University, Harrington in geology/geography at Eastern Illinois University. (v5,#4)

Burnett, G. W., and Kamuyu wa Kang'ethe, "Wilderness and the Bantu Mind." Environmental Ethics 16(1994):145-160. In the West, it is widely believed that, since Africans lack an emotional experience with romanticism and transcendentalism, they do not possess the philosophical prerequisites necessary to protect wilderness. However, the West's disdain for African systems of thought has precluded examination of customary African views of wilderness. Examination of ethnographic reports on Kenya's Highland Bantu reveals a complex view of phenomena that the West generally associates with wilderness. For the Bantu, wilderness is an extension of human living space, and through concerted social action rather than individual initiative, it is, or at least can be, dominated by society. Wildlife is unnatural and alienated from human society, which is natural. Because wilderness is, consequently, understood to be fearsome and hostile, it is not a place that can provide inspiration or self-actualization. Almost all forests have a special spiritual relationship with humankind, and some trees have a special relationship with God. Although traditional Bantu thought is contrary to a concept of wilderness as conserved, managed space filled with tourists and recreators, it does embrace a concept of wilderness as wildlands. The Bantu have gone to considerable length to develop an approach to wilderness that minimizes individual contact while requiring association with wilderness as a social activity. Population growth and want of vocational opportunities continue to thrust Highland Bantu into wilderness as a fundamental and traditional survival technique. Burnett is in Parks, Recreation and Tourism, Clemson, SC; Kang'ethe is in sociology and religion, Cardinal Stritch College, Milwaukee, and formerly of Nairobi, Kenya. (EE)

Burnett, G.W.; Joulie-Kuttner, Regine; and wa Kang'ethe, Kamuyu. "A Willing Benefactor: An Essay on Wilderness in Nilotic and Bantu Culture." Society and Natural Resources 9, no.2 (1996): 201. (v7, #3)

Burnett, H. Sterling, Review of Dizard, Jan E. Going Wild: Hunting, Animal Rights, and the Contested Meaning of Nature. Environmental Ethics 18(1996):105-109. (EE)

Burnett, H. Sterling. Review of Forrest Wood, Jr., The Delights and Dilemmas of Hunting: The Hunting Versus Anti-Hunting Debate. Environmental Values 8(1999):120. (EV)

Burnett, H. Sterling, Review of David Takacs, The Idea of Biodiversity: Philosophies of Paradise. Environmental Ethics 20(1998):203-06.

Burney, Jonathan. "Is Valuing Nature Contributing to Policy Development?" Environmental Values 9(2000):511-528. Abstract: This paper examines technical, ethical and ecological science perspectives on environmental valuation, and discusses problems in terms of the implications for practical policy-making. It suggests that all these perspectives raise legitimate concerns about the use of stated preference methods, but concludes that such methods still have a role to play in policy making for nature conservation provided they are applied in the right circumstances, designed very carefully, and used in conjunction with other decision-making tools. Keywords: Nature, biodiversity valuation, ecosystem functions, cost-benefit. Jonathan Burney resides at English Nature, Northminster House, Peterborough PE1 1UA, UK. (EV)

Burnham, Neal. "More Damnation in Quebec," Alternatives 24(no. 2, spring 1998):5- . Hydro-Quebec plans to divert eight more rivers to generate additional electricity for the US. (v9,#2)

Burnham, Philip. Indian Country, God's Country: Native Americans and the National Parks. Covelo, CA: Island Press, 2000. 352 pages. \$27.50. The complex relationship between Native Americans and the national parks, relating how Indians were removed, relocated, or otherwise kept at arm's length from lands that became some of our nations's most hallowed ground. (v.11,#4)

Burnheim, John. "Power-Trading and the Environment." Environmental Politics 4(Winter 1995):49. (v7,#2)

Burnley, I. H., "Population and Environment in Australia: Issues in the Next Half Century," Australian Geographer 34(no. 3, 2003):267-280. Varying sets of environmental ethics and values considered in relation to Australia's global responsibilities and commitments. An increase in population to 26 million by 2050 will not place severe stresses on the physical environment, provided that environmental and resource management strategies are put firmly in place, and if consumption and resource use practices are significantly modified. The environmental perspective that rejects growth and diversity among humans while embracing environmental conservation is an inward-looking nationalism/environmentalism that is harmful both to Australia's moral integrity as a nation, and in local and world citizenship. Australia is in a position to receive quite a number of refugees from other, degrading nations. Burnley is in geography, University of New South Wales, Sydney, Australia.

Burns, Kelly A., "Warren's Ecofeminist Ethics and Merleau-Ponty's Body-Subject: Intersections," Ethics and the Environment 13(no. 2, 2008):101-118. While Karen Warren offers an ecofeminist ethic that is pluralistic, contextualist, and challenges Cartesian dualism, one area that remains underdeveloped in her theory is embodiment. I will examine Merleau-Ponty's notion of embodied subjectivity and show that it would fit consistently with her theory. I will also explore some other areas in which the two theories supplement each other. Burns is assistant professor of philosophy at Dominican University in River Forest, IL.

Burr, S., "A Review of: Wellman, J. Douglas, and Dennis B. Probst. Wildland Recreation Policy: An

Introduction (2nd ed.)," Society and Natural Resources 18(no. 10, November/December 2005): 944-946.

Burrell, David, Malits, Elena. Original Peace: Restoring God's Creation. Mahwah, N.J.: Paulist Press, 1997. \$6.95. A work of philosophical theology that places Christ at the meeting place between humans and their natural world. The authors take seriously what is traditionally called "fall-and-redemption theology", thereby taking exception to the works of some theorists who deny the importance of original sin. (v8,#2)

Burrows, Mae, "Just Transition," Alternatives 27(no. 1, Winter 2001):29- . Moving to a green economy will be more attractive when programs are designed to remove job loss fears, and focus on transition to a more sustainable future. (v.12,#2)

Burton, Anthony C., Susan M. Chilton, Martin K. Jones.

"The WTP/WTA Discrepancy: A Preliminary Qualitative Examination." Environmental Values 9(2000):481-491. ABSTRACT: This paper explores the psychological foundations of the 'Willingness to Pay/Willingness to Accept' discrepancy. Using a qualitative approach we find that the two response modes appear to invoke different strategies for completion. An examination of the heuristics used by respondents to answer questions concerning the buying and selling of the chance to play a straightforward lottery shows that only some could be taken as supporting current theories which aim to explain the discrepancy. Keywords: Willingness to pay, willingness to accept, heuristics. Anthony C. Burton is at the Nuffield Institute for Health, University of Leeds, UK. Susan M. Chilton is in the Department of Economics, University of Newcastle, UK. Martin K. Jones is in the Department of Economics, University of Dundee, UK. (EV)

Burton, Ian, Kates, Robert W., and White, Gilbert F., The Environment as Hazard, 2nd ed. New York: Guilford Press, 1993. Storms, floods, droughts, introduction of exotic species, pathogens, earthquakes, and hurricanes. How individuals, communities, and nations respond and what factors condition and restrain those responses. First issued in 1978. (v9,#1)

Burton, Ian and Peter Timmerman, "Human Dimensions of Global Change: A Review of Responsibilities and Opportunities," International Social Science Journal 41(1989):297-313. "Ordinary human interactions with the environment are entering a new stage that calls for an extraordinary response." "As we now enter the era of global change, a new relationship has to be forged between human society and environment, which will be morally, economically and ecologically sustainable." "A new environmental ethic and a coalition of reason will be needed." "The moral solidarity of humankind must continue to grow." The authors are in geography, International Federation of Institutes for Advanced Study, Toronto. This whole journal issue is on the theme: Reconciling the Sociosphere and the Biosphere: Global Change, Industrial Metabolism, Sustainable Development, Vulnerability. (v5,#4)

Burton, Jeanne L., & McBride, Brian W., "Recombinant Bovine Somatotropin (rbST): Is There a Limit for Biotechnology in Applied Animal Agriculture?", Journal of Agricultural Ethics 2(1989):129-159. The intent of this article is to outline, integrate, and interpret relevant scientific, economic, and social issues of rbST technology that have contributed to the acceptance dilemma for this product. Although this article demonstrates that rbST has met most physiological criteria for acceptance, the consuming public has treated the acceptance issue with forceful skepticism. The question this article addresses is, why? Burton and McBride are in animal and poultry science at the University of Guelph, Ontario.

Burton, L. and Williams, T., "This Bird Has Flown: The Uncertain Fate of Wildlife on Closed Military Bases," Natural Resources Journal 41(no.4, 2001): 885-918. (v.13,#2)

Burton, Peter S., "Land Use Externalities: Mechanism Design for the Allocation of Environmental Resources," Journal of Environmental Economics and Management 30(1996);174-185. The competing interests of "the forest industry" and of "environmentalists" for three possible land uses: "intensive forestry," "nonintensive forestry," and "wilderness." Constraints imposed by the finite amount of land available and the reluctance of the environmentalists to use monetary valuation techniques can be overcome by using a modified version of the Groves mechanism to determine the preferences of each group and thereby to determine the socially optimal allocation. A technical paper in economics. Burton is in economics, Dalhousie University, Halifax, NS. (v.10,#2)

Burton, Rob. Review of: Luloff, A. E., and R. S.Krannich, Persistence and Change in Rural Communities: A Fifty Year Follow-up to Six Classic Studies. Environmental Values 13(2004):267-269. (EV)

Burtonchristie (Burton-Christie), Douglas, "Mapping the Sacred Landscape: Spirituality and the Contemporary Literature of Nature," Horizons (College Theological Society, Villanova, PA) 21 (no. 1, 1994):22-47. The contemporary dialogue between spirituality and the contemporary literature of nature. (1) Their distinctive approaches to the mapping of the sacred landscape. (2) Some of the ambiguities and tensions within the literature of nature toward matters of religion. (3) Recent developments within the discipline of spirituality that enable scholars to respond more thoughtfully to questions raised by nature writers. (4) Genres found in the burgeoning literature of nature writing and themes that make it a useful resource and conversation partner for spirituality. (5) Evaluation of three prominent themes in contemporary nature writing--relationship, mystery, and moral responsibility--themes of particular importance for developing a contemporary spirituality of nature. Burton-Christie is at the Jesuit School of Theology, Graduate Theological Union, Berkeley, also the author of The Word in the Desert: Scripture and the Quest for Holiness in Early Christian Monasticism (Oxford University Press, 1993). (v.10,#1)

Burtraw, Dallas, "Compensating Losers When Cost-Effective Environmental Policies Are Adopted," Resources (Resources for the Future), Summer 1991, no. 104. (v2,#3)

Burwood, S, "Greening the Radiant City," Journal of Applied Philosophy 19(no.1, 2002):69-74. (v.13, #3)

Busby, C.C., and A.V. Yablokov, eds. European Committee on Radiation Risk. *Chernobyl 20 Years On: Health Effects of the Chernobyl Accident*. Brussels: Green Audit, 2006. Although only 290 people died of direct radiation damage, Rosalie Bertell estimates that another 899,310 to 1,786,657 people died of fatal cancers attributable to indirect radiation contamination. Contents include: (1) "The Chernobyl Catastrophe 20 Years After (a meta-review)" by Alexy Y. Yablokov, (2) "Is it Safe to Live in Territories Contaminated with Radioactivity: Consequences of the Chernobyl Accident 20 Years Later" by E.B. Burlakova and A.G. Nazarov, (3) "Mental, Psychological and Central Nervous System Effects: Critical Comments on the Report of the UN Chernobyl Expert Group <<Health>> (EGH)" by Konstantin N. Loganovsky, (4) "The Influence of the Chernobyl Accident on Wild Vertebrate Animals" by Eugene Yu. Krysanov, (5) "Chromosome Aberrations in the Blood Lymphocytes of People Exposed to Radiation as a Result of the Chernobyl Accident" by G.P. Snigiryova and V.A. Shevchenko, (6) "Radiation-Induced Effects in Humans After *in utero* Exposure: Conclusions from Findings After the Chernobyl Accident" by Inge Schmitz-Feuerhake, (7) "Reflections of the Chernobyl Accident on the Plant World: Special and General Biological Aspects" by D.M Grodzinsky, (8) "Infant Leukemia in Europe after Chernobyl and Its Significance for Radioprotection; a Meta-Analysis of Three Countries Including New Data from the UK" by Chris Busby, (9) "Liquidators Health: A Meta-Analysis" by Alexy V. Yablokov, (10) "Did Acute Radiation Syndrome Occur Among the Inhabitants of the 30 km Zone?" by Tetsuji Imanaka, (11) "Combined Spatial-Temporal Analysis of Malformation Rates in Bavaria After the Chernobyl Accident"

by Helmut Küchenhoff, Astrid Engelhardt, and Alfred Körblein, (12) "Radio-Ecological Consequences in Belarus 20 Years After the Chernobyl Catastrophe and the Necessity of Long-Term Radiation Protection for the Population" by V.B. Nesterenko and A.V. Nesterenko, (13) "Studies of Pregnancy Outcome Following the Chernobyl Accident" by Alfred Körblein, and (14) "First Assessment of the Actual Death Toll Attributable to the Chernobyl Disaster Based Upon Conventional Risk Methodology" by Rosalie Bertell. This book can be downloaded as a PDF at the website:

<<http://www.euradcom.org/publications/chernobylinformation.htm>>.

Busby, C.C., and A.V. Yablokov, eds. European Committee on Radiation Risk. *Chernobyl 20 Years On: Health Effects of the Chernobyl Accident*. Brussels: Green Audit, 2006. Although only 290 people died of direct radiation damage, Rosalie Bertell estimates that another 899,310 to 1,786,657 people died of fatal cancers attributable to indirect radiation contamination. Contents include: (1) "The Chernobyl Catastrophe 20 Years After (a meta-review)" by Alexy Y. Yablokov, (2) "Is it Safe to Live in Territories Contaminated with Radioactivity: Consequences of the Chernobyl Accident 20 Years Later" by E.B. Burlakova and A.G. Nazarov, (3) "Mental, Psychological and Central Nervous System Effects: Critical Comments on the Report of the UN Chernobyl Expert Group <<Health>> (EGH)" by Konstantin N. Loganovsky, (4) "The Influence of the Chernobyl Accident on Wild Vertebrate Animals" by Eugene Yu. Krysanov, (5) "Chromosome Aberrations in the Blood Lymphocytes of People Exposed to Radiation as a Result of the Chernobyl Accident" by G.P. Snigiryova and V.A. Shevchenko, (6) "Radiation-Induced Effects in Humans After *in utero* Exposure: Conclusions from Findings After the Chernobyl Accident" by Inge Schmitz-Feuerhake, (7) "Reflections of the Chernobyl Accident on the Plant World: Special and General Biological Aspects" by D.M. Grodzinsky, (8) "Infant Leukemia in Europe after Chernobyl and Its Significance for Radioprotection; a Meta-Analysis of Three Countries Including New Data from the UK" by Chris Busby, (9) "Liquidators Health: A Meta-Analysis" by Alexy V. Yablokov, (10) "Did Acute Radiation Syndrome Occur Among the Inhabitants of the 30 km Zone?" by Tetsuji Imanaka, (11) "Combined Spatial-Temporal Analysis of Malformation Rates in Bavaria After the Chernobyl Accident" by Helmut Küchenhoff, Astrid Engelhardt, and Alfred Körblein, (12) "Radio-Ecological Consequences in Belarus 20 Years After the Chernobyl Catastrophe and the Necessity of Long-Term Radiation Protection for the Population" by V.B. Nesterenko and A.V. Nesterenko, (13) "Studies of Pregnancy Outcome Following the Chernobyl Accident" by Alfred Körblein, and (14) "First Assessment of the Actual Death Toll Attributable to the Chernobyl Disaster Based Upon Conventional Risk Methodology" by Rosalie Bertell. This book can be downloaded as a PDF at the website:

<<http://www.euradcom.org/publications/chernobylinformation.htm>>.

Busby, Chris, "And the dangers pylon," *The Ecologist*, 30 (No. 2, 2000 Apr 01): 50- . New evidence claims that overhead power lines and cancer are unrelated. Chris Busby examines the truths. (v.11,#4)

Busch, Lawrence, "Virgil, vigilance, and voice: Agrifood ethics in an age of globalization," *Journal of Agricultural and Environmental Ethics* 16(2003):459-477. Some 2000 years ago, Virgil wrote *The Georgics*, a political tract on Roman agriculture in the form of a poem. Today, as a result of rising global trade in food and agricultural products, growing economic concentration, the merging of food and pharmacy, chronic obesity in the midst of hunger, and new disease and pest vectors, we are in need of a new Georgics that addresses the two key issues of our time: vigilance and voice. KEY WORDS: agricultural policy, democracy, governance, standards, Virgil. (JAEE)

Busch, Lawrence, "The Homiletics of Risk," *Journal of Agricultural and Environmental Ethics* 15(no. 1, 2002):17-29. Today there is considerable disagreement between the US and the EU with respect to food safety standards. Issues include GMOs, beef hormones, unpasteurized cheese, etc. In general, it is usually asserted that Europeans argue for the precautionary principle (with exceptions such as the Sanitary and Phytosanitary Agreement where "substantial equivalence," a form of familiarity, is used) while Americans defend risk analysis or what is sometimes described as the familiarity principle. This is not to

suggest that EU member countries agree on how the precautionary principle should be applied; considerable differences exist among nations as will be noted below.

I review both positions arguing that they are best understood as variants of the homiletics of risk rather than as differing scientific positions. I conclude that while science must necessarily enter into the formulation of food and agricultural standards, state policy, private economic interests, and the interface between the two (e.g., when democratic states are successfully lobbied to support particular private interests), play important roles in determining how particular risks will be treated. Moreover, I argue that the role of science must necessarily be limited if its credibility is to be preserved. KEY WORDS: food safety, genetically modified organisms, policy, regulation, risk, standards. Busch is with the Institute for Food and Agricultural Standards, Michigan State University, East Lansing, MI. (JAE)

Busch, Lisa. "Saving Whales Contentiously," Bioscience 46(no.10, 1996):737. Not everyone in Hawaii is happy about providing a sanctuary for humpbacks. (v7,#4)

Bush, George on Environmental Ethics. On June 8, 1989, President George Bush outlined five principles of his administration's environmental ethic in an address to the Sixth International Waterfowl Symposium in Washington, DC. Bush said, "It's time to renew the environmental ethic in America," and went on to claim that "the environment is a moral issue, ... it is imperative that we preserve the earth and all its blessings," citing Aldo Leopold and his land ethic. Bush emphasized his policy of "no net loss" of wetlands. See story in Earth Ethics, vol. 1, no. 2, p. 10. (v1,#2)

Business and the Environment is the theme issue of Illahee: Journal for the Northeast Environment, vol. 10, no. 1, spring 1994. Sample article: Stuart L. Hart, University of Michigan, "How Green Production Might Sustain the World." Also a section featuring businesses that are making more effort in environmental responsibility. Species, Habitats, and Ecological Health is the theme of vol. 10, no. 2, summer 1994. Sample article: Gordon H. Orians, "Endangered Species and Endangered Habitats," arguing that, although the potential benefits of the Endangered Species Act are considerable, there are many flexible options available, under existing law, giving ample authority for an ecosystem approach to conserving the nation's living species and habitats. Contact: Institute for Environmental Studies, University of Washington, Seattle, WA 98195. (v5,#3)

Business Ethics Quarterly, vol. 5, no. 4, October 1995 is a theme issue on business and the environment. Contains:

- Westra, Laura, "The Corporation and the Environment," Business Ethics Quarterly 5(1995):661-673.
- Brenkert, George G., "The Environment, The Moralists, the Corporation and Its Culture," Business Ethics Quarterly 5(1995):675-697. Business has its own special "ethics," which relates not simply to the internal nature of the corporation but also to the corporate (free market) system. Given this special ethics, business cannot in general be environmentally responsible in the manner that classical moralists demand. More far-reaching changes are needed.
- Frederick, Robert E., and W. Michael Hoffman, "Environmental Risk Problems and the Language of Ethics," Business Ethics Quarterly 5(1995):699-711. Six criteria for assessing proposed solutions to environmental risk problems. But before these criteria can be used business persons must be willing to discuss the problem in ethical terms, and they are often reluctant to do so.
- Halme, Minna, "Environmental Issues in Product Development Process," Business Ethics Quarterly 5(1995):713-733. Studies a shift of a managerial paradigm in a business organization from "traditional management thinking" to "environment-related management."
- Rolston, Holmes, III, "Environmental Protection and an Equitable International Order: Ethics after the Earth Summit," Business Ethics Quarterly 5(1995):735-752. The UNCED Summit established two new principles of international justice: an equitable international order and protection of the environment. Wealth is asymmetrically distributed; approximately one-fifth of the world produces and consumes approximately four-fifths of goods and services. This difference can be interpreted as both an earnings

differential and as exploitation; responses may require justice or charity, producing and sharing.

--Shrader-Frechette, Kristin S., "Environmental Risk and the Iron Triangle," Business Ethics Quarterly 5(1995):753-777. There appears to be an iron triangle of industry, government, and consultant/contractors promoting the siting of the first permanent geological repository of high-level nuclear waste and spent fuel proposed for Yucca Mountain, Nevada. The iron triangle has ignored important epistemological and ethical difficulties with the proposed facility.

--Orts, Eric W., "A Reflexive Model of Environmental Regulation," Business Ethics Quarterly 5(1995):779-794. We should begin to consider a new model of reflexive environmental law. This regulatory strategy aims to provide more reflective as well as more efficient environmental regulation.

--Reichart, Joel E., "A New Environmental Ethic" (Critical Review of Laura Westra, A Proposal for Environmental Ethics), Business Ethics Quarterly 5(1995):795-804. (v7,#2)

Business Horizons, "Business and the Environment," a special issue, vol. 35, no. 2, March-April 1992. About a dozen articles on a deepening commitment in business to environmental integrity. Samples: Richard E. Byrd, "Corporate Integrity: Paradise Lost and Regained." The corporate hell of lack of integrity is not permanent, but getting out takes real commitment. Frank B. Friedman, "The Changing Role of the Environmental Manager." Managers must think "environment" today more than ever; knowledge and awareness are the keys. William K. Reilly, "Environment, Inc." Cooperation between U.S. corporations and the government on the environmental front forms a model for the world.(v4,#2)

Business Recycling Manual. Covelo, CA: Island Press, 1991. \$ 92.00 in a binder. 196 pages. Every business's recycling needs. Waste audits, marketing recyclables, monitoring and evaluating recycling programs. (v2,#3)

Buss, Doris. Review of Paul Stanton Kibel. The Earth on Trial: Environmental Law on the International Stage, London: Routledge, 1999, Environmental Values 10(2001):561. (EV)

Butchart, S, "Using the IUCN Red List Criteria to Assess Species with Declining Populations," Conservation Biology 17(no.5, 2003):1200-1201. (v.14, #4)

Butler, Lynda L., "State Environmental Programs: A Study in Political Influence and Regulatory Failure." William and Mary Law Review, vol. 31, no. 4, Spring 1990. Butler is at the School of Law, College of William and Mary. (v1,#3)

Butler Ricketts, Catherine, Hume's Passion and Aristotle's Virtue: Ethics of Caring and Their Application to the Natural World, Master's Thesis, Department of Philosophy, Lancaster University, September 1993.

Butler Ricketts, Catherine, Hume's Passion and Aristotle's Virtue: Ethics of Caring and Their Application to the Natural World, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Butler, Steven, "Rod? Reel? Dynamite," U.S. News and World Report 121(no. 21, Nov. 25, 1996):56-57. Devastation of the coral reefs in the Philippines by local peoples fishing with dynamite and capturing aquarium fish by stunning them with cyanide. (v7,#4)

Butler, Victoria, "Unquiet on the Western Front: Controversy in Kenya," International Wildlife 28 (no. 6, Nov./Dec. 1998): 12-24. Controversy about conservation strategy and the extent to which it can and ought to include local peoples, in a land where the population has grown from 9 to 28 million in three decades, and encroachments on wildlife parks has reduced the wildlife by 44%, both by direct impact and by reduced buffer zones. The current head of the Kenya Wildlife Service is David Western, who favors more concessions to local people. Former head Richard Leakey takes a harder line and believes that the

concessions will prove the park's undoing, as well as unraveling Kenya's tourism, vital in the Kenyan economy. (v.9,#4)

Butler, W.F., and T.G. Acott, "An Inquiry Concerning the Acceptance of Intrinsic Value Theories of Nature," *Environmental Values* 16(2007): 149-168. This study empirically assesses the extent to which intrinsic value theories of nature are accepted and acknowledged outside the realm of academic environmental ethics. It focuses on twenty of the largest landowning organisations in England, including both conservation and non-conservation organisations and investigates the environmental philosophical beliefs and values held by representative individuals of these groups. An in-depth interview was held with a representative from each organisation. The interviews were analysed using qualitative data analysis software and the results compared against a backdrop of academic philosophical positions. The study found that an ecocentric position which acknowledges nature's intrinsic value was adopted by the majority of respondents, both from conservation and non-conservation organisations. However, it was also found that individuals felt the idea of nature's intrinsic value was generally not reflected in organisational policy. The authors are at the Department of Earth and Environmental Science, University of Greenwich, Kent, UK.

Butry, D. T., Mercer, D. E., Prestemon, J. P., Pye, J. M. and Holmes, T. P., "What Is the Price of Catastrophic Wildfire?," *Journal of Forestry* 99(no.11, 2001): 9-17. (v.13,#2)

Buttel, Frederick H., Dickens, Peter, Dunlap, Riley E., and Gijswijt, August, *Sociological Theory and The Environment*. Lanham, MD: Littlefield, 2002. With attention to Marx, Durkheim, Weber in the past, and to contemporary issues, individual and society, modernity, culture and the natural world; consumption, lifestyles, and the environment; globalization vs. localism. (v.13,#2)

Buttimer, Anne, *Geography and the Human Spirit*. Baltimore: The Johns Hopkins University Press, 1993. Geography with a philosophical turn, and with a postmodernist awareness. Some chapter titles: "The Drama of Western Humanism," and four world-views in Western geography: "World as a Mosaic of Forms," "World as Mechanical System," "World as Organic Whole," "World as Arena of Events." The author ranges widely, from Plato to Kant to the *Upanishads*, from Goethe to Barry Lopez. Her book is a "step toward discovering mutually acceptable bases for rational discourse on wiser ways of dwelling." Buttimer is professor of geography, University College, Dublin. (v4,#2)

Button, Gregory V. "What You Don't Know Can't Hurt You!: The Right to Know and the Shetland Island Oil Spill," *Human Ecology* 23, no. 2 (June 1995): 241- . (v6,#4)

Buzzworm, "1991 Directory to Environmental Organizations," May/June 1991. A useful, compact list, with vital statistics. (v2,#2)

Byers, E. Sandra, "Wilderness Camping as a Therapy for Emotionally Disturbed Children: A Critical Review," *Exceptional Children* 45 (no. 8, May 1979):628-635 (Journal of the Council for Exceptional Children, Reston, VA) The wilderness camp has been described as a particularly good setting for treatment of emotionally disturbed children. This article summarizes the current literature on therapeutic camping, including the nature of existing programs, rationales for the superiority of camping as a therapeutic program, and evaluation of existing programs. The results of program evaluation research reported in the literature provides only minimal support for any particularly effectiveness ascribed to therapeutic camping in terms of either short-term or long-term therapeutic outcome. This is largely due to inadequate investigation of the process and/or the outcome of therapeutic camping. Byers is in psychology, University of New Brunswick, Fredericton, New Brunswick, Canada.

Byrne, J. Peter, "Basic Themes For Regulatory Takings Litigation," *Environmental Law* 29 (No. 4, 1999):

811- . Professor Byrne presents arguments for a narrow reading - consistent with the original understanding - of the Fifth Amendment's Takings Clause. He explains how these arguments, called "litigation themes," can be used in regulatory takings cases to advance this position. He stresses that the use of litigation themes is particularly important in the regulatory takings context because of the ambiguities and contradictions in the case law on the subject. (v.11,#2)

Byrne, J. Peter. "Ten Arguments for the Abolition of the Regulatory Takings Doctrine," Ecology Law Quarterly 22(no. 1, 1995):89- . (v6,#4)

Byrne, M. L., "Review of Using Statistics to Understand the Environment, C. Philip Wheeler and Penny A. Cook," Environments 29(no.2, 2001): 109. (v.13,#2)

Byrne, Richard W., The Thinking Ape: Evolutionary Origins of Intelligence. New York: Oxford University Press, 1995. 266 pages. "It seems that the great apes, especially the common chimpanzee, can attribute mental states to other individuals; but no other group of animals can do so--apart from ourselves, and perhaps cetaceans" (p. 146). "A sharp discontinuity is implied between great apes and all other animals" (p. 154). (v.8,#4)

Byrnes, Stephen. "The Myths of Vegetarianism." The Ecologist 29(no. 4, July 1999):260- . (v.11,#1)

Caddy, John F., "A fisheries management perspective on marine protected areas in the Mediterranean," Environmental Conservation 27(no.2, JUN 01 2000):98- . (EE v.12,#1)

Cade, Tom J., Woods, Christopher P. "Changes in Distribution and Abundance of the Loggerhead Shrike," Conservation Biology 11(no.1, 1997):21. (v8,#2)

Cadieux, Charles L., Wildlife Extinction. Covelo, CA: Island Press, 1991. \$ 24.95 cloth. 259 pages. A sequel to These Are the Endangered, 1981. The exploding human population, hunting, poaching, wildlife parks and zoos. Battles to maintain wild ecosystems. (v2,#3)

Cadigan, Tui, "Land Ideologies that Inform a Contextual Maori Theology of Land," Ecotheology Vol 6 (Jul 01/Jan 02):123-137. thasista@ihug.co.nz This paper is primarily concerned with a Maori theological perspective with regard to relationship to land. A series of traditional Maori concepts are employed to articulate this three-way relationship between God-Land-People. The ideologies dealt with here were selected from a list of seven ideologies of land Maori identify with. The context is Aotearoa, the people referred to are the local indigenous people, namely Maori, also known as Tangata Whenna. To assist international readers some brief referencing to possible similarities and obvious differences with the Christian scriptural theological perspective have been applied. The paper seeks to share with the reader something of the depth of relationship Maori have to their environment generally and to land in particular.

Cadman, David, Review of Short, John Rennie, Imagined Country. Environmental Values Vol.1 No.3(1992):278.

Cafaro, Philip, and Verma, Monish. "For Indian Wilderness." Terra Nova 3 (no. 3, 1998): 53-58. A wilderness, on one important definition, is a place which remains largely unmodified by human beings. Due to increased human numbers and technological power, only places mandated by law will remain as wildernesses in the coming centuries. Wilderness preservation gains support from two cornerstone positions of Western environmentalism, as it has developed over the past twenty years. First, the view articulated within environmental ethics that wild, non-human nature, or at least some parts of it, has intrinsic value and that it should be treated respectfully as a consequence. Second, the understanding developed within conservation biology that we have entered a period of massive anthropogenic extinction

of biological species and biodiversity loss, that human economic activities are the major cause of this, and that landscape-level habitat preservation is essential for ameliorating it.

Recently, some writers have argued that wilderness preservation is a specifically American or Western preoccupation, whose promotion in the third world amounts to cultural imperialism. According to Ramachandra Guha, for example, wilderness preservation is inappropriate and unnecessary in the third world, whose peoples face more pressing environmental issues, centered on meeting basic human needs. In effect, Guha denies the intrinsic value of non-human nature and dismisses as unimportant the loss of biodiversity in the third world.

In opposition to this well-intentioned anthropocentrism, we argue that non-human nature retains intrinsic value in the third world, as in the first. Furthermore, biodiversity loss is not in the interests of third world citizens, but will lead rather to their material, intellectual and spiritual impoverishment. In order to stem such loss, we advocate, with Guha, sustainable development for the poor, decreased consumption among the rich, and wilderness preservation, worldwide. Cafaro teaches philosophy at Southwest State University, Marshall, Minnesota. Verma is a consultant for UNICEF in New Delhi, India. (v.9,#3)

Cafaro, Philip, "Environmental Virtue Ethics: An Introduction," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):1-3. Introduction to a special double issue of the journal devoted to the topic of environmental virtue ethics. Articles by Geoffrey Frasz, John O'Neill, Louke van Wensveen and eleven other contributors. 160 pages total. To order a copy, contact the Philosophy Documentation Center. (v.13,#2)

Cafaro, Philip, "Rachel Carson's Environmental Ethics," Worldviews: Environment, Culture, Religion 6(2002):58-80. Rachel Carson is well known as a founder of the modern environmental movement. Her life and writings have much to offer contemporary environmental philosophy. I begin by discussing the environmental ethics articulated in Silent Spring. I next examine Carson's earlier natural history writings and the non-anthropocentrism they express. I conclude with some suggestions for how Carson points the way forward for environmental ethics. (An abridged version of this article appeared in Reflections: Newsletter of the Program for Ethics, Science, and the Environment, volume 9, no. 2 (May, 2002): 17-21.) (v.13,#4)

Cafaro, Philip and Primack, Richard, "Ecological Integrity: Evaluating Success in National Parks and Protected Areas." In J. Bottrill, ed., Encyclopedia of Life Sciences (New York: MacMillan Publishers: 2002). Volume 6, pp. 136-141. National parks and protected areas have been established for a variety of purposes, but three concepts are important in defining what we are trying to protect: wilderness, biodiversity, and ecological integrity. These concepts can be used to evaluate the success of a park or protected area.

Cafaro, Philip, book review of Peter Singer, One World: the Ethics of Globalization, Conservation Biology 18 (no. 2, 2004): 585-6.

Cafaro, Philip, "Review of: Peter Singer, One World: The Ethics of Globalization," Conservation Biology 18(2004):585-586. (v. 15, # 3)

Cafaro, Philip and Primack, Richard, "Ethical Issues in Biodiversity Protection," Encyclopedia of Biodiversity 2: 593-607. Conservationists and conservation biologists share a basic ethical commitment to preserve biodiversity. But ethical disagreements and dilemmas arise in the attempt to realize this commitment. This article examines some important ethical issues faced by those who seek to protect biodiversity. (v.11,#4)

Cafaro, Philip, Thoreau's Living Ethics: Walden and the Pursuit of Virtue. Athens: University of Georgia

Press, 2004. The first full, rigorous account of Henry Thoreau's ethical philosophy. Focused on Walden but ranging widely across his writings, the study situates Thoreau within a long tradition of ethical thinking in the West, from the ancients to the romantics and on to the present day. Cafaro shows Thoreau developing a comprehensive virtue ethics, less based in ancient philosophy than many recent efforts and more grounded in modern life and experience. He presents Thoreau's evolutionary, experimental ethics as superior to the more static foundational efforts of current virtue ethicists. Another main focus is Thoreau's environmental ethics; the book shows Thoreau not only anticipating recent arguments for wild nature's intrinsic value, but also demonstrating how a personal connection to nature furthers self-development, moral character, knowledge, and creativity. Thoreau's life and writings, argues Cafaro, present a positive, life-affirming environmental ethics, combining respect and restraint with an appreciation for human possibilities for flourishing within nature. (v.14, #4)

Cafaro, Philip, review of video "Suits and Savages: Why the World Bank Won't Save the World," Organization and Environment 14 (2001): 463-465. Takes filmmakers to task for ignoring the needs of wildlife. "The film makers share the World Bank's tradition view that people and their concerns are all important. They differ on which people they care about and what they think is best for them." (v.12,#4)

Cafaro, Philip, "Less is More: Economic Consumption and the Good Life." Philosophy Today 42(1998): 26-39. We should judge economic consumption on whether it improves or detracts from our lives, and act on that basis. The issue of consumption is placed in the context of living a good life, in order to discuss its justifiable limits. Two important areas of our economic activity, food consumption and transportation, are examined from an eudaimonist perspective.

From the perspective of our enlightened self-interest, we see that when it comes to economic consumption, less is more. Not always, and not beyond a certain minimum level. But often, less is more; especially for the middle and upper class members of wealthy industrial societies. This is the proper perspective from which to consider environmentalists' calls for limiting consumption in order to protect nature. (v.9,#3)

Cafaro, Philip, "Rachel Carson's Environmental Ethics," Reflections 9 (Number 2, Spring, 2002):17-21. Lays out Carson's environmental ethics based on a careful reading of Silent Spring and the natural history writings. (v.13,#2)

Cafaro, Philip, "Nature's Star Witness," Conservation Biology 14(2000):911-912. Review of L. Lear, Rachel Carson: Witness for Nature (New York: Holt, 1997) and R. Carson, Lost Woods: The Discovered Writings of Rachel Carson (Boston: Beacon Press, 1998). (v.11,#2)

Cafaro, Philip Justin. Thoreau's Vision of a Good Life in Nature: Towards an Environmental Virtue Ethics. Ph. D. thesis, Boston University Graduate School of Arts and Sciences, 1997. Major Professor: Michael Martin, Professor of Philosophy. Environmental ethics from a virtue ethics perspective. Positive relationships to nature are necessary to a good human life, while negative relationships stunt and limit us. The thesis is developed through a consideration of the writings of Henry David Thoreau, focusing on his analyses of two important areas of our lives: economic activity and the pursuit of knowledge. It brings Thoreau into current environmental debates with the goal of furthering the creation of a strong environmental virtue ethics, arguing that an enlightened self-interest demands environmental protection and the preservation of wild nature.

Part one outlines a theory of virtue ethics and develops a position on the nature and limits of ethical justification. It then explores Thoreau's method of ethical theorizing, a blend of analysis, experiment, exhortation and story-telling.

Part two presents Thoreau's economic philosophy and argues for its contemporary relevance. Treating economics within the context of virtue ethics, Thoreau argues that the real importance of our economic lives lies in what sorts of people they make us, and in how they relate us to other people and to

nature. Because modern economic theory takes a narrower view of the purpose of economic life, these chapters challenge both our economic lives and currently accepted ways of understanding them.

Part three considers the role of the search for knowledge in a good life. One chapter explores Thoreau's career as a naturalist and argues that the study of natural history is an important avenue for personal growth and fulfillment. A second considers Thoreau's ambivalent yet lasting interest in natural science and his contributions to the nascent science of ecology. Building on recent insights into the importance of narrative to virtue ethics, it discusses the stories that individual scientists may tell about their activities, and the stories that we may tell of science itself, as the career of humanity knowing nature. This dissertation argues that stories which include loving and respectful relationships to nature are superior to those which promote its control and domination.

Cafaro is now assistant professor of philosophy at Southwest State University, Marshall, Minnesota. (v.9,#3)

Cafaro, Philip, and Primack, Richard, "Ethical Issues in Biodiversity Protection." In Levin, Simon Asher, Encyclopedia of Biodiversity (San Diego: Academic Press [Harcourt], 2001), vol. 2:593-607. (v.13,#1)

Cafaro, Philip, "For a Grounded Conception of Wilderness and More Wilderness on the Ground," Ethics and the Environment 6(no. 1, 2001):1-17. Recently a number of influential academic environmentalists have spoken out against wilderness, most prominently William Cronon and J. Baird Callicott. This is odd, given that these writers seem to support two cornerstone positions of environmentalism as it has developed over the past twenty years: first, the view articulated within environmental ethics that wild, nonhuman nature, or at least some parts of it, has intrinsic or inherent value; second, the understanding developed within conservation biology that we have entered a period of massive anthropogenic biodiversity loss and that landscape-level habitat preservation is essential for combating this. I argue here that Cronon and Callicott are wrong. In fact, an ethics of respect for nonhuman nature and an informed, scientific understanding of what is necessary to preserve it do strongly support increased wilderness preservation. Cafaro is in philosophy, Colorado State University. (E&E)

Cafaro, Philip, "Thoreauvian Patriotism as an Environmental Virtue." Philosophy in the Contemporary World 2 (1995): 1-9. In Walden Henry David Thoreau argues for and against patriotism. Thoughtful environmentalists should do likewise. Thoreau's accounts of "settling" and farming are efforts to rethink and deepen his connections to the land. These efforts define a patriotism that is local, thoughtful and moral, and Thoreau's economic philosophy can be seen as applied patriotism. Like other virtues such as courage or prudence, patriotism is liable to a skewed development and various kinds of misuse. Yet properly developed it is a part of a good human life. Thoreauvian patriotism provides a strong base from which to oppose militarism and xenophobia, which many intellectuals mistakenly equate with patriotism. (v.9,#3)

Cafaro, Philip and Primack, Richard, "Ecological Integrity: Evaluating Success in National Parks and Protected Areas," Encyclopedia of Life Sciences, Nature Publishing Group, London. Website: <http://www.els.net> This encyclopedia went online January 2001; a print version will be published in 2002. "Nature Publishing Group" is a part of Macmillan Press. (v.12,#4)

Cafaro, Philip, "The Naturalist's Virtues," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):85-99. This paper argues that studying natural history helps make us more virtuous; that is, better and happier people. After sketching a broad conception of virtue, It discusses how naturalizing may improve our moral character and help develop our intellectual, aesthetic and physical abilities. It asserts essential connections between non-anthropocentrism and wisdom, and between natural history study and the achievement of a non-anthropocentric stance toward the world. Finally, it argues that the great naturalists suggest a noble, inspiring alternative to the gross consumption and trivial pleasures offered by our destructive modern economy: the exploration, understanding and appreciation of nature. It concludes

that a better understanding of our enlightened self-interest would do as much to further environmental protection as the acknowledgment of nature's intrinsic value. (v.13,#2)

Cafaro, Philip J., Richard B. Primack and Robert L. Zimdahl, "The Fat of the Land: Linking American Food Overconsumption, Obesity, and Biodiversity Loss," Journal of Agricultural and Environmental Ethics 19(2006):541-561. Americans' excessive consumption of food harms their health and quality of life and also causes direct and indirect environmental degradation, through habitat loss and increased pollution from agricultural fertilizers and pesticides. We show here that reducing food consumption (and eating less meat) could improve Americans' health and well-being while facilitating environmental benefits ranging from establishing new national parks and protected areas to allowing more earth-friendly farming and ranching techniques. We conclude by considering various public policy initiatives to lower per capita caloric intake and excessive meat consumption, and to translate this temperate behavior into substantial environmental protection. Keywords: biodiversity - consumption - environmental protection - food ethics - obesity - overconsumption - sustainability - temperance. Cafaro and Zimdahl are in the Department of Philosophy, Colorado State University, Fort Collins, CO. (JAEE)

Cafaro, Philip, Review of Ronald L. Sandler, *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics* (New York: Columbia University Press, 2007). *Journal of Agricultural and Environmental Ethics* 21(2008):389-393.

Cafaro, Philip. Review of Conscious Cinema's "Suits and Savages: Why the World Bank Won't Save the World", Organization and Environment 14 (No. 4, December 2001) pp.463-5.

Cafaro, Philip. "Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics." Environmental Ethics 23 (2001):3-18. I argue for an environmental virtue ethics which specifies human excellence and flourishing in relation to nature. I consider Henry David Thoreau, Aldo Leopold, and Rachel Carson as environmental virtue ethicists, and show that these writers share certain ethical positions that any environmental virtue ethics worthy of the name must embrace. These positions include putting economic life in its proper, subordinate place within human life as a whole; cultivating scientific knowledge, while appreciating its limits; extending moral considerability to the nonhuman world; and supporting wilderness protection. I argue that Thoreau, Leopold, and Carson themselves exemplify the potential for cultivating excellence in engagement with wild nature: their lives are among our most powerful arguments for its preservation. (EE)

Cafaro, Philip. Book Review of *Skeptical Environmentalism: The Limits of Philosophy and Science*. By Robert Kirkman. Environmental Ethics 26(2004):101-104. (EE)

Cafaro, Philip. Review of Material Faith: Henry David Thoreau on Science. Edited by Laura Dassow Walls. Environmental Ethics 24(2002):97-98. (EE)

Cafaro, Philip. Review of Wild Fruits: Thoreau's Rediscovered Last Manuscript. Edited by Bradley P. Dean. Environmental Ethics 24(2002):97-98. (EE)

Cafaro, Philip. "Environmental Ethics and the Business Professional: Responsibilities and Opportunities." In J. Rowan and S. Zinaich (eds.), Ethics for the Professions (Wadsworth Press, 2003): 189-196. A discussion of environmental ethics tailored to business students. Discusses both deontological and eudaimonist aspects of business decisions as they effect the environment. (v 14, #3)

Cafaro, Philip. Review of *Dirty Virtues: The Emergence of Ecological Virtue Ethics*. By Louke van Wensveen. Environmental Ethics 23(2001):211-214. (EE)

Cafaro, Philip. "Thoreau's Environmental Ethics in Walden." The Concord Saunterer 10 (2002): 17-63. A detailed discussion of Thoreau's environmental ethics, focused on Walden, but rounding out his conservation philosophy with reference to his journal and late natural history writings. Shows Thoreau to have anticipated intrinsic value arguments and to have fully articulated an environmental virtue ethics. (v 14, #3)

Cafaro, Philip. "Economic Consumption, Pleasure and the Good Life." Journal of Social Philosophy 32 (2001): 471-486. This paper makes two contentions; first, that we should judge consumption on whether it improves or detracts from our lives, and act on that basis; second, that many of the limits to economic consumption advocated by environmentalists would improve our lives. (v 14, # 3)

Cafaro, Philip. "Thoreau's Virtue Ethics in Walden." The Concord Saunterer 8 (2000): 23-47. Presents Thoreau as a virtue ethicist. Includes discussion of Thoreau's meta-ethical foundations and his particular prescriptions for living well. (v 14, #3)

Cafaro, Philip. "Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics." Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Cafaro, Philip. "Henry David Thoreau," in S. Kretch, J. McNeill and C. Merchant (eds.), Encyclopedia of World Environmental History (Routledge): 1200-1202.

Cafaro, Philip. "Gluttony, Arrogance, Greed, and Apathy: An Exploration of Environmental Vice." In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005). Reprinted in Natur und Kultur 2004 (5/2): 3-28, in German.

Cafaro, Philip. Review of The Pine Island Paradox. By Kathleen Dean Moore. Environmental Ethics 28(2006):435-438. (EE)

Cafaro, Philip. "Concerning Thoreau's Living Ethics." Environmental Ethics 28(2006):111-112. (EE)

Cahalan, James M.. Edward Abbey: A Life. Tucson: University of Arizona Press, 2001. Meticulous research, separating fact from fiction, from Abbey's birth to his secret burial in the desert. Chronicles Abbey's many trips in the wilderness and the corresponding development of his career as an author and defender of the wilderness. (v.13,#4)

Cahen, Harley, "Against the Moral Considerability of Ecosystems," Environmental Ethics 10(1988):195-216. This article is a challenge to the land ethic of Leopold or any other holistic environmental ethic, for Cahen denies that ecosystems are morally considerable in themselves. Even if all goal-directed behavior is morally considerable, there is a difference between the goals and incidental by-products of activity. Ecosystemic theory is individualistic; it assumes that the stability of systems is not a goal but a by-product of numerous individual behaviors. Cahen rests this argument on the lack of group or community selection in natural systems. But this argument is based on only one side of current debates in evolutionary ecological theory. For more discussion, see Stanley and Barbara Salthe, "Ecosystem Moral Considerability: A Reply to Cahen," Environmental Ethics 11 (1989):355-361. (Katz, Bibl # 2)

Cahen, Harley. "Against the Moral Considerability of Ecosystems." Environmental Ethics 10(1988):195-216. Are ecosystems morally considerable--that is, do we owe it to them to protect their "interests"? Many environmental ethicists, impressed by the way that individual nonsentient organisms such as plants tenaciously pursue their own biological goals, have concluded that we should extend moral

considerability far enough to include such organisms. There is a pitfall in the ecosystem-to-organism analogy, however. We must distinguish a system's genuine goals from the incidental effects, or byproducts, of the behavior of that system's parts. Goals seem capable of giving rise to interests; byproducts do not. It is hard to see how whole ecosystems can be genuinely goal-directed unless group selection occurs at the community level. Currently, mainstream ecological and evolutionary theory is individualistic. From such a theory it follows that the apparent goals of ecosystems are mere byproducts and, as such, cannot ground moral considerability. Cahen is in the department of Natural Resources, Cornell University, Ithaca, NY. (EE)

Cahill, Michael and Tony Fitzpatrick, eds., Environmental Issues and Social Welfare. Oxford: Blackwell Publishers, 2002. Reviewed by Julie Whitaker in Environmental Values 14(2005):276-278.

Cahill, Thomas V., Review of Scarce, Rik, Eco-Warriors: Understanding the Radical Environmental Movement. Environmental Values Vol.2 No.2(1993):185.

Cahn, Matthew Alan, O'Brien, Rory, eds. Thinking About the Environment: Readings on Politics, Property, and the Physical World. Armonk, NY: M.E. Sharpe, 1996. 312pp. \$24.95 paper. The physical world, law and property, the green critique, and the future of the environment within the context of Western traditions.

Cahn, Matthew A., Environmental Deceptions: The Tension Between Liberalism and Environmental Policymaking in the United States. Albany, NY: State University of New York Press, 1995. 179 pages. The tensions between individual liberty (my rights, my property) and the common good. Thoughtful analysis. (v8,#2)

Cahn, Robert, Footprints on the Planet. Universe Books, 1978.

Cahn, Robert. "Countdown at Trinity, Part II: Welders' glasses, sunburn lotion, and 150 evacuation trucks at the ready." The Christian Science Monitor, July 11, 1995, pp 10, 11. (v6,#2)

Cahn, Robert. "How They Built the Bomb, Part 1: Clouds over Alamogordo." The Christian Science Monitor, July 10, 1995, pp. 9-11. (v6,#2)

Cahn, Robert. "Over the Desert A Nuclear Dawn, Part III: Elation gives place to contemplation." The Christian Science Monitor, July 13, 1995, pp. 10, 11. (v6,#2)

Cahn, Steven M., and Peter Markie, eds., Ethics: History, Theory, and Contemporary Issues. New York: Oxford University Press, 1998. Said to be the most comprehensive anthology available, but not comprehensive enough to include any environmental ethics. Tom Regan, "The Case for Animal Rights," and Carl Cohen, "The Case for the Use of Animals in Medical Research," make it in, but that's as non-human as ethics gets here. Otherwise the issues are the usual ones: abortion, euthanasia, capital punishment, affirmative action, famine relief. Cahn is in philosophy at the City University of New York; Markie is in philosophy at the University of Missouri, Columbia. (v.8,#4)

Cahn, Steven M., ed., Philosophy for the 21st Century. New York: Oxford University Press, 2003. Environmental philosophy creeps into philosophy for the new century with four selections on ethical duties toward animals. Kant: "Why We Have No Obligations to Animals." Robert Nozick: "Constraints and Animals." James Rachels, "The Moral Argument for Vegetarianism." Tibor R. Machan, "Do Animals Have Rights?"

Cai Ya'na, Miu Shenyu & Huang Xiaobing, "On Latent Environmental Problems: The Risk Involved in

Gene Transfer Organisms." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol. 3, no. 4 (December 30, 2000). Abstract: This paper describes the historical origins and basic ideas regarding the issue of the risk involved in gene transfer organisms as one of the latent environmental problems. In Chinese. (EE v.12,#1)

Cai Ya'na, Miu Shenyu & Huang Xiaobing, compilers, "Ecology for the 21st Century: Deep Ecology," a bibliographic compilation, with introduction. Huanjing yu Shehui, a Quarterly, (Environment and Society), vol. 3, no. 4 (December 30, 2000). In Chinese. (EE v.12,#1)

Cain, A. T., Tuovila, V. R., Hewitt, D. G. and Tewes, M. E., "Effects of a Highway and Mitigation Projects On Bobcats in Southern Texas," Biological Conservation 114(no. 2, 2003): 189-197.

Cain, LP; Kaiser, BA, "Public Goods Provision: Lessons from the Tellico Dam Controversy," Natural Resources Journal 43(no.4, 2003):979-1008. (v. 15, # 3)

Cairncross, Frances, Costing the Earth: The Challenge for Governments, the Opportunities for Business. Cambridge, MA: Harvard Business School Press, 1992. 341 pages. \$ 24.95. Environmentalists "need to help develop incentives for industry to support human needs in the least polluting way." They must "put down their placards ... and come into the boardroom with constructive advice." (v3,#2)

Cairns, John, Jr., "Sustained Emergencies," International Journal of Sustainable Development and World Ecology 12(2005):221-226. Emergency situations require more resources than normal operations. If human society does not address environmental problems effectively before they reach the emergency stage, life from then on will be in a sustained (indefinite) state of emergency. Sustainable use of the planet requires optimal use of resources, which can be facilitated by avoiding sustained emergency conditions. Some emergencies beyond human control will always occur, and adequate global resources must be allocated to cope with them. However, a huge number of emergencies are simply the result of failing to take precautionary preventative action in time. Cairns is in biology (emeritus) at Virginia Tech, Blacksburg, VA.

Cairns, John, Jr., "Ecological Restoration: Replenishing our National Global Ecological Capital." Pages 193-208 in Denis A. Sanders, Richard J. Hobbs, and Paul Ehrlich, eds., Nature Conservation 3: Reconstruction of Fragmented Ecosystems. New York: Surrey Beaty, 1993. (v5,#4)

Calbick, KS, Day, JC; Gunton, TI, "Land Use Planning Implementation: A 'Best Practices' Assessment", Environments 31 (no.3, 2003): 69-82.

Caldecott, Julian. Designing Conservation Projects. New York: Cambridge University Press, 1996. 300 pages. \$64.95 cloth. Many challenges are involved in protecting biodiversity in tropical terrestrial and coastal ecosystems, and conservation projects teach many practical lessons. Guidelines to help others design projects that are practical and effective, yet more complete and more robust than some of those designed in the recent past. (v7, #3)

Calderazzo, John, Rising Fire: Volcanoes and our Inner Lives. Guilford, CT: Lyons Press, 2004. Earth's volcanoes have inspired poetry and terror. They also inspire a sense of where the world truly begins. "Over the long arc of time, volcanoes heave themselves up into high, holy mountains and haunted summits, burst apart, erode back down. Their lavas leap and turn with the grace of sandhill cranes in their mating dance; they breathe, roar and sing. And singing, volcanic rocks and fires can deeply affect the way we see and act in the world, the stories we tell about the world." "The natural world can revolutionize the human heart." Calderazzo teaches English, including nature writing, at Colorado State University. (v. 15, # 3)

Caldwell, Lynton Keith and Kristin Shrader-Frechette, Policy for Land: Law and Ethics. Lanham, MD, Rowman and Littlefield, and Lanham, MD: University Press of America, 1992. \$ 24.95 paper. \$ 67.50 cloth. A survey of the problem that have arisen from environmentally counterproductive land policies and use. The authors challenge traditional justifications for property rights and land use. California agricultural land and Appalachian coal land are used as case studies. Caldwell is professor emeritus of political science at Indiana University. Shrader-Frechette is professor of philosophy at the University of South Florida. (v3,#4)

Caldwell, Lynton Keith, Shrader-Frechette, Kristen, Policy for Land: Law and Ethics. (Lanham, MD: Rowman and Littlefield, 1993). Reviewed by Dan T. Vadnjal. Environmental Values 6(1997):365-366. (EV)

Caldwell, Lynton K., Between Two Worlds: Science, the Environmental Movement and Policy Choice. New York: Cambridge University Press, 1989. 200 pages, \$ 44.50. Will humans adapt their ways of life to conserve the natural systems upon which their future and the living world depend? Caldwell attempts an integrated analysis of the interrelationships among science, the environmental movement, and public policy. Special emphasis is given to the interaction of environmentalism and science in generating public and international environmental policies. (v1,#4)

Caldwell, Lynton Keith and Kristin Shrader-Frechette, Policy for Land: Law and Ethics. Lanham, Md: Roman and Littlefield, 1993. 333 pages. Cloth. A new, ecologically enlightened view of land and policy, analyzed and defended against arguments often brought against it. What people believe about their relationship with the Earth takes the form of ethical conclusions that are expressed in institutions defined by law. This account is both biocentric and anthropocentric, drawing on political and legal theory, as well as on analyses of both science and ethics. Chapters on different kinds of land ethics, on concepts of ownership and rights of use, on limits to policy, on land-use policy in international issues, on ecosystemic criteria for land policy, on practical steps and ethical justifications, and on a national policy for land. Caldwell is emeritus in political science at Indiana University; Shrader-Frechette is in philosophy at the University of South Florida, Tampa. (v4,#4)

Caldwell, Wayne, Bowers, Steve and Williams, Owen, "A Community Development Approach to Environmental Management," Environments 27 (No. 2, 1999): 63- . (v.11,#2)

Calhoun, Craig and Hiller, Henryk, "Asbestos Exposure by Johns Manville," in M. David Ermann and Richard J. Lundman, Corporate and Governmental Deviance. New York: Oxford University Press, 1996, 5th edition.

Califaro, Philip. "Personal Narratives and Environmental Ethics." Environmental Ethics 21(1999):109-110.

Callahan, Daniel, "Can Nature Serve as a Moral Guide?" Hastings Center Report 26 (no. 6, Nov.-Dec. 1996):21-27, a short essay, with short replies by Leon R. Kass, "The Troubled Dream of Nature as a Moral Guide," by Bryan G. Norton, "Moral Naturalism and Adaptive Management," and by Strachan Donnelley, "Nature as a Reality Check." Callahan: "I have never quite given up the hope that nature might put in a reappearance in ethics. ... The supposed naturalistic fallacy is, on closer inspection, an odd kind of fallacy since `is' is all the universe has to offer, to say that it cannot be the source of an `ought' is tantamount to saying a priori that an ought can have no course at all--and to say that is no less than to say there can be no oughts. ... Quite apart from these philosophical puzzles, it is useful to note that there is now a major field of inquiry and action right under our noses where nature is frequently held up--with little objection--as the standard for proper behavior." Kass: "Natural knowledge may be very useful in

selecting our means, but not in discerning our ends, and it is utterly useless in deciding how to balance one good against another." Callahan is the retiring president of the Hastings Center. The whole collection of four pieces could be quite profitably read for discussion in a single class hour, in an introductory philosophy class, as well as in an environmental ethics class. (v7,#4)

Callicott, J. Baird, "Conservation Values and Ethics" in Gary K. Meffe and C. Ronald Carroll, eds., Principles of Conservation Biology (Sunderland, MA: Sinauer Associates, Inc., 1994), pp. 24-49. A useful introduction to environmental ethics and value theories for conservation biology students, in a large text, see separate entry. Also useful for introductory philosophy students at freshmen and sophomore levels. Focuses on Norton, Taylor, Rolston, Sagoff, Singer, Regan, Goodpaster, all brought into the perspective of Aldo Leopold and a concentric circle theory of ethics. Excellent for condensing the main issues into a short article. With box essays by Holmes Rolston, III, "Our Duties to Endangered Species," by Susan P. Bratton, "Monks, Temples, and Trees: The Spirit of Diversity," and by Roderick F. Nash, "Discovering Radical Environmentalism in our Own Cultural Backyard: From Natural Rights to the Rights of Nature." Callicott is in philosophy at the University of Wisconsin, Stevens Point. (v5,#2)

Callicott, J. Baird. Review of The Case for Animal Rights. By Tom Regan. Environmental Ethics 7(1985):365-72.

Callicott, J. Baird. "Hume's Is/Ought Dichotomy and the Relation of Ecology to Leopold's Land Ethic." Environmental Ethics 4(1982):163-74. Environmental ethics in its modern classical expression by Aldo Leopold appears to fall afoul of Hume's prohibition against deriving ought-statements from is-statements since it is presented as a logical consequence of the science of ecology. Hume's is/ought dichotomy is reviewed in its historical theoretical context. A general formulation bridging is and ought, in Hume's terms, meeting his own criteria for sound practical argument, is found. It is then shown that Aldo Leopold's land ethic is expressible as a special case of this general formulation. Hence Leopold's land ethic, despite its direct passage from descriptive scientific premises to prescriptive normative conclusions, is not in violation of any logical strictures which Hume would impose upon axiological reasoning. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird, "The Metaphysical Transition in Farming: From the Newtonian-Mechanical to the Eltonian Ecological", Journal of Agricultural Ethics 3(1990):36-49. Modern agriculture is subject to a metaphysical as well as an ethical critique. As a casual review of the beliefs associated with food production in the past suggests, modern agriculture is embedded in and informed by the prevailing modern world view, Newtonian Mechanics, which is bankrupt as a scientific paradigm and unsustainable as an agricultural motif. A new holistic, organic world view is emerging from ecology and the new physics marked by four general conceptual features. A future post-modern ecological agriculture will help to solve the ethical problems engendered by modern mechanical agriculture. Callicott is in philosophy at the University of Wisconsin, Stevens Point.

Callicott, J. Baird. "The Case against Moral Pluralism." Environmental Ethics 12(1990):99-124. Despite Christopher Stone's recent argument on behalf of moral pluralism, the principal architects of environmental ethics remain committed to moral monism. Moral pluralism fails to specify what to do when two or more of its theories indicate inconsistent practical imperatives. More deeply, ethical theories are embedded in moral philosophies and moral pluralism requires us to shift between mutually inconsistent metaphysics of morals, most of which are no longer tenable in light of postmodern science. A univocal moral philosophy--traceable to David Hume's and Adam Smith's theory of moral sentiments, grounded in evolutionary biology by Charles Darwin, and latterly extended to the environment by Aldo Leopold--provides a unified, scientifically supported world view and portrait of human nature in which multiple. Lexically ordered ethics are generated by multiple human, "mixed," and "biotic" community

memberships. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird. "Animal Liberation: A Triangular Affair." Environmental Ethics 2(1980):311-38. The ethical foundations of the "animal liberation" movement are compared with those of Aldo Leopold's "land ethic," which is taken as the paradigm for environmental ethics in general. Notwithstanding certain superficial similarities, more profound practical and theoretical differences are exposed. While only sentient animals are morally considerable according to the humane ethic, the land ethic includes within its purview plants as well as animals and even soils and waters. Nor does the land ethic prohibit the hunting, killing, and eating of certain animal species, in sharp contrast to the humane ethic. The humane ethic rests upon Benthamic foundations: pain is taken to be the ultimate evil and it is reductive or atomistic in its moral focus. The land ethic, on the other hand, is holistic in the sense that the integrity, stability, and beauty of the biotic community is its summum bonum. A classical antecedent of some of the formal characteristics of the land ethic is found in Plato's moral philosophy. Special consideration is given to the differing moral status of domestic and wild animals in the humane and land ethics and to the question of moral vegetarianism. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird, Review of Snyder, Gary, A Place in Space. Environmental Ethics 18(1996):321-326. (EE)

Callicott, J. Baird, "Environmental Ethics: Overview," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 676-87. (v6,#2)

Callicott, J. Baird, "Conservation Ethics and Fisheries Management," Fisheries: A Bulletin of the American Fisheries Society, vol. 16, no. 2, (March-April 1991):22-28. Leopold's land ethic applied to fisheries management, with attention to whether we ought to stock exotic fish. "While the first commandment of the Leopold Land Ethic, thou shalt not extirpate species or render them extinct, is categorical; the second is hypothetical: thou mayest introduce exotics provided thou exerciseth great caution in doing so." A case in point: "California's Clear Lake, 'one of the oldest lakes in North America,' originally had 12 native fish species. It is now home to 23. Thus, it is presently nearly twice as diverse as in its historical ('natural') condition and presumably ecologically stable." Regrettably, "the introduction of 16 species has made Clear Lake a much richer fishery than formerly, but five of the natives were extirpated, of which two are now globally extinct. In absolute terms the planet is poorer." Callicott is professor of philosophy, University of Wisconsin, Stevens Point. (v2,#2)

Callicott, J. Baird, "Land Ethic" (Environmental Ethics), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 688-90. (v6,#2)

Callicott, J. Baird. "The Metaphysical Implications of Ecology." Environmental Ethics 8(1986):301-16. Although ecology is neither a universal nor foundational science, it has metaphysical implications because it profoundly alters traditional Western concepts of terrestrial nature and human being. I briefly sketch the received metaphysical foundations of the modern world view, set out a historical outline of an emerging ecological world view, and identify its principal metaphysical implications. Among these the most salient are a field ontology, the ontological subordination of matter to energy, internal relations, and systemic (as opposed to oceanic) holism. I treat moral psychology as a special case of the metaphysical implications of ecology. Ecology undermines the concept of a separable ego or social atom and thus renders obsolete any ethics which involves the concepts of "self" and "other" as primitive terms. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird. "Intrinsic Value, Quantum Theory, and Environmental Ethics." Environmental Ethics

7(1985):257-75. The central and most recalcitrant problem for environmental ethics is the problem of constructing an adequate theory of intrinsic value for nonhuman natural entities and for nature as a whole. In part one, I retrospectively survey the problem, review certain classical approaches to it, and recommend one as an adequate, albeit only partial, solution. In part two, I show that the classical theory of inherent value for nonhuman entities and nature as a whole outlined in part one is inconsistent with a contemporary scientific world view because it assumes the validity of the classical Cartesian partition between subject and object which has been overturned by quantum theory. Based upon the minimalistic Copenhagen Interpretation of quantum theory, I then develop a theory of inherent value which does not repose upon the obsolete subject/object and ancillary fact/value dichotomies. In part three, I suggest that a more speculative metaphysical interpretation of quantum theory--one involving the notion of real internal relations and a holistic picture of nature--permits a principle of "axiological complementarity," a theory of "intrinsic"--as opposed to "inherent"--value in nature as a simple extension of ego. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird, "Moral Monism in Environmental Ethics Defended," Journal of Philosophical Research 19(1994):51-60. In dealing with concern for human beings, sentient animals, and the environment, Christopher D. Stone suggests that a single agent adopt a different ethical theory--Kant's, Bentham's, Leopold's--for each domain. But employing Kant's categorical imperative in this case, Bentham's hedonic calculus in that, and Leopold's land ethic in another, a single agent would have either simultaneously or cyclically to endorse contradictory moral principles. Instead, Callicott suggests that different and sometimes conflicting duties are generated by an agent's membership in multiple moral communities. Peter Wenz, Gary Varner, Andrew Brennan, Anthony Weston, and Eugene Hargrove variously misunderstand either what is at issue in the monism versus pluralism debate or Callicott's suggested communitarian alternative to the sort of pluralism that Stone recommends. (v5,#2)

Callicott, J. Baird, "La nature est morte, vive la nature!" Écologie Politique (Paris), No. 7, Été 1993, pp. 73-90. A French translation of an article that appeared first in English in the Hastings Center Report, September-October 1992. (v4,#3)

Callicott, J. Baird. Review of Foundations of Environmental Ethics. By Eugene C. Hargrove. Environmental Ethics 11(1989):169-77.

Callicott, J. Baird, "A Critique of and an Alternative to the Wilderness Idea," Wild Earth 4, no. 4 (Winter 1994-95): 54-59. Wildernesses could be better conceived as managed biosphere reserves. The wilderness idea (1) was conceived to meet human aesthetic and spiritual needs, not as biodiversity reserves; (2) is a defensive, losing strategy, because most of nature has already been developed, nature is at an end; (3) is not an international idea universalizable for all countries; (4) is ethnocentric, because there was no real wilderness even prior to Columbus; native Americans actively managed the landscape; (5) is flawed because nature is not static as envisioned in wilderness; and (6) the idea perpetuates a dichotomy between humans and nature. A better policy is active human management of nature reserves, with illustrations of how this could be so in the Greater Yellowstone Ecosystem.

Immediately following are two replies, the first by Reed Noss, "Wilderness--Now More than Ever," Wild Earth 4, no. 4 (Winter 1994-95):60-63. "Callicott is dead wrong." "Callicott erects a straw man." "No ecologist interprets wilderness in the static, pristine, climax sense that Callicott caricatures it." The second reply is by Dave Foreman, "Wilderness Areas Are Vital," Wild Earth 4(no. 4, Winter 1994-1995):64-69. Callicott's argument "is fraught with mischief, and unschooled in its subject." "Before a respected scholar like Callicott criticizes the Wilderness concept (even from a friendly if disingenuous point of view), he ought to become more familiar with the history of the Wilderness preservation movement." Callicott counter-replies, a "retort," in "Deep Grammar," Wild Earth 5(no. 1, Spring 1995):64-66. Wilderness is a religion and anyone who criticizes it gets jumped on; Callicott argues that we should "abandon the concept of wilderness (with its historicist baggage) for the concept of

biodiversity reserves."

Callicott, J. Baird, "Tertium Organum and Mankind's Role in Future Evolution." Philosophica 39 (1987): 101-112. A minor piece by Callicott, suggesting a new organistic myth of the human place in the world. The world is a product of "emergent evolution," and we humans are the central nervous system. (Katz, Bibl # 2)

Callicott, J. Baird. "On Warren and Cheney's Critique of Callicott's Ecological Metaphysics." Environmental Ethics 15(1993):373-74. (EE)

Callicott, J. Baird. Beyond the Land Ethic: More Essays in Environmental Philosophy. Albany: Suny Press, 1999. Review by Piers Stephens, Environmental Values 10(2001):138. (EV)

Callicott, J. Baird, Crowder, Larry B., and Mumford, Karen, "Current Normative Concepts in Conservation," Conservation Biology 13(no. 1, 1999):22-35. A plethora of normative conservation concepts have recently emerged, most of which are ill-defined: biological diversity, biological integrity, ecological restoration, ecological services, ecological rehabilitation, ecological sustainability, sustainable development, ecosystem health, ecosystem management, adaptive management, and keystone species are salient among them. These normative concepts can be organized and interpreted by reference to two new schools of conservation philosophy, compositionism and functionalism. The former comprehends nature primarily by means of evolutionary ecology and considers Homo sapiens separate from nature. The latter comprehends nature primarily by means of ecosystem ecology and considers Homo sapiens as part of nature. Biological diversity, biological integrity, and ecological restoration belong primarily in the compositionist glossary; the rest belong primarily in the functionalist glossary. The former set are more appropriate norms for reserves, the latter for areas that are humanly inhabited and exploited. In contrast to the older schools of conservation philosophy, preservationism and resourcism, compositionism and functionalism are complementary, not competitive and mutually exclusive. As the historically divergent ecological sciences--evolutionary ecology and ecosystem ecology--are increasingly synthesized, a more unified philosophy of conservation can be envisioned. Callicott is in philosophy, University of North Texas. Crowder is in zoology, Duke University, Marine Laboratory. Mumford is in Fisheries and Wildlife, University of Minnesota St. Paul.

Callicott, J. Baird, "Can a Theory of Moral Sentiments Support a Genuinely Normative Environmental Ethic?" Inquiry 35(1992):183-198. The conceptual foundations of Aldo Leopold's land ethic are traceable through Darwin to the sentiment-based ethics of Hume. According to Hume, the moral sentiments are universal; and, according to Darwin, they were naturally selected in the intensely social matrix of human evolution. Hence they may provide a "consensus of feeling," functionally equivalent to the normative force of reason overriding inclination. But then ethics, allege Kristin Shrader-Frechette and Warwick Fox, is reduced to a description of human nature, and the question remains open whether one really ought or ought not value, approve, or do this or that. The moral sentiments, however, are informed by culture. Specific ethical injunctions, even so, are not culturally relative, because cultural beliefs are amenable to cognitive criticism. New experience and new discoveries of science may bring to light hitherto unrecognized "proper objects" of our moral sentiments. This paper was originally delivered at the Pacific Division, APA, March 1991. Callicott is professor of philosophy, University of Wisconsin, Stevens Point. (v3,#3)

Callicott, J. Baird, "The Pragmatic Power and Promise of Theoretical Environmental Ethics: Forging a New Discourse," Environmental Values 11(2002):3-25. Pragmatist environmental philosophers have (erroneously) assumed that environmental ethics has made little impact on environmental policy because environmental ethics has been absorbed with arcane theoretical controversies, mostly centered on the question of intrinsic value in nature. Positions on this question generate the allegedly divisive categories

of anthropocentrism/nonanthropocentrism, shallow/deep ecology, and individualism/holism. The locus classicus for the objectivist concept of intrinsic value is traceable to Kant, and modifications of the Kantian form of ethical theory terminate in biocentrism. A subjectivist approach to the affirmation of intrinsic value in nature has also been explored. Because of the academic debate about intrinsic value in nature, the concept of intrinsic value in nature has begun to penetrate and reshape the discourse of environmental activists and environmental agency personnel. In environmental ethics, the concept of intrinsic value in nature functions similarly to way the concept of human rights functions in social ethics. Human rights has had enormous pragmatic efficacy in social ethics and policy. The prospective adoption of the Earth Charter by the General Assembly of the United Nations may have an impact on governmental environmental policy and performance similar to the impact on governmental social policy and behavior of the adoption by the same body in 1948 of the Universal Declaration of Human Rights. Belatedly, but at last, the most strident Pragmatist critics of the concept of intrinsic value in nature now acknowledge its pragmatic power and promise. (EV)

Callicott, J. Baird, "La Nature est Morte; Vive la Nature," Hastings Center Report 22 (September-October 1992):16-23. "The old, mechanistic idea of nature is dying. We are witnessing the shift to a new idea, in which nature is seen as an organic system that includes human beings as one of its components rather than as brutal and ultimately self-defeating conquistadores." "We are animals ourselves, large omnivorous primates, very precocious to be sure, but just big monkeys, nevertheless. We are therefore a part of nature, not set apart from it. Chicago is no less a phenomenon of nature than is the Great Barrier Reef." Callicott is in the Department of Philosophy, University of Wisconsin, Stevens Point. (v3,#3)

Callicott, J. Baird. "Traditional American Indian and Western European Attitudes toward Nature: An Overview." Environmental Ethics 4(1982):293-318. A generalized traditional Western world view is compared with a generalized traditional American Indian world view in respect to the practical relations implied by either to nature. The Western tradition pictures nature as material, mechanical, and devoid of spirit (reserving that exclusively for humans), while the American Indian tradition pictures nature throughout as an extended family or society of living, ensouled beings. The former picture invites unrestrained exploitation of nonhuman nature, while the latter provides the foundations for ethical restraint in relation to nonhuman nature. This conclusion is defended against disclaimers by Calvin Martin and Tom Regan. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird. "Silencing Philosophers: Minter and the Foundations of Anti-foundationalism." Environmental Values 8(1999):499-516. ABSTRACT: In "No Experience Necessary: Foundationalism and the Retreat from Culture in Environmental Ethics", Ben A. Minter forgivably misconstrues my critique of moral pluralism. Contrary to Minter's representation: I do not accuse moral pluralists of "moral promiscuity"; nor do I posit a "master principle" to govern all human action respecting the environment; and although I offer conceptual foundations for environmental ethics, I do not claim that they rest on certain, a priori, and non-empirical intuitions. Rather, the conceptual foundations I offer for environmental ethics are largely scientific. Contrary to Minter's representation: I do consider a multiplicity of contexts in which ethical actions are situated; and I do respectfully attend to and creatively engage a variety of cultural points of view, both western and nonwestern, in constructing environmental ethics. Anti-foundationalists, such as Minter and Bryan G. Norton, ironically pose an insidious threat to democratic discussion and debate of environmental values, because they themselves posit, but do not frankly acknowledge, foundational beliefs. KEYWORDS: Foundationalism, anti-foundationalism, environmental ethics, pragmatism, culture. J. Baird Callicott, Department of Philosophy and Religion Studies University of North Texas Denton, TX 76203, USA. (EV)

Callicott, J. Baird, "Intrinsic Value, Quantum Theory, and Environmental Ethics," Environmental Ethics 7(1985):257-275. This is the latest in a series of articles that attempt to delineate the concept of intrinsic

value in nature. Callicott rightly sees this as the central problem for environmental ethics. He further develops his axiological subjectivism of Humean/ Darwinian empathy to take into account the revelations of quantum physics. That science has effectively ended the duality of subject/object--thus making the conflict between subjectivism and naturalism a moot point. In ethics, this means that we can value nature as part of an expanded concept of self. What Callicott has done is develop a Deep Ecology position, but rather than basing his conclusions on some kind of mystical intuition, he has grounded his position in coherent and relevant arguments. But in practical terms, it is unclear how far the extension of "self" can reach. (Katz, Bibl # 1)

Callicott, J. Baird, "The Case Against Moral Pluralism," Environmental Ethics 12(1990):99-124. A critique of pluralism and deconstruction as applied to environmental ethics, as seen in the writings of Christopher Stone and Jim Cheney. Callicott argues that the main problem with pluralism is the separation of ethics from metaphysics. Each ethical view is based on a specific metaphysical world-view, so how is pluralism possible? Pluralism abandons the attempt to develop a coherent vision of the world. Callicott proposes the community model of Darwin and Leopold, which presents a univocal ethical theory with multiple duties. In practical operation, Callicott's Darwinian metaphysic of morals is not any less pluralistic than Stone's view. (Katz, Bibl # 2)

Callicott, J. Baird., In Defense of the Land Ethic: Essays in Environmental Philosophy. Albany: SUNY Press, 1989. Pp. x, 325. Callicott is a central figure in environmental ethics, and this is a collection of his principal articles published over the last fifteen years. All of the chapters appeared before 1988, and many of them are reviewed in the first version of this bibliography. Callicott is primarily known as a critic of "animal liberation" and a defender of an extreme holism, but his best work (represented here) involves the development of a foundation for environmental ethics based on Humean psychology, Darwinian evolution, and quantum physics. (Katz, Bibl # 2)

Callicott, J. Baird, ed. Companion to A Sand County Almanac. Reviewed in Environmental Ethics 10(1988):169-76.

Callicott, J. Baird, ed., Companion to A Sand County Almanac: Interpretive and Critical Essays. Madison: University of Wisconsin Press, 1987. Pp. x, 308. This is the first collection of essays devoted exclusively to Aldo Leopold's A Sand County Almanac (Oxford 1948). Leopold is the most influential historical source in the field of environmental ethics; his essay, "The Land Ethic," in Almanac is almost universally cited by environmental philosophers. The essays here range from personal biographical accounts of Leopold to general philosophical discussions of his ideas. Of chief philosophical interest are: Holmes Rolston, "Duties to Ecosystems," (pp. 246-274), which presents a detailed analysis of the reasons why environmental systems can be the objects of moral concern. Ecosystemic communities should not be thought of as organismic individuals. The model of individualism in moral thinking may be appropriate for culture (interhuman activity) but it fails as a model when applied to human-nature interaction. "The appropriate unit for moral concern is the fundamental unit of development and survival," i.e., the ecosystemic community (p. 258). Ecosystemic communities are not analogues of human communities, mainly because the elements of natural communities lack subjectivity; nonetheless, they still have value in themselves. J. Baird Callicott, "The Land Aesthetic" (pp. 157-171), shows how Leopold's aesthetic view of nature was "informed by ecological and evolutionary natural history" (p. 168), so that one ascribes beauty to land that is functioning as a natural ecosystem, not to land that is "pretty" in a merely scenic sense. For Leopold, both moral and aesthetic value are based on ecological relationships. In "The Conceptual Foundations of the Land Ethic" (pp. 186-217), Callicott shows the internal development and logic of Leopold's argument (which is often misunderstood) as being based on: a Darwinian natural history of ethical development, a kinship theory of ethical ties among living things, and an ecological model of biological communities, "all overlaid on a Humean-Smithian moral psychology" (p. 195). Callicott resolves problems of the holism of Leopold's ethic--in particular, the charges that ecological

holism is a kind of "ecofascism," and that the land ethic is just a form of enlightened species-wide human self-interest. The land ethic does not "cancel human morality" (p. 208). It supplements it. And the land ethic is not prudential-consequentialist; it is a deontological system of ethics based on love and respect for the community of the land. In "Aldo Leopold's Intellectual Heritage," (pp. 63-88), Roderick Nash shows that Leopold's land ethic was not entirely original; it has intellectual roots in Darwin, the humane movement regarding animal welfare, and the "reverence-for-life" ethic of Albert Schweitzer. But Nash misses the point of Leopold's originality. The land ethic was holistic; it is based on the community of the ecosystem, not isolated individuals. This was a view that was radical and new. Peter A. Fritzell, "The Conflicts of Ecological Conscience," (pp. 128-153), presents a literary and philosophical exegesis of the Almanac which reveals the basic tensions and paradoxes of conceiving man as both part of the natural community and as part of a moral culture. The collection also contains several worthwhile literary essays on the development of the Almanac and "The Land Ethic," as well as an earlier Foreword written by Leopold in 1947 but not published in the final version of the first edition. No bibliography. (Katz, Bibl # 1)

Callicott, J. Baird, "Genesis and John Muir." ReVision 12:3 (Winter 1990): 31-47. Using an interpretation of Genesis by John Muir as a starting point, Callicott examines the possible presence of a "citizenship" model for human-nature relationships in the Hebrew Bible. The analysis is based on the recognition that Genesis had several authors; Callicott uses the "J" version of creation as his primary source and argues that anthropocentrism was original sin. Another version of this article appears in Environmental History Review 14:1-2 (1990): 65-90. (Katz, Bibl # 2)

Callicott, J. Baird, and Mumford, Karen. "Ecological Sustainability as a Conservation Concept," Conservation Biology 11(no.1, 1997):32. Neither the classic resource management concept of maximum sustainable yield nor the concept of sustainable development are useful to contemporary, nonanthropocentric, ecologically informed conservation biology. As an alternative, we advance an ecological definition of sustainability that is in better accord with biological conservation: meeting human needs without compromising the health of ecosystems. In addition to familiar benefit-cost constraints on human economic activity, we urge adding ecological constraints. Projects are not choice-worthy if they compromise the health of the ecosystems in which human economic systems are embedded. Sustainability, so defined, is offered as an approach to conservation that would complement wildlands preservation for ecological integrity, not substitute for wildlands preservation. Callicott is in philosophy at the University of North Texas. Mumford is in the Department of Fisheries and Wildlife, University of Minnesota, St. Paul. (v8,#2)

Callicott, J. Baird and Fernando J. R. da Rocha, eds., Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Reviewed by Thomas Heyd. Environmental Ethics 19(1997):437-440. (EE)

Callicott, J. Baird, and Roger T. Ames, eds., Nature in Asian Traditions of Thought: Essays in Environmental Philosophy. Albany: SUNY Press, 1989. Pp. xxi, 335. This is the only collection of environmental philosophy that merges recent trends in environmental ethics with oriental philosophy. The bulk of the collection derives from several sessions of the Society for Asian and Comparative Philosophy and were previously published in the Environmental Ethics 8:4 (1986) and Philosophy East and West 37:2 (April 1987). (Katz, Bibl # 2)

Callicott, J. Baird, Smith, Smith, eds. 'The Intrinsic Value of Nature,' The Monist. Reviewed by Ned Hettinger. Environmental Ethics 18(1996):99-104. (EE)

Callicott, J. Baird. "Intrinsic Value in Nature: A Metaethical Analysis." EJAP, The Electronic Journal of Analytic Philosophy. A topical issue on foundational justifications of intrinsic value in environmental

ethics. This journal does not appear in paper, only on internet. A phenomenological proof and a teleological proof for intrinsic value in nature. An answer to Norton's claims that anthropocentric and nonanthropocentric environmental ethics converge. Kant on objective intrinsic value. The Biocentrists (Albert Schweitzer, Paul Taylor, Holmes Rolston) and their insights and inadequacies. Callicott argues that we should "base environmental ethics on our human capacity to value non-human natural entities for what they are--irrespective of what they may do for us and of whether or not they can value themselves." Suggestions how to envision a postmodern account of value in nature, one still in the making.

Other papers are by Robin Attfield and Stephen R. L. Clark. Contact the guest editor for this issue, Martin Schönfeld, Department of Philosophy, Indiana University, Bloomington, IN 47405; ejap@phil.indiana.edu. (v6,#1)

Callicott, J. Baird, "Genesis Revisited: Murian Musing on the Lynn White, Jr., Debate," Environmental History Review 14(1990):65-90. The roots of the ecological crisis are as Greek as they are Hebrew. John Muir read Genesis with neither the despotic (subdue and conquer) nor the stewardship model, but rather with an ecocentric-bioegalitarian model. This is not the perspective of the first creation story (the P-account), but it is the perspective of the second creation story (the J-account). Though second in the biblical text, this is the earlier Hebrew account, an atavistic account that sees anthropocentrism as the original sin. Muir's own lifestyle was of this kind. Persons in contemporary society, however, since they have fallen into this anthropocentrism, cannot realistically undertake such a primitive return to nature. But they can perhaps reach a Self-realization, an ecological self (in the sense advocated by Naess) that does transcend anthropocentrism. (v1,#3)

Callicott, J. Baird, "Agroecology in Context", Journal of Agricultural Ethics 1(1988):3-9. Agriculture and medicine palpably manifest a culture's world view. Correspondingly, changes in agriculture and medicine may be barometers of change in a culture's overall outlook. Agroecology translates this abstract new vision into a concrete agricultural vocabulary: The farmstead is regarded as an artificial ecosystem with a multiplicity of diverse plant and animal constituents interacting with one another and with environing natural ecosystems in complex and mutually supporting ways. Callicott is in philosophy at the University of Wisconsin, Stevens Point.

Callicott, J. Baird, "'Back Together Again' Again," Environmental Values 7(1998): 461-475. Response to Dale Jamieson's article "Animal Liberation is an Environmental Ethic" in Environmental Values, Vol. 7, No. 1.

Callicott, J. Baird. In Defense of the Land Ethic. Reviewed in Environmental Ethics 13(1991):181-86.

Callicott, J. Baird, "Benevolent Symbiosis: The Philosophy of Conservation Reconstructed." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Callicott, J. Baird, "Principal Traditions in American Environmental Ethics: A Survey of Moral Values for Framing an American Ocean Policy," Ocean and Coastal Management 17(1992):299-308. (v5,#4)

Callicott, J. Baird and Michael Nelson, eds. Great, New, Wilderness Debate. Reviewed by David Rothenberg. Environmental Ethics 22(2000):199-202.

Callicott, J. Baird. "Rolston on Intrinsic Value: A Deconstruction." Environmental Ethics 14(1992):129-43. Central to Holmes Rolston's Environmental Ethics is the theoretical quest of most environmental philosophers for a defensible concept of intrinsic value for nonhuman natural entities and nature as a whole. Rolston's theory is similar to Paul Taylor's in rooting intrinsic value in conation, but

dissimilar in assigning value bonuses to consciousness and self-consciousness and value dividends to organic wholes and elemental nature. I argue that such a theory of intrinsic value flies in the face of the subject/object and fact/value dichotomies of the metaphysical foundations of modern science--a problem Rolston never directly confronts. The modern scientific world view is obsolete. A post-modern scientific world view provides for a range of potential values in nature actualizable upon interaction with consciousness. The best that a modern scientific world view can provide are subject-generated--though not necessarily subject-centered--values in nature. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird and Eugene C. Hargrove. "Leopold's 'Means and Ends in Wild Life Management': A Brief Commentary." Environmental Ethics 12(1990):333-37. Leopold's lecture at Beloit College provides an important glimpse into his conversion from a philosophy of prudent scientific resource management to a land ethic and aesthetic. Leopold here advocates natural regulation not simply because of his growing concern that invasive management principles are limited, but also because of aesthetic considerations that were independent of his instrumental or "utilitarian" training at the Yale Forest School and in the U.S. Forest Service. The lecture is helpful in correcting an unfortunate misreading of Leopold's famous essay, "The Land Ethic," according to which the land ethic is interpreted as being based primarily on human welfare and self-interest. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. Hargrove is in the department of philosophy, University of North Texas, Denton, Texas. (EE)

Callicott, J. Baird, "A Brief History of the American Land Ethic Since 1492," Inner Voice (Association of Forest Service Employee's for Environmental Ethics), vol. 6, no. 1 (January-February 1994). A summary of such figures as George Perkins Marsh, Emerson, Thoreau, Gifford Pinchot, John Muir, Aldo Leopold, and Leopold's legacy. Callicott teaches philosophy at the University of Wisconsin, Stevens Point. (v5,#1)

Callicott, J. Baird, "Whither Conservation Ethics? in Conservation Biology vol. 4, no. 1 (March 1990):15-20. Callicott concludes that Leopold advocated "active management for a mutually beneficial human-nature symbiosis, in addition to passive preservation of 'wilderness.'" As the human population grows and more nations develop, the best hope for conservation biology lies in a generalization of Leopold's ideal of ecosystems which are at once economically productive and ecologically healthy. The principal intellectual challenge raised by such an ideal for conservation biology is the development of criteria of ecological health and integrity in an inherently dynamic, evolving, and human-saturated biota."

Callicott, J. Baird, "How Environmental Ethical Theory May Be Put into Practice," Ethics and the Environment 1(no.1, 1996):3-14. Environmentalists do not appear to walk their walk as consistently as animal liberationists and anti-abortionists. Are we therefore more hypocritical? Maybe: but there's another explanation. Unlike concern for individual animals or individual fetuses, environmental concerns are holistic (systemic)--air and water pollution, species extinction, diminished ecological health and integrity. One pro-life pregnant woman may preserve the life of one unborn baby, the one in her uterus; and one animal liberationist can save the life of one animal, the one he didn't eat. But one environmentalist who refuses to own and operate an automobile has no measurable effect on air pollution. Only collective, social change--universal banning of automobiles, mandatory recycling, etc.--will effectively redress environmental insults. Thus, the best way to put environmental ethics into practice is not to try to do one's bit and hope that all such individual environmental ethical acts will aggregate into significance. The best way to put environmental ethics into practice is to work to instill environmental values in society as the foundation for coercive environmental policies, regulations, and laws. The mechanistic-materialistic worldview and its associated consumerist value system trickled down into the collective consciousness via its technological manifestation in a plethora of machines. The systemic worldview in which environmental values are embedded may be communicated to the general public less

by means of discursive discourse than by a new generation of systemic-electronic technologies. Callicott teaches philosophy at the University of North Texas, Denton. (E&E)

Callicott, J. Baird, "The Search for an Environmental Ethic," in Tom Regan, ed., Matters of Life and Death: New Introductory Essays in Moral Philosophy, 3rd edition (New York: McGraw Hill, 1993). Earlier editions were in 1980 and 1986, first published by Random House and Temple University Press. The version in the 3rd edition is the most up-to-date.

Callicott, J. Baird, "Non-anthropocentric Value Theory and Environmental Ethics." American Philosophical Quarterly 21 (1984): 299-309. Callicott's interest in developing a non-anthropocentric axiology as the basis for an environmental ethic leads him to David Hume's theory of moral sentiments, now seen as an expression of evolutionary development. A blending of the thought of Hume, Darwin, and Aldo Leopold. Humans develop a feeling of value for the nonhuman world due to a misplaced biological altruism. (Katz, Bibl # 1)

Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. 248 pages. Paperback \$19.95, hardcover \$59.90. This book is an outgrowth of the Porto Alegre, Brazil, conference of 1992, immediately preceding the UNCED Summit in Rio de Janeiro. The Conference aim was to put the Earth Summit in philosophical perspective, influence its outcome, and chart a new course, linking environment and ethics through university education. Contributors:
--J. Baird Callicott and Fernando J.R. da Rocha, "Ethics, University, and Environment"
--Jose Lutzenberger, "Science, Technology, Economics, Ethics, and Environment"
--Nicholas M. Sosa, "The Ethics of Dialogue and the Environment: Solidarity as a Foundation for Environmental Ethics"
--Peter Madsen, "What Can Universities and Professional Schools Do to Save the Environment?"
--Andrew Brennan, "Incontinence, Self-Deception, Shallow Analysis, Myth-making, and Economic Rationality: Their Bearing on Environmental Policy"
--Catherine Larrere, "Ethics, Politics, Science, and the Environment: Concerning the Natural Contract"
--Holmes Rolston, III, "Earth Ethics: A Challenge to Liberal Education"
--John Lemons, "University Education in Sustainable Development and Environmental Protection"
--J. Baird Callicott, "Benevolent Symbiosis: The Philosophy of Conservation Reconstructed."

Callicott, J. Baird. "Elements of an Environmental Ethic: Moral Considerability and the Biotic Community." Environmental Ethics 1(1979):71-81. An environmental ethic based on Aldo Leopold's land ethic, compared with the call for a new ethic by Richard Routley (now Sylvan) and with that of John Passmore. Includes some logical formalism. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. (EE)

Callicott, J. Baird. "Moral Monism in Environmental Ethics Defended." Journal of Philosophical Research 19 (1994): 51-60. "In dealing with concern for fellow human beings, sentient animals, and the environment, Christopher D. Stone suggests that a single agent adopt a different ethical theory--e.g. Kant's, Bentham's, Leopold's--for each domain. Ethical theories, however, and their attendant rules and principles are embedded in moral philosophies. Employing Kant's categorical imperative in this case, Bentham's hedonistic calculus in that, and Leopold's land ethic in another, a single agent would therefore have either simultaneously or cyclically to endorse contradictory moral philosophies. Instead, I suggest that different and sometimes conflicting duties and obligations are generated by an agent's membership in multiple moral communities. Peter Wenz, Gary Varner, Andrew Brennan, Anthony Weston, and Eugene Hargrove, among others, variously misunderstand either what is at issue in the monism versus pluralism debate in environmental ethics or my suggested communitarian alternative to the sort of pluralism that

Stone recommends." Callicott is in philosophy at the University of North Texas. (v7, #3)

Callicott, J. Baird, "Animal Liberation and Environmental Ethics: Back Together Again." Between the Species 4 (1988): 163-169. An attempt to reconcile these two philosophical movements through the notions of community and sympathy---but this reconciliation tends to eliminate Callicott's most famous position, the lack of value of domesticated animals. (Katz, Bibl # 2)

Callicott, J. Baird, "The Search for an Environmental Ethic," pages 322-382 in Tom Regan, ed., Matters of Life and Death: New Introductory Essays in Moral Philosophy, 3rd ed. New York: McGraw Hill, 1993. A useful general introduction, written for freshmen and sophomores. Callicott analyzes the need for an environmental ethic, anthropocentric versus nature-based ethics, deep ecology (especially Naess), ecofeminism, the criteria for an adequate environmental ethics, two versions of a Judeo-Christian environmental ethics, the need for an evolutionary and ecologically based ethics, and then several accounts of an expanding ethics: animal welfare/rights ethics (Singer and Regan), biocentrism (Goodpaster, Taylor, Rolston), and concluding with his own recommendation, ecocentrism (Leopold, Callicott, Rolston). The revision in the third edition is more current than earlier editions. Callicott is in philosophy at the University of North Texas.

Callicott, J. Baird, "Environmental Ethics" in Lawrence C. Becker and Charlotte B. Becker, eds., Encyclopedia of Ethics, in 2 vols, Vol. I, A-K (New York: Garland Publishing Co., 1992), pages 311-315.

Callicott, J. Baird. "The Value of Ecosystem Health." Environmental Values 4(1995):345-361. The concept of ecosystem health is problematic. Do ecosystems as such exist? Is health an objective condition of organisms or is it socially constructed? Can 'health' be unequivocally predicated of ecosystems? Is ecosystem health both objective and valuable? Are ecosystem health and biological integrity identical? How do these concepts interface with the concept of biodiversity? Ecosystems exist, although they are turning out to be nested sets of linked process-functions with temporal boundaries, not tangible superorganisms with spatial boundaries. Ecosystem health--or normal occurrence of ecological processes and functions--is an objective condition of ecosystems, although the concept of ecosystem health allows some room for personal and social determination or construction. Ecosystem health is prudentially, aesthetically, and intrinsically valuable, although the value of ecosystem health is subjectively conferred. Biodiversity and biological integrity are different from, but not unrelated to, ecosystem health. Together these three normative concepts represent complementary conservation goals. KEYWORDS: Biodiversity, community, ecosystem, ecosystem health, health, integrity, objective, subjective, value. Callicott is in the philosophy and religious studies department, University of North Texas. (EV)

Callicott, J. Baird, "American Indian Land Ethics," Environmental Ethics 18(1996):438. Reply to Kaufman, Frederick, who claims that the Native American environmental ethic differs from Aldo Leopold's land ethic. In form, though not in content, the Ojibwa land ethic and the Aldo Leopold land ethic are identical. (EE)

Callicott, J. Baird, "On Norton and the Failure of Monistic Inherentism," Environmental Ethics 18(1996):219-221. Norton misrepresents Callicott's arguments. Further, Norton's campaign to make people believe that Aldo Leopold was a weak anthropocentrist is prosecuted by means of text torturing. (EE)

Callicott, J. Baird, Beyond the Land Ethic. Albany, NY: SUNY Press, 1999. A sequel to In Defense of the Land Ethic (SUNY Press, 1989). This compilation collects many of the author's scattered journal articles and book chapters published in the intervening decade. An introduction locates environmental ethics in the wider discipline of philosophy and sets each item in the collection in its context. Contents:

1. Introduction: Compass Points in Environmental Philosophy
- I. Practicing Environmental Ethics
 2. Environmental Philosophy Is Environmental Activism: The Most Radical and Effective Kind
 3. How Environmental Ethical Theory May Be Put Into Practice
 4. Holistic Environmental Ethics and the Problem of Ecofascism
- II. The Conceptual Foundations of the Land Ethic Revisited
 5. Just the Facts, Ma'am
 6. Can a Theory of Moral Sentiments Support a Genuinely Normative Environmental Ethic?
 7. Do Deconstructive Ecology and Sociobiology Undermine the Leopold's Land Ethic?
- III. Moral Monism vs. Moral Pluralism
 8. The Case Against Moral Pluralism
 9. Moral Monism in Environmental Ethics Defended
- IV. Nature's Intrinsic Value
 10. Genesis and John Muir
 11. Rolston on Intrinsic Value
 12. Intrinsic Value in Nature: A Metaethical Analysis
- V. Ecological Metaphysics in Agriculture, Medicine, and Technology
 13. The Metaphysical Transition in Farming: From the Newtonian-Mechanical to the Eltonian-Ecological
 14. Environmental Wellness
 15. After the Industrial Paradigm, What?
- VI. Toward a New Philosophy of Conservation
 16. Whither Conservation Ethics?
 17. Aldo Leopold's Concept of Ecosystem Health
 18. The Value of Ecosystem Health
 19. Ecological Sustainability as a Conservation Concept

Callicott is in philosophy at the University of North Texas, and is president of ISEE. (v.9,#4)
 Callicott, J. Baird, "Do Deconstructive Ecology and Sociobiology Undermine Leopold's Land Ethic?," Environmental Ethics 18(1996):353-372. Recent deconstructive developments in ecology (doubts about the existence of unified communities and ecosystems, the diversity-stability hypothesis, and a natural homeostasis or 'balance of nature'; and an emphasis on 'chaos,' 'perturbation,' and directionless change in living nature) and the advent of sociobiology (selfish genes) may seem to undermine the scientific foundations of environmental ethics, especially the Leopold land ethic. A reassessment of the Leopold land ethic in light of these developments (and vice versa) indicates that the land ethic is still a viable environmental ethic, if judiciously updated and revised. Callicott is in philosophy, University of North Texas, Denton. (EE)

Callicott, J. Baird, "Environmental Ethics in Taiwan," ISEE Newsletter, vol. 11, no. 3, fall 2000, pp. 11-13. (v. 11,#3)

Callicott, J. Baird, Earth's Insights: A Survey of Ecological Ethics from the Mediterranean Basis to the Australian Outback. Berkeley: University of California Press, 1994. 261 pages. \$ 35.00, cloth only. A comparative environmental ethics, the first book-length systematic study by Callicott, whose numerous articles (including those collected into In Defense of the Land Ethic) have made him internationally known as the principal philosophical interpreter of Aldo Leopold's land ethic. Here we have Callicott looking around the globe for insights, modern, classical, ancient, East and West, indigenous, and, finally, postmodern. Chapter 1. The Notion of and Need for Environmental Ethics (including comparative environmental ethics and the One-Many problem). Chapter 2. Western European Historical Roots (Judeo-Christian, Graeco-Roman, Islam, Gaia Redux). Chapter 3. South Asia (Hinduism, Jainism, Buddhism). Chapter 4. Traditional East Asia (Taoism, Confucianism). Chapter 5. East Asian Buddhism (Hua-yen, Tendai and Shingon, Zen, The Japanese and the Environment: A paradox). Chapter 6. Far

Western (Polynesian Paganism, American Indian Land Wisdom). Chapter 7. South American Eco-Eroticism. Chapter 8. African Biocommunitarianism and Australian Dreamtime. Chapter 9. A Postmodern Evolutionary-Ecological Environmental Ethic (Science, Postmodernism, Natural History, Leopold's Land Ethic). Chapter 10. Traditional Environmental Ethics in Action (Stewardship, Hindus, Buddhists, with examples such as the Sri Lanka Sarvodaya Movement and Buddhist Forest Conservation in Thailand). Wide-ranging, comprehensive, and an important contribution toward the possibility of global environmental ethics. Callicott is professor of philosophy at the University of Wisconsin, Stevens Point. Reviewed by Mary Evelyn Tucker in Environmental Ethics 17(1995):321-325. (v5,#3)

Callicott, J. Baird, Crowder, Larry B., and Mumford, Karen, "Normative Concepts in Conservation Biology: Reply to Willers and Hunter," Conservation Biology 14 (No. 2, 2000 Apr 01): 575- . (v.11,#4)

Callicott, J. Baird, "Harmony between Men and Land--Aldo Leopold and the Foundations of Ecosystem Management," Journal of Forestry 98 (No. 5, 2000 May 01): 4- . Essays published only recently reveal that formulating a concept of ecosystem health--"land health," as he called it--was central to Aldo Leopold's philosophy of conservation. Our contemporary concepts of ecosystem health and ecosystem management were, in fact, clearly outlined in Leopold's writings 50 years ago. (v.11,#4)

Callicott, J. Baird. "Many Indigenous Worlds or the Indigenous World? A Reply to My 'Indigenous' Critics." Environmental Ethics 22(2000):291-310. Earth's Insights is about more than indigenous North American environmental attitudes and values. The conclusions of Hester, McPherson, Booth, and Cheney about universal indigenous environmental attitudes and values, although pronounced with papal infallibility, are based on no evidence. The unstated authority of their pronouncements seems to be the indigenous identity of two of the authors. Two other self-identified indigenous authors, V. F. Cordova and Sandy Marie Angl s Grande, argue explicitly that indigenous identity is sufficient authority for declaring what pre-Columbian indigenous environmental attitudes and values were. Exclusive knowledge claims based on essentialist racial-cultural identity, though politically motivated, are politically risky. They may inadvertently legitimate more noxious and dangerous racial-cultural identity politics and exclusion of those who identify themselves (or are identified by others) in oppositional racial-cultural terms from full and equal participation in the political and economic arenas of the prevailing culture. Biologically, racial differences are entirely superficial; Homo sapiens is a single, homogeneous species. Contrary to Hester et al., ethnic conflict was common among pre-Columbian indigenous North American peoples. Other indigenous authors, among them McPherson, have found my comparison of pre-Columbian indigenous North American attitudes and values with the Aldo Leopold land ethic to be illuminating. I wish I had not said that pre-Columbian indigenous North American attitudes and values are "validated" by ecology, but rather that they and ecology are "mutually validating." (EE)

Callicott, J. Baird, and Nelson, Michael P., eds. The Great New Wilderness Debate. Athens: University of Georgia Press, 1998. 696 pp. \$30. A big anthology on wilderness, which will become a leading reference in the field. Contains the following:

Part One: The Received Wilderness Idea

--Edwards, Jonathan, "The Images or Shadows of Divine Things", "Christian Doctrine of Original Sin Defended," "Sinners in the Hands of an Angry God."

--Emerson, Ralph Waldo, Selections from Nature.

--Thoreau, Henry David, "Walking" and "Huckleberries."

--Muir, John, Selections from Our National Parks.

--Roosevelt, Theodore, "The American Wilderness: Wilderness Hunters and Wilderness Game."

--Leopold, Aldo, "Wilderness as a Form of Land Use."

--Marshall, Robert, "The Problem of the Wilderness."

--Olson, Sigurd, "Why Wilderness?"

--Leopold, A. Starker, et al., "Wildlife Management in the National Parks," --The Wilderness Act of 1964.

- Woods, Mark, "Federal Wilderness Preservation in the United States: The Preservation of Wilderness?"
- Nelson, Michael P. "An Amalgamation of Wilderness Preservation Arguments."
- Part Two: Third and Fourth World Views of the Wilderness Idea
- Standing Bear, Chief Luther, "Indian Wisdom."
- Nash, Roderick, "The International Perspective."
- Harmon, David, "Cultural Diversity, Human Subsistence and the National Park Ideal"
- Guha, Ramachandra, "Radical American Environmentalism and Wilderness Preservation: A Third World Critique."
- Johns, David M. "The Relevance of Deep Ecology to the Third World: Some Preliminary Comments."
- Guha, Ramachandra, "Deep Ecology Revisited."
- Naess, Arne, "The Third World, Wilderness, and Deep Ecology."
- Gomez-Pompa, Arturo, Kaus, Andrea, "Taming the Wilderness Myth."
- Bayet, Fabienne, "Overturning the Doctrine: Indigenous People and Wilderness--Being Aboriginal in the Environmental Movement."
- Talbot, Carl, "The Wilderness Narrative and the Cultural Logic of Capitalism."
- Part Three: The Wilderness of Idea Roundly Criticized and Defended
- Callicott, J. Baird, "The Wilderness Idea Revisited: The Sustainable Development Alternative."
- Rolston, Holmes, III, "The Wilderness Idea Reaffirmed."
- Callicott, J. Baird, "That Good Old-Time Wilderness Religion."
- Foreman, Dave, "Wilderness Areas for Real."
- Noss, Reed F., "Sustainability and Wilderness."
- Denevan, William M., "The Pristine Myth: The Landscape of the Americas in 1492."
- Birch, Thomas H., "The Incarceration of Wildness: Wilderness Areas as Prisons."
- Cronon, William, "The Trouble with Wilderness, or, Getting Back to the Wrong Nature."
- Henberg, Marvin, "Wilderness, Myth, and American Character."
- Part Four: Beyond the Wilderness Idea
- Leopold, Aldo, Selections from "Threatened Species" and "Wilderness."
- Noss, Reed F. "Wilderness Recovery: Thinking Big in Restoration Ecology."
- Waller, Donald M., "Getting Back to the Right Nature: A Reply to Cronon's 'The Trouble With Wilderness'."
- Foreman, Dave, "Wilderness: From Scenery to Nature."
- Callicott, J. Baird, "Should Wilderness Areas Become Biodiversity Reserves?"
- Grumbine, R. Edward, "Using Biodiversity as a Justification for Nature Protection in the U.S."
- Turner, Jack "In Wildness Is the Preservation of the World."
- Nabhan, Gary Paul, "Cultural Parallax in Viewing North American Habitats."
- Snyder, Gary, "The Rediscovery of Turtle Island."
- Plumwood, Val, "Wilderness Skepticism and Wilderness Dualism." (v9,#2)

Callicott, J. Baird, and Nelson, Michael P., American Indian Environmental Ethics: An Ojibwa Case Study. Upper Saddle River, NJ: Pearson/Prentice Hall, 2004. Connecting environmental theory with diverse stories from Ojibwa Indians, Callicott and Nelson reveal the meaning and power of cultural worldviews as they inform ethical principles and practices, as they show that competing worldviews demonstrate the many ways "of cognitively organizing human experience." "On the whole American Indians probably treated nature better because of their environmental ethics than otherwise they might have" (p. 135). Callicott is in philosophy, University of North Texas. Nelson is in philosophy University of Wisconsin, Stevens Point. (v 14, #3)

Callicott, J. Baird, "Wetland Gloom and Wetland Glory," Philosophy and Geography 6(2003):33-45.

Callicott, J. Baird, "Environmental Ethics." Pages 467-471 (vol. 1) in Lawrence C. Becker and Charlotte B. Becker, eds., *Encyclopedia of Ethics*, 2nd ed. Routledge: New York and London, 2001. First edition

was in 1992.

Callicott, J. Baird, "Choosing Appropriate Temporal and Spatial Scales for Ecological Restoration," Journal of Biosciences 27(no. 4, Suppt 2, 2002):409-420. Ecological restoration classically seeks a balance of nature. Human disturbance is regarded as unnatural and in the Western Hemisphere started with the Europeans. Restoration may seek a pre-settlement state. But the new ecology finds nature always in flux; moreover human disturbance in the New World goes back 10,000 years. Some wish to restore conditions at the Pleistocene-Holocene boundary, even restoring the fauna from that time, so far as possible. But with the choice of appropriate temporal and spatial scales for ecological restoration, one can still make a scientifically defensible case for restoration to pre-settlement conditions. Post-settlement conditions greatly exceeded earlier aboriginal influences, nor does one have to claim that such pre-settlement conditions were in equilibria. Callicott is in philosophy, University of North Texas.

Callicott, J. Baird "What 'Wilderness' in Frontier Ecosystems?" *Environmental Ethics* 30(2008):235-249. Wilderness, for seventeenth-century Puritan colonists in America, was hideous and howling. In the eighteenth century, Puritan preacher and theologian, Jonathan Edwards, began the process of transforming the American wilderness into an aesthetic and spiritual resource, a process completed in the nineteenth century by Ralph Waldo Emerson. Henry David. Thoreau was the first American to recommend wilderness preservation for purposes of transcendental recreation (solitude, and aesthetic and spiritual experience). In the twentieth century, Theodore Roosevelt and Aldo Leopold advocated wilderness preservation for a different kind of recreation (hunting, fishing, and primitive travel) in order to preserve the putatively unique American character and institutions. Of these three historic conceptions of wilderness preservation, the third is the best model for frontier ecosystems at the austral tip of the Americas. (EE)

Callicott, J.B., da Rocha, F.J., (eds). Earth Summit Ethics. Review by Mauro Grün. Environmental Values 7(1998):367.

Calow, Peter, ed. Handbook of Environmental Risk Assessment and Management. Oxford: Blackwell Science Ltd., 1998. Reviewed by Clive Spash. Environmental Values 9(2000):109.

Calthorpe, Peter, The Next American Metropolis: Ecology, Community, and the American Dream. New York: Princeton Architectural Press, 1993. 175 pages. paper. Calthorpe holds that the environmental, economic, and social limits to growth are reaching crisis proportions. He advocates a fundamental change in our patterns of building, defining new directions for planning. He avoids an architectural manifesto or utopian proposal and describes alternatives currently shaping the debate over growth in communities across the United States. He deals with housing, traffic, environmental, and social problems inherent in sprawl. The underlying principle is that "environmentally benign places and technologies are fundamentally more humane and richer than those which are demanding and destructive of natural ecosystems" (p. 1). Calthorpe is a California architect. (v4,#4)

Calthorpe, Peter, and Fulton, William, The Regional City: Planning for the End of Sprawl. 260 pages. Cloth \$55. Paper \$35. A new metropolitan form and how regional-scale planning and design can help direct growth wisely and reverse current trends in land use. (v.11,#4)

Calvez, Leigh, "Deafness in the depths," The Ecologist 30 (No. 4, 2000 Jun 01): 48- . Leigh Calvez shows how sonar equipment used by the US navy is threatening the existence of whales, dolphins and other sea mammals. (v.11,#4)

Camacho, David E. Environmental Injustices, Political Struggles. Reviewed by Shari Collins-Chobanian. Environmental Ethics 22(2000):319-322.

Camacho, David, ed. Environmental Injustices, Political Struggles: Race, Class, and the Environment. Durham, NC: Duke University Press, 1998. 232 pp. \$17.95. The environment, public policy, and civil rights, race and ethnicity, urban and regional planning. (v.10,#1)

Camas: An Environmental Journal is published by the Environmental Studies Department, University of Montana, with a focus on the Northern Rocky Mountains. In addition to critical articles, the journal publishes poetry, photography, and artwork. Contact: Rick Stern, Editor, Environmental Studies Department, University of Montana, Missoula, MT 59812 USA. (v7, #3)

Cameron, Angus, "Geographies of welfare and exclusion: initial report," Progress in Human Geography 29(no.2, April 2005):194-203(10).

Cameron, J., Werksman, J., Roderick, P. Improving Compliance with International Environmental Law. Review by Martin Dixon, Environmental Values 7:(1998):376.

Cameron, James, David J. Robertson, and Paul Curnow, "Legal and Regulatory Strategies for Ghg Reductions - a Global Survey," Natural Resources & Environment 15(no.3, 2001 Wint): 176-. (v.12,#3)

Cameron, Trudy Ann, Englin, Jeffrey. "Respondent Experience and Contingent Valuation of Environmental Goods," Journal of Environmental Economics and Management 33(no.3, 1997):296. (v8,#3)

Camm, J.D., Polasky, S., Csuti, B. "A Note on Optimal Algorithms for Reserve Site Selection," Biological Conservation 78(no.3, 1996):353.

Campagna, Claudio, and Teresita Fernandez, "A Comparative Analysis of the Vision and Mission Statements of International Environmental Organisations," Environmental Values 16(2007):369-398. The vision and mission statements of 24 environmental organisations were analysed under the premise that the language used in these statements reflects and influences the priorities of their operation. A dominant perspective, hinging on the concept of 'sustainable development', merged the profile of government agencies and non-governmental groups. The language reflected an utilitarian ethics: the environment was more generally portrayed as resources than as nature. Aesthetic remarks were exceptional, even among groups focusing on wildlife. Despite a broadly claimed link between human welfare and habitat viability, environmental issues were not broadly referred to by humanitarian organisations, while conservation groups comply with societal priorities and needs. Organisational statements seem more concerned about political legitimisation by audiences with specific expectations than about articulating purposes with internal structural consequences or goals that advocate change or reflect organisational uniqueness. The authors are at the Centro Nacional Patagónico, Chubut, Argentina.

Campbell, Bruce, Neil Byron, and Wily, Liz. "Moving to Local Control of Woodland Resources - Can CAMPFIRE Go Beyond the Mega-Fauna." Society & Natural Resources 12(no. 5, July 1999):501- . (v.11,#1)

Campbell, Courtney and Lisa Sideris (eds.), "Giving Voice to Silent Spring: the Legacy of Rachel Carson." A special issue of Reflections, the newsletter of the program for ethics, science and technology at Oregon State University, devoted to Rachel Carson's legacy for conservation and environmental ethics (volume 9, number 2, May, 2002). Contributors include Linda Lear, William Howarth, Phil Cafaro, Lisa Sideris and Peter List. 44 pages. For a free copy write Courtney Campbell at ccampbell@orst.edu. (v.13,#2)

Campbell, L, "Review of: Conservancy: The land trust movement in America. By Richard Brewers.

Dartmouth College University Press of New England, Lebanon, New Hampshire, 2003. xxi + 348 pp," Human Ecology 33 (no. 3, June 2005): 439-441.

Campbell, L. M. and Vainiomattila, A., "Participatory Development and Community-Based Conservation Opportunities Missed for Lessons Learned?," Human Ecology 31(no. 3, 2003): 417-437.

Campbell, M., and D. Salus, "Community and Conservation Land Trusts as Unlikely Partners? The Case of Troy Gardens, Madison, Wisconsin," Land Use Policy 20(no. 2, 2003): 169-180.

Campbell, Martha, John Cleland, Alex Ezeh, and Ndola Prata. "Return of the Population Growth Factor." *Science*, Vol. 315, no. 5818 (16 March 2007): 1501-02. Between 2005 and 2050, the world population is projected to grow by 2.6 billion a number roughly equal to the total global population in 1950. Decisions made now can influence the growth rate. Some nations have some success; most do not. In 1950 Sri Lanka had the same population as Afghanistan, but Sri Lanka implemented a realistic set of fertility regulation choices and as a result will have one-quarter of the population of Afghanistan a century later. In 1970, there were 5 million more people in Bangladesh than Pakistan, but Bangladesh focused on making family planning available in culturally acceptable ways, while Pakistan did not. As a result, by 2050 Pakistan will have 62 million more people than Bangladesh. Sir David King notes that "the massive growth in the human population through the 20th century has had more impact on biodiversity than any other single factor."

Campbell, Mora, Review of Michael W. Fox, Agricide: The Hidden Farm and Food Crisis That Affects Us All. Malabar, FL: Krieger Publishing Company, 1996. pp. 252. Journal of Agricultural and Environmental Ethics 10(1997/1998):200-203. Campbell is at York University.

Campbell, Mora, "Beyond the Terms of the Contract: Mothers and Farmers", Journal of Agricultural and Environmental Ethics 7(1994):205-220. At the heart of the recent Canadian agricultural policy review, "Growing Together", is the concept of partnership. The formation of partnerships between various members of the agri-food sector, it is claimed, will provide a framework in which all parties will benefit. I describe the contractarian assumptions inherent in this proposal, and show how their application jeopardizes the economic survival and values of many household farmers. Drawing on the work of philosophers Virginia Held and Sara Ruddick, I outline strong connections between the practices of mothering persons and household farmers, arguing that the values arising out of the practice of household farming are best articulated under a feminist ethic of care. I conclude that agricultural ethics must be contextualized to encompass all of the moral relations in agriculture. Campbell is in environmental studies, York University, New York, Ontario.

Campbell, Mora. Review of Charles V. Blatz, ed. Agriculture Ethics. In Journal of Agricultural and Environmental Ethics 8(1995):93f. (JAEE)

Campbell, Robert A., "A Narrative Analysis of Success and Failure in Environmental Remediation: The Case of Incineration at the Sydney Tar Ponds", Organization and Environment, 15, (No. 3, 2002): 259-77. In this article, the author constructs a sociological narrative as a means of describing and analyzing a project to incinerate an estimated 700,000 tonnes of toxic sludge created as a by-product of a century of steel making in Sydney, Nova Scotia, Canada. On one level, the author's objective here is to document some of the events that have taken place at what is considered one of the worst toxic sites in Canada. On another level, though, the author attempts to outline a method through which we may better understand the dynamics of environmental movements. Specifically, in this case, the author uses a multidimensional conceptualization of success and failure that includes scientific, technological, economic, political, social and cultural components. Campbell is a senior lecturer in sociology at the Scarborough campus of the University of Toronto.

Campbell SueEllen, Even Mountains Vanish: Searching for Solace in an Age of Extinction. Salt Lake City: University of Utah Press, 2003. Campbell faces a paradox: whenever she contemplates the beauty of the cosmos and the astonishing inventiveness of nature she encounters the deleterious environmental impact of humankind. Campbell describes a visit to Pajarito Canyon, a wilderness area just outside Los Alamos, and her sudden need to understand more about Earth's improbable evolution. Campbell invokes plate tectonics, sandhill cranes, Pueblo cultures, nuclear waste, even a flash flood that inundates her university's library. Rocky Mountain National Park and Canada's Arctic coast. Campbell is beset with ecological and spiritual blues, ponders the survival strategies of tundra plants, animals, and people. She struggles with human destructiveness and the transitoriness of life. Campbell teaches English and nature writing at Colorado State University.

Campbell SueEllen. Bringing the Mountain Home. Tucson: University of Arizona Press, 1997. "The desire for wildness is an elemental force, like gravity, like magnetism." "A deeply loved landscape holds us fast to the planet. Drawn to one wild place, to a small lily-splashed lake in the Rockies, I'm drawn to all wild places." A narrative of what landscape means to the author, recalling especially her walks in the Rockies. "I realized I was taking two walks at once." "One was intensely personal and immediate, my body, senses, memories moving through a specific and extraordinary place and moment. The other was shared, my own experience formed by my culture, by other, earlier visitors to wild places, by circumstances, attitudes, assumptions, words, even emotions I had no part in creating but had somehow absorbed myself." Campbell teaches English at Colorado State University. (v8,#1)

Campos, Daniel G. "Assessing the Value of Nature: A Transactional Approach." Henry David Thoreau's discussion of the highest value of wild apples and my own reflection upon my experience, interacting with the sea and enjoying its products during my Central American upbringing, motivate this discussion of how human beings may apprehend nature's highest worth. I propose that in order to apprehend nature's highest value it is necessary to understand the complete transaction between human beings and nature—an active transaction that requires from the human being a continuous movement along experience, reflection, and responsible action. I argue that the economic valuation of natural products—via the contemporary economic concepts of utility, use-value, existence-value, and willingness-to-pay—is insufficient to comprehend the full worth of nature because it reduces the human being-nature transaction to mere economic terms. Hence, a reading of Ralph Waldo Emerson's Nature provides insight into the services—commodity, beauty, language, and discipline—that the human being receives, as part of the transaction, from nature. In turn, a reading of Aldo Leopold's A Sand County Almanac complements the Emersonian position by considering the human being's position as a member of a natural community. Finally, I propose that in order to apprehend the worth of nature, it is further necessary to move from the reflective understanding of the human being-nature transaction into necessary action, that is, into the assumption of responsibility towards nature. Environmental Ethics 24(2002):57-74. (EE)

Canadian Graduate Environmental Studies Programs, Alternatives 27(no. 1, Winter 2001):41- . Alternatives presents its third annual annotated graduate directory. (v.12,#2)

Canan, P, "Review of Andresen, Steinar, Tora Skodvin, Arild Underdal, and Jorgen Wettstad, Science and Politics in International Environmental Regimes: Between Integrity and Involvement," Society and Natural Resources 14(no.8, 2001): 734-36. (v.13,#2)

Caniglia, B., "Review of: Gobster, Paul H., and R. Bruce Hull, Eds. Restoring Nature: Perspectives from the Social Sciences and Humanities," Society and Natural Resources 16(no. 5, 2003): 461-462. (v 14, #3)

Cannaughton, Kent, "Sustainability: The Key Forest Policy Issue of the New Millennium?," Journal of Forestry 99(no.2, 2001 Feb 01): 7-. The Journal presents this special section on forest sustainability in

the hope that it will generate discussion and further responses on this elusive but increasingly critical concept. (v.12,#3)

Cannavo (Cannavò), Peter F. *The Working Landscape: Founding, Preservation, and the Politics of Place*. Cambridge, MA: The MIT Press, 2007. Analyzes what the author calls a zero-sum conflict between development and preservation, and offers practical and theoretical alternatives to this dead-locked, polarized politics of place. Logging of old-growth forests in the Pacific Northwest, urban sprawl, and the redevelopment of the former site of the World Trade Center in New York City.

Cannavo, Peter F. "American Contradictions and Pastoral Visions: An Appraisal of Leo Marx's 'The Machine in the Garden'", *Organization and Environment* 14 (No. 1, March 2001) pp.74-92. This article discusses the significance of Leo Marx's 1964 "The Machine in the Garden" in environmental studies, and how Marx's ideas have evolved in later essays, noting especially Marx's insight into the contradictory relationship with nature embodied in American pastoralism. Americans celebrate nature and rural values and yet embrace industry and commercialism as means to a pastoral utopia, even though these are ultimately destructive of the natural environment. Given these contradictions, Marx argues that American pastoralism ultimately fails as a viable cultural and political ideal. This article is critical of such pessimism but also shows how Marx revises his prognosis in later essays and comes to see the pastoral ideal, particularly as manifested in environmentalism, as offering a key political alternative to contemporary industrial society and its social and ecological pathologies. Cannavo recently received his PhD in political science from Harvard University. (v.13,#2)

Cannavò, Peter F. *The Working Landscape: Founding, Preservation, and the Politics of Place*. Cambridge, MA: MIT Press, 2007. Cannavò uses case studies of the debate over the logging of old-growth forests in the Pacific Northwest, the problems of urban sprawl, and the redevelopment of the former World Trade Center site in New York to discuss zero-sum conflict between nature preservation versus economic development, resource exploitation, and commodification as a contemporary crisis of place. To resolve this crisis, he offers theoretical and practical alternatives built upon an approach that unifies democratic governance and ecological values and that embraces both change and stability to create a "working landscape" in rural, suburban, and urban areas.

Cannavò, Peter F. *The Working Landscape: Founding, Preservation, and the Politics of Place*. Cambridge, MA: MIT Press, 2007. Cannavò uses case studies of the debate over the logging of old-growth forests in the Pacific Northwest, the problems of urban sprawl, and the redevelopment of the former World Trade Center site in New York to discuss zero-sum conflict between nature preservation versus economic development, resource exploitation, and commodification as a contemporary crisis of place. To resolve this crisis, he offers theoretical and practical alternatives built upon an approach that unifies democratic governance and ecological values and that embraces both change and stability to create a "working landscape" in rural, suburban, and urban areas.

Cannon, John R. "Whooping Crane Recovery: A Case Study in Public and Private Cooperation in the Conservation of Endangered Species." *Conservation Biology* 10, no.3 (1996): 813. (v7, #3)

Cannon, Teresa, and Peter Davis, *Aliya--Stories of The Elephants of Sri Lanka*. Ferntree Gully, Victoria, Australia: Airavilta Press (P.O. Box 204, 3156), 1995. ISBN 0-646-21408-X Sri Lankan elephants, now an endangered species, in their encounters with people, for better and worse and over the millennia, used for war, sport, and work, and as cultural symbols. Also, elephants in the wild, their complex social systems and how they constitute a keystone species in that their survival is crucial to the survival of entire ecosystems, and to the welfare of Sri Lankans.

Cannovo, Peter F. Review of *Deliberative Environmental Politics: Democracy and Ecological Rationality*. By Walter F. Baber and Robert V. Bartlett. 319-322. (EE)

Cantrill, James, and Masluk, Michelle, "Place and Privilege and Predictors of How the Environment is Described in Discourse," Communication Reports 9(1996):79. Focusing on the Beartooth Alliance, the authors find that proximity to a site of environmental controversy influences environmental discourse. The role of place and privilege must be considered when attempting to assess the most influential modes of discourse. (v.8,#4)

Cantrill, James G., "Communication and Our Environment: Categorizing Research in Environmental Advocacy," Journal of Applied Communication Research 21(no. 1, 1993):18 (v.8,#4)

Cao Mengqin. *Humanity and Nature: A Reflection on the Philosophical Foundations of Ecological Ethics*. Nanjing: Nanjing Normal University Press, 2004.

Cao Mengqin. "Reflection and Reconstruction of the Ontology of Environmental Ethics." *Morality and Civilization* No. 3 (2007). Cao Mengqin, and Zhang Pengsong. "Ecological Ethics: Human Beings Self Cure of Narcissism." *Science, Technology and Dialectics* No. 4 (2006).

Capitalism, Nature, Socialism: A Journal of Socialist Ecology. P.O. Box 8467, Santa Cruz CA 95061. A new journal that began publishing in 1988, with six issues through 1990. The focus is on Marxist and socialist analysis of the ecological and economic crisis. "Even though environmentalism constitutes one of the most powerful social movements in the United States and other countries, and ecological destruction and crises now ravage the world, Marxists and socialists have made few or feeble attempts to theoretically explain these facts in a coherent way." The journal plans to fill this "theoretical void" (CNS, 3, 1989, p. 1). (Katz, Bibl # 2)

Capitalism, Nature, Socialism: A Journal of Socialist Ecology is now in its eighth volume, recently expanded in size. The journal claims still to be "the only serious theoretical and political left green journal in the English-speaking world." It seeks to link the traditional concerns of labor movements with ecological issues and the struggles of new social movements. Sample forthcoming articles: Joan Martinez, "Environmental Justice, Local and Global"; Andrew Light, "Interview with Arne Naess"; Alain Lipietz, "What Is Ecological Marxism?"; Timothy W. Luke, "Nature Protection or Nature Projection: A Cultural Critique of the Sierra Club." The editor is James O'Connor. Published by Guilford Publications, 72 Spring Street, New York, NY 10012. Phone 212/431-9800. Fax 212/966-6708. (v7,#4)

Capitalism, Nature, Socialism: A Journal of Socialist Ecology is the only international theoretical and political journal of socialist ecology, including ecological Marxism and feminism. The July 1991 issue is on red green politics and on science and ecology. U. S. address: Guilford Publications, Journals Department, 72 Spring St., New York, NY 10012. Outside the U.S.: Guilford Press, The Distribution Centre, Blackhorse Rd., Letchworth, Herts, SG6 1HN, UK. (v2,#3)

Capitini, Claudia; Tissot, Brian; Carroll, Matthew; Walsh, William; Peck, Sara, "Competing Perspectives in Resource Protection: The Case of Marine Protected Areas in West Hawai`I", Society and Natural Resources 17(no.9, October 2004): 763-778(16).

Caplan, Ruth and the staff of Environmental Action. Our Earth, Ourselves, Bantam Books, New York, 1990. \$ 9.95. (v1,#2)

Cappelen, Alexander W. "The Case for Applying a 'Maximin' Strategy in Situations of Environmental Uncertainty." Pages 103-112 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Capra, Frithjof, David Seindl-Rast, with Thomas Matus, Belonging to the Universe: Explorations on the Frontier of Science and Spirituality. San Francisco: Harper and Row, 1992. \$ 10.00, paper. Conversations between Capra, physicist and cosmologist with an Eastern turn of mind, and Seindl-Rast, a Benedictine monk. (v3,#4)

Capra, Fritjof, The Web of Life: A New Scientific Understanding of Living Systems. New York: Doubleday Anchor Books, 1996. Chapter 1 is "Deep Ecology: A New Paradigm." (v.12,#2)

Capture, Care and Management of Threatened Mammals. Onderstepoort, South Africa: Wildlife Group of the South African Veterinary Association, 1993 (P. O. Box 12900, Onderstepoort, 0110 R. South Africa). 84 pages, R30.00 (RSA), \$30 (USA). The capture, care, and management of threatened mammals. The data presented are the proceedings of an international symposium held at Skukuza, Kruger National Park, South Africa.

Caputi, Jane, "Green Consciousness: Earth-based Myth and Meaning in Shrek," *Ethics and the Environment* 12(no. 2, 2007):23-44. Green consciousness is a holistic worldview based in many ancient and still-current principles and wisdoms, holistic worldview, and one that offers alternative conceptions of human and non-human subjectivity, of humans' relationships with each other and with non-human nature. Its principles are elaborated not only in environmentalist philosophies but also in some forms of popular culture. Shrek retells ancient earth-based myth, specifically around its imagination of greenness as an emblem of the life force, its respect for the feminine principle, its refusal of hierarchy and split consciousness, its endorsement of the happy body and communal ecstasy, and its ringing celebration of diversity. Caputi is in Women's Studies and Communications, Florida Atlantic University.

Caputo, Marc. "Florida Fights to Save Crown Jewel." The Christian Science Monitor, vol. 89, 28 Jan. 1997, p. 1-8.

Caraco, Nina; Cole, Jonathan; Findlay, Stuart; Wigand, Cathleen, "Vascular Plants as Engineers of Oxygen in Aquatic Systems," BioScience 56 (no.3, March 2006): 219-225 (7). The impact of organisms on oxygen is one of the most dramatic examples of ecosystem engineering on Earth. In aquatic systems, which have much lower oxygen concentrations than the atmosphere, vascular aquatic plants can affect oxygen concentrations significantly. Aquatic plants are generally thought of as adding oxygen to aquatic systems through photosynthesis, but the impact of vascular aquatic plants on oxygen varies greatly with plant morphology. Floating-leaved plants that vent oxygen to the atmosphere can strongly deplete oxygen. In some ecosystems where floating-leaved plants have replaced submersed vegetation, oxygen concentrations have been substantially reduced. This can have cascading impacts on nutrient and trace gas chemistry and on the suitability of plant beds as habitat for animal life.

Caragata, Lea, "New Meanings of Place: The Place of the Poor and the Loss of Place as the Center of Mediation," Philosophy and Geography 3 (1998): 215-237. Caragata is associate professor in community development for the Faculty of Social Work at Wilfrid Laurier University. (P&G)

Card, Claudia, Review of Janet Biehl and Peter Staudenmaier, Ecofascism: Lessons From the German Experience (San Francisco, AK Press, 1995), Ethics and the Environment 1(no.2, 1996):201-204. (E&E)

Card, Claudia, "Environmental Atrocities and Non-Sentient Life," Ethics and the Environment 9(no. 1, 2004):23-45. "I lean toward the even stronger judgment that such culpable omissions and deeds are atrocities also in the sense of evils to a great many kinds of life, including non-sentient nature--plants, species, biotic communities, and ecosystems. But can that intuition be sustained philosophically?" Card is in philosophy, University of Wisconsin. With commentary: Norlock, Kathryn, "The Atrocity Paradigm Applied to Environmental Evils," Ethics and the Environment 9(no. 1, 2004):85-93. (E&E)

Carder, Al C. Forest Giants of the World Past and Present. Markham, Ont: Fitzhenry and Whiteside, 1994. 208pp. \$55 cloth. An authoritative record of the world's super trees, past and present, and other striking and remarkable trees. Covers 140 species. Excellent photographs. The tallest? It's difficult to be sure, because some crowns have broken off, and many of the tallest were cut before reliable records were kept. Principal candidates: Mountain ash, Eucalyptus regnans in Australia; California coastal redwoods, Sequoia sempervirens; Douglas-Fir, Pseudotsuga menziesii, in the Pacific Northwest, all about 400 feet. The oldest? Trees over 1,000 years are difficult to date reliably, often the inner core has rotted. Probably Bristlecone pine, Pinus longaeva, 4,900 years, in the Western United States. In these forest giants "beauty and goodness abide in good measure and will ever-increasingly strengthen, commensurate with time" (p. 169). (v8,#1)

Cardilio, Marcel et al., "Multiple Causes of High Extinction Risk in Large Mammal Species," Science 309(19 August 2005):1239-1241. Many large animal species run a high risk of extinction, commonly thought to relate to large body size, visibility, low rates of reproduction. But these authors find many more contributing factors, both environmental and intrinsic to the morphology and behavior of large animals, such as the need for larger ranges of habitat. The dangers of extinction for large animals are greater than previously recognized. Cardilio is in biology, Imperial College, London.

Care, Norman S. "Future Generations, Public Policy, and the Motivation Problem." Environmental Ethics 4(1982):195-213. A motivation problem may arise when morally principled public policy calls for serious sacrifice, relative to ways of life and levels of well-being, on the part of the members of a free society. Apart from legal or other forms of "external" coercion, what will, could, or should move people to make the sacrifices required by morality? I explore the motivation problem in the context of morally principled public policy concerning our legacy for future generations. In this context the problem raises special moral-psychological difficulties. My inquiry suggests pessimism regarding our ability to solve the motivation problem relative to what morality requires on behalf of future generations. Care is in the department of philosophy, Oberlin College, Oberlin, OH. (EE)

Care, Norman S., Review of Light, Andrew, Katz, Eric, eds., Environmental Pragmatism. Ethics and the Environment 2(1997):199-202. (E&E)

Caretsky, Steven D. "Turning Brownfields Into Homes: A Case Study." Journal of Environmental Law & Practice 3(Mar.1996):42. The pitfalls and solutions to Brownfields projects. (v7,#2)

Carew-Reid, Jeremy, Prescott-Allen, Robert, Bass, Stephen, Dalal-Clayton, Barry. Strategies for National Sustainable Development: A Handbook for their Planning and Implementation. London: Earthscan Publications, 1994. 203 pp. Produced by IUNC and its partners to assist countries and communities seeking to implement Agenda 21, the action programme of the United Nations Conference on Environment and Development.

Carew-Reid, Jeremy, Prescott-Allen, Robert, Bass, Stephen, Dalal-Clayton, Barry. Strategies for National Sustainable Development: A Handbook for their Planning and Implementation. London: Earthscan Publications, 1994. 203 pp. Produced by IUNC and its partners to assist countries and communities seeking to implement Agenda 21, the action programme of the United Nations Conference on Environment and Development.

Carey, John, "Where Have All the Animals Gone?" Wildlife 29(1999):12-21. In Bolivia, the Sirono and Yugi people of the Bolivian Amazon are over-hunting the forest to meet their basic needs. Increased use of cars and guns has made them hunt more effectively, with empty forests remaining.

Carey, John, "Where Have All the Animals Gone?" International Wildlife 29 (no. 6, Nov./Dec. 1999):12-

20. Meat for the pot. In many tropical forests around the globe, virtually every animal has been killed, leaving an empty forest. Hunting for the pot is becoming a bigger conservation threat than habitat loss--Laos, Southeast Asia, Indonesia, India, the Brazilian Amazon, the Congo. In some areas biologists can best inventory what is in the forests by walking through the markets. Everything is eaten. Typically national regulation authority is weak, and where wildlife responsibility has been transferred to local peoples, the problem is worse. Sustainability is a myth before the pressures of exploding populations. George Schaller says, "Only people that sit in offices have the romantic notions that local people live in harmony with the environment" (p. 17). There are dozens of contributing factors. Perhaps the major one is logging, when logging roads open up once-remote areas. Carey covers science and technology for Business Week magazine. (v.10,#3)

Carey, P. D. et al, "A Comparison of the Ecological Quality of Land between an English Agri-Environment Scheme and the Countryside as a Whole," Biological Conservation 108(no.2, 2002): 183-97. (v.13,#4)

Carey, Seamus. Book Review of Eco-Phenomenology: Back to the Earth Itself. Edited by Charles S. Brown and Ted Toadvine. Environmental Ethics 26(2004):327-330. (EE)

Carey, Seamus. Review of Mick Smith. An Ethics of Place: Radical Ecology, Postmodernity, and Social Theory. Environmental Ethics 25(2003):417-420. (EE)

Carey, Seamus. Review of A Spirituality of Resistance: Finding a Peaceful Heart and Protecting the Earth. By Roger S. Gottlieb. Environmental Ethics 24(2002):213-216. (EE)

Carey, Seamus. Review of Rethinking Nature: Essays in Environmental Philosophy. Edited by Bruce V. Foltz and Robert Frodeman. Environmental Ethics 28(2006):217-220. (EE)

Carey, Seamus. Review of Transformations: Thinking After Heidegger. By Gail Stenstad. Environmental Ethics 29(2007):327-330. (EE)

Caring for Creation: Vision, Hope and Justice is a study booklet, 28 pages, by the Evangelical Lutheran Church in America Environment Task Force, released August 1991. Contact: ELCA Distribution Service, 426 South Fifth Street, Box 1209, Minneapolis, MN 55440. Phone 800/328-4648. (v2,#4)

Caring for the World: A Strategy for Sustainability. This is the new title for the successor to the World Conservation Strategy, now released in a June 1990 draft. Available from World Conservation Center, Avenue du Mont Blanc, CH-1196 Gland, Switzerland. (v1,#3)

Carlassare, Elizabeth. "Socialist and Cultural Ecofeminism: Allies in Resistance." Ethics and the Environment 5(2000):89-106. ABSTRACT: Ecofeminism is a social movement and form of theoretical inquiry that resists formations of domination and seeks to construct a politics for planetary survival and social egalitarianism. In the words of Australian ecofeminist Ariel Salleh (1995, 26), "[E]cofeminists are concerned about global Sustainability as much as gender justice." Ecofeminism consists in many different ideas and actions, and as a result cannot be generalized easily. That ecofeminism accommodates a diverse array of perspectives has led some feminists (most notably social ecologist and former ecofeminist Janet Biehl, [Biehl 1991]) to criticize ecofeminism on the basis that it is incoherent. Ecofeminists hold different views on how to effect social change and on the role of Western dualism, capitalism, patriarchy, and imperialism in perpetuating ecological degradation and oppression along multiple lines, including gender, race, and class. Despite this diversity, ecofeminism is united by the commitment of its proponents to planetary survival and ending oppression. In this essay, I explore the differences and common ground between two predominant perspectives in ecofeminism, socialist and

cultural ecofeminism, examining the strategies for social change and epistemological positions that arise from these perspectives. I argue against attempts by feminists and ecofeminists of materialist persuasions to dismiss all or part of ecofeminism on the basis that it is incoherent or regressive, examining the question of who such criticisms serve and suggesting alternative interpretations of ecofeminism's "regressive" moves and "incoherence." I argue that, despite their different views, ecofeminists are able to act together politically in their shared desire to end ecological degradation and foster social egalitarianism. (E&E)

Carle, David, "Reformation Through Amputation: Expanding National Parks by Shrinking National Forests," Wild Earth 10(no. 2, Summer 2000):39- . (v.12,#2)

Carley, Michael and Ian Christie, Managing Sustainable Development. Minneapolis: University of Minnesota Press, 1993. Co-published with Earthscan in the United Kingdom. 288 pages. Paper, \$ 19.95. Sustainable development is an intensely political process, however defined and on whatever scale, and involves continual trade-offs between economic, social, and biophysical needs and objectives. The authors propose an action-centered network as a key innovation in environmental management. (v4,#2)

Carlile, William H. "Underground Aquifers Are 'Banks' for Southwestern Gold." The Christian Science Monitor 89 (8July 1997): 3. (v.8,#2)

Carlile, William. "Class Under Glass." The Christian Science Monitor, vol. 89. 7 Jan. 1997, p. 13.

Carlomagno, Mary. *Give It Up! My Year of Learning to Live Better with Less*. New York: Harper Collins, William Morrow, 2006. Experiments in giving up one luxury per month.

Carlson, Allen, Aesthetics and the Environment: The Appreciation of Nature, Art, and Architecture. London: Routledge, 2000. Carlson's essays on aesthetics and nature, published over two decades, here gathered into book form, with several chapters published for the first time, including cross-referencing and overviews of the field. Carlson is in philosophy, University of Edmonton, Alberta. (v.13,#1)

Carlson, Allen, and Arnold Berleant, eds., The Aesthetics of the Natural Environment. Peterborough, Ontario: Broadview Press, 2004. Contributions by Ronald Hepburn, Allen Carlson, Arnold Berleant, Noël Carroll, Stan Godlovitch, Yuriko Saito, Emily Brady, Marcia Muelder Eaton, Holmes Rolston, III, Cheryl Foster, Ronald Moore, John Andrew Fisher, Donald W. Campbell, Thomas Heyd, and Yrjö Sepänmaa. Designed as an introduction to the present state of the field of environmental aesthetics. Carlson is in philosophy, University of Alberta, Edmonton. Berleant is philosophy (emeritus), Long Island University, C.W. Post Campus. now in Castine, Maine. (v. 15, # 3)

Carlson, Allen, Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture. New York: Routledge, 2003. How much of our aesthetic experience is in response to nature, sunsets, mountains, or horizons, or more mundane surroundings like gardens or the view from our window. Knowledge of what we are appreciating is essential to having an appropriate aesthetic experience and a scientific understanding of nature can enhance our appreciation, rather than denigrate it. Carlson is in philosophy at the University of Alberta.

Carlson, Allen, "Nature and Positive Aesthetics," Environmental Ethics 6(1984):5-34. A consideration of various justifications for the position of "Positive Aesthetics": all of nature untouched by man is beautiful. Carlson supports this view by a comparison of art appreciation with natural science. As natural science informs us of the properties of the ecosystem, we discover its beauty. (Katz, Bibl # 1)

Carlson, Allen, "Is Environmental Art an Aesthetic Affront to Nature?" Canadian Journal of Philosophy

16 (1986): 635-650. Carlson argues that "environmental art"--the earthworks, earthmarks, and large structures erected on natural sites--are an aesthetic indignity to nature itself. Environmental art changes an "object's kind ... thereby altering its aesthetic qualities" (p. 641). The discussion owes much to an article by Peter Humphrey in Environmental Ethics and Donald Crawford, "Nature and Art: Some Dialectical Relationships," Journal of Aesthetics and Art Criticism 42 (1983). (Katz, Bibl # 1)

Carlson, Allen, "Saito on the Correct Aesthetic Appreciation of Nature," Journal of Aesthetic Education 20 (no. 2, 1986):85-93. Saito does not adequately distinguish between a correct and a relevant appreciation of nature. Saito's arguments neither clearly establish the relevance of a variety of possible kinds of aesthetic appreciation of nature nor seriously erode the grounds for the prominence that ought to be granted to scientific categories of nature in this appreciation.

Carlson, Allen, "Nature, Aesthetic Appreciation, and Knowledge," Journal of Aesthetics and Art Criticism 53(1995):393-400. Critiquing the views of Carroll and Godlovitch, Carlson argues that appropriate aesthetic appreciation of nature does require knowledge, especially that of science and natural history. Carlson is in philosophy at the University of Alberta. (v7,#2)

Carlson, Allen, "On aesthetically appreciating human environments," Philosophy and Geography 4 (No. 1, 2001): 9-24. In this essay I attempt to move the aesthetics of human environments away from what I call the designer landscape approach. This approach to appreciating human environments involves a cluster of ideas and assumptions such as: that human environments are usefully construed as being in general "deliberately designed" and worthy of aesthetic consideration only in so far as they are so designed, that human environments are in this way importantly similar to works of art, and that the aesthetics of human environments thus has much in common with the aesthetics of art. As an alternative to the designer landscape approach, I suggest that the aesthetics of human environments should be understood as a major area of the aesthetics of everyday life. To facilitate this shift I develop the idea of an ecological approach to the aesthetics of human environments and the related notion of functional fit. The ecological approach employs an analogy with natural ecosystems and, by stressing the role of functional fit in each, facilitates the appreciation of both natural and human environments in a way that I characterize as "looking as they should." The upshot, I maintain, is a set of appreciative consequences constituting a more satisfying aesthetic experience of our everyday human environments. Carlson is Professor of Philosophy at the University of Alberta. (P&G)

Carlson, Allen, "Hargrove, Positive Aesthetics, and Indifferent Creativity," Philosophy and Geography 5(2002):224-234.

Carlson, Allen, "Soiden Ihaileminen: Kosteikkojen Vaikea Kauneus" (Admiring Mirelands: The Difficult Beauty of Wetlands"). Pages 173-181 in L. Heikkilä-Palo, ed., Suo on kaunis. Helsinki: Maakenki Oy, 1999.

Carlson, Allen, and Sheila Lintott, eds. *Nature, Aesthetics, and Environmentalism: From Beauty to Duty*. New York: Columbia University Press, 2008. This is a major anthology on aesthetics of nature with a focus on the connections between aesthetics of nature and environmental ethics. Carlson is in philosophy at the University of Alberta; Lintott is in philosophy at Bucknell University. Contents include: (1) "Introduction: Natural Aesthetic Value and Environmentalism" by Allen Carlson and Sheila Lintott, (2) "Historical Foundations" by Allen Carlson and Sheila Lintott, (3) "The Historical Foundations of American Environmental Attitudes" by Eugene C. Hargrove, (4) "The Nature of Beauty" by Ralph Waldo Emerson, (5) "Walking" by Henry David Thoreau, (6) "A Near View of the High Sierra" by John Muir, (7) "The Art of Seeing Things" by John Burroughs, (8) "A Taste for Country: Country, Natural History, and the Conservation Esthetic" by Aldo Leopold, (9) "Nature and Aesthetic Value" by Allen Carlson and Sheila Lintott, (10) "Leopold's Land Aesthetic" by J. Baird Callicott, (11) "Aesthetic Appreciation of the

Natural Environment” by Allen Carlson, (12) “Icebreakers: Environmentalism and Natural Aesthetics” by Stan Godlovitch, (13) “Appreciating Nature on Its Own Terms” by Yuriko Saito, (14) “On Being Moved by Nature: Between Religion and Natural History” by Noel Carroll, (15) “Scientific Knowledge and the Aesthetic Appreciation of Nature” by Patricia Matthews, (16) “Nature and Positive Aesthetics” by Allen Carlson and Sheila Lintott, (17) “Nature and Positive Aesthetics” by Allen Carlson, (18) “The Aesthetics of Unscenic Nature” by Yuriko Saito, (19) “Aesthetics and the Value of Nature” by Janna Thompson, (20) “Valuing Nature and the Autonomy of Natural Aesthetics” by Stan Godlovitch, (21) “The Aesthetics of Nature” by Malcolm Budd, (22) “Nature Appreciation, Science, and Positive Aesthetics” by Glenn Parsons, (23) “Nature, Aesthetic Value, and Environmentalism” by Allen Carlson and Sheila Lintott, (24) “From Beauty to Duty: Aesthetics of Nature and Environmental Ethics” by Holmes Rolston III, (25) “The Beauty That Requires Health” by Marcia Muelder Eaton, (26) “Cultural Sustainability: Aligning Aesthetics and Ecology” by Joan Iverson Nassauer, (27) “Toward Ecofriendly Aesthetics” by Sheila Lintott, (28) “Aesthetic Character and Aesthetic Integrity in Environmental Conservation” by Emily Brady, and (29) “Objectivity in Environmental Aesthetics and Protection of the Environment” by Ned Hettinger.

Carlson, Allen. Review of Philosophy Gone Wild. By Holmes Rolston, III. Environmental Ethics 8(1986):163-77.

Carlson, Allen. Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture. London: Routledge, 2000. Review by Cheryl Foster, Environmental Values 10(2001):548. (EV)

Carlson, Allen. Aesthetics and the Environment. Environmental Ethics 25(2003):203-206. (EE)

Carlson, Allen. "Nature and Positive Aesthetics." Environmental Ethics 6(1984):5-34. Positive aesthetics holds that the natural environment, insofar as it is unaffected by humans, has only positive aesthetic qualities and value--that virgin nature is essentially beautiful. In spite of the initial implausibility of this position, it is nonetheless suggested by many individuals who have given serious thought to the natural environment and to environmental philosophy. Certain attempts to defend the position involve claiming either that it is not implausible because our appreciation of nature is not genuinely aesthetic, or that the position is justified in virtue of human limited control and understanding of the natural world or in virtue of the natural world's divine design and origin. Such attempts are inadequate; they neither justify the position nor explain its acceptance. In order to account for positive aesthetics, we must note the intimate connection between nature appreciation and the development of natural science. An understanding of the role of scientific knowledge in the aesthetic appreciation of nature not only sheds light on the acceptance of the positive aesthetics position, but also suggests a means by which to justify it. Carlson is at the philosophy department, University of Alberta, Edmonton, Alberta, Canada. (EE)

Carlson, Allen. Review of Placing Nature: Culture and Landscape Ecology. Edited by Joan Iverson Nassauer. Environmental Ethics 22(2000):211-214.

Carlsson, Fredrik, and Peter Martinsson, "Do Hypothetical and Actual Marginal Willingness to Pay Differ in Choice Experiments? Application to the Valuation of the Environment," Journal of Environmental Economics And Management 41(no.2, 2001): 179-. (v.12,#3)

Carlton, J.T. "Pattern, Process, and Prediction in Marine Invasion Ecology", Biological Conservation 78(no.1/2, 1996):97.

Carmin, J, "Resources, Opportunities and Local Environmental Action in the Democratic Transition and Early Consolidation Periods in the Czech Republic," Environmental Politics 12(no.3, 2003):42-64. (v.14,

#4)

Carmin, JoAnn & Balsler, Deborah B., "Selecting Repertoires of Action in Environmental Movement Organizations: An Interpretive Approach". Organization and Environment, 15, (No. 4, 2002): 365-88. Environmental Movement Organizations (EMOs) with similar goals frequently deploy different tactics and strategies to advance their agendas. This article uses an interpretive perspective to examine the factors influencing EMO selection of a repertoire of action. Building on concepts from organization and social movement theories, and relying on interview and archival data from Friends of the Earth and Greenpeace, this study suggests that experience, core values and beliefs, environmental philosophy and political ideology work together to create distinct organizational interpretations of the political environment, efficacy of action, acceptability of tactics, significance of an issue, and source of the problem. These interpretations combine to shape EMO determinations of what types of action will be most appropriate and effective. Although structural factors influence the decisions that are made within EMOs, organizations also rely on interpretive processes in their selection of a repertoire of action. Carmin is an assistant professor in the Department of Urban Affairs and Planning at Virginia Tech. Balsler holds an assistant professor post with a joint appointment in the College of Business Administration and the Public Policy Administration programs at the University of Missouri-St. Louis.

Carnegie Commission on Science, Technology, and Government, The, in the report of a recent task force, has urged creation of a strong top-level institutional mechanism in the Executive Branch of the U. S. Government to provide environmental policy analysis and direction to the President. The report is entitled E3: Organizing for Environment, Energy, and the Economy in the Executive Branch of the U. S. Government. Contact Avery Russell, Carnegie Commission on Science, Technology, and Government, 10 Waverly Place, New York, NY 10003. Phone 212/371-3200. (v1,#2)

Carnus, Jean-Michel; et al., "Planted Forests and Biodiversity," Journal of Forestry 104 (no.2, March/April 2006): 65-77 (13).

Caro, T., Borgerhoffmulder, M. and Moore, M., "Effects of Conservation Education on Reasons To Conserve Biological Diversity," Biological Conservation 114(no. 1, 2003): 143-152.

Caro, T.M., "Species richness and abundance of small mammals inside and outside an African national park," Biological Conservation 98(no.3, 2001):251-. (v.12,#4)

Caro, T.M. "Demography and Behaviour of African Mammals Subject to Exploitation. Biological Conservation 91(No. 1, 1999):91- . (v10,#4)

Caro, TM; Stoner, CJ, "The potential for interspecific competition among African carnivores," Biological Conservation 110(no.1, 2003): 67-75.

Carolan, Micael S. "Disciplining Nature: The Homogenising and Constraining Forces of Anti-Markets on the Food System," Environmental Values 14(2005): 363-387. To understand the changing patterns within agriculture, it is important to look not only at social relations and organisational configurations. Also salient to such an analysis is an examination of how those formations give shape to non-humans. Much attention has been placed recently on the political economy of agriculture when speaking of these emergent patterns. Yet in doing this, the natural environment is all too often relegated to the backdrop; where the agro-economy is viewed as something that manoeuvres within the environment but never through it. The conceptual groundwork for this paper draws from two often unconnected scholars: Michel Foucault and Fernand Braudel. In Foucault, we find a framework, with a little conceptual development, through which to talk about how the economy (of both discipline and capital) enters into nature. Specifically, the argument is made that through the embodiment of discipline, nature too becomes

disciplined. Yet in Foucault we find a discursive conception of socio-economic history; where capitalism is discussed, but always as an effect of the discursive structures of power/knowledge. Enter the work of Braudel, to provide us with a materialist counterweight to Foucault's theorising. In Braudel, we find a detailed analysis on the emergence of capitalism, out of which then comes his distinction between markets and anti-markets. In short, when both accounts of history are overlaid, interesting connections between the emergence of Braudelian anti-markets and Foucaultian discipline are revealed. Two brief case studies are then examined to add further depth to the discussion: the first focusing on corn; the second centring on the cow. The paper then concludes speaking on the issue of resistance. Carolan is in sociology, Colorado State University, Fort Collins, CO. (EV)

Carolan, Michael S., "Ontological Politics: Mapping a Complex Environmental Problem," Environmental Values 13(2004):497-522. What is an environmental problem? Philosophers of science and sociologists of knowledge have been writing for more than a decade about the de-centred, multiple object. Yet what if this insight were applied to the realm of environmental problems? What would be revealed? These questions are explored in this paper by examining the ontology of environmental problems. Ethnomethodologists, social constructionists, and sociologists of knowledge have all painted a descriptive picture of a thoroughly sociological ontology; an ontology that is fluid, at times de-centred, and (at least potentially) multiple. Yet if ontology is social, and thus multiple, than it is also ultimately political. But multiplicity need not imply fragmentation. It can be coherent, but this requires both coordination and trust. To give further visual and conceptual shape to this argument a heuristic model is constructed. Through this model I 'map' a handful of environmental problems - in terms of their 'complexity' and 'epistemological distance' - and in doing so give focus to the ontologically diverse nature of environmental problems today. A case study involving a particularly contentious environmental dispute is then examined so as to give the argument additional focus and an empirical grounding. Carolan is in sociology, Colorado State University, Fort Collins, CO. (EV)

Carolan, Michael S., "Risk, Trust and 'The Beyond' of the Environment: A Brief Look at the Recent Case of Mad Cow Disease in the United States," Environmental Values 15(2006): 233-252. The epistemologically distant nature of many of today's environmental risks greatly problematises conventional risk analyses that emphasise objectivity, materiality, factual specificity and certainty. Such analyses fail to problematise issues of ontology and epistemology, assuming a reality that is readily 'readable' and a corresponding knowledge of that reality that is asocial, objective and certain. Under the weight of modern, invisible, manufactured environmental risks, however, these assumptions begin to crack, revealing their tenuous nature. As this paper argues, statements of risk are ultimately social products that come to us by way of translation. They are statements not of what is (ontology) but of knowledge (epistemology) expressed in probabilistic terms, and are thus thoroughly social in nature, for it is we - through our actions and social networks - that imbue them with meaning. One way we do this is through our social relations of trust. And it is this relationship - between trust and risk - that this paper seeks to detail both conceptually and empirically (while remaining grounded in a realist philosophy of science). While one could look toward any number of case studies to develop the conceptual details of this project, this paper focuses on the relatively recent (and first) case of mad cow disease to have been reported within the United States. Here, we have an epistemologically distant, and thus hotly contested, 'object' (or is it?), which has been the source of much risk debate; a debate that is also, in part, the effect of a deeper erosion of trust, particularly toward those managing our meat supply. (EV)

Carolan, Michael S., and Bell, Michael M., "In Truth We Trust: Discourse, Phenomenology, and the Social Relations of Knowledge in an Environmental Dispute" Environmental Values 12(2003): 225-245. In this age of debate it is not news that what constitutes 'truth' is often at issue in environmental debates. But what is often missed is an insight that the speakers of Middle English understood a millennium ago: that truth comes from trust, which, is the central theoretical position of this paper. Our point is that truth depends essentially on social relations - relations that involve power and knowledge, to be sure, but also identity. Thus, challenges to what constitutes the 'truth' are equally challenges to identities and the social

networks of trust in which that truth is embedded. We therefore attempt to move beyond Foucaultian discursive theory by reintroducing the subject as both the product and producer of discourse.

For Foucault, the subject is reduced to the discursive relations of power/knowledge. In his effort to free us from the Cartesian cogito and the modernist absolutisms that eventually followed, Foucault lapses into a kind of postmodern functionalism. We argue that we should not speak of power/knowledge, as Foucault suggested, but of power/knowledge/identity, recovering the actors and concrete social relations that produce discourse, and are not only produced by it. We then argue that these social relations become constituted (and reconstituted) in particular moments of phenomenological challenge - discursive moments that confront the existing social relations of knowledge and their dialogue of trust and truth. We illustrate the implications of a threat to the social relations of environmental knowledge through an analysis of one such moment of phenomenological challenge: a dispute over whether or not the power plant in the community where we used to live, Ames, Iowa, is producing dioxin.

Carolan, Michael S., "Conserving Nature, But to What End? Conservation Policies and the Unanticipated Ecologies They Support," Organization and Environment, 19 (no. 2, June 2006): 153-170. The author examines various cases of conservation policies in practice, and the implications of those practices in terms of the ecologies they support, showing, in the end, that the "nature" being preserved is not always the one intended. In doing this, insights are also gleaned to inform the future of environmental sociology. Carolan is in sociology at Colorado State University.

Carolan, Michael S., "The Multidimensionality of Environmental Problems: The GMO Controversy and the Limits of Scientific Materialism," This paper argues for a broader understanding of complexity; an understanding that speaks to the multidimensionality of environmental problems. As argued, environmental problems rest upon ontological, epistemological, and moral claims; they rest, in other words, upon statements about what is, knowledge, and what ought to be, respectively. To develop and illustrate this argument, the GMO (genetically modified organism) controversy is broken down according to these three dimensions. Dissecting environmental problems in this manner reveals why we cannot look solely toward the natural sciences for resolution: because these problems beg questions that cannot be answered with references to materiality alone.

Carolan, Michael S. Review of Precautionary Politics: Principle and Practice in Confronting Environmental Risk. By Kerry H. Whiteside. *Environmental Ethics* 30(2008):213-214. (EE)

Carolan, MS, "Ecological Modernization Theory: What About Consumption?" Society and Natural Resources 17 (no.3, 2004): 247-260(14).

Carolan, MS, "Ecological Modernization and Consumption: A Reply to Mol and Spaargaren", Society and Natural Resources 17 (no.3, 2004): 267-270(4).

Caron, C., "A Review of: Shivatoki, Ganesh P. and Elinor Ostrom, eds. Improving Irrigation Governance and Management in Nepal," Society and Natural Resources 18(no. 8, September 2005): 773-775.

Carone, Gabriela Roxana. "Plato and the Environment." Environmental Ethics 20(1998):115-33. I set out to refute several charges that have recently been raised against Plato's attitude toward the environment and to present him under a new light of relevance for the contemporary environmental debate. For this purpose, I assess the meaning of Plato's metaphysical dualism, his notion of nature and teleology, and the kind of value that he attributes to animals, plants, and the land in general. I thus show how Plato's organicist view of the universe endows it with an intrinsic value that is over and above each of its parts, including humans, and provides an argument for the preservation of species of nonhuman animals, which in many relevant ways are not ranked below the human species. In addition, I show how Plato's dialogues provide good evidence for human concern about the environment and how such a concern is promoted

rather than hindered by his nonanthropocentric notion of teleology. Carone is in the Department of Philosophy, University of Colorado, Boulder. (EE)

Carpenter, Betsy, "A Panther by Another Name: Should the Government Protect Imperiled Animals That Fool Around Outside the Species?" U. S. News and World Report, June 17, 1991. How pure does an animal have to be before it merits protection? Illustrated by the Florida panther problem and the wolf-coyote interbreeding. The panther carries some genes of a South American cousin. Wolves and coyotes rarely interbreed "Merely possessing a smidgen of coyote blood does not automatically transform a wolf into a woyote (half-breed hybrid)." "The biological significance of the crossmating is nearly nil," quoting Timm Kaminski, U.S. Forest Service wolf expert. Given the high rates of extinction among some species, "There will be more and more times when hybridization will be the only way to hold on to a least a chunk of a species's rich library of genes." "When a hybrid is all we've got, we should go for it," quoting geneticist Stephen O'Brien. (v2,#2)

Carpenter, Betsy and Bob Holmes, "Living with Nature," U. S. News and World Report, November 30, 1992. Story on Edward O. Wilson's urgent defense of biodiversity. Wilson says, "Wilderness settles peace on the soul because it needs no help; it is beyond human contrivance. Wilderness is a metaphor of unlimited opportunity, rising from the tribal memory of a time when humanity spread across the world ... godstruck, firm in the belief that virgin land went on forever." With the loss of wild nature, "we face an enormous psychological and spiritual loss." We "court spiritual disaster." (v3,#4)

Carpenter, SR; Gunderson, LH, "Coping with Collapse: Ecological and Social Dynamics in Ecosystem Management," Bioscience 51(no. 6, 2001):451-458. (v.13,#1)

Carpenter, Stephen R. et al (six others), "Millennium Ecosystem Assessment: Research Needs," Science 314(13 October 2006):257-258. "We lack a robust theoretical basis for linking ecological diversity to ecosystem dynamics and, in turn, to ecosystem services underlying human well-being. ... The most catastrophic changes in ecosystem services identified in the MA (Millennium Assessment) involved nonlinear or abrupt shifts. We lack the ability to predict thresholds for such changes, whether or not such a change may be reversible, and how individuals and societies will respond. ... Relations between ecosystem services and human well-being are poorly understood. One gap relates to the consequences of changes in ecosystem services for poverty reduction. The poor are most dependent on ecosystem services and vulnerable to their degradation. Empirical studies are needed."

Carpenter, Stephen R. Sallie W. Chisholm, Charles J. Krebs, David W. Schindler, and Richard F. Wright. "Ecosystem Experiments." Science 269(1995):324-327. Experimental manipulations of ecosystems have produced some surprising results. (v6,#3)

Carr, Anna; Wilkinson, Roger, "Beyond Participation: Boundary Organizations as a New Space for Farmers and Scientists to Interact," Society and Natural Resources 18(no.3, March 2005):255-265(11).

Carr, Ethan, Wilderness by Design: Landscape Architecture and the National Park Service. Lincoln, NE: University of Nebraska Press, 1998. 378 pages. \$ 45 cloth. Even though the public still equates the national parks with primordial, untouched wilderness, Carr claims that the reality is considerably different. Not only is the conception of a park a cultural construct, but the very appearance and design of national parks is based on social conventions, for example, aesthetic and political ideologies, that allow "land" to become "landscape." "The designed landscapes in national and state parks, as works of art, directly express the value society invests in preserving and appreciating natural areas. Few other arts, with the exception of landscape painting, more fully explore this leitmotif of American culture. Neither pure wilderness nor mere artifact, the national park is the purest manifestation of the peculiar American genius which sought to reconcile a people obsessed with progress with the unmatched price paid for that advance: the near total loss of the North American wilderness" (p. 9). (v.10,#3)

Carr III, Archie. "Archie Carr, Model Naturalist," Conservation Biology 11(no.1, 1997):264. (v8,#2)

Carr, Mark H., "Marine protected areas: challenges and opportunities for understanding and conserving coastal marine ecosystems," Environmental Conservation 27(no.2, JUN 01 2000):106- . (EE v.12,#1)

Carr, Susan, "Ethical and Value-Based Aspects of the European Commission's Precautionary Principle," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):31-38. In February 2000, the European Commission adopted a Communication on the precautionary principle. This states how the Commission intends to apply the principle and establishes guidelines for its application. The document is intended to inform discussions on international agreements. In particular, it provides a defense of European Union (EU) precautionary policies in case of trade disputes, for example, in case the EU is accused of imposing unfair trade barriers on exports of genetically-modified (GM) products from the United States under the rules of the World Trade Organisation. In the communication, the Commission emphasizes the scientific aspects of the precautionary principle, perhaps partly to counter claims from US officials that the EU's reluctance to accept GM imports is not based on science but is politically motivated. However, a principle is by definition a moral guide to behavior. In other words, it is an ethic. The precautionary principle should be viewed as a complement to science, to be invoked when a lack of scientific evidence means that outcomes are uncertain. Any interpretation of this principle needs to place at least as much emphasis on its ethical and value-based aspects as on its scientific justification. The Commission's interpretation risks undermining the painstaking progress made among European Union member states in responding to public concern about GM crops and food by adopting increased precaution. This paper explores the balance between the scientific and ethical/value-based aspects of the precautionary principle as set out in the Commission's communication, to make the case that it is the ethical and value-based aspects rather than the scientific aspects of the guidelines that need strengthening. KEY WORDS: ethics, GM crops, precautionary principle, trans-Atlantic trade. Carr is with the Biotechnology Policy Group Centre for Technology Strategy, The Open University, Milton Keynes, UK. (JAEE)

Carraro, C., ed. International Environmental Negotiations: Strategic Policy Issues. Cheltenham: Edward Elgar, 1997. Review by Kjell Sunevag, Environmental Values 10(2001):130. (EV)

Carrere, Ricardo and Larry Lohmann. Pulping the South: Third World Tree Plantations in the Global Paper Economy. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1996. In many regions of the South today, the expansion of the pulp and paper industry is one of the most important causes of land and water conflicts. Information from a wide range of countries and sources on the threats to livelihood, soil, and biodiversity generated by large-scale pulpwood plantations. Case studies from Brazil, Chile, Indonesia, South Africa, Thailand and Uruguay. How a varied assemblage of actors both inside and outside the state construct the social and physical grids through which the wood-fiber industry captures subsidies, redistributes risk, manages paper demand and evades, digests, and regulates resistance. (v7,#1)

Carrere, Ricardo. "Pulping the South: Brazil's Pulp and Paper Plantations", The Ecologist 26(no.5, 1996):206. Demand for paper is soaring, particularly in the North. To supply cheap pulp, fast-growing tree plantations are being established on the forests, pastures and farmlands of the South, with severe environmental and social impacts. Anticipating opposition to their activities, the pulp and paper industry has become adept at "greenwashing" its activities. A case study of three of Brazil's leading pulp operations compares the companies' claims with their impacts on the ground. (v7,#4)

Carrick, I 1991. "The earth God has given to human beings" (Ps 115:16): Unwrapping the gift and its consequences. Missionalia 19:1, 33-43. (Africa)

Carrick, Paul, "Environmental Ethics and Medical Ethics: Some Implications for End-of-Life Care,"

Cambridge Quarterly of Healthcare Ethics 8(no. 2, 1999):250-256.

Carrier, Jim. "Unbearable Futures: Behind the Cuteness Lies an Ethical Debate." The Denver (Colorado) Post, 3 April 1995, 1A, 12A. The Denver Zoo has two polar bear cubs, Klondike and Snow, stars in a zoo of ooohs, in an exhibit with lines waiting to see them a quarter of a mile long, and March was the biggest month in zoo history. Polar bear doll sales were \$7,000; the bears even have their own touch-tone button on the Denver Zoo switchboard. But University of Colorado philosopher, Dale Jamieson, says the bears are condemned to a life of captivity, and there is a "moral presumption against keeping wild animals in captivity." University of Colorado zoologist, Mark Bekoff says that "a polar bear in captivity is not a polar bear," since the public sees them, unrealistically, as cute and cuddly creatures, and that "it's extremely self-centered [of humans] to have cute little polar bears in captivity." William Conway, director of the New York Zoo, replies that the most serious threat to wild creatures" is that they will be ignored ... the most profound and moving lessons zoo education has to offer are simply well cared-for, well-exhibited, living animals."

Carrier, Paul, "The Hidden Costs of Environmentally Responsible Health Care," Perspectives in Biology and Medicine 48(no. 3, 2005):4530463. Review essay of Pierce, Jessica and Andrew Jameton, The Ethics of Environmentally Responsible Health Care (Oxford: Oxford University Press, 2004). Pierce and Jameton worry about the environmental (and other) costs of high tech medicine and medical care and advocate the model of a "Green Health Center." Carrick appreciates this, but worries that sick patients may be pressured to think more about preserving the health and welfare of the surrounding environment than preserving their own health. Perhaps only those therapies and treatment goals that tend to reduce negative impacts on the environment would be considered morally acceptable. Carrick thinks this is "a deadly gamble," which might result in the loss of patient autonomy, in ecological paternalism, and cheapen the respect for life, giving priority to the ecosystem over individual life. With a response by Pierce and Jameton. Carrick is in philosophy, Gettysburg College, Gettysburg, PA.

Carroll, John E., Review of Barde, Jean-Philippe and David W. Pearce, eds., Valuing the Environment: Six Case Studies. Environmental Values Vol.1 No.2(1992):182.

Carroll, C, et al., "Defining Recovery Goals and Strategies for Endangered Species: The Wolf as a Case Study," BioScience 56 (no. 1, January 2006): 25-37. We used a spatially explicit population model of wolves (*Canis lupus*) to propose a framework for defining rangewide recovery priorities and finer scale strategies for regional reintroductions. The model predicts that Yellowstone and central Idaho, where wolves have recently been successfully reintroduced, hold the most secure core areas for wolves in the western United States, implying that future reintroductions will face greater challenges. However, these currently occupied sites, along with dispersal or reintroduction to several unoccupied but suitable core areas, could facilitate recovery of wolves to 49% of the area in the western United States that holds sufficient prey to support wolves. That percentage of the range with recovery potential could drop to 23% over the next few decades owing to landscape change, or increase to 61% owing to habitat restoration efforts such as the removal of some roads on public lands.

Carroll, John E., and Albert LaChance, eds., Embracing Earth: Catholic Approaches to Ecology. Maryknoll, NY: Orbis Books, 1994. 300 pages. \$ 18.95. Richard Rohr, "Christianity and Creation": David Toolan, "Open to Life--and Death," (on the prohibition of all but "natural" birth control); Tessa Bielarki on the mystical-spiritual schemes suggested by the Gaia model, the Samsara construct, and C. S. Lewis' allegorical kingdom of Narnia; William McNamara on verbal pollution and a provocative call to a radical renewal of language; Paul Gonzalez on expanding spiritual horizons beyond the modern norm of a limited concern for the self. Carroll is professor of natural resources at the University of New Hampshire and LaChance is a psychologist and author of Greenspirit. (v5,#3)

Carroll, John E., and Warner, Keith, eds., Ecology and Religion: Scientists Speak. Quincy, IL: Franciscan Press (Quincy University), 1998. 407 pages. \$ 22.00. Contributions by E. O. Wilson, Stephanie Kaza, Paula Gonzalez, Al Fritsch, Carl Jordan, Calvin DeWitt, and Elliott Norse. Experts in ecology, agricultural sciences, natural resource sciences, forest and marine conservation biology, entomology, environmental toxicology, forestry, geography. Christians, Jews, Buddhists, Baha'i, among others. (v.9,#4)

Carroll, John E. and Brockelman, Paul T., The Greening of Faith: God, The Environment, and the Good Life. Hanover, NH: University Press of New England, 1997. Carroll is in natural resources, Brockelman in religion and philosophy, University of New England. (v.14, #4)

Carroll, John E. "Envisioning Ecological Sustainability: The Need and a Method." Environmental Values 4(1995):167-168. It has been suggested that a fundamental reason why our society cannot grapple with and overcome so many of its basic environmental and social problems and bring about a needed level of change which is greater than mere cosmetic change is our collective failure to envision a future without such problems, a future more desirable than the one we too often fear will be our legacy.¹ We have a visioning problem, for if we cannot see, if we cannot envision such a future, then such a future will always remain beyond our grasp, and the problems will only worsen. Carroll is in the department of natural resources, University of New Hampshire. (EV)

Carroll, John, Review of Holmberg, Johan, ed. Policies for a Small Planet. Environmental Values Vol.2 No.1(1993):84.

Carroll, Matthew S., Daniels, Steven E. and Kusel, Jonathan, "Policy Review: Employment and Displacement Among Northwestern Forest Products Workers.," Society & Natural Resources 13 (No. 2, Mar 01 2000): 151- . (v.11,#2)

Carroll, Matthew S., Blatner, Keith A. and Findley, Angela J., "Adaptation Strategies of Displaced Idaho Woods Workers: Results of a Longitudinal Panel Study," Society & Natural Resources 13 (No. 2, Mar 01 2000): 95- . (v.11,#2)

Carroll, Noël, "On Being Moved by Nature: Between Religion and Natural History," in Salim Kemal and Ivan Gaskell, eds. Landscape, Natural Beauty and the Arts (Cambridge: Cambridge University Press, 1993), pp. 244-266. Nature arouses us in ways that are neither religious nor scientific, and these are legitimate ways of appreciating nature aesthetically. "We may appreciate nature by opening ourselves to its stimulus, and to being put in a certain emotional state by attending to its aspects. Experiencing nature, in this mode, just is a manner of appreciating it. ... Such experiences have a genuine claim to be counted among the ways in which nature may be (legitimately) appreciated." This does not require knowledge of natural history. They are "of a less intellectual, more visceral sort" (p. 245). Carroll is at the University of Wisconsin. (v7,#2)

Carroll, Rory, "Leakey Puts Wildlife at Top of Tree," The Guardian (London), Friday, September 12, 2003. Richard Leakey puts wildlife at top priority, over people. The wildlife conservationist Richard Leakey stirred up controversy at the World Parks Congress in Durban (in a speech Sept. 11) by saying that conservation had to come before the rights of indigenous peoples. Protected nature areas are too important to be "subjugated" to people complaining of eviction from ancestral lands in the name of biodiversity. Indigenous people deserve compensation but to let them manage the parks where they once lived risks unravelling environmental and economic gains. These parks belong to the world. (v.14,#4)

Carroll, John E., and Albert LaChance, eds., Embracing Earth: Catholic Approaches to Ecology

(Maryknoll: Orbis Books, 1994). A collection of Christian visions attempting to provide valuable, thought-provoking, and inspiring resources with which to confront the global ecological crisis. Contributors include Richard Rohr, William McNamara, David Toolan, and Paula Gonzalez. (v5,#4)

Carruthers, David V. "Agroecology in Mexico: Linking Environmental and Indigenous Struggles,": Society & Natural Resources 10(no.3, 1997):259. (v8,#2)

Carruthers, David V., ed. *Environmental Justice in Latin America: Problems, Promise, and Practice*. Cambridge, MA: The MIT Press, 2008. Contents include: (1) "Introduction: Popular Environmentalism and Social Justice in Latin America" by David V. Carruthers, (2) "Tracing Race: Mapping Environmental Formations in Environmental Justice Research in Latin America" by Juanita Sundberg, (3) "Contesting Trade Politics in the Americas: The Politics of Environmental Justice" by Peter Newell, (4) "Grassroots Reframing of Environmental Struggles in Brazil" by Henri Acselrad, (5) "Environmental Conflicts and Environmental Justice in Argentina" by Carlos Reboratti, (6) "Waste Practices and Politics: The Case of Oaxaca, Mexico" by Sarah H. Moore, (7) "Where Local Meets Global: Environmental Justice on the US-Mexico Border" by David V. Carruthers, (8) "Environmental Justice in Mexico: The Peñoles Case" by Jordi Díez and Rodríguez Reyes, (9) "Ecotourism, Park Systems, and Environmental Justice in Latin America" by Michele Zebich-Knos, (10) "Environmental Justice and Agricultural Development in the Brazilian *Cerrado*" by Wendy Wolford, (11) "Popular Protest and Unpopular Policies: State Restructuring, Resource Conflict, and Social Justice in Bolivia" by Tom Perreault, (12) "The Struggle for Environmental Justice in Vieques, Puerto Rico" by Katherine T. McCaffrey, and (13) "Cultural Politics and the Essence of Life: Who Controls the Water?" by Stefanie Wickstrom.

Carruthers, P., The Animals Issues. New York: Cambridge University Press, 1992. Enlarges the argument of "Brute Experience." Animals, even if they do feel pain, are not rational agents, and outside the social contract of morality. But animals, although they have pain mechanisms and unconscious mental states, are incapable of feeling pain and are therefore morally irrelevant. Carruthers is in philosophy at the University of Essex.

Carruthers, Peter, "Brute Experience," Journal of Philosophy 86 (1989):258-269. "The question whether brutes have experience has been granted as obvious in recent times, and in one sense of the term 'experience' no doubt it is so. But not, I shall argue, in the sense that makes their experience an appropriate object of moral concern." "Many experiences ... do not feel like anything." These are "nonconscious experiences." Only conscious experiences have a distinctive phenomenology, a distinctive feel." Based on "the nonconscious status of most animal experiences," Carruthers concludes that "in the case of brutes: since their experiences, including their pains, are nonconscious ones, they are of no immediate moral concern." "Much time and money is presently spent on alleviating the pains of brutes which ought properly to be directed toward human beings. ... Such activities are not only morally unsupportable but morally objectionable." "And it also follows that there is no moral criticism to be leveled at the majority of people who are indifferent to the pains of factory-farmed animals." Carruthers is in philosophy at the University of Essex. (v3,#4)

Carson, Rachel, Lost Woods: The Discovered Writing of Rachel Carson. Boston: Beacon Press, 1999. Edited with an introduction by Carson biographer Linda Lear. Little known Carson writings and correspondence, revealing details of Carson's life and thought. (v.10,#1)

Carson, Richard, Flores, Nicholas E., and Hanemann, W. Michael, "Sequencing and Valuing Public Goods," Journal of Environmental Economics and Management 36(No.3, 1998):314. (v.10,#2)

Carte, Brad K. "Biomedical Potential of Marine Natural Products." Bioscience 46, no.4 (1996): 271. Marine organisms are yielding novel molecules for use in basic research and medical applications. (v7,

#3)

Carter, Alan, Review of: Andrew Dobson, Justice and the Environment, Environmental Values 11(2002):120-123.

Carter, Alan, "Some Theoretical Foundations for Radical Green Politics," Environmental Values 13(2004):305-328. On the basis of our apparent obligations to future generations, it would seem that we are morally obliged to reduce the risk our environmentally destructive behaviour poses for their well-being. But if, rather than choosing to destroy the environment, we are in fact driven to do so, then any obligation to reduce our environmental impact requires an understanding of the mechanism driving our behaviour. This article argues that the State-Primacy Theory provides a plausible explanation for the nature of that mechanism, and concludes that the most common strategies offered as a response to our environmental impact are most likely to be insufficiently radical to meet our seeming obligations effectively. Carter is in philosophy, University of Colorado, Boulder. (EV)

Carter, Alan, "On Harming Others: A Response to Partridge," Environmental Values 11(2002):87-96. Response to Ernest Partridge's paper "The Future - For Better or Worse" in this issue of Environmental Values. (EV)

Carter, Alan, A Radical Green Political Theory. London: Routledge, 1999. 409 pages. Claims to be the first systematic, comprehensive environmental political philosophy. Exposes the relationships between the ever-worsening environmental crises, the nature of the prevailing economic structures, and the role of the modern state, and concludes that the combination of these factors is driving humanity towards destruction. After analyzing authoritarian, reformist, Marxist and anarchist approaches to the environmental problem, the author argues strongly that only the most radical of political practices can prevent an ecological catastrophe. This is explored through analysis of social relationships, power, the state, anarchism and Third World development. Sample chapters: Chapter 6: The state and nature: Radical green values: feminist, socialist and anarchist. An environmentally hazardous dynamic. An environmentally benign interrelationship? The coherence of green political thought. Chapter 7: Towards a cooperative autonomy. Anarchism. Cooperative autonomy. A green vision. Two justifications of civil disobedience. A duty of radical disobedience. More details:

<http://www.heythrop.ac.uk/cartargpt.htm>

Carter is in philosophy at Heythrop College, London, and moving to a position in philosophy and environmental studies at the University of Colorado, Boulder. (v.12,#2)

Carter, Alan, A Radical Green Political Theory. London: Routledge, 1999. 409 pp. ISBN 0-415-20309-0. The first systematic, comprehensive environmental political philosophy, exposing the relationships between the ever-worsening environmental crises, the nature of the prevailing economic structures and the role of the modern state. The combination of these factors is driving humanity towards destruction. After analyzing authoritarian, reformist, Marxist and anarchist approaches to the environmental problem, Carter argues that only the most radical of political practices can prevent an ecological catastrophe. A detailed analysis of social relationships, power, the state, anarchism, and Third World development. Sample sections: The need for a green political theory. Eco-authoritarianism. Eco-reformism. Marxism as a basis for green political theory. Individualism or collectivism? Re-thinking the state. Development or underdevelopment. The state and nature. Radical green values: feminist, socialist and anarchist. The coherence of green political thought. A duty of radical disobedience. Carter is in philosophy, Heythrop College, University of London. (v.10,#1)

Carter, Alan, "Animals, Pain and Morality," Journal of Applied Philosophy 22(no.1, March 2005):17-22(6).

Carter, Alan. Review of DeSilva, Environmental Philosophy and Ethics in Buddhism. Environmental Values 9(2000):396.

Carter, Alan. Book Review of Environmental Culture: The Ecological Crisis of Reason. By Val Plumwood. Environmental Ethics 26(2004):323-326. (EE)

Carter, Alan. Review of Tim Hayward, Political Theory and Ecological Values, Cambridge: Polity Press, 1998, Environmental Values 10(2001):135. (EV)

Carter, Alan. "Humean Nature." Environmental Values 9(2000):3-37. Abstract: It has been argued that there is an irreconcilable difference between those advocating animal liberation or animal rights, on the one hand, and those preferring a wider environmental ethic, which includes concern for non-sentient life-forms and species preservation, on the other. In contrast, I argue that it is possible to provide foundations for both seemingly environmentalist positions by exploring some of the potential of a 'collective-projectivist' reading of Hume - one that seems more consistent with Hume's texts than other readings. In short, this article seeks to advance our understanding of some of the possibilities within Humean moral theory, while simultaneously providing new foundations for both animal welfare and a wider environmental ethic. KEYWORDS: Animal rights, intrinsic value, projectivism, secondary qualities, subjectivism, sympathy, welfare. Carter is in philosophy, Heythrop College, University of London. (EV)

Carter, Alan. Review of Kerry S. Walters and Portmess, Lisa, eds., Ethical Vegetarianism: From Pythagoras to Peter Singer, Albany: State University of New York Press, 1999, Environmental Values 10(2001):270. (EV)

Carter, Alan. "Can We Harm Future People?" Environmental Values 10(2001):429-454. It appears to have been established that it is not possible for us to harm distant future generations by failing to adopt long-range welfare policies which would conserve resources or limit pollution. By exploring a number of possible worlds, the present article shows, first, that the argument appears to be at least as telling against Aristotelian, rights-based and Rawlsian approaches as it seems to be against utilitarianism, but second, and most importantly, that it only holds if we fail to view moral agents as individuals. The article also concludes that the argument has profoundly counter-intuitive implications. Keywords: Future generations, Schwartz, Parfit, non-identity problem, person-affecting principle. Alan Carter is in the Department of Philosophy, University of Colorado at Boulder, CO, USA. (EV)

Carter, Alan. "Saving Nature and Feeding People." Environmental Ethics 26(2004):339-360. Holmes Rolston, III has argued that there are times when we should save nature rather than feed people. In arguing thus, Rolston appears tacitly to share a number of assumptions with Garrett Hardin regarding the causes of human overpopulation. Those assumptions are most likely erroneous. Rather than our facing the choice between saving nature or feeding people, we will not save nature unless we feed people.. (EE)

Carter, Dee, "Foregrounding the Environment: The Redemption of Nature and Jurgen Moltmann's Theology," Ecotheology No 10 (Jan 2001):70-83.

Carter, Dick, "Maintaining Wildlife Naturalness in Wilderness," International Journal of Wilderness 3 (no. 3, 1997):17-21. Federal managers may not introduce exotic species to wilderness areas, but they allow state managers to stock non-native fishes and to introduce non-native goats adjacent to wilderness areas, knowing they will migrate there. Carter is a Utah environmentalist. (v.8,#4)

Carter, Jimmy, "Who's Afraid of Genetic Engineering," New York Times, August 26, 1998, p. 23. The former U.S. President argues that a team studying threats to biodiversity from genetically engineered crops and other organisms has come under the influence of environmental extremists. The team was constituted under the U.N. Biodiversity Convention and has members from more than 100 different

governments. Anti-technology activists, especially in third world nations, exaggerate the threats to biodiversity and prohibit useful genetically engineered crops, such as the soybeans Carter raises on his own farm in Georgia. (v.9,#3)

Carter, Luther J., and Thomas H. Pigford, "Proof of Safety at Yucca Mountain," Science 310(21 October 2005):447-448. After court rulings, the Environmental Protection agency has proposed a two-tiered new standard that would stay within a 15-mrem/year for the first 10,000 years and a 350 mrem/year for up to one million years thereafter. These authors conclude: "In our view, the present repository design cannot meet these tests." Carter is the author of Nuclear Imperatives and Public Trust: Dealing with Radioactive Waste. Pigford is in nuclear engineering, University of California, Berkeley.

Carter, N. and Rootes, C., "One Step Forward? Greens and the Environment in the 2001 British General Election," Environmental Politics 10(no.4, 2001): 103-08. (v.13,#2)

Carter, Robert Edgar, "The Importance of Intrinsic Value," Philosophy and Phenomenological Research 28(1967):567-577. A world without intrinsic value would be an entirely arbitrary world, a world entirely lacking in non-arbitrary reasons for acting.

Carter-Long, Lawrence. "Learning from Debate," The Animals' Agenda 17(no.4, 1997):28. Animals deserve nothing less than thoughtful, spirited, and messy debates on their behalf. (v8,#3)

Carter-Long, Lawrence. "Expanding the Circle," The Animals' Agenda 17(no.1, 1997):11. Building bridges and forming alliances can effect positive change. (v8,#2)

Cartmill, Matt, A View to a Death in the Morning: Hunting and Nature Through History. Cambridge, MA: Harvard University Press, 1993. 384 pages. \$ 24.95. The origins and the strange allure of the myth of "man the hunter." What it means to be human, to stand uncertainly between the wilderness of beast and prey and the peaceable kingdom. "It is hard to see how we can justify sportive hunting, since it inflicts grave suffering for the sake of mere amusement." Such "hunting, then, is not a 'natural' activity in any meaningful sense" (pp. 240-242). Cartmill is in biological anthropology at Duke University. (v4,#1)

Cartmill, Matt, A View to a Death in the Morning: Hunting and Nature through History. Reviewed by Steven Bissell. Environmental Ethics 19(1997):441-444. (EE)

Cartwright, David. "Varner's Challenge to Environmental Ethics." Environmental Ethics 9(1987):189-90. (EE)

Carvalho, G. O., Nepstad, D., McGrath, D., del Carmen Vera Diaz, M., Santilli, M. and Barros, A. C., "Frontier Expansion in the Amazon: Balancing Development and Sustainability," Environment 44(no.3, 2002): 34-45. (v.13,#2)

Carwald, Georgia O., "Hydroelectric Development and Road Paving in Brazil's Transamazon Area" The Journal Of Environment And Development 8(no. 4, Dec 01 1999):397- . (v10,#4)

Cary, Geoffrey; et al., "Comparison of the Sensitivity of Landscape-fire-succession Models to Variation in Terrain, Fuel Pattern, Climate and Weather," Landscape Ecology 21 (no.1, January 2006): 121-137 (17).

Casas, Alejandro, del Carmen, Maria, Caballero, Javier. "Plant Management Among the Nahua and the Mixtec in the Balsas River Basin, Mexico: An Ethnobotanical Approach to the Study of Plant Domestication," Human Ecology 24(1996): 455. (v8,#1)

Casavant, Ken. "Salmon Recovery Plans: Some Fundamental Choices." Environmental Law 26, no.2 (1996): 663. (v7, #3)

Case, T. J. "Global Patterns in the Establishment and Distribution of Exotic Birds", Biological Conservation 78(no.1/2, 1996):69. (v7,#4)

Casebeer, William D. *Natural Ethical Facts: Evolution, Connectionism, and Moral Cognition*. Cambridge, MA: The MIT Press, 2005. We can articulate a fully naturalized ethical theory using concepts from evolutionary biology and cognitive science. We can study moral cognition just as we study other forms of cognition. We have "softly fixed" human natures, these natures are evolved, and our lives go well or badly depending on how we satisfy the functional demands of these natures.

Casey, Edward S., "The Production of Space or The Heterogeneity of Place: A Commentary on Edward Dimendberg and Neil Smith," Philosophy and Geography 2 (1998): 71-80. Casey is a professor in the Department of Philosophy at the State University of New York, Stony Brook. (P&G)

Casey, Edward S. The Fate of Place: A Philosophical History. Reviewed by David Macauley. Environmental Ethics 22(2000):219-221.

Casey, Edward S. Getting Back into Place: Toward a Renewed Understanding of the Place-World. Reviewed by David Macauley. Environmental Ethics 22(2000):219-221.

Casey, Edward S., "Smooth Spaces and Rough-Edged Places: The Hidden History of Place," Review of Metaphysics 51(1997):267-296. Casey is in philosophy at the State University of New York, Stony Brook. (v.10,#3)

Casey, Edward S., Getting Back into Place: Toward a Renewed Understanding of the Place-World. Bloomington, IN: Indiana University Press, 1993. 416 pages. Cloth, \$ 45.00. Paper, \$ 19.95. What would the world be like if there were no places? Our lives are so place-oriented that we cannot begin to comprehend sheer placelessness. Despite the pervasiveness of place, philosophers have neglected it. Part I. Finding Place. Greek views contrasted with modernist efforts to reduce place to space and to assert the primacy of time. Part II. The Body in Place. Embodied emplacement requires structures in which to reside, structures devised by humans to support their desires and needs. Develops the analysis of Merleau-Ponty and Husserl. Part III. Built Places. How we dwell in places, what it means for places to be built. Part IV. Wild Places. Place in its unbuilt and uncultivated aspects, the ecological horizons and wilderness modes. Part V. Moving between Places. Our life in the place-world at large, especially in home places. Casey is a philosopher at the State University of New York (SUNY), Stony Brook. (v4,#4)

Casey, Edward S., "J.E. Malpas's Place and Experience: A Philosophical Topography (Cambridge University Press, 1999) Converging and diverging in/on place," Philosophy and Geography 4 (No. 2, 2001): 225-231. Exchange with Jeffery Malpas. Casey is in the Department of Philosophy, SUNY Stony Brook. (P&G)

Casey, Edward. The Fate of Place: A Philosophical History. Berkeley: University of California Press, 1997. 495 pp. \$45 cloth, \$19.95 paper. A philosophical history of the evolving conceptualizations of place and space in Western thought, an interpretation that is acutely sensitive to silences, absences, and missed opportunities in the complex history of approaches to space and place. (v.10,#1)

Casey, Timothy. Review of Robert Mugerauer, Interpretations on Behalf of Place: Environmental Displacements and Alternative Responses. Environmental Ethics 20(1998):429-32.

Casimir, Michael J., Rao, Aparna. "Sustainable Herd Management and the Tragedy of No Man's Land: An Analysis of West Himalayan Pastures Using Remote Sensing Techniques," Human Ecology 26(no.1, Mar. 1998):113- . (v9,#2)

Cassen, Robert. The Population and Development Debate: Fictions, Factions, and Facts--U.S.-Third World Policy Perspectives Series, No. 19. New Brunswick, NJ: Transaction Publishers, Rutgers, 1995. 304 pp. \$32.95 cloth, \$17.95 paper. The effect of population growth on economic development and other areas of concern, such as poverty, health, human resource development and the environment. (v7,#4)

Cassey, Phillip, and Tim M. Blackburn. "Reproducibility and Repeatability in Ecology." *BioScience* Vol. 56, no. 12 (2006): 958-59.

Cassidy, K. M., Grue, C. E., and Aubry, Keith B., "Using current protection status to assess conservation priorities," Biological Conservation 97(no. 1, 2001):1- . (v.12,#2)

Cassingham, K. M., Sills, E. O., Pattanayak, S. K., and Mansfield, C. A., "North Carolina's Natural Heritage Program: A Case for Public-Private Cooperation," Journal of Forestry 100(no.5, 2002): 16-23. (v.13,#4)

Castelletta, Marjorie, Navjot S. Sodhi, and R. Subaraj, "Heavy Extinctions of Forest Avifauna in Singapore: Lessons for Biodiversity Conservation in Southeast Asia," Conservation Biology 14(no.6, 2000 Dec 01): 1870-. (v.12,#3)

Castelo, Carmen Velayos, "Reflections on Stoic Logocentrism," Environmental Ethics 18(1996):291-296. William O. Stephens is to be applauded for the way in which he presents and analyzes some paradigmatic Stoic arguments, and thus defends Stoicism from the misplaced charges of Jim Cheney. Nonetheless, Stephens's individualist interpretation of what he calls Stoic 'logocentrism' obscures key features of the Stoics' theory of value and their related ethic and metaphysic. Once the Stoics are allowed to speak for themselves, it emerges that they adhered to a holistic axiology, that for them virtue lay in conformity with cosmic nature, and that the standard charges of anthropocentrism and blindness to natural beauty, often wielded by environmental philosophers against them, are misguided. Castelo is in philosophy, University of Salamanca Campus Unamuno, Salamanca, Spain. (EE)

Castle, David G.A., Review of Peacock, Kent A., Living with the Earth: An Introduction to Environmental Philosophy. Journal of Agricultural and Environmental Ethics 10(1997):87-89. (JAEE)

Castle, David. "Limitations on an Inclusive Definition of Ecosystem-Human Health." Ethics and the Environment 5(2000):153-162. ABSTRACT: The ecology movement has been effective in focusing our attention on humanity's antipathy toward nature and the risks associated with that antipathy. Evidence of the effects of human-caused environmental destruction performed in the march of progress has long been recognized, but it has been realized only recently that degraded environments can reciprocate and impose severe if not final limits on human pursuits. Ecologists and philosophers who have foreseen our environmental midnight have attempted to reformulate contemporary society so that humanity and nature can work in concert, not in opposition. In this respect, the ecological movement has sponsored various forms of ecocentrism, all of which are distinguished by their attempt to integrate the norms underlying ecosystem health and human health. Despite the fact that significant aspects of the ecocentrist platform have been called into question (Steverson 1994), the prospect of their integration still has appeal. An integrated definition would imply that concern for human and natural welfare could be coextensive and that right action would simultaneously benefit humans and nature. Ostensibly, an inclusive definition of ecosystem-human health must satisfy two basic criteria. It must 1. Articulate the relationship between

human health and ecosystem health, 2. Provide a set of norms that are consistent for human health and ecosystem health. I argue that an analysis of the basic principles underlying ecosystem health and human health enable us to answer (1), but that it is not presently possible to answer (2). (E&E)

Castle, Emery N., "A Pluralistic, Pragmatic and Evolutionary Approach to Natural Resource Management," Forest Ecology and Management 56(1993):279-295. Four requirements must be satisfied by natural resource management. (1) It must provide for economic and social change, especially true in modern societies. (2) It must recognize the interdependence of humans and the natural environment. (3) The welfare of future generations must be considered. (4) The process by which group decisions are made is critical. Castle reaches three conclusions: (1) No single environmental ethic or philosophical system exists nor is one likely to be discovered that will guide environmental policy, though several philosophical approaches help. Natural resource policy is necessarily pluralistic. (2) Pluralism is not an acceptable comprehensive system because it does not forbid inconsistencies. For this reason policy must be pragmatic, and democracy is a pragmatic device. (3) Social and natural systems co-exist through time and must mutually adapt, though neither is stable or predictable far into the future. Castle teaches economics at Oregon State University. (v5,#4)

Castree, N., "Environmental issues: relational ontologies and hybrid politics", Progress in Human Geography 27(no.2, 2003):203-211.

Castree, N., "Commodifying What Nature?," Progress in Human Geography 27(no. 3, 2003): 273-297. (v 14, #3)

Castree, N., "Environmental issues: signals in the noise?," Progress in Human Geography 28(no.1, 1 February 2004):79-90(12). (v. 15, # 3)

Castree, Noel. *Nature*. London: Routledge, 2005. This is offered as "an incisive introduction to the nature that geographers study." "The nature that geographers produce must, therefore, be seen as part of a high-stakes contest over how we understand and act towards those myriad things we label 'natural.' This contest has implications for us all, as well as for the non-human world" (frontis). A quite problematic part of the contest, it turns out, is that geography is itself a "schizophrenic field" (p. 179), torn between the physical geographers who think that nature is real and the cultural geographers who are oversold on the social construction of nature. Castree is in the School of Environment and Development at Manchester University (UK).

Castro, AP, "Book Review: Hunter, Malcolm L., ed., Maintaining Biodiversity in Forest Ecosystems (Cambridge University Press, Cambridge, 1999)", Human Ecology 31(no.1, 2003):167-170.

Castro, Carlos J., "Sustainable Development: Mainstream and Critical Perspectives", Organization and Environment 17 (no. 2, June 2004).

Catalano, George D., "Chaos and a New Environmental Ethic: The Land Ethic Revisited," Between the Species 11 (Nos. 1 & 2, 1995):64-73. The revised ethic reads: "A thing is right when it tends to allow the natural world and all the entities thereof, to thrive in richness and diversity, and to experience change. It is wrong when it tends otherwise." Catalano is at the United States Military Academy, West Point. (v.9,#4)

Cataldi, Suzanne Laba, "Animals and the concept of dignity: Critical reflections on a circus," Ethics and the Environment 7(no. 2, 2002):104-126.

Cataldi, Suzzane L., and William S. Hamrick, eds. *Merleau-Ponty and Environmental Philosophy:*

Dwelling on the Landscapes of Thought. Albany: State University of New York Press, 2008. Contents include: (1) "A Little Knowledge of Dangerous Things: Human Vulnerability in a Changing Climate" by Robert Kirkman, (2) "An Inquiry into the Intercorporeal Relations Between Humans and the Earth" by Kenneth Liberman, (3) "The Liminal World of the Northwest Coast" by Patricia M. Locke, (4) "Borders and Boundaries: Edging into the Environment" by Edward S. Casey, (5) "Logos of Our Eco in the Feminine: An Approach Through Heidegger, Irigaray, and Merleau-Ponty" by Carol Bigwood, (6) "Umwelt and Nature in Merleau-Ponty's Ontology" by Duane H. Davis, (7) "Merleau-Ponty, Ecology, and Biosemiotics" by Maurita Harney, (8) "Earth in Eclipse" by David Abram, (9) "Lived Body and Ecological Value Cognition" by John R. White, (10) "'Fleshing' Out an Ethic of Diversity" by Molly Hadley Jensen, (11) "Social Ecology and the Flesh: Merleau-Ponty, Irigaray, and Ecocommunitarian Politics" by Sally Fischer, (12) "Harmony in a Dislocated World" by Jocelyn Dunphy-Blomfield, (13) "Merleau-Ponty's Transversal Geophilosophy and Sinic Aesthetics of Nature" by Hwa Yol Jung, and (14) "Merleau-Ponty and the Ontology of Ecology or Apocalypse Later" by Martin C. Dillon.

Catton, Jr., William R., "Kulturelle Rueckstaendigkeit gefaehrdet die Zukunft der Menschheit" (article in German) *Humanity's Future Imperiled by Cultural Lags*. Natur und Kultur, Vol. 1/2, 2000, pp. 3-25. Abstract: Human societies exploiting Earth's ecosystems beyond carrying capacity make ideas about human dominion obsolete. Formerly successful policies become disastrous. With six billion humans using Earth three ways (as supply depot, activity space, and disposal site) mutual interference between these uses escalates. Technological advances, once progressive, now enlarge per capita resource appetites and impacts, reducing the number of humans the planet can continue supporting. Sustainability requires enormous efficiencies and a period of "negative population growth". (v.11,#4)

Catton, T., "Review of: Karl Jacoby, Crimes against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation," Environmental History 7(no.1, 2002): 141-42. (v.13,#2)

Catton, Theodore, Inhabited Wilderness: Indians, Eskimos, and Natural Parks in Alaska. Albuquerque: University of New Mexico Press, 1997. Focus in Glacier Bay, Denali, and Gates of the Arctic. The Alaska National Interest Lands Conservation Act in 1980 set aside ten national parks, nine of which allow Alaska natives, whites included, "customary and traditional" subsistence use. Catton is a historian for the Historical Research Associates, Missoula, MT. (v.10,#1)

Catturi, Guisepppe, Produrre e Consumari, Ma Comme? (Produce and Consume, But How?). Padova, Italy: CEDAM--Casa Editrice Dot A. Milani, 1990. A discussion of environmental responsibility from the perspective of accounting, as contrasted with economics. Systems theory should be used to understand the relation of a business to others in its environment or business ecosystem, governed by the principle of consonance or harmony, finding for each business a niche in the system. Accounting should reflect responsibility beyond the confines of the business. The European Community's "Atto Unico" (Single [environmental] Act) is used as a model and guide for this interaction. Catturi is president of the Accounting Institute of the University of Siena. (v3,#2)

Cauchon, Dennis, "Maurauding Beetles Menace Forests," USA Today, November 12, 2004, p. 3A. The emerald ash borer, transplanted from China about ten years ago, has killed six million ash trees in Ohio, and threatens to spread to over 7.5 billion ash trees in the U.S., if not stopped. Stopping it requires drastic measures: cutting all ash trees in a six to twelve mile wide protective belt, and this may not be enough. The beetle kills big, strong trees in a few years. When it appeared, it was a species unknown to researchers in the U.S.; a now aged-Chinese entomologist had described it, but his research was destroyed in the Cultural Revolution, a ten year campaign against intellectuals starting in 1966. (v.14, #4)

Caufield, Catherine, "The Ancient Forests," New Yorker, May 14, 1990. (v1,#3)

Caughley, Graeme and Anne Gunn, Conservation Biology in Theory and Practice. Cambridge, MA: Blackwell Science, 1995. 448 pages. \$ 44.95. The logic and methods for the diagnosis and treatment of species extinctions and declines. The success of previous recovery efforts and methods of improving or reversing the plight of endangered species worldwide. Issues of population dynamics, risk assessment, and wildlife management, balanced against social and cultural pressures such as economics and legislation. (v8,#1)

Caughley, Graheme. "Directions in Conservation Biology." Journal of Animal Ecology 63(1994):215-244. Most theories about conservation have been developed in studies of species that occur in small populations under constrained conditions. These are amenable to theoretical treatment, but the theory provides an answer to a trivial question, How long will the population persist if nothing happens. It bears tenuous relevance to the specific problems of aiding a species in trouble. The real conservation problems, however, involve species that are declining in numbers from widespread, large populations. The reasons are humdrum, various, defy tight generalization, and not of theoretical interest. But such theory is in urgently needed to orient practice. Caughley is with the CSIRO Division of Wildlife and Ecology, Canberra, Australia. (v6,#3)

Causey, Ann S. "On the Morality of Hunting." Environmental Ethics 11(1989):327-343. The controversy between hunting apologists and their anti-hunting antagonists continues to escalate. Numerous attempts to settle the issue have failed in part because the participants have often not distinguished and treated separately the various activities labeled "hunting." Those who participate in hunting fall into one of two categories: shooters or sport hunters. Shooters are those whose ultimate goals do not depend on hunting but can be met in other ways; sport hunters are those who take immense pleasure in the hunt itself and who kill in order to have had an authentic hunting experience. Discussion of the morality of hunting (as opposed to its prudence) is properly restricted to the moral evaluation of the desire of sport hunters to kill for pleasure. This desire can be explained by biological/evolutionary concepts and defended as morally neutral. Neither the animal protectionists nor the utilitarian apologists recognize that violent death is part of nature and that man's desire to participate in it can be both natural and culturally valuable. Though well-intentioned, utilitarianism is an impotent ethical defense of hunting because it can judge only the prudence, not the morality, of hunting. Causey is in the department of Botany and Microbiology, Auburn University, Auburn, AL. (EE)

Causey, Ann, Review of Zoos and Animal Rights. Environmental Values 3(1994):276-277. (EV)

Causey, Ann S. "On Sport Hunting as an Instinct." Environmental Ethics 14(1992):377-78. (EE)

Causey, Cindy Ubben. Cherish the Gift: A Congregational Guide to Earth Stewardship. Valley Forge, PA: Judson Press, 1996. Earth stewardship. Incorporating environmental concerns into religious education, church property, worship, fellowship, in the nursery, with children, youth, camping and retreats, publicity. Tips for homes. Causey is a senior copy chief with JC Penny Catalog and chairs the Catalog Environmental Committee at JC Penny. Judson is a Baptist press. (v8,#2)

Cavalieri, Paola, and Singer, Peter, eds., The Great Ape Project: Equality Beyond Humanity. London: Fourth Estate, 1993.

Cavalieri, Paola, Why Non-Human Animals Deserve Human Rights. New York: Oxford University Press, 2001. It is necessary to go beyond the traditional opposition between utilitarianism and Kantianism and focus on the question of fundamental moral protection. In the case of human beings, such protection is granted within the doctrine of universal human rights. The logic of this doctrine extends to non-human animals who are owed basic moral and legal rights. As a result, human rights are not merely human, after all. Cavalieri is editor of the journal Ethics and Animals. (v.13,#1)

Cavanaugh, Michael, "Global Population Equilibrium: A Model for the Twenty-First Century," Zygon 32(1997):163-174. A global population in equilibrium can serve as an organizing model, or scientific myth, both as a plausible description of reality and a goal with a compelling normative status. Few deny that, unless humans stabilize their population, our world will face serious problems before the year 2050, and a consensus about this can unite persons in many cultures, and also join scientific and theological perspectives. (v8,#2)

Cave, George S. "Animals, Heidegger, and the Right to Life." Environmental Ethics 4(1982):249-54. Quantitative utilitarianism demands equal treatment of human and nonhuman animals where there are no relevant differences between them. A difference is relevant only if it excludes the animal from suffering evil if it is treated differently. Quantitative utilitarianism cannot, however, resolve conflicts of interest nor prove that painless killing of animals is morally wrong. For this we need a higher qualitative good. I suggest that Care, as Heidegger understands it, is such a good, and that it is the essence not only of human, but of nonhuman animal Dasein as well. Because animals care, we are morally obliged to desist from killing them, even painlessly. Cave is an animal rights activist at State College, PA. (EE)

Caviglia Harris, J. L., "Book Review: Natural Resource Valuation and Policy in Brazil, Peter H. May, ed. (Columbia University Press, 1999), Human Ecology 30(no.3, 2002): 417-19. (v.13,#4)

Cawthorne, Jane, "Risky Business: Rethinking the Social and Ecological Impact of Biotechnology," Environments 28(no.2, 2000): 65-. (v.12,#3)

Ceballos, Gerardo and Ehrlich, Paul R., "Mammal Population Losses and the Extinction Crisis," Science 296(3 May 2002):904-907. The disappearance of populations is a prelude to species extinction. No geographically explicit estimates have been made of current population losses of major indicator taxa. Here we compare historic and present distributions of 173 declining mammal species from six continents. These species have collectively lost over 50% of their historic range area, mostly where human activities are intensive. Australia is the continent with the largest number of mammal species extinctions. Worldwide, this implies a serious loss of ecosystem services and goods. It also signals a substantial threat to species diversity. Ceballos is in the Instituto de Ecologia, Universidad Nacional Autonoma de Mexico. (v.13,#2)

Cebon, Peter, Dahinden, Urs, Davies, Huw C., Imboden, Dieter, Jaeger, Carlo C., eds. Views from the Alps: Regional Perspectives on Climate Change. Cambridge, MA: MIT Press, 1998. 536 pp. \$60. This book takes a regional approach to the Alpine region. The result of the ongoing Swiss research program Climate and Environment in the Alpine Region (CLEAR), it incorporates the work of an independent network of approximately fifty researchers from a variety of disciplines. (v.9,#4)

Cela Conde, Camilo J., "Humanos y no humanos. Sobre los derechos de unos y otros (On the Rights of Human and Non-Human Animals. Animal Experimentation and Animal Rights)," Arbor-Ciencia Pensamiento y Cultura (Madrid) 150(issue 592, 1995):47-60. In Spanish. Cela conde is in the Department of Philosophy, University of Islas-Baleares, Palma-de-Mallorca, Spain. (v.10,#1)

Cembalest, Robin, "The Ecological Art Explosion," Artnews, Summer 1991, pp. 96-1-5. Artworks about ecological disasters; a wheatfield planted on a Manhattan Battery Park landfill, to help people rethink their priorities; waste filter systems artistically designed; Puget Sound's sewage used as a glaze for plates; a waste site field artistically arranged with plants that are absorbing the toxic wastes beneath, and more.

Cenci Goga, Beniamino T., and Clementi, Francesca, "Safety Assurance of Foods: Risk Management Depends on Good Science but it is not a Scientific Activity," Journal of Agricultural and Environmental

Ethics 15(no. 3, 2002):305-313. We make many decisions in our lives and we weigh the benefits against the drawbacks. Our decisions are based on what benefits are most important to us and what drawbacks we are willing to accept. Decisions about what we eat are made in the same way; but when it comes to safety, our decisions are usually made more carefully. Food contains natural chemicals and it can come into contact with many natural and artificial substances during harvest, production, processing, and preparation. They include microorganisms, chemicals, either naturally present or produced by cooking, environmental contaminants, and pesticides. Since the chance of being harmed by these potential hazards is called risk, risk analysis might be better termed as the science of safety, because risk management is an essential part of it. It would, however, be difficult and shortsighted to maintain that questions about risk and safety can have no moral dimension. Risk and safety become matters of moral concern when they raise further questions about responsibility, accountability, and justifiability. The question of risk cannot be ignored in any ethical investigation of genetic engineering, novel foods, animal welfare, and individual choices. However, food is more than metabolic fuel. It has physiological, psychological, social, cultural, and aesthetic associations that merge to form a gestalt that people endanger and maintain. The contribution of any food towards an individual's well being is as complex as the individual himself. In this context, the benefits of consuming food that contains hazards may outweigh the risk. KEY WORDS: food safety, food science, risk management. Cenci Goga is in the Dipartimento di Scienze degli Alimenti, Universita degli Studi di Perugia, Perugia, Italy. Clementi is with the Dipartimento di Biotecnologie Agrarie e Ambientali, Universita' degli Studi di Ancona, Ancona, Italy. (JAEE)

Centner, T. J., "Coordinating fence law with range management strategies in the USA," Environmental Conservation 27(no.2, JUN 01 2000):201- . (EE v.12,#1)

Centner, TJ, "Agricultural nuisances: qualifying legislative "right-to-farm" protection through qualifying management practices," Land Use Policy 19(no.3, 2002): 259-267.

Cervi, Gregg Anthony, "War Wrecks and the Environment: Who's Responsible for the Legacy of War? A Case Study: Solomon Islands and the United States," Journal of Environmental Law and Litigation 14(no.2, 1999):351- . (EE v.12,#1)

Cessford, Gordon, "Antarctic Tourism: A Frontier for Wilderness Management," International Journal of Wilderness 3 (no. 3, 1997):7-11. Antarctic tourism has grown rapidly in recent years, 10,000 persons in the four summer months. To date impacts have been relatively benign, but the prospect of continued growth brings some concerns about the adequacy of existing rules and calls for continued surveillance and research. Cessford is with the Department of Conservation in Wellington, New Zealand. (v.8,#4)

CGIAR: Agricultural Research for Whom?" The Ecologist 26 (no.6, 1996): 259. Off-farm agricultural research plays a central role in shaping the current and future direction of agriculture. Who controls that research and who sets its agenda is of critical importance for food security. Of particular concern is the influence exerted by the Consultative Group on International Agricultural Research (CGIAR). Under its direction, research has been geared towards intensive, industrialized method of production--at great cost to genetic diversity, the environment and poorer farmers in the South. Non-governmental organizations are pressing CGIAR to implement wide-ranging changes so as to restructure its research agenda and decision-making processes. (v8,#2)

Ch'iu Jen-tsung, ed., Kuo wai tzy jan k'o hsüeh che hsüeh wen t'i (Philosophical Problems in Foreign Natural Science). Chung-kuo she hui k'o hsüeh, 1994. Beijing: Chinese Social Science Press, 1994. ISBN 7-5004-1514-1. Chinese translations of international works in philosophy of science and related issues. Part I is Philosophy of Science: Section I is Theories of Scientific Thought. Section II is History of Science and Philosophy of Science. Section III is Scientific and Sociological Epistemology. Part II is Ecological Ethics, with an introduction by Yu Mouchang, "Major Issues in Modern Western Ecological

Research," and translations of the following three articles: Holmes Rolston, III, "Science-based versus Traditional Ethics," pp. 259-275, (from J. Ronald Engel and Joan Gibb Engel, eds., Ethics of Environment and Development, London: Belhaven Press, 1990); Holmes Rolston, III, "Environmental Ethics: Values in and Duties to the Natural World," pp. 276-295, (from F. Herbert Bormann and Stephen R. Kellert, eds., Ecology, Economics, Ethics: The Broken Circle, New Haven: Yale University Press, 1991); Mary Anne Warren, "The Rights of the Nonhuman World," pp. 296-320, (from Robert Elliot and Aaran Gare, eds., Environmental Philosophy, St. Lucia: University of Queensland Press, 1983). Part III is Psychological Philosophy. (China)

Chace, J, "Imperial America and the Common Interest," World Policy Journal 19(no.1, 2002):1-10. (v.13, #3)

Chace, James, "The Time of the Primitives" World Policy Journal 15(no.2, 1998), p.99. (v.9,#4)

Chaddock, Gail Russell. "Pacific Nations Use Money to End French Atomic Tests: Despite outcry, President Chirac stands by decision to resume testing." The Christian Science Monitor, June 23, 1995, p. 6. (v6,#2)

Chadwick, Douglas H. "A Place for Parks in the New South Africa." National Geographic 190, no. 1, pp. 2-41. Conservationists in South Africa hope to preserve a balance between the nation's magnificent wildlife and a rapidly expanding human population desperate for land. Still, South Africa holds the best hope on the continent for the conservation of wildlife. (v7, #3)

Chadwick, Douglas H., "Dead or Alive: The Endangered Species Act," National Geographic 187 (March, no. 3, 1995):2-41. (v7,#1)

Chadwick, Ruth, editor-in-chief, Encyclopedia of Applied Ethics. 4 volumes. San Diego: Academic Press, 1997. Contains, among others, the following articles: (alphabetically by entry title)

- Mepham, Ben, "Agricultural Ethics"
- Parascandola, Mark, "Animal Research"
- Pluhar, Evelyn. "Animal Rights"
- Rawles, Kate. "Biocentrism"
- Lee, Keekok. "Biodiversity"
- Leopold, Aldo Carl. "Conservation (Stewardship)"
- Munz, Peter. "Darwinism"
- Talbot, Carl. "Deep Ecology"
- Dower, Nigel. "Development Ethics"
- Dower, Nigel. "Development Issues"
- Holland, Alan. "Ecological Balance"
- Burrill, Roger. "Environmental Compliance by Industry"
- Sagoff, Mark. "Environmental Economics"
- Attfield, Robin. "Environmental Ethics, Overview"
- Jarvela, Marja. "Environmental Impact Assessment"
- Talbot, Carl. "Environmental Justice"
- MacDonald, Chris. "Evolutionary Perspectives in Ethics"
- Brennan, Andrew. "Gaia Hypothesis"
- Valadez, Jorge. "Indigenous Rights"
- Booth, Annie L. "Land-Use Issues"
- Mori, Maurizio. "Life, Concept of"
- Daffern, Thomas. "Native American Cultures"
- Allen, Garland E. "Nature vs. Nurture"

--ShraderFrechette (Shrader-Frechette). Kristin. "Nuclear Power"
--Ryder, Richard. "Painism"
--Clark, John P. "Political Ecology"
--Parker, Jenneth. "Precautionary Principle"
--Christman, John. "Property Rights"
--Carpenter, Robert Stanley. "Sustainability"
--Kaplan, Helmut. "Vegetarianism"
--Rollin, Bernard E. "Veterinary Ethics"
--Spash, Clive L. "Wildlife Conservation"
--Dower, Nigel. "World Ethics"
--Bostock, Stephen. "Zoos and Zoological Parks"

Chadwick, Ruth, Guest Editor, Special Issue: "Food Safety, Food Quality and Food Ethics." Selected papers from the 3rd Congress of the European Society for Agricultural and Food Ethics. Journal of Agricultural and Environmental Ethics 15(no. 3, 2002). (JAEE)

Chahal, Surjeet Kaur, Environment and the Moral Life: Towards a New Paradigm. New Delhi: Ashish Publishing House, 1994. ISBN 81-7024-615-6. The first systematic work on environmental ethics from a philosopher in India. Chapter titles: Necessity and Possibility of Environmental Ethics. The Problem of Interests and Rights in Environmental Ethics. Reflective Equilibrium--A Framework for Environmental Ethics. Environmental Ethics: The Ultimate Questions. She develops a holistic approach towards the geosphere, on the basis of which she hopes for a change in the prevalent behavior towards nature and preserving the environment for future generations. "The problems of environmental ethics restore a sense of urgency and realism to the philosophical enterprise itself" (p. vii). She is well read in the British and American literature, and draws especially from the Sikh tradition. The author teaches philosophy at the University of Poona (or Pune), inland from Bombay (or Mumbai). (v9,#1)

Chahal, Surjeet Chahal, Ecology Redesigning Genes: Ethical and Sikh Perspective. Amritsar, India: Singh Brothers, 2005. Research in genetics cannot be isolated from its impact on ecology. With the genes redesigned, with newer organisms appearing and various unwanted species eliminated, it may not be possible for us to undo the damage to the biosphere. Genetic technology challenges the relationship between God, humans, and the rest of nature. A Sikh perspective. Chahal is in philosophy, University of Pune, India.

Chahal, Surjeet Kaur. Environment and the Moral Life: Towards a New Paradigm. Reviewed in Environmental Ethics 21(1999):441-443.

Chaitanya, Krishna, "Man, Nature and Cosmos in Vedic India," The Ecologist 30 (No. 1, Jan 01 2000): 21- . The thrust of the Religion of ancient India was to follow R'ta - the natural and moral law - that which maintained the order of the Cosmos. (v.11,#2)

Chaloupka, William J., "Tragedy of the Ethical Commons: Demoralizing Environmentalism." Pages 113-140 in Jane Bennett and Michael J. Shapiro, eds., The Politics of Moralizing. New York: Routledge, 2002. Chaloupka is in political science, Colorado State University.

Chaloupka, William. "John Dewey's Social Aesthetics as a Precedent for Environmental Thought." Environmental Ethics 9(1987):243-60. In this essay I review John Dewey's pragmatism from the perspective of environmental social theory. Dewey's clarification of aesthetics, values, experience, and the natural world are useful to contemporary environmentalism. His work represents a precedent for critical, anti-dualistic social philosophy in the U.S., and usefully clarifies the relationship of humans to the "material world." Dewey's conception of values, politics, and experience suggests that these elements

may be combined in ways congenial to environmental thought. Chaloupka is at the Political Science Dept., University of Montana, Missoula, MT. (EE)

Chamberlain, J. L., Bush, R. J., Hammett, A. L. and Araman, P. A., "Eastern [U.S.] National Forests: Managing for Non-timber Products," Journal of Forestry 100(no.1, 2002): 8-14. (v.13,#2)

Chambers, P. E. and Jensen, R. A., "Transboundary Air Pollution, Environmental Aid, and Political Uncertainty," Journal of Environmental Economics and Management 43(no.1, 2002): 93-112. (v.13,#2)

Chan, Kai M. A. Review of The Death of Our Planet's Species: A Challenge to Ecology and Ethics. By Martin Gorke. Environmental Ethics 27 (2005):433-436.

Chan, Kai M.A. "Value and Advocacy in Conservation Biology: Crisis Discipline or Discipline in Crisis." *Conservation Biology* Vol. 22, no. 1 (2008): 103. From the article: "Conservation biology is fraught with confusion and controversy about advocacy. Until we resolve the confusion over *how* we should advocate, controversy will prevail over *whether* we should advocate.... We should advocate for policies *as conservation biologists* only when the policy difference is not a value difference.... Thus, when policies differ in values (e.g. different permissible risk of extinction), we should not suggest that science can recommend policy." Chan is with the Institute for Resources, Environment & Sustainability at the University of British Columbia in Vancouver.

Chan, KM, "Intransitivity and Future Generations: Debunking Parfit's Mere Addition Paradox," Journal of Applied Philosophy 20(no.2, 2003):187-200. (v.14, #4)

Chan, KMA, "The Golden Rule and the Potentiality Principle: Future Persons and Contingent Interests", Journal of Applied Philosophy 21 (no.1, 2004): 33-42(10).

Chance, Norman A., Andreeva, Elena N. "Sustainability, Equity, and Natural Resource Development in Northwest Siberia and Arctic Alaska," Human Ecology 23, no. 2 (June 1995): 217- . (v6,#4)

Chao Jing. *Worldview of the Ecological Era: A Comparative Study of Moltman and Cobb's Ecotheology*. Beijing: Chinese Social Sciences Press, 2007.

Chao Mengqing, "New concept of human nature and ecological ethics", Academic Research, 2003(2)

Chape, Stuart, Mark D. Spalding, and Martin D. Jones, eds. *The World's Protected Areas: Status, Values, and Prospects in the Twenty-first Century*. Berkeley: University of California Press, 2007. Chape is with the Island Ecosystems Secretariat of the Pacific Regional Environment Program (SPREP).

Chapin, III, F. Stuart, et al., "Biotic Control over the Functioning of Ecosystems," Science 277(1997):500-504. See under theme issue, Science, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Chapman, Anne, "The Ways That Nature Matters: The World and the Earth in the Thought of Hannah Arendt," *Environmental Values* 16(2007): 433-445. One of the many sets of distinctions made by Hannah Arendt was that between the world and the earth. I give two different interpretations of this distinction then set out four different ways in which nature matters to us, depending on whether nature is regarded as world or as earth, and whether humans are seen as biological beings or as beings who create and inhabit a world. These different ways are represented in different forms of environmentalism and theories of environmental ethics. The controversy over wind farms in the UK as an instance in which two of the different ways that nature matters come into conflict with each other. Chapman lives in Lancaster,

UK.

Chapman, Audrey R., Unprecedented Choices: Religious Ethics at the Frontiers of Genetic Science. Minneapolis: Fortress Press, 1999. We now face, from genetic science, urgent and unprecedented choices that may involve re-designing our nature, for which traditional ethics provides little direct guidance, and science provides even less. How can we integrate religious, ethical, and scientific reasoning in this crisis?

Chapman, Audrey R., and Frankel, Mark S., eds., Designing our Descendants: The Promises and Perils of Genetic Modifications. Baltimore: Johns Hopkins University Press, 2003. The science of genetic modification, ethical and religious issues, policy issues. Right to reproduce. Designing tomorrow's children? Markets, economics, and genetic modification. Jewish, Roman Catholic, Protestant perspectives. (v.14, #4)

Chapman, Audrey R., "The Greening of Science, Theology, and Ethics." Pages 211-227 in Peters, Ted., ed., Science and Theology: The New Consonance (Boulder, CO: Westview Press, 1998). "The constructive thesis of this article is that a greater integration of science into eco-theology and eco-ethics could contribute significantly to the development of ecological theology (eco-theology) and ecological ethics (eco-ethics). A multi-disciplinary perspective could provide greater conceptual rigor, concreteness, and relevance to these specializations. A scientific grounding is essential if eco-theology and eco-ethics are to understand and come to terms with what is happening to the planet as a basis for formulating an appropriate theological response. Humanity's spiritual life and future depend, not so much on an exhortation to lead a sustainable and develop a sustainable society, but on learning what makes for sustainability and wrestling with the difficult theological, moral, social, and environmental issues it raises" (pp. 212-213). Chapman is program director for the American Association for the Advancement of Science, Dialogue between Science and Religion, Washington, DC. (v.10,#3)

Chapman, Audrey R., Unprecedented Choices: Religious Ethics at the Frontiers of Genetic Science. Minneapolis, MN: Fortress Press, 1999. A thorough survey of what ethicists, especially religious ethicists, have said about genetics: cloning, patenting life, DNA modification for therapeutic purposes or for designer children. One conclusion is that theologians find it difficult to translate the reverence for life in their traditions into applied ethics in the unprecedented challenges posed by possibilities in genetics. A variety of conclusions is often possible. But science without ethical guidance is also irresponsible. Chapman is Director of the Dialogue on Science, Ethics, and Religion, a program of the American Association for the Advancement of Science, Washington.

Chapman, Audrey R., "The Greening of Science, Theology, and Ethics." Pages 211-227 in Ted Peters, ed., Science and Theology: The New Consonance (Boulder, CO: Westview Press, 1998). Chapman is with the Program on Dialogue on Science, Ethics, and Religion, American Association for the Advancement of Science. (v. 15, # 3)

Chapman, David. Natural Hazards. New York: Oxford University Press, 1995. 192pp. \$12. Potential answers to the questions concerning natural disaster preparedness and management. (v8,#2)

Chapman, J. Harley, Review of Pinnock, Clark, The Openness of God: A Biblical Challenge to the Traditional Understanding of God. American Journal of Theology and Philosophy 18(no.1, 1997):100-105. (v8,#1)

Chapman, K., "Book Review: Bluestone, B. and Harrison, B., Growing Prosperity: The Battle for Growth with Equity in the 21st Century," Progress in Human Geography 26(no.5, 2002): 684. (v.13,#4)

Chapman, L.J., Chapman, C.A., Chandler, M. "Wetland Ecotones as Refugia for Endangered Fishes,"

Biological Conservation 78(no.3, 1996):263.

Chapman, M., "The Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve: Ephemeral Protection," Ecology Law Quarterly 29(no.2, 2002): 347-70. (v.13,#4)

Chapman, Robert L. "The Goat-stag and the Sphinx: The Place of the Virtues in Environmental Ethics," Environmental Values 11(2002):129-144. Standard virtue ethics approach to environmental issues do not go far enough because they often lack significant attachment to local environments. Place provides the necessary link that enlarges the arena of moral action by joining human well-being to a place-based goal of wildness (Thoreau) or biotic harmony (Leopold). Place defines a niche for human activity as part of nature. Virtuous action, then, is understood as deliberation from a position of being in and of the natural world; respect and gratitude are examples of this type of deliberation. (EV)

Chapman, Robert L., "Ecological Restoration Restored," Environmental Values 15(2006): 463-478. Conceptual and methodological changes in ecology have the potential to alter significantly the way we view the world. A result of embracing a dynamic model ('the flux of nature', and 'disturbance regimes') has been to make ecological restoration projects a viable alternative, whereas under 'equilibrium ecology' (climax communities/nature-knows-best) restoration was considered destructive interference. The logic of sustainability strategies within the context of dynamic forces promises a greater compatibility with anthropogenic activity. Unhappily, environmental restoration turns out to be paradoxical under the current identification of wilderness with wildness where wildness is, at least, a necessary condition for the possession of natural value. The solution to the paradox is to separate wilderness from wildness both conceptually and ontologically by enlarging the domain of wildness to include certain human activities. (EV)

Chapman, Robert L., has completed a Ph.D. dissertation, "Values Beyond Culture: A Study in Environmental Axiology," at Fordham University, Bronx, NY, under Elizabeth Kraus. The central argument is that nature possesses non-instrumental value. The arguments are mainly aesthetic and favorably supplement a purely ethical approach to environmental value. Chapman is now adjunct assistant professor at Pace University, New York, New York, where he is teaching environmental ethics and establishing a degree program in environmental studies. (v3,#4)

Chapman, Robert L. "Immigration and Environment: Settling the Moral Boundaries." Environmental Values 9(2000):189-209. Abstract: Large populations fuelled by immigration have damaging effects on natural environments. Utilitarian approaches to immigration (whether restrictive or permissive) are inadequate, since they fail to draw the appropriate boundaries between people, as are standard rights approaches buttressed by sovereignty concerns because they fail to include critical environmental concerns within their pantheon of rights. A right to a healthy environment is a basic/subsistence right to be enjoyed by everyone, resident and immigrant alike. Current political-economic arrangements reinforced by familiar ethical positions that support property rights and preference satisfaction favours (privileged) residents while directly or indirectly denying basic rights to potential immigrants and should be abandoned and a basic rights procedure adopted. Keywords: Dependency theory, livable environment, subsistence rights, utilitarianism. Chapman is in the Department of Philosophy and Religious Studies, 41 Park Row - Schiff Faculty Center, New York, NY 10038, USA. (EV)

Chapman, Robert. Review of Daniel Botkin, No Man's Garden: Thoreau and a New Vision of Civilization and Nature, Washington, DC: Island Press, 2001, Environmental Values 10(2001):541. (EV)

Chappell, T. D. J., ed., The Philosophy of the Environment. Edinburgh: Edinburgh University Press, 1997, and New York: Columbia University Press, 1997. 194 pages. Contains new as well as reprinted articles. Chappell teaches philosophy at the University of Manchester.

Chappell, Timothy, "Respecting Nature--Environmental Thinking in the Light of Philosophical Theory," pages 1-18.

Clark, Stephen R. L., "Platonism and the Gods of Place," pp. 19-37.

Rolston, III, Holmes, "Nature for Real: Is Nature a Social Construct?", pp. 38-64.

Hepburn, Ronald W., "Trivial and Serious in Aesthetic Appreciation of Nature," pp. 65-77.

Haldane, John, "'Admiring the High Mountains': The Aesthetics of Environment," pp. 78-88.

Midgley, Mary, "Sustainability and Moral Pluralism," pp. 89-101.

Chappell, Timothy, "How to Base Ethics on Biology," pp. 102-116.

Sprigge, Timothy L. S., "Respect for the Non-Human," pp. 117-134.

Rawles, Kate, "Conservation and Animal Welfare," pp. 135-155.

Callicott, J. Baird, "Whaling in Sand County: The Morality of Norwegian Minke Whale Catching," pp. 156-179.

Jamieson, Dale, "Zoos Revisited," pp. 180-192. (v.8,#4)

Chapple, Christopher Key, ed., Ecological Prospects: Scientific, Religious, and Aesthetic Perspectives. Albany: State University of New York Press, 1993. 236 pages. \$ 19.95 paper. \$ 59.50 hardcover. How ecological insight can serve as a management model for appropriate economic development, the possible categories that can be used to determine land use priorities, working models for environmental activism, potential paradigms for spiritually attuned environmentalism, and the role of aesthetic appreciation in the development of sensitivity to the environment. Chapple is in theology at Loyola Marymount University. (v4,#3)

Chapple, Christopher Key, and Tucker, Mary Evelyn, eds., Hinduism and Ecology: The Intersection of Earth, Sky, and Water. Cambridge: Center for the Study of World Religions, Harvard University, 2000.

Some two dozen contributors. Some samples:

--Dwivedi, O. P., "Dharmic Ecology."

--Agarwal, Anil, "Can Hindu Beliefs and Values Help India Meet Its Ecological Crisis?"

--Lai, Vinay, "Too Deep for Deep Ecology: Gandhi and the Ecological Vision of Life."

--Habeman, David L., "River of Love in an Age of Pollution."

--Fisher, William L., "Sacred Rivers, Sacred Dams: Competing Visions of Social Justice and Sustainable Development along the Narmada."

Chapple is in Asian studies, Loyola Marymount University in Los Angeles. Tucker is in religion, Bucknell University, Lewisburg, PA. (v.12,#2)

Chapple, Christopher Key and Mary Evelyn Tucker, eds., Hinduism and Ecology: The Intersection of Earth, Sky, and Water. Reviewed in Environmental Ethics 25(2003):333-336. (EE)

Chapple, Christopher Key, Nonviolence to Animals, Earth, and Self in Asian Traditions. Albany: SUNY Press, 1993. The origins of the practice of nonviolence in early India and its paths within the Jain, Hindu, and Buddhist traditions. The relevance of this for contemporary issues: vegetarianism, animal and environmental protection, and religious tolerance. Chapple is in theology at Loyola Marymount University. (v5,#3)

Charles, Dan. "Polar Bear Listing Opens Door to New Lawsuits." *Science* Vol. 320, no. 5879 (23 May 2008): 1000-01. The Bush Administration's decision to list the polar bear as a threatened species is likely to bring lawsuits using the threatened status to change US climate policy. Some complain that the polar bear ought not to be a "Trojan horse/bear" used to penetrate the barriers to changing US energy use in the face of global warming.

Charles, Daniel, Lords of the Harvest: Biotech, Big Money, and the Future of Food. Perseus Publishing, 2001. Seed--what used to be considered a gift of nature and a public good, like rain and sunshine, has

been turned into a profit-driven market regulated by patents and license fees, just like computer software.

Charlton, Noel G., A Paradigm Change in Values for Environmental Survival?, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Charlton, Noel, Review of Skolimowski, Henryk, The Participatory Mind: A New Theory of Knowledge and of the Universe. Environmental Values 5(1996):183-186. (EV)

Charlton, Noel G., A Paradigm Change in Values for Environmental Survival?, Master's Thesis, Department of Philosophy, Lancaster University, September 1994.

Charlton, Noel G. *Understanding Gregory Bateson: Mind, Beauty, and the Sacred Earth*. Albany: State University of New York Press, 2008. Charlton presents an overview of the science/philosophy of holistic thinker Gregory Bateson (1904-1980) by exploring the evolution of Bateson's ideas and situating Bateson's thought in relation to other ecological thinkers. Bateson developed a theory of mental processes and mind that were immanent in nature. From this, Charlton reconstructs a Batesonian understanding of aesthetics, awe of the sacred, and need to develop a new ecological ethics that reconnects people with the living world.

Charter, Martin, and Polonsky, Michael Jay, eds. Greener Marketing: A Global Perspective on Greening Marketing Practice. £35.00/\$US65.00. 432 pages hardback. ISBN 1 874719 14 4. Sheffield, UK: Greenleaf Publishing, 1999. A sequel to Greener Marketing: A Responsible Approach to Business, 1992. Best-practice examples and actionable recommendations on how to implement green marketing activities. Three sections: The first sets out the strategic issues and rationale for green marketing; the second addresses tactical issues in more detail; and the third provides detailed case studies from around the world. Sustainable product development. Green marketing alliances. Environmental communications. Green consumers. Eco-tourism. Environmental marketing in developing countries. Charter is at the Centre for Sustainable Design, UK, and Polonsky at the University of Newcastle, Australia. Greenleaf Publishing, Aizlewood Business Centre, Aizlewood's Mill, Nursery Street, Sheffield S3 8GG, UK. Tel: +44 (0)114 282 3475. Fax: +44 (0)114 282 3476. E-mail: greenleaf@worldscope.co.uk <http://www.greenleaf-publishing.com> (v.10,#2)

Charton, J. A., Garcia, Williams, I. D. and Riggio, S., "Evaluating the ecological effects of Mediterranean marine protected areas: habitat, scale and the natural variability of ecosystems," Environmental Conservation 27(no.2, JUN 01 2000):159- . (EE v.12,#1)

Chase, Alston, In a Dark Wood: The Fight over Forests and the New Tyranny of Ecology. New York: Ticknor and Fields (Houghton Mifflin), 1995. A pair of contrasting reviews by Terry L. Anderson and Karl Hess, Jr., with Alston Chases rejoinders, is in PERC Reports (502 S. 19th Avenue, Suite 211, Bozeman, MT 59715). Anderson: "The main contribution of this book is that it exposes the lack of any scientific basis for biocentrism and ecosystem management. ... By embracing biocentrism and ecosystem management, environmentalists have `confused science with philosophy, facts with values, and truth with mythology.' .. The emperor has no clothes. I hope that In a Dark Wood will cripple the idea if not drive a stake into the heart and soul of biocentrism." Hess: There is "a demon in Chase, a mean-spiritedness aimed willy-nilly at greens. In a Dark Wood is a compendium of prejudicial pseudo-science, ad hominem attacks, and facile analyses. It is environmental clearcutting at its most sophisticated and also at its worst. ... Chase is shakiest when attacking ecologists for embracing static models of nature. Here he is dead wrong. Chase bogs down in eco-bashing. By innuendo and coincidence (Nazis were green) he tries to link ecology and biocentrism to tyranny."

Chase, Alston. In a Dark Wood: The Fight over Forests and the Rising Tyranny of Ecology. Reviewed by Paul Wood, Environmental Ethics 20(1998):215-18.

Chase, J.M.; Leibold, M.A., "Ecological Niches: Linking Classical and Contemporary Approaches," Biodiversity and Conservation 13(no.9, August 2004):1791-1793(3). (v. 15, # 3)

Chase, Marcelle P., "Animal Rights: An Interdisciplinary, Selective Bibliography," Law Library Journal 82(1990):359-389. Chase is international law librarian, Arizona State University College of Law, Tempe. (v3,#1)

Chase, Steve, ed., Defending the Earth: A Dialogue between Murray Bookchin and Dave Foreman. Boston: South End, 1991. A social ecologist versus a deep ecologist in a dialogue that moves both toward acknowledging truth on both sides of the debate.

Chasek, Pamela S. "The Convention to Combat Desertification: Lessons Learned for Sustainable Development," The Journal of Environment and Development 6(no.2, 1997):147. (v8,#2)

Chatelain, C., Gautier, L., Spichiger, R., "A Recent History of Forest Fragmentation in Southwestern Ivory Coast (Africa)", Biodiversity and Conservation 5(No.1, 1996):37- . (v7,#1)

Chatterjee, Pratap and Finger, Matthias, The Earth Brokers: Power, Politics and World Development. London: Earthscan Publications, 1994. The Biodiversity Convention converts, perverts, a concern for the destruction of biodiversity into a preoccupation with biotechnology and natural resources to be manipulated and exploited and manipulated as national and private property.

Chauveur, Michele, Ecology, Ethics, Education, in 1996, Dalhousie University (Canada), M.A. degree in education. 158 pages. The Nova Scotia environmental movement has a wide spectrum of positions. Unification among these groups is precarious due to the incompatibility of the anthropocentric view and the biocentric view. Sustainable development is rejected by biocentric opponents. Animal rights activists defend universal justice for humans and animals alike. Ecofeminism links women/human oppression and nature's oppression, rejecting anthropocentric and androcentric values. Social ecology and deep ecology have different views. The role of education versus fears of indoctrination. For a Freirian and a feminist educational approach, understanding nuclearism as a form of oppression and violence is a way to seek empowerment and change toward a post patriarchal society based on a profound awareness of interdependence and respect for the right of all beings to life. The advisor was Ann Manicom. (v.10,#1)

Chavez, Deborah J., James A. Harding, and Tynon, Joanne F. "National Recreation Trails: A Forgotten Designation." Journal of Forestry 97(No. 10, Oct. 1999):40- . Ever heard of a National Recreation Trail? The authors look at this forgotten designation and suggest ways to revitalize it. (v10,#4)

Chavez, DJ, "Natural Areas and Urban Populations: Communication and Environmental Education Challenges and Actions in Outdoor Recreation," Journal of Forestry 103 (no. 8, December 2005): 407-410.

Chavez, Octavio E., "Mining of Internationally Shared Aquifers: The El Paso-Juarez Case," Natural Resources Journal 40(no. 2, Spring 2000):237- . (v.12,#2)

Chawla, Louise, In the First Country of Places: Nature, Poetry, and Childhood Memory. Albany, NY: SUNY Press, 1994. How people's personal philosophies of nature shape their childhood memories and self-identities. Uses five American poets: William Bronk, David Ignatow, Audre Lorde, Marie Ponsot, and Henry Weinfield. Each confronts the modern scientific image of an alien nature and each elaborates alternative versions of connections with nature and with their own past. Chawla teaches at Whitney Young College, an interdisciplinary honors college at Kentucky State University. (v5,#3)

Chawla, Saroj. "Linguistic and Philosophical Roots of Our Environmental Crisis." Environmental Ethics 13(1991):253-62. I suggest a close relationship between language, philosophy, and our handling of the natural environment. My focus is on unconscious language habits and the presuppositions about reality or world view which underlie these language habits. I discuss three distinct features of Amerindian languages and the English language. Amerindian languages do not give form to intangibles and mass nouns, they make a distinction between spatial and metaphorical aggregates (real and imaginary nouns), and they treat time as being continuous or fluid. In contrast, the English language does give form to intangibles and mass nouns, uses the same terminology for real and imaginary nouns, and has a fragmented (three-dimensional) perception of time. As a result, English language habits are not very conducive to a holistic and careful attitude toward the natural environment. Chawla is in the department of Sociology, York University, North York, Ontario, Canada. (EE)

Chazdon, Robin L., "Tropical Forests- Log'Em or Leave'Em?" Science 281(28 August 1998):1295-1296. Isolated forest fragments, logged forests, and second-growth forests are now being recognized for their value in the conservation of biodiversity, for example in forests of Borneo. But these results cannot be generalized to all forests, and other forests are unlikely ever to recover their original composition after logging. Chazdon is in ecology and evolutionary biology at the University of Connecticut, Storrs. (v.9,#4)

Chester, Mark, "Wolf Spirit Returns to Idaho," National Wildlife 36 (no. 5, August/September 1998):32-41. The Nez Perce Indians bring a spiritual dimension to restore endangered gray wolves to former habitat. The Indians are in charge of a group of wild wolves transplanted to Idaho by the U.S. federal government. Horace Axtell, spiritual leader of the tribe, says, "I told them they're back on their land and gave them a blessing so they'll multiply and become part of this circle of life again."

CHEC (Commonwealth Human Ecology Council) Journal is published in the UK, with various articles, news, book reviews. Sample articles from a current issue: Ben Boer (University of Sydney, Australia), "Social Ecology and Environmental Law"; John Maskell (University of Waterloo, Ontario), "The CHORE of Sustainable Development: A Charter of Obligations and Responsibilities"; Jerzy Wojciechowski (Philosophy, University of Ottawa), "Knowledge as a Source of Problems: Can Man Survive the Development of Knowledge?" Contact Robert Waller, Willow Cottage, Clarendon Road, Widcome, Bath BA2 4NJ, UK. (v5,#1)

Cheddadi, R., Guiot, J. and Jolly, D., "The Mediterranean Vegetation: What if the Atmospheric CO₂ Increased?," Landscape Ecology 16(no.7, 2001): 667-75. (v.13,#2)

Cheetham, Tom. "The Forms of Life: Complexity, History, and Actuality." Environmental Ethics 15(1993):293-11. A fundamental misapprehension of the nature of our being in the world underlies the general inhumanity and incoherence of modern culture. The belief that abstraction as a mode of knowing can be universalized to provide a rational ground for all human knowledge and action is a pernicious and unacknowledged background to several modern diseases. Illustrative of these maladies is the seeming dichotomy between the aesthetic and the analytic approaches to nature. One critical arena in which the incoherences of our current understandings of our place in nature come to light is in the battle over the environment. I argue that a more adequate conceptualization of our place in the natural world can be erected if the central metaphors for our understanding are grounded in notions derived from the sciences of life. The key concepts must include contingency, historicity, evolution, organism, and imaginative interaction with concrete reality in individual human beings. Cheetham is in the Program in Environmental Studies, Department of Biology, Wilson College, Chambersburg, PA. (EE)

Cheever, Federico. "The Road to Recovery: A New Way of Thinking About the Endangered Species

Act." Ecology Law Quarterly 23, no.1 (1996): 1. (v7, #3)

Chen Aihu. "Why Is Environmental Ethics Possible." *Journal of Shanghai Normal University* No. 1 (2004).

Chen Cangshu, Sustainable Development From the Perspective of Philosophy. Chinese Social Science Press, 2000. 253 pages. Main chapters: The Vagueness of the Concept of Sustainable Development; Is Industrial Civilization Sustainable? Is Sustainability Compatible with Development? The Causes of Unsustainable Development; Dualism of Subject and Object; To Harmonize Man and Nature; The Predicaments of Equality; The Mechanism of Sustainable Development; The Role of Science and Technology; On Sustainable Development of China. In Chinese. (EE v.12,#1)

Chen Denglin and Ma Janzhang, Outline of Chinese Conservation History (in Chinese). Harbin, China: Northeast Forestry University Press, 2nd edition, 1993. 173 pages. ISBN 7-81008-292-2. 5.60 Yuan. This book narrates systematically the changing history of the natural environment, of its use as resources and its preservation in the various historical periods of China, from primitive society until 1949 before the People's Republic of China was founded. It traces ideas of exploitation, utilization, and conservation, and also governmental institutions for water resources, land resources, forest and wildlife resources. This is the first systematic work of its kind in China, to be used in school education. Chapter titles: (1) Period of Primitive Society. (2) Period of Hsia, Shang, Western Chou Dynasties. (3) Period of Spring and Autumn, and Warring. (4) Ch'in and Han Periods. (5) Three Kingdoms, Two Tsins, and Southern and Northern Dynasties Period. (6) Period of Sui, T'ang, and Five Dynasties. (7) Period of Sung, Liao, Kin and Yüan. (8) Period of Ming and Ch'ing. (9) Modern Period. (Thanks to Ye Ping, Northeast Forestry University, Harbin.) (China) (v5,#4)

Chen, Jim, "Webs of Life: Biodiversity Conservation as a Species of Information Policy," Iowa Law Review 89(no. 2, 2004):495-608. Book-length article in law journal with hundreds of citations. The biosphere as an information platform. Touring the biosphere: layer by layer. Logic of conservation biology and adaptive ecosystem management, diversity and stability, restoration biology, "ecomathematics," legal mandates, "species and specimens, genes and memes," creation myths, environmental aesthetics. Touches on almost everything in biology, ecology, evolutionary natural history, environmental ethics, policy, all with the hope of finding bearings in law. Chen is in law, University of Minnesota Law School.

Chen Lai, "On Morality From the Perspective of Ecology: The Ecological Dimension of New Confucianism," Zhongguo Zhaxueshi (The History of Chinese Philosophy) 2(1999):3-9. In Chinese. (v.11,#1)

Chen, Nancy Tzu-Mei, Introduction to TESA Series in Thought and Praxis of Environmental Ethics: Volume II: *From Land Ethics to Earth Charter*

Introductions to Volume II by Dr. Tsao-Cheng Lin (National Cheng Kung University) and Dr. Sun-Mei Wang (Institute of Environmental Education, National Taiwan Normal University).

Part One:

The Thought and/or Legacy of Aldo Leopold, Rachael Carson, E. F. Schumacher, Nancy Victorian Vangerud, Mosei Lin," ten essays by Nancy Tzu-Mei Chen.

In Search of the Concept of the Harmony between Nature and Man in Traditional China: A Critique," by Dr. Edgar Jun-Yi Lin, Lecture in TESA's Conference (1999).

Part Two: "Introduction to the History of Ecological Ideas in *Nature's Economy* by Donald Worster," six essays by Nancy Tzu-Mei Chen.

Part Three: "Reawakening the Ancient Wisdom, In Search of an Alternative Life," ten essays by Masauli Koung, Eunice Jiang, Esther Jiang, and Nancy Tzu-Mei Chen.

Part Four: "Introducing the Earth Charter: History, Principles and ECYI," translated by Nancy Tzu-Mei Chen.

Part Five: "*Teacher's Guide of the Earth Charter: Bringing Sustainability into the Classroom*," edited by Mohit Mukerjee, translated by Nancy Tzu-Mei Chen.

Conclusion of Volume II: "Taitung, We Are Coming!" by Dr. J. C. Liu.

Chen, Nancy Tzu-Mei, Introduction to TESA Series in Thought and Praxis of Environmental Ethics: Volume IV: *Reconstructing the Ecological Culture in Taiwan*

Introductions to Volume IV by Dr. Jong-Ho Wang (Taiwan Academia Sinica) and Jean-Yi Chen (Association of the Promotion of Land Ethics).

Part One:

Taiwan Christian Ecological Center.

Conference on Ecological Concern.

Taiwan Ecological Stewardship Association.

Core Values of TESA.

Part Two:

Faith and Environmental Ideas Study Group (twenty-four essays of book study report).

Land Ethics Study Group (four essays of book study report).

Part Three: Conference Lectures and Research Papers by Scholars:

The Global Environmental Issues.

The Taiwanese Environmental Problems.

The History of Environmental Protection Movement in Taiwan.

The Water Issues in Taiwan.

Deep Environmental Movement in Taiwan.

Biodiversity and Traditional Wisdom.

The Church of Biodiversity.

After the Kyoto Protocol.

Conclusion of Volume IV: "Caring for the Planet Earth" by Nancy Tzu-Mei Chen.

Chen, Nancy Tzu-Mei, Introduction to TESA Series in Thought and Praxis of Environmental Ethics: Volume III: *The Praxis of Environmental Ethics and Ecological Spirituality in Taiwan*

Introductions to Volume III by Dr. Jen-Wen Wang (Tainan Theological Seminary) and Dr. Sang-Ren Chen (Taiwan Theological Seminary).

Part One: "Global Warming as a Theological Concern," ten essays by Nancy Tzu-Mei Chen.

Part Two: "Renewal of Faith in the Context of Ecological Crisis," ten essays by Nancy Tzu-Mei Chen, one essay by Rev. Ke-Siu Young (former General Secretary of Presbyterian Church in Taiwan), and one essay by Rev. Carver Yu (President of China Graduate School of Theology in Hong-Kong).

Part Three: "Series on Freedom of Simplicity," twelve essays by Nancy Tzu-Mei Chen.

Part Four: "A Mother Who Cares for the Earth and Her Family," twelve essays by Nancy Tzu-Mei Chen.

Part Five: "The Journey to Find the Lost Taiwan Lily," by Ming-Yong Lo (President of TESA)

Part Six: "Introduction to 'The Greening of Religion' in Roderick Frazier Nash's *The Rights of Nature*" (1989), by Nancy Tzu-Mei Chen.

Conclusion of Volume III: "Land Ethics from the Kitchen," by Nancy Tzu-Mei Chen.

Chen, Nancy Tzu-Mei, "Environmental Ethics in Taiwan, Update," *Newsletter, International Society for Environmental Ethics*, vol 19, no. 2, Spring/Summer 2008, pages 36-39.

Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

The Taiwan Ecological Stewardship Association (TESA) has invited local cultural groups, churches, and environmental NGOs to join the global community in celebrating the international year of Planet Earth.

TESA will encourage cities in north, south, east, and west part of Taiwan to host the Climate Change Community Summit on October 11. The Taiwan Ecological Stewardship Association (TESA) has developed the following material. TESA Series in Thought and Praxis of Environmental Ethics, The

content is mainly intended as reference reading for the general education on environmental ethics related courses in university, and can be very informative also for the school teachers, churches or NGOs.

I. *Introduction to Environmental Ethics*

II. *From Land Ethics to Earth Charter*

III. *The Praxis of Environmental Ethics and Ecological Spirituality in Taiwan*

IV. *Reconstructing the Ecological Culture in Taiwan*

More detail in separate entries.

Chen, Nancy Tzu-Mei, Introduction to TESA Series in Thought and Praxis of Environmental Ethics:

“The Island Country Taiwan needs Environmental Ethics for Sustainable Development” by Dr. Hsin-Huang Michael Hsiao (Executive Director of Center for Asia-Pacific Studies, Taiwan Academia Sinica).

Preface: “Sow the Seeds in Heart” by Nancy Tzu-Mei Chen (General Secretary of TESA).

Volume I: *Introduction to Environmental Ethics (Huan-Jing Luun-Li-Shei Ru-Men)*

Introductions to Volume I by Dr. Hen-biau King (Director of Taiwan Forestry Research Institute) and Dr. Tze-tsao Chang (Institute of Environmental Education, National Taiwan Normal University).

Part One: Introduction and translation of articles and lectures by J. Baird Callicott.

J. Baird Callicott articles and lectures translated by Nancy Tzu-Mei Chen:

Benevolent Symbiosis: The Philosophy of Conservation Reconstructed,” in *Earth Summit Ethics: Toward A Reconstructive Postmodern Philosophy of Environmental Education* (1996).

Holistic Environmental Ethics and the Problem of Ecofascism,” in *Beyond the Land Ethic: More Essays in Environmental Philosophy* (1999).

The Land Aesthetic,” in *Companion to A Sand County Almanac: Interpretive and Critical Essays* (1987). “Multicultural Environmental Ethics,” Taiwan Lecture 1999.11.5.

Conservation Values and Ethics,” in *Principles of Conservation Biology*, 2nd ed. (1997).

Ecological Sustainability as a Conservation Concept,” in *Beyond the Land Ethic*.

Ethics and Environmental Ethics,” in *Earth’s Insights: A Multicultural Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback* (1994).

Introduction:

Quiet Strength: Environmental Philosopher Is Environmental Activist” by Nancy Tzu-Mei Chen.

A Philosopher In Defense and Beyond the Land Ethic” by Dr. Yi-ming Jean (National Cheng Kong University)

Part Two: Introduction and translation of lectures and articles by Holmes Rolston III.

Introduction by Nancy Tzu-Mei Chen:

A Philosopher Gone Wild.”

Introduction of Rolston’s *Philosophy Gone Wild*.

Holmes Rolston III articles and lectures translated by Nancy Tzu-Mei Chen and others:

The River of Life: Past, Present, and Future,” Chapter 4 in *Philosophy Gone Wild: Environmental Ethics* (1986), translated by Yen-Ju Lin.

The Pasqueflower,” in *Philosophy Gone Wild*, translated by Wei-Jen Liang.

Wild Life and Wild Lands,” in *After Nature’s Revolt: Eco-Justice and Theology* (1992)

The Bible and Ecology,” in *Interpretation: Journal of Bible and Theology* (1996).

Caring for Nature: From Fact to Value, From Respect to Reverence,” in *Zygon* (2004).

Templeton Prize address at the American Academy of Religion, November 23, 2003.

Preaching on the Environment,” in *Journal for Preachers* (2000).

Ethics and the Environment,” *Ethics Applied*, 2nd ed. (1999), translated by Yu-Lin Wu.

Lecture: “Living with Nature” by Dr. Hen-Biau King, Lecture in the Conference of Rolston’s Trip to Taiwan (2004).

Part Three: “Issues of Science and Religion in Taiwan,” four essays in *Wilderness* magazine (1991), by Nancy Tzu-Mei Chen.

Conclusion of Volume I: “Insights in the Three Trips of Dr. Callicott in 1999 and 2000” by Nancy Tzu-

Mei Chen.

Chen Shaofeng, "On the Relations between Environmental Ethics and Economic Sustainable Development", Daode Yu Wenming (Ethics and Civilization) 1(2000): 21-23. In Chinese. (EE v.12,#1)

Chen Wangheng. "Environmental Ethics & Environmental Aesthetics." *Journal of Zhengzhou University* No. 6 (2006).

Cheney, Dorothy L. and Robert M. Seyfarth, How Monkeys See the World. Chicago: University of Chicago Press, 1990. 389 pages. \$ 24.95. The first book to explore the communication and intelligence of these free-ranging primates using field experiments and the theories of modern cognitive science. This book is likely to become the standard reference for biological and behavioral detail in evaluating cognitive theories that compare and contrast humans and monkeys. (v1,#4)

Cheney, Jim, Review of: Calvin Luther Martin, In the Spirit of the Earth, Environmental Ethics 16(1994):321-327.

Cheney, Jim, "Eco-feminism and Deep Ecology," Environmental Ethics 9(1987):115-145. The best of a series of papers on eco-feminism. Cheney shows precisely what is different about a feminist perspective on ecological ethics. It rejects both the model of individual rights/biospherical egalitarianism and the model of extreme holism the supenndividual organism. Feminist ethical thought focuses on relations, and these can be maintained only in a community of care and trust. The modes of individual rights and extreme holism are incapable of taking relationships seriously. Contextual relationships determine ethical worth and value, and the appropriate response to a moral situation. (Katz, Bibl # 1)

Cheney, Jim, and Anthony Weston. "Environmental Ethics as Environmental Etiquette: Toward an Ethics-Based Epistemology." Environmental Ethics 21(1999):115-134. An ethics-based epistemology is necessary for environmental philosophy: a sharply different approach from the epistemology-based ethics that the field has inherited, mostly implicitly, from mainstream ethics. In this paper, we try to uncover this inherited epistemology and point toward an alternative. In section two, we outline a general contrast between an ethics-based epistemology and an epistemology-based ethics. In section three, we examine the relationship between ethics and epistemology in an ethics-based epistemology, drawing extensively on examples from indigenous cultures. We briefly explore several striking implications of an ethics-based epistemology in sections four and five. (EE)

Cheney, Jim, Review of Anthony Weston Back to Earth, Environmental Ethics 18(1996):89-92. (EE)

Cheney, Jim, "The Dusty World: Wildness and Laws in Thoreau's Walden," Ethics and the Environment 1(no. 2, 1996):75-90. To the attentive reader, the high contrast between Thoreau's depiction of a life in conformity to "Higher Laws" and his depiction of Wildness can seem to be yet another endorsement of nature/culture dualism. I argue that while such a dualism frames much of Thoreau's "experiment" at Walden Pond, a deeper understanding of the relationship between Higher Laws and Wildness emerges which is decidedly nondualistic, an understanding for which I invoke the Buddhist image of the Dusty World. I conclude with some reflections on Val Plumwood's recent work on the nature/culture dualisms at work in current discussions about wilderness. Cheney teaches philosophy at the University of Wisconsin-Waukesha. (E&E)

Cheney, Jim, "In the Shadow of Ancient Ruins: Hellenism and Gnosticism in Contemporary Environmental Ethics," special issue: The Moral Sense of Nature, Environmental History Review, vol. 15, no. 2, Summer 1991. (v2,#3)

Cheney, Jim, "Postmodern Environmental Ethics: Ethics as Bioregional Narrative," Environmental Ethics 11(1989):117-134. An ambitious attempt to outline the direction of a postmodern environmental ethic, i.e., an ethic based on the social construction of truth and normative belief. Cheney combines the feminist critique of a universal patriarchal belief system, the development of contextualism, Rolston's concept of "storied residence," McAIntyre's use of narrative in ethical thought, and myth and ritual practice in non-Western communities. The central claim is that bioregional narratives, situated in specific landscapes and places, determine our selves and our communities, and with them, the ethical norms that create healthy lives and societies. The problem here is the relativism of narratives. (Katz, Bibl # 2)

Cheney, Jim, and Karen J. Warren. "Ecosystem Ecology and Metaphysical Ecology: A Case Study." Environmental Ethics 15(1993):99-116. We critique the metaphysical ecology developed by J. Baird Callicott in "The Metaphysical Implications of Ecology" in light of what we take to be the most viable attempt to provide an inclusive theoretical framework for the wide variety of extant ecosystem analyses--namely, hierarchy theory. We argue that Callicott's metaphysical ecology is not consonant with hierarchy theory and is, therefore, an unsatisfactory foundation for the development of an environmental ethic. Cheney is at the Philosophy Dept., University of Wisconsin-Waukesha, Waukesha, WI. Warren is at the Philosophy Dept., Macalester College, St. Paul, MN. (EE)

Cheney, Jim, "The Neo-Stoicism of Radical Environmentalism," Environmental Ethics 11(1989):293-325. Complex account of what Cheney calls the subtext of deep ecology: the task of containing the other by denying difference through a project of cosmological identification and self-realization; the use of intuition isolated from discourse and negotiation; the creation of a totalizing world-view which simultaneously denies otherness and preserves the autonomy of the self. What is required instead is a politics of difference, based on bioregional and historical narratives, with values derived in context and not deduced from a metaphysical vision. Cheney's argument is a plea for a society based on a model of community with difference, not on a model of a unified organism. (Katz, Bibl # 2)

Cheney, Jim, "Truth, Knowledge and the Wild World," Ethics and the Environment 10(no. 2, 2005):101-135. I had hoped for a narrative of storied residence in Midwest prairie, lake, and river country, and in the mountains and deserts of Idaho, with the history of the development of an environmental ethic (or ethos) left largely implicit within that larger narrative, leaving readers to reflect as they may on the philosophical dimensions of the journey. To leave traditional philosophical modes of expression completely behind proved impossible (for now), but it has been for me a worthwhile exercise to locate my reflections on "truth, knowledge, and the wild world" in something of a narrative form. It is the lakes and rivers, prairies, mountains, and deserts that have remained implicit. They have cast their spell, however, on any attempt to impose cultural order on the relationship between truth, knowledge, and wild world. Cheney is in philosophy, University of Wisconsin-Waukesha. (Eth&Env)

Cheney, Jim. "Universal Consideration: An Epistemological Map of the Terrain." Environmental Ethics 20(1998):265-77. I offer an epistemologically grounded revisioning of Tom Birch's ethical principle of universal consideration, suggesting that epistemologies have ethical dimensions and hence that universal moral consideration is intrinsic to the epistemological enterprise. I contrast epistemologies of domination with epistemologies in part constituted by the generosity of spirit that is the hallmark of Birch's notion of universal consideration. Cheney is in philosophy, University of Wisconsin--Waukesha. (EE)

Cheney, Jim. Review of Ecology, Community and Lifestyle: Outline of an Ecosophy. By Arne Naess. Environmental Ethics 13(1991):263-73.

Cheney, Jim. "Callicott's `Metaphysics of Morals.'" 13(1991):311-25. In his campaign against moral pluralism, J. Baird Callicott has attempted to bring "theoretical unity and closure" to environmental ethics by providing a "metaphysics of morals" encompassing environmental, interpersonal, and social concerns,

as well as concerns for domesticated animals. The central notion in this metaphysics is the community concept. I discuss two quite different, and separable, aspects of Callicott's project. First, I argue that his metaphysics of morals does not provide ethical unity and closure. Second, and less specifically focused on Callicott, I discuss the thesis that we can derive ethical obligations from descriptions of the structures of the various communities to which we belong. Cheney is at the Philosophy Dept., University of Wisconsin-Waukesha, Waukesha, WI. (EE)

Cheney, Jim. "Postmodern Environmental Ethics: Ethics as Bioregional Narrative." Environmental Ethics 11(1989):117-34. Recent developments in ethics and postmodernist epistemology have set the stage for a reconceptualization of environmental ethics. In this paper, I sketch a path for postmodernism which makes use of certain notions current in contemporary environmentalism. At the center of my thought is the idea of place: (1) place as the context of our lives and the setting in which ethical deliberation takes place; and (2) the epistemological function of place in the construction of our understandings of self, community, and world. Central to these themes, in turn are the related notions of myth, narrative, storied residence, and ethical vernacular. Cheney is at the Philosophy Dept., University of Wisconsin-Waukesha, Waukesha, WI. (EE)

Cheney, Jim. "The Neo-Stoicism of Radical Environmentalism." Environmental Ethics 11(1989):293-325. Feminist analysis has convinced me that certain tendencies within that form of radical environmentalism known as deep ecology--with its supposed rejection of the Western ethical tradition and its adoption of what looks to be a feminist attitude toward the environment and our relationship to nature--constitute one more chapter in the story of Western alienation from nature. In this paper I deepen my critique of these tendencies toward alienation within deep ecology by historicizing my critique in the light of a development in the ancient world that is disquietingly similar to the rise of deep ecology in recent times namely, the rise of Stoicism in the wake of the breakup of the ancient polis. Cheney is at the Philosophy Dept., University of Wisconsin-Waukesha, Waukesha, WI. (EE)

Cheney, Jim. "Eco-Feminism and Deep Ecology." Environmental Ethics 9(1987):115-45. I examine the degree to which the so-called "deep ecology" movement embodies a feminist sensibility. In part one I take a brief look at the ambivalent attitude of "eco-feminism" toward deep ecology. In part two I show that this ambivalence stems largely from the fact that deep ecology assimilates feminist insights to a basically masculine ethical orientation. In part three I discuss some of the ways in which deep ecology theory might change if it adopted a fundamentally feminist ethical orientation. Cheney is at the Philosophy Dept., University of Wisconsin-Waukesha, Waukesha, WI. (EE)

Cheney, Jim. "Naturalizing the Problem of Evil." Environmental Ethics 19(1997):299-313. I place my analysis and naturalization of the problem of evil in relation to (1) Holmes Rolston's views on disvalues in nature and (2) the challenge posed to theology by environmental philosophy in the work of Frederick Ferré. In the analysis of the problem of evil that follows my discussion of Rolston and Ferré, I first discuss the transformative power for the religious believer of reflection on the problem of evil, using the biblical Job as a case study. I point out difficulties with Job's particular resolution of the problem of evil and suggest that these difficulties can be satisfactorily addressed by naturalizing spirituality. Cheney is in philosophy at the University of Wisconsin-Waukesha, WI. (EE)

Cheng, AS; Kruger, LE; Daniels, SE, "'Place' as an Integrating Concept in Natural Resource Politics: Propositions for a Social Science Research Agenda", Society and Natural Resources 16(no.2, 2003):87-104.

Cheng, Chung-ying. "On the Environmental Ethics of the Tao and the Ch'i." Environmental Ethics 8(1986):351-70. How the Tao applies to the ecological understanding of the human environment for the purpose of human well-being as well as for the harmony of nature is an interesting and crucial issue for

both environmentalists and philosophers of the Tao. I formulate five basic axioms for an environmental ethic of the Tao. (1) the axiom of total interpenetration; (2) the axiom of self-transformation; (3) the axiom of creative spontaneity; (4) the axiom of a will not to will; and (5) the axiom of non-attaching attachment. I show that each axiom generates important consequences for environmental ethics and that together they provide a necessary foundation for environmental ethics. Cheng is in the department of philosophy, University of Hawaii at Manoa, Honolulu, HI. (China)

Cheng, Joseph Y.S. and Zhang Mujin, "Historical Survey and the Cultivation of a New Culture Regarding the Ecology in China's Western Provinces," International Journal of Sustainable Development and World Ecology 11(2004):129-142. Extensive background analysis. China's leadership is giving priority to developing the Western Provinces, where environmental pollution and degradation are worse than in the provinces of the East. Here the blind imitation of the (World) West is striking, but there are Chinese environmentalists who seek a "new ecological culture." This plans for sustainable development and also includes respect for the environment, including intrinsic values in nature. Cheng is with the Contemporary China Research Project, University of Hong Kong. Zhang is at Tsing Hua University, Beijing.

Cheng Lixian, "Ethical Premises for Developing a Good Green Education." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Chenje, Munyaradzi, and Phyllis Johnson, eds., State of the Environment in Southern Africa, 1994. A Report by the Southern African Research and Documentation Centre, in collaboration with IUCN and the Southern African Development Community. Contact: Southern African Development Community, Box 24, Maseru 100, Lesotho. Fax: 266 310190. ISBN 0-7974-1374-X. Also available in Portuguese. Fourteen chapters, on all aspects: people, history, policy, climate, soils, woodlands and forests, wildlife and protected areas, freshwater resources, marine ecosystems, pollution, armed conflict and the environment, trends and scenarios. (v6,#3)

Cherett, J. M., "Key Concepts: The Results to a Survey of Our Members Opinions," in J. M. Cherett, ed, Ecological Concepts (London: Blackwells, 1989), pages 1-16. The fifty most important concepts in ecology, as revealed in a survey of the British Ecological Society. (v4,#2)

Chermak, David S. "Theoretical Environmental Philosophy Is Not Environmental Activism." M.A. Thesis, Colorado State University, 2007. J. Baird Callicott claims that theoretical environmental philosophy is environmental activism, with a strong sense of how by offering good reasons justifying ethical beliefs, ethicists may affect the actions of individuals. Callicott's ethic is grounded in an evolutionary-ecological worldview, which understands humans as a part of the greater biotic community, which leads to the realization that we ought intrinsically to value nature, expanding our moral sentiments. Callicott believes that his environmental ethic demonstrates why individuals ought to value the natural world, and he asserts that his ethic is genuinely normative. Callicott's claim to normativity fails, however, as he is unable to bridge the is/ought gap. There does not seem to be a rationally compelling argument from the evolutionary-ecological worldview to an environmental ethic. Though Callicott's ethic lacks normative force, it remains important in a descriptive sense. Humans naturally grant broaden their identification to include family, friends, and community. Viewing humans as a part of a large biotic community further broadens their identification to include the natural world, as is promoted by deep ecologists. Such an outlook has been a powerful source of motivation for committed environmental activists, although it is not rationally compelling. Bernard Rollin and Holmes Rolston were advisors.

Chernobyl, 10 Years Later. Environment 38, no.3 (1996): 3. On the tenth anniversary of the accident at Chernobyl, a group of distinguished scholars and scientists offers some thoughts on the accident's legacy. (v7, #3)

Chertow, Marian R., and Esty, Daniel C., eds., Thinking Ecologically: The Next Generation of Environmental Policy. New Haven: Yale University Press, 1997. 15 articles. Samples: Gordon, John, and Coppock, Jane, "Ecosystem Management and Economic Development"; Stavins, Robert, and Whitehead, Bradley, "Market-Based Environmental Policies"; Dowdeswell, Elizabeth and Charnovitz, Steve, "Globalization, Trade, and Interdependence"; Strauss, Todd and Urquhart, John A., "Energy Prices and Environmental Costs." And more. (v.9,#3)

Chess, Caron; Burger, Joanna; McDermot, Melanie, "Speaking Like a State: Environmental Justice and Fish Consumption Advisories," Society and Natural Resources 18(no.3, March 2005):267-278(12).

Chessa, Frank. "Endangered Species and the Right to Die." Environmental Ethics 27 (2005):23-41. Assuming that both humans and nonhuman organisms have intrinsic value, the concept of a "death with dignity" should extend to the natural world. Recently, an effort has been undertaken to save the razorback sucker, an endangered species of fish in the Colorado River. Razorback are bred and raised in captivity and transferred to the river only when large enough to survive predation by nonnative fish. While this effort is well-intentioned, there is little chance that the razorback will again live unassisted in the Colorado River. There may be human-centered reasons for saving the razorback. However, just as respecting a person sometimes requires limiting his or her life-sustaining medical treatment, so too respecting the razorback may require removing human assistance with its reproductive cycle.(EE)

Chesters, Graeme. Review of Amory Starr, "Naming the Enemy: Anti-Corporate Movements Confront Globalization", Organization and Environment, 15, (No. 2, 2002): 214-17. Chesters is a research fellow in the Centre for Local Policy Studies at Edge Hill University College, UK. (v.13, #3)

Cheyette, Dan. "Breaking the Trail of Broken Promises: 'Necessary' in Section 810 of ANILCA Carries Substantive Obligations," Environmental Law 27(no.2, 1997):611. Chayette examines the U.S. Forest Service's subsistence management policies for the Tongass National Forest in light of section 810 of Alaska National Interest Lands and Conservation Act, which requires federal land management agencies to consider subsistence resources in all land use decisions. He concludes that the Forest Service has ignored the substantive requirements of the statute by managing the Tongass for timber harvesting to the detriment of subsistence resources. Cheyette argues that until the Forest Service creates a new management plan that considers equally all resources of the Tongass, the courts must enjoin timber sales that adversely impact subsistence resources. (v8,#3)

Cheyne, Ilona, "Law and Ethics in the Trade and Environment Debate: Tuna, Dolphins and Turtles," Journal of Environmental Law (Oxford University Press) 12 (no. 3, 2000):293-316. The author's conclusions "throw doubts on the rhetoric of sustainable development ... as an overriding policy framework under which the three human goals of environmental protection, economic welfare ... and social justice can be harmonised. While as a purely empirical matter the three goals may sometimes be combinable, they are essentially incommensurable and competing. Examination of the ethical dimension in particular exposes competing conceptions of sustainability which must be explicitly articulated to prevent protagonists at any level of the trade and environment debate talking past each other" (p. 313).

"There are obvious problems in adopting even enlightened anthropocentric reasons when making decisions that are intended to protect the environment. Policies may be short-lived if human preferences change, or it turns out that human interests are affected detrimentally. There is also the risk of ignoring the value of species with which we have little or no affinity" (p. 314). Cheyne is in law, Newcastle Law School, UK.

Chiang, Tao-Chang, "Historical geography in China," Progress in Human Geography 29(no.2, April 2005):148-164(17).

Chiarelli, Brunetto, Director, Centre for Bioethics, Societa' Italiana di Bioetica, Italy, Universita' di Firenze, Via del Proconsolo, 12, 50122, Firenze, is publishing a newsletter and has offered to publish parts of our own Newsletter with it, including membership information. (v1,#3)

Chicago Wilderness: Exploring Nature and Culture. This might seem an oxymoron, but in fact Chicago Wilderness is a magazine and movement with surprising success--so successful that other cities are imitating the program. There are over 220,000 acres of nature preserves in the Chicago area, and more in the region. Several dozen organizations cooperate in educating Chicago people to appreciate the nature and natural history in the region--bird migrants, wildflowers, wetlands, trails, Lake Michigan, the sand dunes. Contact Chicago Wilderness, P. O. Box 268, Downer's Grove, IL 60515-0268. (v.10,#3)

Chidester, David, and Edward T.G. Linenthal, eds., American Sacred Space. Bloomington: Indiana University Press, 1995. Includes Taylor, Bron, "Resacralizing Earth: Pagan Environmentalism and the Restoration of Turtle Island," a review of Earth-based religiosity. (v8,#3)

Children, Youth and Environments Vol. 18, no. 1 (2008). The topic of this special issue is "Children and Disasters." Contents include: (1) "Children and Disasters: Understanding Vulnerability, Developing Capacities, and Promoting Resilience—An Introduction" by Lori Peek (pp. 1-29), (2) "Psychological and Physiological Correlates of Stress in Children Exposed to Disaster: Current Research and Recommendations for Intervention" by Inka Weissbecker, Sandra E. Sephton, Meagan B. Martin, and David M. Simpson (pp. 30-70), (3) "The Implications of Climate Change for Children in Lower-Income Countries" by Sheridan Bartlett (pp. 71-98), (4) "Children, Adolescents and the HIV and AIDS Pandemic: Changing Inter-Generational Relationships and Intra-Family Communication Patterns in Botswana" by Klaus Geiselhart, Fred Krüger, and Thando D. Gwebu (pp. 99-125), (5) "Vulnerability of Children and Youth in Drought Disasters: A Case Study of Botswana" by Agnes A. Babugura (pp. 126-57), (6) "A Look at the Standards Gap: Comparing Child Protection Responses in the Aftermath of Hurricane Katrina and the Indian Ocean Tsunami" by Anne Westbrook Lauten and Kimberly Lietz (pp. 158-201), (7) "The School as a Source of Support for Katrina-Evacuated Youth" by Edith J. Barrett, Maria Martinez-Cosio, and Carrie Y. Barron Ausbrooks (pp. 202-36), (8) "Caring for Young Children after a Hurricane: Childcare Workers Reflect on Support and Training Needs" by Samantha L. Wilson and Mary Ann Kershaw (pp. 237-53), (9) "The Role of Children and Youth in Communicating Disaster Risk" by Tom Mitchell, Katharine Haynes, Nick Hall, Wei Choong, and Katie Oven (pp. 254-79), (10) "Displaced Once Again: Honduran Migrant Children in the Path of Katrina" by Marisa O. Ensor (pp. 280-302), (11) "Disaster Resilience and Children: Managing Food Security in Zimbabwe's Binga District" by Siambabala Bernard Manyena, Maureen Fordham, and Andrew Collins (pp. 303-31), (12) "Promoting Child and Family Resilience to Disasters: Effects, Interventions and Prevention Effectiveness" by Kevin R. Ronan, Kylie Crellin, David M. Johnston, Julia Becker, Kristen Finnis, and Douglas Paton (pp. 332-53), (13) "Out of the Floodwaters, But Not Yet on Dry Ground: Experiences of Displacement and Adjustment in Adolescents and Their Parents Following Hurricane Katrina" by Jennifer A. Reich and Martha Wadsworth (pp. 354-70), (14) "Youth Mortality by Forces of Nature" by Sammy Zahran, Lori Peek, and Samuel D. Brody (pp. 371-88), (15) "Disaster Risk Reduction and Vulnerable Populations in Jamaica: Protecting Children within the Comprehensive Disaster Management Framework" by Kerry-Ann N. Morris and Michelle T. Edwards (pp. 389-407), (16) "Caring for Children in the Aftermath of Disaster: The Church of the Brethren Children's Disaster Services Program" by Lori Peek, Jeannette Sutton, and Judy Gump (pp. 407-21), (17) "Hurricane Disaster Response by School-Based Health Centers" by Norma A. Dolch, Daniel L. Meyer, and Angel V. Huval (pp. 422-34), (18) "Garbage to Garden: Developing a Safe, Nurturing and Therapeutic Environment for the Children of the Garbage Pickers Utilizing an Academic Design/Build Service Learning Model" by Daniel Winterbottom (pp. 435-55), (19) "Big Bird, Disaster Masters, and High School Students Taking Charge: The Social Capabilities of Children in Disaster Education" by Tricia Wachtendorf, Bethany Brown, and Macia C. Nickle (pp. 456-69), (20) "After the Tsunami in Cooks Nagar: The Challenges of Participatory

Rebuilding” by Sheridan Bartlett (pp. 470-84), and (21) “Children and Disasters Annotated Resource List” by Sara Gill, Lindsey Gulsvig, and Lori Peek (pp. 485-510).

Chiles, James R., Inviting Disaster: Lessons from the Edge of Technology. New York: HarperBusiness, 2001. Science and technology have made humans ever more powerful, but no less prone to error. Growing technological power and unchanging fallibility invite disaster, as with the Three Mile Island meltdown. But one safety feature is that, though disasters seem to have happened suddenly, often many steps of multiple failures and mistakes lead to disasters, and we can devise detection systems stepwise. Still, we are prone to ignore the early warnings. For some of the most dangerous potential catastrophes, even a tiny risk is intolerably high. (v.13,#1)

Chimpanzee Sequencing and Analysis Consortium, "Initial Sequence of the Chimpanzee Genome and Comparison with the Human Genome," Nature 437(1 Sept. 2005):69-87. The authors note the differences between chimpanzee genes and human genes, focussing on the protein generating genes. Differences are few on overall percentage scales, but considerable on local gene scales. Given the massive size of the sequenced data array, a few percent differences accumulate into millions of differences: thirty-five million single-nucleotide changes, five million insertion/deletion events, and various chromosomal rearrangements. They run various analyses to see what genes in humans and chimps might have been differentially selected. They also frankly recognize that what makes us distinctively human is not yet understood.

"Our close biological relatedness to chimpanzees not only allows unique insights into human biology, it also creates ethical obligations. ... We hope that elaborating how few differences separate our species will broaden recognition of our duty to these extraordinary primates that stand as our siblings in the family of life" (p. 83). The same issue of Nature contains a half dozen related articles, equally puzzled about what makes us human.

Chinese Society of Dialectics of Nature, Nong Ye Zhe Xue Ji Chu (The Basis of a Philosophy of Agriculture), by a Working Group of the Chinese Society of Dialectics of Nature. Beijing: Science Press, 1991. 361 pages. Entirely in Chinese. A contact and one of the working group is Zhang Xiang-gin, Beijing Agricultural University, Beijing China. She is also one of the authors. (China)

Chinn, Lily N. "Can the Market Be Fair and Efficient? An Environmental Justice Critique of Emissions Trading." Ecology Law Quarterly 26(No. 1, 1999):81- . (v10,#4)

Chipeniuk, Raymond, "The Old and Middle English Origins of 'Wilderness'," Environments (Waterloo, Ont.: Faculty of Environmental Studies, University of Waterloo) 21(1991):22-28. Interesting and important article on the roots of the idea of wilderness, which should be read by anyone who has read Roderick Nash. There is a widespread view that until the eighteenth century it was usual for people in the Western tradition to fear and hate wilderness. This view is elaborated by Roderick Nash in Wilderness and the American Mind. But, contrary to Nash, in old English the sense is not always negative; there are many commonsense, neutral, and sometimes positive evaluations of wilderness. There are two possible roots "wil(d)deor," or "wild deer" and "wildeorern," or "wild, uncontrolled or untamed," and "wildeornes" generally meant wild or uncultivated land, inhabited only by wild animals. The word "wild" goes back to Old Teutonic, the precursor of English, long before 450 A.D. In the Bible, the meanings of several words for "wilderness" are not always negative, but they sometimes are, and with the coming of Bible translations these could enter English usage, where wilderness is a frightening and wasted place.

"All in all, the evidence seems to suggest speakers of English have always used the word 'wilderness' ... to mean primarily land not farmed or settled, or ... land inhabited by wild animals. ... Americans do not deserve quite as much credit for elevating wilderness to its current high esteem as Nash and others are wont to give them. Interest in and regard for wilderness as the home of abundant wildlife was the heritage of the English-speaking world from its beginnings." Chipeniuk has degrees in English

language and literature from McGill University and the University of Toronto, and works in regional planning with an interest in wilderness. (v7,#1)

Chipeniuk, Raymond. "On Contemplating the Interests of Fish." Environmental Ethics 19(1997):331-332. (EE)

Chiras, Dan, and the Sustainable Futures Society, eds., Voices for the Earth: Vital Ideas from American's Best Environmental Writers. Boulder, CO: Johnson Books, 1995. 256 pages. \$ 16.95. (v6,#4)

Cho, Hong Sik. "An Overview of Korean Environmental Law." Environmental Law. 29(No. 3, 1999): 501- . Severe environmental harms have forced the Korean people to reevaluate the balance between industrialization and environmental protection in Korea. Korea has reached a point in its economic development where its people have begun to evaluate their surroundings and quality of life as affected by the environment. Hong Sik Cho recommends that other developing nations take a serious look at Korea's current challenge of balancing economic prosperity with environmental protection and that they learn from Korea's experience. (v10,#4)

Cho, Mildred K., Magnus, David, Caplan, Arthur L., McGee, Daniel, and the Ethics of Genomics Group, "Ethical Considerations in Synthesizing a Minimal Genome," Science 286(1999):2087-2090. Efforts to create a free-living organism with a minimal genome are underway, although the prospects of so doing are rather far off. Such an organism would have the minimal genome that allows for replication in an environment, estimated at 256 genes. The research may give insight into the origins of life and into more complex genomes, as well as have applications in genetic engineering. "The prospect of constructing minimal and new genomes does not violate any fundamental moral precepts or boundaries, but does raise questions that are essential to consider before this work advances further." "The dominant view is that, while there are reasons for caution, there is nothing in the research agenda for creating a minimal genome that is automatically prohibited by legitimate religious considerations." (v10,#4)

Chomitz, K. M. *At Loggerheads? Agricultural Expansion, Poverty Reduction, and Environment in the Tropical Forests*. Washington, DC: World Bank, 2007. This is also in Spanish, Indonesian, French, and Portuguese, and a free down-loadable version is available online at <www.worldbank.org/tropicalforestreport>. This is essentially an economic study, with models to analyze the tradeoffs, necessary and unnecessary, between agriculture and forest conservation. People clear forests because they profit from doing so, sometimes substantially and sometimes not, but all too often the private gains are ephemeral, whereas the public losses are severe and enduring. The aim is to formulate policies with optimal tradeoffs between profit-making and nature protecting, with much poverty, geography and corruption, and biodiversity and population pressure en route. This is an excellent treatment of the globally critical issue of tropical forest conservation. The author argues for carbon payments for avoided deforestation.

Choosing a Sustainable Future: The Report of the National Commission on the Environment. Washington, DC: Island Press, 1993. The report of a private sector initiative convened by the World Wildlife Fund. Nineteen prominent members. "We the members of the National Commission on the Environment, are convinced that the natural processes that support life on Earth are increasingly at risk and that by choosing to act or not to act to confront this risk now, our country is choosing between two very different futures" (p. xi). Russell E. Train, Chair, World Wildlife Fund and former Environmental Protection Agency (EPA) Administrator and Council on Environmental Quality Chair (CEQ) was the chair of the commission. (v4,#2)

Chornesky, Elizabeth A. et al., "Science Priorities for Reducing the Threat of Invasive Species to Sustainable Forestry," BioScience 55(no.4, April 2005):335-349(15). Invasive species pose a major, yet

poorly addressed, threat to sustainable forestry. Here we set forth an interdisciplinary science strategy of research, development, and applications to reduce this threat. To spur action by public and private entities that too often are slow, reluctant, or unable to act, we recommend (a) better integrating invasive species into sustainable forestry frameworks such as the Montreal Process and forest certification programs; (b) developing improved cost estimates to inform choices about international trade and pest suppression efforts; and (c) building distributed information systems that deliver information on risks, identification, and response strategies. To enhance the success of prevention and management actions, we recommend (a) advancing technologies for molecular identification, expert systems, and remote sensing; (b) evolving approaches for ecosystem and landscape management; and (c) better anticipating interactions between species invasions and other global change processes.

Choucri, Nazli, ed., Global Accord: Environmental Challenges and International Responses. Cambridge: MIT Press. 688 pages. \$ 45.00. Fifteen essays on how individuals, groups, and nations create environmental dislocations and can work together to solve ecological problems that cross their borders. Choucri is professor of political science at the Massachusetts Institute of Technology. (v4,#2)

Choudry, Enamul, and Charles Senseman, "The Relevance of Environmental Ethics for Policy Ethics: Why Anthropocentric and Ecocentric Considerations Matter," Indiana Academy of Social Sciences Proceedings, 1994, George C. Roberts, ed. Indianapolis: Indiana Academy of Social Sciences, 1994. (v8,#2)

Chow, Jeffrey, Kopp, Raymond J., and Portney, Paul R., "Energy Resources and Global Development," Science 302(2003):1528-1531. "In order to address the economic and environmental consequences of our global energy system, we consider the availability and consumption of energy resources. Problems arise from our dependence on combustible fuels, the environmental risks associated with their extraction, and the environmental damage caused by their emissions. Yet no primary source, be it renewable or nonrenewable, is free of environmental or economic limitations. As developed and developing economies continue to grow, conversion to and adoption of environmentally benign energy technology will depend on political and economic realities."

The world does not seem to be running out of mineral fuels, but using these fuels intelligently, justly, and without degrading the environment is a much tougher question, and not currently being adequately addressed. The authors are with Resources for the Future, Washington, DC.

Chown, SL; Rodrigues, ASL; Gremmen, NJM; Gaston, KJ, "World Heritage Status and Conservation of Southern Ocean Islands," Conservation Biology 15(no.3, 2001):550-557. (v.12,#4)

Christ, Carol P. and Kathryn Rountree. "Humanity in the Web of Life." Environmental Ethics 28(2006):185-200. The humanity-nature divide is a modern Western construction based on the notion that matter (nature) is dead, while consciousness (humanity) is alive, rational, and positioned to use matter (nature) to achieve its ends. In contrast, in the world views of the indigenous MaFori of New Zealand and Aborigines of Australia, nature is not separate from humanity and all is infused with consciousness. The ecofeminist and Goddess movements which emerged in the last decades of the twentieth-century, share with many indigenous religions the perception that all of nature is alive and that human beings must respect other beings within the web of life. Yet these are postmodern rather than premodern movements with an explicit critique of the assumptions of modernity. Process philosophy, especially when understood through the "feminist process paradigm" proposed here, is a postmodern philosophical system that affirms the insights of indigenous peoples, as well as Goddess and ecofeminists, that humanity must situate itself within the web of life. At the same time, process philosophy provides the tools for reconciling "premodern" insights with the findings (but not the assumptions) of modern science. Each of these resources can help us to provide alternatives to the humanity-nature divide. (EE)

Christensen, Harriet H. and Daniel L. Dustin, "Reaching Recreationists at Different Levels of Moral Development," Journal of Park and Recreation Administration 7(no. 4, Winter 1989):72-80. Illustrations of interpretive signs and other appeals in environmental ethics directed toward persons at different levels of moral development. Differences between Lawrence Kohlberg and Carol Gilligan on what these levels are and the consequent appeals. Especially at the higher levels, men are characterized by an ethic of justice, fairness, and self-respect, women by an ethic of reference and relation to self and others, with caring the highest value. Christensen is a social scientist with the U. S. Forest Service Pacific Northwest Research Station, Seattle. Dustin is a professor in the Department of Recreation at San Diego State University. (v2,#1)

Christensen, Karen, Home Ecology: Simple and Practical Ways to Green Your Home. Golden, CO: Fulcrum Publishing Co., 1990. \$ 15.95 paper. (v1,#4)

Christensen, Paul D., Whitehead, Bradley W. "Operationalizing A Value-Based Approach to Environmental Management," Journal of Environmental Law & Practice 3(no.3 Nov. 1995):32- . The skills needed and the steps to follow for companies to optimize strategic environmental decision making. (v6,#4)

Christian, C. S.; Lacher, T. E.; and Burnett, G. W. "Parrot Conservation in the Lesser Antilles With Some Comparison to the Puerto Rican Efforts." Biological Conservation 77, no.2 (1996): 159. (v7, #3)

Christian, Colmore S., Michael P. Zamore, Adolphus E. Christian. "Parrot Conservation in a Small Island-Nation: Case of the Commonwealth of Dominica." Human Ecology 22 (no. 4, 1994): 495-

Christie, I, "Sustainability and Spiritual Renewal: the Challenge of Creating a Politics of Reverence," Conservation Biology 16(no.6, 2002): 1466-1468.

Christoff, P., Dryzek, J. S., Eckersley, R., Goodin, R. E. and Plumwood, V., "Green Thinking--from Australia," Environmental Politics 10(no.4, 2001): 85-102. (v.13,#2)

Christofferson, April. "Setting the Record Straight: Native Americans and Yellowstone, Past Present and Future." Yellowstone Discovery. Publication of the Yellowstone Association, Vol. 22, no. 3 (Fall 2007). Some new data counter the numerous early records that found few Native Americans in Yellowstone. Christofferson gives a more politically correct account of the Native Americans in Yellowstone, particularly the Bannock. One account now revised is that the American Indians stayed away because they feared the spooky geothermal features.

Christoforou, Theofanis, "Settlement of Science-Based Trade Disputes in the WTO: A Critical Review of the Developing Case Law in the Face of Scientific Uncertainty," New York University Environmental Law Journal 8(no.3, 2000):622- . (EE v.12,#1)

Christopher, A. J. "Land Restitution in South Africa, 1991-94," Land Use Policy 12(no.4, Oct 1995):267- . (v6,#4)

Church and Society, July/August 1996, is a theme issue: "For the Beauty of the Earth: Restoring Creation for Ecology and Justice." Articles by a dozen contributors. Samples: William E. Gibson, "Eco-Justice and the Beauty of God"; Dieter T. Hessel, "Spirited Earth Ethics: Cosmological and Covenantal Roots"; Holmes Rolston, III, "Environmental Ethics: Some Challenges for Christians"; Bruce Babbitt, "Leading America Closer to the Promise of God's Covenant"; Peggy Curlin, "Women, Poverty, and Population: A Call to Engagement for People of Faith." And more. (v7,#2)

Church and Society, vol. 80, no. 4, March/April 1990 is a special issue, "While the Earth Remains...." devoted to ecojustice, with papers on theology and environmental ethics, waste disposal, sustainable agriculture, water quality, climate change. Holmes Rolston contributes a paper, "Wildlife and Wildlands: A Christian Perspective."

Church, Jill Howard. "The Business of Animal Research," The Animals' Agenda 17(no.4, 1997):30. Church spotlights the industries that profit from vivisection but hide from public scrutiny. (v8,#3)

Church, Jill Howard. "The Politics of Animal Research," The Animals' Agenda 17(no.1, 1997):31. The methods and motives of the nation's increasingly aggressive vivisection advocacy groups. (v8,#2)

Church, Jill Howard, "The Elephants' Graveyard: Life In Captivity," The Animals' Agenda 15(no. 4, Sept. 1995):22- . Elephants have killed 21 people in zoos, circuses, and entertainment-related events around the world since 1985. At least 50 persons were injured by elephants in similar venues during that same period. Jill Howard Church, an animal activist and freelance writer in Peachtree City, Georgia, explains why. (v6,#4)

Church, Jill Howard. "In Focus: How the Media Portray Animals." The Animals' Agenda 16, no.1 (1996): 24. How often the media portray animals (and their defenders) as violent and negative. For every program like "The Simpsons" that promotes animal rights, too many reinforce harmful attitudes. But viewers can help turn the tide. (v7, #3)

Ciampitti, Robert A., Jr. "Use of Experts: Proving the New Generation of Environmental Damages." Journal of Environmental Law and Practice 3, no.2 (1995): 48. The hurdle of proving nontangible injuries as a result of toxic exposure through the use of expert testimony. (v7, #3)

Cicchetti, Charles J., and Sepetys, Kristina M. "Measuring the Effects of Natural Resource Damage and Environmental Stigma on Property Value." Journal of Environmental Law and Practice 3, no.2 (1995): 28. Recent cases point to a growing role for "stigma" in pursuing damages for declining property value. (v7, #3)

Cicinsain (Cicin-Sain), Biliana, and Knecht, Robert W. Integrated Coastal and Ocean Management: Concepts and Practices, Washington, D.C.: Island Press, 1998. \$65 cloth, \$32.50 paper. 416 pp. (v9,#2)

Ciesla, W. M., Mbugua, D. K., and Ward, J. D. "Ensuring Forest Health and Productivity: A Perspective from Kenya," Journal of Forestry 93, no. 10 (Oct. 1995): 36- . (Africa)

Ciesla, William A., "Ethics in Photogrammetry and Remote Sensing: A Perspective from a Natural Resource Specialist," Photogrammetric Engineering and Remote Sensing 57(no. 3, March 1991):281-282. Resource managers now face much more complex decisions than before, owing to the intense conflicts in society over which values are to be pursued in environmental management, across a spectrum from more economic output and stability to concern for the other organisms with whom we share the planet. Technicians in photogrammetry and remote sensing have an obligation to take great care to present reliable and unbiased results to society, as a basis for social decisions. They ought not to cloud their conclusions with personal bias. Also, they ought not to overestimate the powers of technology. Following Leopold's land ethic, they also need continually to re-evaluate their "ground truth," that they have a responsibility and role in helping society to manage and protect the resources on which we depend for the common good of our planet and future generations. Ciesla is with the USDA Forest Service, Pacific Northwest Region, Portland, OR.

Cifric, Ivan, "Anthropocentrism and Naturalism--Bases of Modern Thought?" Socijalna Ekologija:

Casopis za ekolosku misao i sociologijska istrazivanja okoline (Social Ecology: Journal for Environmental Thought and Sociological Research) 4(1995):5-34. Published in Zagreb, Croatia. The journal is ordinarily published in Croatian, some articles in German or French, but some issues are in English, as is this one. Based on a study of the convictions of Croatian students, finding and analyzing two main bases of modern thought. The first relies on anthropocentrism, is optimistic, supports progress, projects development. The second is pessimistic, relies on naturalism, and from a moral standpoint contests the existing progress of civilization, advocates saving natural resources, and sees a catastrophic future. Cifric is in the faculty of philosophy, Department of Sociology, University of Zagreb. Other articles in this issue on progress and politics, attitudes toward nuclear power plants, radioactive wastes, and the sense of the quality of life. (v8,#3)

Cifric, Ivan, "Development and Environmental Protection in Croatia," Socijalna Ekologija (Journal for Environmental Thought and Sociological Research) (Zagreb, Croatia) 4(nos. 2-3, 1995):149-170. Most of those surveyed see environmental problems as quite serious and are pessimistic about improvements in the next ten years. But men, religious persons, those who identify with a political party, and those with living standards above average expect more progress, especially after ten years. Depending on the region of Croatia, 19% to 36% think there will be no improvement, and those who favor market models expect that environmental protection will degrade even more. Cifric is on the philosophy faculty at Zagreb. (v6,#4)

Cifric, Ivan. "Relation between Socioenvironmental Orientations and Religious Belief." Socijalna ekologija (Social Ecology: Journal for Environmental Thought and Sociological Research) 4(1995):15-33. (published by the Faculty of Philosophy, Department of Sociology, University of Zagreb, Croatia. In Croatian, with paper summary in English and German. Comparing surveys in 1988 and 1992, there was a decrease in anthropocentric beliefs and an increase of desire for natural balance, though believers in formal congregations were more anthropocentric. Cifric is in philosophy at the University of Zagreb. (v6,#3)

Cinelli, Albert. Review of Moral and Political Reasoning in Environmental Practice. Edited by Andrew Light and Avner de-Shalit. Environmental Ethics 28(2006):439-442. (EE)

Ciochon, Russell and Nisbett, Richard, eds., The Primate Anthology: Essays on Primate Behavior, Ecology, and Conservation from Natural History. Englewood Cliffs, NJ: Prentice-Hall, 1998. Twenty years of field studies and conservation efforts with primates. (v.12,#3)

Claiborne, Margaret L. "Trends & Insights Regulation Consensus: The Expanded Use of Regulatory Negotiation Under the Clean Air Act", Natural Resources & Environment 11(no.2, 1996):44.

Clapp, RA; Crook, C, "Drowning in the Magic Well: Shaman Pharmaceuticals and the Elusive Value of Traditional Knowledge," Journal of Environment and Development 11(no.1, 2002):79-102. (v.13, #3)

Claridge, M.F., Dawah, A.H., Wilson, M.R. eds. Species: The Units of Biodiversity. Washington, D.C.: Smithsonian Institution Press, 1997. 456 pp. \$89.95. An international team of experts provides a detailed account of their ideas on the species concept for selected groups of organisms, from viruses to mammals. (v8,#3)

Clark, Ann Marie, Friedman, Elisabeth J., and Hochstetler, Kathryn, "The Sovereign Limits of Global Civil Society: A Comparison of NGO Participation in UN World Conferences on the Environment, Human Rights, and Women," World Politics 51(No.1, 1998):1-. (v.10,#2)

Clark Ann E. and Hugh Lehman, "Assessment of GM Crops in Commercial Agriculture," Journal of

Agricultural and Environmental Ethics 14(2001):3-28. The caliber of recent discourse regarding genetically modified organisms (GMOs) has suffered from a lack of consensus on terminology, from the scarcity of evidence upon which to assess risk to health and to the environment, and from value differences between proponents and opponents of GMOs. Towards addressing these issues, we present the thesis that GM should be defined as the forcible insertion of DNA into a host genome, irrespective of the source of the DNA, and exclusive of conventional or mutation breeding.

Some defenders of the commercial use of GMOs have referred to the scientific work of GMO critics as "junk science." Such a claim is false and misleading, given that many papers critical of both the utility and safety of GMOs have been published in peer reviewed journals by respected scientists. In contrast, there is a dearth of peer reviewed work to substantiate the frequently heard assertions of either safety or utility in GMOs. The polarity, which now characterizes much of the public discourse on GMOs, reflects not simply scientific disagreement, but also disagreement in underlying value assumptions. Value differences strongly affect the assessment of both benefit and harm from GMOs.

The concept of substantial equivalence occupies a pivotal position in the GMO risk assessment process that is used in both Canada and the US. A GMO judged to be substantially equivalent to a conventional product - as have all submissions to date - is presumed to be safe enough for commercialization. The conclusion of safety - from both human health and environmental perspectives - should be based on scientific evidence, corroborated by actual experimentation. However, regulators infer safety largely from assumptions-based reasoning, with little or no experimental validation. The judgement of safety because of substantial equivalence is a dubious argument by analogy. Keywords: biotechnology, genetic engineering, junk science, risk assessment, substantial equivalence. Clark and Lehman are in the Department of Plant Agriculture, University of Guelph, Guelph, Ontario, Canada. (JAEE)

Clark, B., "Boardman, Robert, The Political Economy of Nature: Environmental Debates and the Social, Society and Natural Resources 15(no.7, 2002): 651-53. (v.13,#4)

Clark, Brad, "Agenda Setting and Issue Dynamics: Dam Breaching on the Lower Snake River," Society and Natural Resources 17(no.7, August 2004):599-609(11). (v. 15, # 3)

Clark, Brett, "Ebenezer Howard and the Marriage of Town and Country: An Introduction to Howard's 'Garden Cities of Tomorrow'", Organization and Environment, 16, (No. 1, 2003): 87-97. An introductory examination of how Ebenezer Howard advocated the construction of garden cities to reduce the alienation of human society from nature. Howard insisted that the long term sustainability of garden cities was founded on abiding by the law of restitution, where all wastes were recycled back to the soil to ensure the continued productive potential of the land. In this, Howard's garden cities dissolved the town-country divide and provided a model for an ecologically sustainable society. Clark is a sociology doctoral student at the University of Oregon.

Clark, Brett & York, Richard, "Dialectical Materialism and Nature: An Alternative to Economism and Deep Ecology," Organization and Environment 18 (no. 3, Sept 2005).

Clark, Brett, and Foster, John Bellamy. "Helen Keller and the Touch of Nature: An Introduction to Keller's 'The World I Live in'", Organization and Environment, 15, (No. 3, 2002): 279-92. The authors provide an introduction to the environmental and social thought of Helen Keller, with its radicalism and invocation of the use of the sensory domain, as an introduction to some extended extracts from her work. Clark is a sociology doctoral student at the University of Oregon. Foster is a professor of sociology at the University of Oregon. (v.13, #3)

Clark, Brett., "The Indigenous Environmental Movement in the United States: Transcending Borders in Struggles Against Mining, Manufacturing, and the Capitalist State". Organization and Environment, 15, (No. 4, 2002): 410-442. Sociql Movement theory emphasizes the importance of resource mobilization

and the strategic political processes of struggles within a society. This critical essay argues that although it yields useful insights into the dynamics involved in a struggle, social movement theory ultimately is too narrow to grapple with all social struggles. The indigenous environmental movement breaks the mould, revealing unconsidered historical forces and variables involved in social struggles. The economic dynamics of capitalism and the history of internal colonialism must be incorporated into an account of the evolution of the indigenous environmental movement. Struggles over treaty rights and sovereignty are unique to the Native population, making their movement one of the most powerful and effective groups for protecting the environment. Although the indigenous environmental movement is connected to other environmental movements, the Native struggle remains fundamentally grounded in a challenge to the whole of society, as presently constituted, as they fight for the survival of their nations and ways of life. Brett Clark is a sociology doctoral student at the University of Oregon with research interests in ecology, political economy and imperialism.

Clark, Brett. Review of Adam S. Weinberg, David N. Pellow & Allan Schnaiberg, "Urban Recycling and the Search for Sustainable Community Development", Organization and Environment 14 (No. 1, March 2001) pp.120-24. Clark is a sociology doctoral student at the University of Oregon. (v.13,#2)

Clark, E. Ann, Review of Ecological Effects of Genetically Modified Organisms, eds. Jaap Weverling and Piet Schenkelaars, Journal of Agricultural and Environmental Ethics 6(1993):103ff.

Clark, E. Ann, "Resolving Conflicting Priorities in Ontario Agriculture", Journal of Agricultural Ethics 1(1988):275-289. Enhancing the viability of nontraditional farm operations, an historically neglected component of the farming community, as well as commercial farms is viewed as one approach to sustaining and improving both the agricultural land base and the agricultural community. Applying resource-extensive rather than resource-intensive approaches to forage management reveals that these apparently divergent priorities are, in fact, interlocking pieces of the same puzzle. Clark is in crop science at the University of Guelph, Ontario.

Clark, E. Ann & Christie, B. R., "A Forage-Based Vision of Ontario Agriculture", Journal of Agricultural Ethics 1(1988):109-121. The necessity of incorporating societal and environmental concerns into publicly funded agricultural initiatives in research, extension, and practice is increasingly evident. Agriculturalists are urged to acknowledge and respond to societal concerns before an insensitive and largely ill-informed urban majority assumes a dominant posture in agricultural policy. Clark and Christie are in crop science at the University of Guelph, Ontario.

Clark, Eric, "The Ballad Dance of the Faeroese: Island Biocultural Geography in an Age of Globalisation," Tijdschrift voor Economische en Social Geografie 95(no. 3, 2004):284-297. In English. The Ballad Dance of the Faeroese (connected with local identity and whale slaughter) is taken as an example of cultural diversity blended with biodiversity, and the Faeroe Islands an example of a distinctive island culture encountering globalisation. What to make of boundaries, of island-ness in a global age? Historical studies of island biocultural geographies provide promising means for probing ties between biological and cultural diversity and enhancing our perceptions of co-evolution under globalisation. Clark is in the Department of Social and Economic Geography, Lund University, Lund, Sweden.

Clark, JA; Hoekstra, JM; Boersma, PD; Kareiva, P, "Improving U.S Endangered Species Act Recovery Plans: Key Findings and Recommendations of the SCB Recovery Plan Project," Conservation Biology 16(no.6, 2002): 1510-1519.

Clark, Jamie Rappaport, "The Ecosystem Approach from a Practical Point of View." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 3, June 1999):679- . (v10,#4)

Clark, John P., "Marx's Inorganic Body," Environmental Ethics 11(1989):243-258. Marx's philosophy of nature does not include an ecological perspective. In the Grundrisse, "Marx repeatedly stresses the theme that historical progress depends on a continual expansion of the human domination of nature" (253). Marx humanizes, but perpetuates, the nonecological dualisms of pre-ecological thought: anthropocentrism, instrumental rationality, and technological liberation. (Katz, Bibl # 2)

Clark, John P. "Marx's Inorganic Body." Environmental Ethics 11(1989):243-58. Attempts to find an authentically ecological outlook in Marx's philosophy of nature are ultimately unsuccessful. Although Marx does at times point the way toward a truly ecological dialectic, he does not himself follow that way. Instead, he proposes a problematic of technological liberation and mastery of nature that preserves many of the dualisms of that tradition of domination with which he ostensibly wishes to break. Clark is at City College, Loyola University, New Orleans, LA. (EE)

Clark, John, "How Wide is Deep Ecology?" Inquiry 39(no. 2, June, 1996):189-201. "Arne Naess's 'rules of Gandhian nonviolence' might usefully be applied to recent debates in ecophilosophy. The 'radical ecologies' have increasingly been depicted as mutually exclusive alternatives lacking any common ground, and many of the hostile and antagonistic attitudes that Naess cautions against have become prevalent. Naess suggests, however, that fundamental differences concerning theory and practice can coexist with a respect for one's opponents, an openness to the views of others, and a commitment to cooperation in the pursuit of mutually held goals. I raise questions about the scope of deep ecology in the light of Naess's non-ideological, 'deep-questioning' approach. First, I ask whether an expanded consideration of the social institutional implications of deep ecology would not increase its depth, relevance and appeal to proponents of other ecologies. Second, I pose the question of whether certain tendencies to define deep ecology in stark opposition to other ecophilosophies have not impeded the original aims of the movement. And, finally, I suggest that possible answers to these questions are implicit in Arne Naess's ecophilosophy." Clark is at Loyola University, New Orleans. (v8,#3)

Clark, John, Review of David Macauley, ed. Minding Nature: The Philosophers of Ecology. Environmental Ethics 20(1998):199-202.

Clark, John, "The Dialectical Social Geography of Elisée Reclus," Philosophy and Geography 1 (1997): 117-142. Clark is professor of philosophy at Loyola University. (P&G)

Clark, Kendall, and Susan Koxacek, "How Do Your Personal Wilderness Values Rate?" International Journal of Wilderness 3(no. 1, 1997):12-13. (v8,#2)

Clark, Mary E. "Tasks for Future Ecologists." Environmental Values Vol.1 No.1(1992):35-46.
ABSTRACT: Apparent conflicts between human jobs and welfare and the interests of wildlife can frequently be resolved if man is perceived as part of Nature rather than in opposition to it. However, social and scientific paradigms emphasize individuality at the expense of connectedness, and competition at the expense of co-operation. Ecologists are well placed to address the important questions of how fast human societies can adapt to change, which cultures are most adaptable, and how satisfactory given adaptations are likely to prove in the longer term. A new perception of time is needed, with serious questioning of such practices as discounting the future. Ecologists may be able to help predict the long-term effects of climate change, not only on the environment, but also on human social systems.
KEYWORDS: Evolutionary change, human ecology, scientific paradigms. Institute for Conflict Analysis and Resolution, George Mason University, Fairfax, VA 22030-4444, USA.

Clark, Stephen R. L., "Apes and the Idea of Kindred," in The Great Ape Project: Equality Beyond Humanity, edited by P.Singer and P.Cavalieri (London: Fourth Estate, 1993), pp.113-25. (v6,#4)

Clark, Stephen R. L., "Global Religion," in Philosophy and the Environment, edited by R. Attfield and A. Belsey (Cambridge: Cambridge University Press, 1994), pp. 113-28. (v6,#4)

Clark, Stephen R. L. The Nature of the Beast: Are Animals Moral? (New York: Oxford University Press, 1992). Reviewed in Environmental Ethics 9(1987):277-79.

Clark, Stephen R. L., "Natural Integrity and Biotechnology," in Human Lives, edited by David Oderberg and J. Laing (London: Macmillan). (v6,#4)

Clark, Stephen R. L., "Modern, Postmodern and Archaic Animals: Zoology: on (Post)Modern Animals," Antwerpen, edited by B. Verschaffel and Mark Vermink, vol.4, no. 93 (Dublin: Liliput Press, 1993), pp. 55-72. (v6,#4)

Clark, Stephen R. L. The Moral Status of Animals (New York: Oxford University Press, 1984). Reviewed in Environmental Ethics 2(1980):179-85.

Clark, Stephen R. L. Review of Animal Rights and Human Morality. By Bernard E. Rollin. Environmental Ethics 5(1983):185-88.

Clark, Stephen R. L., Biology and Christian Ethics. Cambridge: Cambridge University Press, 2000. Clark is concerned to challenge those who claim too much in the name of science, to unmask the ideological commitments of those who imagine that they carry none. By reducing ethics simply to evolutionary or sociobiological impulses, writers such as Richard Dawkins and E. O. Wilson produce a highly distorted account of what it is to be moral, let alone a religious human being. They proffer a highly questionable series of "scientific" explanations.

Clark is further concerned to challenge scientists and theologians alike. Many of us have a deeply distorted and contradictory relationship with other animals. In Clark's theological account of creation all animals are our neighbors. Scientists should not regard animals as the proper subject of experiments, or of biotechnological manipulations, and the rest of us should not eat them. Instead, we should learn to value and respect them as neighbors who share to a greater or lesser degree many of the qualities and capacities that we regard as characteristically human. Clark has a theological commitment to both ecology and vegetarianism. Clark is in philosophy at the University of Liverpool, UK. (v.13,#2)

Clark, Stephen R. L., "Natural Goods and Moral Beauty," in Virtue and Taste: Essays on Politics, Ethics and Aesthetics in Memory of Flint Schier, edited by D. Knowles and J. Skorupski (Oxford: Blackwell, 1993), pp. 83-97. (v6,#4)

Clark, Stephen R. L., "Natural Goods and Moral Beauty," pages 83-97 in Knowles, Dudley and Skorupski, John, eds., Virtue and Taste: Essays on Politics, Ethics and Aesthetics, vol. 2 in the Philosophical Quarterly Supplementary Series. Oxford: Basil Blackwell, 1993. "How can animals set us good examples of how to behave, without being moral agents? About as easily, I might reply, as they can set us good examples in engineering, without being technologists." (p. 85). Animals do not intend to do beautiful things, but their engineering and survival constraints result in their doing beautiful things, and humans with their aesthetic capacities can discover this objective beauty in the world. "My own conclusion is that the Beautiful is indeed a constraint on what can happen, and that natural selection and engineering efficiency have generated--because they were so intended--creatures that can look directly toward the Beautiful, and not merely at its reflection and shadow, natural good. There is indeed a Beautiful that does not die, and all that passes beautifully in the long nightmare of our present living is eternal There" (pp. 94-95). Clark is in philosophy at the University of Liverpool. (v.9,#3)

Clark, Stephen R. L., "Modern Errors, Ancient Virtues," in Ethics and Biotechnology, edited by A. Dyson and J. Harris (Routledge, 1994), pp.13-32. (v6,#4)

Clark, Stephen R. L., "Environmental Ethics," pages 843-868 in Byrne, Peter and Houlden, Leslie, eds., Companion Encyclopedia of Theology (London: Routledge, 1995). (v6,#4)

Clark, Stephen R. L., "Tools, Machines and Marvels," in Philosophy and Technology, edited by Roger Fellows (Cambridge: Cambridge University Press 1995). (v6,#4)

Clark, Stephen R. L., "Enlarging the Moral Community," in Introducing Applied Ethics, edited Brenda Almond (Oxford: Blackwell, 1995). (v6,#4)

Clark, Stephen R. L., How to Think About the Earth: Models of Environmental Theology. Scott-Holland Lectures at Liverpool, 1992 (Mowbrays, 1993). (v6,#4)

Clark, Stephen R.L. Review of Andrew Berry (ed.), Infinite Tropics: An Alfred Russel Wallace Anthology", Organization and Environment, 16, (No. 2, 2003): 261-3. Stephen R.L. Clark is a professor of philosophy at the University of Liverpool, UK.

Connelly, J., "Review of: Patrick McCully, Silenced Rivers: The Ecology and Politics of Large Dams," Environmental Politics 12(no. 1, 2003): 255. (v 14, #3)

Clark, Tim W., Curlee, A. Peyton, and Reading, Richard P., "Crafting Effective Solutions to the Large Carnivore Conservation Problem," Conservation Biology 10 (no. 4, August 1996):940-948. Grizzly bears. Gray wolves. Mountain lions. Wolverines. Five key variables that must be addressed to protect such endangered species: cultural history, valuation, ecology, management systems, and the political process. For example, many of the positive values associated with large carnivores (humans admiring them for their strength, courage, endurance, prowess) are difficult to quantify, and easy to ignore, though important and widely distributed among Americans, while the negative values (the costs of livestock predation) are easy to quantify, localized with a few ranchers, and hard to ignore in political decision-making. The authors are in the School of Forestry and Environmental Studies, Yale University. (v.10,#1)

Clark, Tim W.; Paquet, Paul C., and Peyton, Curlee A. "General Lessons and Positive Trends in Large Carnivore Conservation." Conservation Biology 10, no.4 (1996): 1055. (v7, #3)

Clark, Tim W.; Curlee, A. Peyton; and Reading, Richard P. "Crafting Effective Solutions to the Large Carnivore Conservation Problem." Conservation Biology 10, no.4 (1996): 940. (v7, #3)

Clark, Tim W., "Developing Policy-Oriented Curricula for Conservation Biology: Professional and Leadership Education in the Public Interest," Conservation Biology 15(no.1, 2001 Feb 01): 31-. (v.12,#3)

Clark, Tim W.; Paquet, Paul C.; and Curlee, A. Peyton. "Introduction: Special Section: Large Carnivore Conservation in the Rocky Mountains of the United States and Canada." Conservation Biology 10, no.4 (1996): 936. (v7, #3)

Clark, W, "A Transition Toward Sustainability," Ecology Law Quarterly 27(no.4, 2000):1021-1076. (v.12,#4)

Clark, William C., "America's National Interests in Promoting a Transition to Sustainability: Issues for the New U.S. Administration," Environment 43(no. 1, Jan. 1, 2001):18-26. For humanity to meet the environmental challenges of the 21st century, it must develop a vision of the future that encompasses the multiple dimensions of a global relationship between society and the environment. What is America's role in promoting this transition? Clark is at the John F. Kennedy School of Government, Harvard University.

(v.12,#2)

Clarke, Benedick, Are There Intrinsic Values in Nature?, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Clarke, Donald H. "Relicensing Hydropower: The Many Faces of Competition", Natural Resources & Environment 11(no.2, 1996):8.

Clarke, James, Back to Earth: South Africa's Environmental Challenges. Halfway House: Southern Book Publisher's, 1991. 332 pages. (Africa).

Clarke, James, Back to Earth: South Africa's Environmental Challenges. Halfway House: Southern Book Publisher's, 1991. 332 pages. (Africa).

Clarke, James, Back to Earth: South Africa's Environmental Challenges. Halfway House: Southern Book Publishers (P. O. Box 3103), 1991. ISBN 1 86812 368 5. 332 pages, cloth. Clarke is a journalist in Sandton, Johannesburg. (v6,#3)

Clarke, Melissa, "Ontology, Ethics, and Sentir: Properly Situating Merleau-Ponty," Environmental Values 11(2002):211-225. Maurice Merleau-Ponty did not author an ethic, and yet it is possible to extend his ontological descriptions to an ethic similar to that espoused by post modern thinkers. It is even possible to distill an environmental ethic, or at least, one of consideration of the more-than-human, from his work. This paper attempts to do some preliminary work in light of this, and lays some groundwork for the future direction of an environmental ethic inspired by a Merleau-Pontian ontology. At the same time, it challenges the popularized view of Merleau-Ponty espoused by David Abram--viz., of Merleau-Ponty as an animist--and properly situates Merleau Ponty. (EV)

Clarke, Melissa. Review of The Good-Natured Feminist: Ecofeminism and the Quest for Democracy. By Catriona Sandilands. Environmental Ethics 22(2000):439-440.

Clarke, Melissa. Review of Wayne Ouderkerk and Jim Hill, eds. Land, Value, Community: Callicott and Environmental Philosophy. Environmental Ethics 25(2003):427-430. (EE)

Clarke, Melissa. Review of Peter Wenz. Environmental Ethics Today. Environmental Ethics 25(2003):111-112. (EE)

Claro,Edmundo, "Exchange Relationships and the Environment: The Acceptability of Compensation in the Siting of Waste Disposal Facilities," Environmental Values 16(2007):187-208. Within siting literature there is strong agreement that compensation for environmental risks is a necessary condition for local acceptance of waste treatment facilities. In-kind compensation is commonly pushed forward as being more effective than financial benefits in reducing local opposition. By focusing on the siting of a sanitary landfill in Santiago, Chile, this paper explores the performance of both types of compensation and relates the analysis to the notion of social norms of exchange. These are understood as being based on three main types of social relations: care, justice and freedom. Whereas monetary compensation is associated with market relations based on freedom and the offer of in-kind compensation to egalitarian relations based on justice, the absence of compensation is linked to fraternal relations based on care. It is argued that in-kind compensation is more acceptable than monetary payments or no compensation because people tend to understand siting conflicts more as matters of justice rather than as matters of freedom or care. Claro lives in Santiago, Chile.

Clatworthy, Jonathan, Good God, Green Theology, and the Value of Creation. Oxford, UK: Jon Carpenter, 1997. 234 pages. Committed to discovering the goodness of God and of creation. an

"optimistic theology." (v. 12, #1)

Clatworthy, Jonathon, "Let the Fall Down: The Environmental Implications of the Doctrine of the Fall," Ecotheology No 4 (Jan 1998):27-34.

Claussen, E, "Climate Change: Present and Future," Ecology Law Quarterly 27(no.4, 2000):1373-1382. (v.12,#4)

Claussen, Eileen, "Global Environmental Governance: Issues for the New U.S. Administration," Environment 43(no. 1, Jan. 1, 2001):28- . The magnitude of the global environmental agenda makes it almost impossible for individual institutions and governments to respond effectively. People and organizations need to work together to solve problems and potential crises facing the environment. (v.12,#2)

Claxton, Guy, "Involuntary Simplicity: Changing Dysfunctional Habits of Consumption." Environmental Values 3(1994):71-78. Why is it so difficult for 'voluntary simplicity' to become truly voluntary? It is suggested that an important distinction has to be made between beliefs which are 'espoused' and those which are 'embodied'. Certain crucial systems of embodied beliefs constitute traps, in the sense that they set, invisibly, a person's motivational agenda, and bias perception against their own detection. This analysis makes it clear why certain popular forms of campaigning and education are ineffective; and suggests that some methodologies of self-transformation associated with spiritual traditions such as Buddhism may have much to offer the environmental movement. KEYWORDS: Beliefs, motivation, perception, psychology, voluntary simplicity. Claxton is in education at the University of Bristol, U.K. (EV)

Clayton, Anthony, Review of: Ian Bellany, The Environment in World Politics: Exploring the Limits, Environmental Values 11(2002):110-112.

Clayton, Anthony, and Radcliffe, Nicholas. Sustainability: A Systems Approach. Review by Ian Hodge, Environmental Values 7(1998):245.

Clayton, Anthony. Review of Ted Trainer. Towards a Sustainable Economy. Environmental Values 8(1999):527. (EV)

Clayton, Anthony. "Systems Theory: Some Caveats." Environmental Values 2(1993):159-161. Some of the same words are used to define physical systems, which can be very precisely defined in mathematical terms, and 'hard systems,' which can be fairly well defined, and 'soft system,' where the definition of the system is usually fluid. Confusion arises, for instance, when a physical system and also a social system is called "closed" or "open." Clayton is at the Institute for Policy Analysis and Development, Edinburgh.

Clayton, Anthony. Review of Tony Gibson, The Power in Our Hands. Environmental Values 8(1999):523. (EV)

Clayton, Ellen Wright, "Bioethics of Genetic Testing." In J. Bottrill, ed., The Encyclopedia of Life Sciences. London: MacMillan Press, 2002. Volume 3, pp. 173-178. (v.13,#4)

Clayton, Mark, "Today's Farm Families in Canada Find They Must Innovate, Diversify--or Quit," The Christian Science Monitor 86 (13 July 1994):1, 6. (v5,#3)

Clayton, Mark, "Majesty Under Pressure: Canada's Banff Park," The Christian Science Monitor 86 (7 September 1994): 7, 10-11. Excellent report on the impact of human development on wildlife and

wilderness in the Bow River Valley, Alberta, Canada. The Canadian government has put a two-year moratorium on all new building within the park. (v5,#3)

Clayton, Mark. "Canada Proposes Wildlife Law With Weak Teeth." The Christian Science Monitor, vol. 89, 27, Feb. 1997, p. 6.

Clayton, Mark. "Workers at Ontario Nuclear Plants Asleep at the Switch, Report Says." The Christian Science Monitor, vol. 89, 28 Feb. 1997, p. 7.

Clayton, Mark. "Shrinking Great Lakes: Where Is All The Water Going?" The Christian Science Monitor, vol. 89, 20 Feb. 1997, pp. 1, 9.

Clayton, Mark. "Latest Fish Fight: 'Captain Canada' Takes on Alaska." The Christian Science Monitor, July 12, 1995, pp. 1, 9. (v6,#2)

Clayton, Mark. "Canada to Kill Seals To Aid Cod Fishermen." The Christian Science Monitor, July 6, 1995, p. 7. (v6,#2)

Clayton, Mark. "Canada's Seal Hunt Provokes Ire, Disgust," The Christian Science Monitor, vol. 89, 14 Feb. 1997, p. 7.

Clayton, Patti H., Connection on the Ice: Environmental Ethics in Theory and Practice. Philadelphia: Temple University Press, 1998. 328 pages. \$25 paper. \$70 cloth. With photographs by Charles Mason. An extraordinary whale rescue that reveals a great deal about values and decision making and about how we think of ourselves as human beings. The 1988 rescue of gray whales near Barrow, Alaska, said to be "the most extraordinary animal rescue effort ever undertaken," serves as a touchstone for critical comparisons in an introductory overview of three major traditions of environmental philosophy: extensionism, ecofeminism's "care" ethic, and Heideggerian phenomenology. The unifying narrative of the rescue story is both an engaging vehicle for the study of environmental ethics and a "real world" testament to the multifaceted nature of human-nonhuman relationships. Clayton is affiliated with North Carolina State University and the University of North Carolina. (v9,#2)

Clayton, Tony. Review of R. Douthwaite. Short Circuit: Strengthening Local Economies for Security in an Unstable World. Environmental Values 9(2000):117.

Clemencon, Raymond. "Global Climate Change and the Trade System: Bridging the Culture Gap." The Journal of Environment and Development 4 (no. 1, 1995): 29- . (v6,#1)

Clemencon, Raymond. "Economic Integration and the Environment in Southeast Asia: Securing Gains From Open Markets While Preventing Further Environmental Degradation," The Journal of Environment and Development 6(no.3, 1997):317. (v8,#3)

Clement, Raymond E., ed. Reference Materials for Environmental Analysis. Boca Raton, FL: St. Lucie Press, 1997. 288 pp. \$59.95. This contains all standards, including those for soil, water, gaseous, and biological analysis, worldwide. (v8,#3)

Clement, Roland C. "On the Relationship of Conservation and Preservation." Environmental Ethics 9(1987):285-86. (EE)

Clement, Roland C. "Beyond the Medical Treatment of Wild Animals." Environmental Ethics 8(1986):95-96. (EE)

Clement, Roland C. "On Environmental Ethics and Process Philosophy." Environmental Ethics 23(2001):111-111. (EE)

Clement, Roland C. "On Conservative Misinterpretation." Environmental Ethics 15(1993):371-72. (EE)

Clement, Roland C. "Watson's Reciprocity of Rights and Duties." Environmental Ethics 1(1979):353-55.
Richard A. Watson's proposal that rights inhere only in those who can perform duties is here objected to as being too intellectualistic. Instead, it is suggested that rights inhere in all those who participate in the process of becoming, as A. N. Whitehead proposed half a century ago. Ecological science lends new support to this view. Clement resides at Norwalk, CT. (EE)

Clements, KA, "Charles T. Rubin, ed, Conservation Reconsidered: Nature, Virtue, and American Liberal Democracy," Environmental History 6(no.2, 2001):311-. (v.12,#4)

Clemings, Russell, Mirage: The False Promise of Desert Agriculture. San Francisco: Sierra Club Books, 1996. 256 pages. \$ 28. Agricultural practices in the American West are unsustainable, especially in California and along the Colorado River. There has been enormous waste of water and money, with especially adverse effects in salinization and selenium, combined with poor drainage and adverse effects on wildlife. Irrigation cannot be eliminated, since one third of the world's food relies on it, but there are better ways to do it, for example Israel's drip irrigation system. "Water has no place in the desert; the soil cannot accommodate it. ... On those rare occasions when rain does fall on the desert, the ground rejects it as though allergic." Clemings is an environmental reporter. (v7,#4)

Clemmons, Janine R., Buchholz, Richard, eds. Behavioral Approaches to Conservation in the Wild. New York: Cambridge University Press, 1997. 398pp. \$64. Theoretical and practical arguments for considering animal behavior patterns in attempts to conserve biodiversity. The limits and potentials of behavioral research to conservation, the importance of variation in animal behaviors as a component of biodiversity, and the use of animal behavior to solve conservation problems. (v8,#3)

Clery, Daniel, "Climate Change Demands Action, Says U.K. Report," Science 311 (3 Feb 2006): 592. Based on a meeting convened last year at the request of U.K. Prime Minister Tony Blair, warns of catastrophic consequences if steps are not taken now.

Clery, Daniel. "A Sustainable Future, If We Pay Up Front." Science Vol. 315, no. 5813 (9 February 2007): 782-83. Introduction to a suite of articles on technological possibilities in sustainable energy, often also profiling the researchers.

Clevenger, A.P., Purroy, F.J., Campos, M.A. "Habitat Assessment of a Relict Brown Bear *Ursus Arctos* Population in Northern Spain," Biological Conservation 80(1997):17.

Cliath, AG, Book Review: "Blatter, Joachim, and Helen Ingram, eds. Reflections on Water: New Approaches to Transboundary Conflict and Cooperation," Society and Natural Resources 15(no.5, 2002):465-468. (v.13, #3)

Clifford, Anne M., Introducing Feminist Theology. Orbis, 2001. With a chapter on "Feminist Perspectives on Ecology." Contrary to those who contend that the Hebrew-Christian tradition divorces God from intimate relation with the creation, or gives humans license to exploit nature as they please, Clifford argues for a sacramental vision of the natural world, recognizing that God is known not only through Christ and other human beings, but also through the whole created order. Those who see the divine in nature, as the Bible does, will radically change their attitudes and behavior toward nature.

(v.13,#1)

Clifford, Hal, Downhill Slide: Why the Corporate Ski Industry is Bad for Skiing, Ski Towns, and the Environment. San Francisco: Sierra Club Books, 2002. Fueled by mergers and buyouts, America's corporate ski resorts are more about real estate than ski runs. Skiing morphed from a more or less environmentally benign outdoor experience into a destructive, extractive industry. The ski industry depends on U.S. Forest Service co-operation (also interested in the monetary gains), demands both forests and water and power to make snow. A major resort spends \$ 1 million annually on its power bill for snowmaking and resorts will (if they can) drain the rivers at their lowest flow in winter, adversely affecting riparian ecology. But the money is not made from skiing. The real money is made at the bottom of the ski runs, in the glitzy real estate, now sprawling widely across the valleys below the runs, and also demanding consumption of natural resources, straining the support capacities of the montane ecosystems. Clifford lives in Telluride, Colorado.

Clifford, Mary, ed., Environmental Crime: Enforcement, Policy, and Social Responsibility. Gaithersburg, MD: Aspen Publishers, 1998. 532 pages. With instructor's manual. Ten contributors, the history of environmental protection efforts, case studies to illustrate controversial environmental issues. (v.10,#2)

Clifford, Mary, ed., Environmental Crime: Enforcement, Policy, and Social Responsibility. Gaithersburg, MD: Aspen Publishers (200 Orchard Ridge Drive, 20878), 1998. 560 pages. Seventeen authors, in criminal justice, political science, biology, sociology. Sample chapters: Five Types of Environmental Criminals. Environmental Ethics, Criminal Law, and Environmental Crime. International Environmental Issues. Environmental Crime Research: Where We Have Been, Where Should We Go. Clifford is in criminal justice at St. Cloud State University, MN. (v9,#1)

Clifford, Nick. Review of Nordgren, Science, Ethics, Sustainability: The Responsibility of Science in Attaining Sustainable Development. Environmental Values 9(2000):392.

Climate Change: The IPCC Response Strategies. By the Intergovernmental Panel on Climate Change. Covelo, CA: Island Press, 1991. \$ 55.00 cloth, \$ 34.95 paper. 272 pages. This panel was established in 1988 by the World Meteorological Organization of the United Nations Environment Programme to identify and evaluate a wide range of international strategies for limiting or adapting to climate change, and to review available ways of implementing these strategies. (v2,#3)

Clinebell, Howard. Ecotherapy. Minneapolis: Augsburg Fortress, 1996. Clinebell explores an ecologically grounded theory of personality development, outlines a model for doing ecologically oriented psychotherapy, counseling, medical healing, teaching, and parenting. He suggests how these earthy approaches may be utilized in a variety of social contexts and cultures. (v7,#1)

Clines, Francis, "Mining Deep underground Stirs Protest Above," New York Times (5/4/01): A14. Subsistence from coal mining stirs debate. Underground coal mining in Pennsylvania involves a slow but relentlessly moving "longwall" that produces miles of slag 7 feet high and 1,000 feet wide underground caverns. Frequently the above ground topography drops 3 or 4 feet, resulting in cracked houses, altered streams, and disappearing water wells. In 1999, about 60% of undermined structures were damaged. State law requires compensation and homeowners are given a range of damage-control and buyout options. But they question why they have to tolerate this destruction in the first place.

Legally the coal industry seems to be on firm ground, for mining rights were usually sold by earlier owners around 1900 and they stipulated the owners' obligation to acknowledge the coal companies' undermining rights. A coal company spokesperson maintains that repair and compensation for damaged structures have been adequate and describes the effects of subsistence on people's homes as "sort of like having your bathroom and kitchen done at the same time." Recent studies of the environmental effects of the longwall suggest significant effects on streams, springs, and wetlands. Critics claim the sediment

from longwall mining is a major pollutant of streams negatively affecting breeding grounds of various species, disrupting food webs, and reducing oxygen levels. The coal company spokesperson argues that any damage is temporary and that change, far from being necessarily bad, can even be an enhancement. He dismisses the critics as "a small group of people trying to mount a modern fight against an economic fact of life that is two centuries old." The Pittsburgh seam, one of the richest in the U.S., yields 23 tons of coal a minute and has about 50 years worth of coal left. (v.12,#4)

Clingerman, Forrest. "Beyond the Flowers and the Stones: Emplacement and the Modeling of Nature." *Philosophy in the Contemporary World* Vol. 11, no. 2 (2004): 17-24. Clingerman argues that modeling nature by using Paul Ricoeur's concept of emplacement can help solve some of the problems in defining nature.

Clive Spash, Greenhouse Economics: Values and Ethics, Reviewed by Paul Ekins, Environmental Values 15(2006):119-121.

Cloke, P., "Deliver Us from Evil? Prospects for Living Ethically and Acting Politically in Human Geography," Progress in Human Geography 26(no.5, 2002): 587-604. (v.13,#4)

Cloke, Paul, and Little, Jo, Contested Countryside Cultures: Otherness, Marginalization and Rurality. New York: Routledge, 1998. (v.9,#3)

Clotworthy, B, "Review of: Smith, Eric R.A.N., Energy, the Environment, and Public Opinion," Natural Resources Journal 42(no.4, 2002):981-984.

Clouse, Roberg G., ed., Wealth and Poverty: Four Christian Views. Downer's Grove, IL: InterVarsity Press, 1984.

Clube, Victor, ed., Catastrophes and Evolution (Cambridge University Press, 1990. \$ 44.50. The physical evidence and scientific arguments favoring the view that catastrophic events in the geological past have had a major influence on the course of evolution. Papers are accessible to a general reader interested in natural extinctions. (v2,#1)

Clugston, Richard M., ed. "The Ethics of Genetic Engineering." Earth Ethics 6, no. 1 (Fall 1994): 1, 3-7. Brief contributions (dialogue) by Michael Fox, Thomas Berry, Robert Welborn, Dieter Hessel, and Stephanie Kaza. The common theme is that current genetic engineering research lacks ethical restraint based on respect for the integrity of nature. The contributors were participants in a symposium on 7 May 1994 at the Center for Respect of Life and Environment. (v6,#1)

Clugston, Richard M., "Deep Ecotourism," Earth Ethics, Summer 1993. Tourism has recently become the world's largest industry, surpassing petroleum-related businesses in economic activity. For many nations, tourism is the largest source of foreign income. For some, such as Kenya and Costa Rica, it is practically the foundation of the economy. Over the past few years one sector of the tourist industry has grown dramatically, that of "eco" or "responsible" tourism. Also: lists of resources, and other articles. Clugston is Director, Center for Respect of Life and Environment, Washington, DC. (v4,#3)

Clugston, Rick, "Soul of the Wilderness: Consumption Gone Wild," International Journal of Wilderness 4(no. 2, July 1998):4-6. Consumerism is destroying the wilderness and us. This obsession with owning and consuming more is driving whole worlds of life, consciousness, and experience into extinction. Clugston directs the Center for Respect of Life and Environment, an affiliate of the Humane Society of the United States. (v.9,#3)

Coady, CAJ, "The Moral Reality in Realism," Journal of Applied Philosophy 22 (no. 2, August 2005): 121-136.

Coast Alliance, Muddy Waters--The Toxic Wasteland Below America's Oceans, Coasts, Rivers, and Lakes. Washington, DC: Coast Alliance, 2000. \$ 25.00. (600 Pennsylvania Ave., Suite 340, Washington, DC 20004. Phone: 202/546-9554. E-mail jsavitz@coastalliance.org) Poisons run out of pipes, off the streets, or drift down from the atmosphere. But they do not usually go on to the ocean bottom, where they might do little damage. Tons of these toxic substances remain in the rivers, lakes, and coastal waters, contaminating the water we drink and the fish we eat. (v.11,#1)

Coates, D.J., and K.A. Atkins, "Priority Setting and the Conservation of Western Australia's Diverse and Highly Endemic Flora," Biological Conservation 97(no.2, 2001): 251-. (v.12,#3)

Coates, Ian. Review of Gert Spaargaren, Arthur P.J. Mol & Frederick H. Buttel (Eds.), "Environment and Global Modernity", Organization and Environment, 15, (No. 2, 2002): 209-11. Coates is a trained sociologist and an associate lecturer with the Open University, UK. (v.13, #3)

Coates, Peter A., Nature: Western Attitudes Since Ancient Times. Cambridge: Polity Press, 1998. 246 pages. Social aspects of nature. Philosophy of nature. (v.9,#4) "Reckless deconstruction cuts the ground from under the argument for the preservation of endangered species" (p. 185). Reviewed by Kate Soper, "Respect (or lack of it)?, Radical Philosophy, November/December 1999, pp. 36-39.

Coates, Peter. Nature: Western Attitudes Since Ancient Times. Berkeley: University of California Press, 1998. 256 pp. \$29.95 cloth. Theories of nature from the Classical and Christian eras to the Enlightenment and Romanticism and up to modern times. Coates emphasizes religion and ethics, science, technology economics, gender, and ethnicity. (v.10,#1)

Coatney, Caryn. "Rare Critters in a Wild World Down Under." Christian Science Monitor 89 (22 July 1997): 14. Two Peoples Bay, a gorgeous nature reserve on the southwestern coast of Australia near the town of Albany, is home to many endangered and rarely seen species, including marsupials. (v8,#3)

Coatney, Caryn. "Court-Paves Way for Aborigine Claims on Huge Tracts of Land." The Christian Science Monitor, vol. 89, 29, Jan. 1997, p. 11.

Cobb, Clifford W. and John B. Cobb, Jr., "The Costs of Free Trade," Christian Century 108 (no. 30, October 23, 1991):967-969. The General Agreement on Tariffs and Trade (GATT) will allow transnational corporations to escape environmental responsibility. The transnationals are subject to no government, and move to another country if they dislike the standards of one. They push standards down; no developing nation has the power to raise them higher than the average. Corporations control governments, rather than governments regulating corporations. Clifford Cobb is a free-lance writer; John Cobb is recently retired from Claremont Graduate School in theology. (v2,#4)

Cobb, John B., Jr. Sustainability: Economics, Ecology, and Justice. Maryknoll, NY: Orbis Books, 1992.

Cobb, John B., Jr. Review of Animal Sacrifices. Edited by Tom Regan. Environmental Ethics 10(1988):181-82.

Cobb, John B., Jr., The Earthist Challenge to Economism: A Theological Critique of the World Bank. New York: St. Martins, 1999. 192 pages. \$ 65.00. A penetrating critique of the World Bank in development and environmental conservation, because Cobb hopes that, troublesome though the Bank has been and is, it will "lead the world beyond economism to earthism." History has moved through a series

of epochs, each ordered by a dominant social institution. Each such social institution has developed an ideology that functions as that society's "shared religion." The excesses of this ideology lead to the demise of the dominant institution and the rise of another.

In the medieval period the church governed, and came to dominate with an inordinately self-serving ideology. Social power and authority shifted to the state, and nationalism developed with its own self-aggrandizing tendencies, substituting for religion. Power has now shifted to economic institutions, notably the European Economic Community/Union, the International Monetary Fund, The World Bank, and the World Trade Organization. The assumption is that all people will be better off if market forces replace national policies--economism. But economism is destined increasingly to bring about its own ideological and institutional demise. What's next? Earthism. Earthists "see the health of the Earth, including its human inhabitants, as of supreme importance." Economism, ideologically degenerating, implies that the poor will get poorer and natural environments will continue to be degraded, and consumerism in developed nations will escalate. We ought all to become earthists, and so can, and ought, the World Bank. Cobb analyzes how. He even applauds the bank's current president, James Wolfensohn, for espousing the kinds of values and pushing the bank to embody the kinds of funding priorities that could demonstrate "an earthist paradigm for development." Cobb is emeritus, Claremont School of Theology. (v.10,#2)

Cobb, John B., Jr. Review of Hartshorne and the Metaphysics of Animal Rights. By Daniel A. Dombrowski. Environmental Ethics 11(1989):373-76.

Cobb, John B., Jr. Postmodernism and Public Policy, Chinese translation, translator: Li Ji and Zhang Cheng. Publisher: Social Sciences Documentation Publishing House, 2003.

Cobb, John B., Jr., Review of: Susan Power Bratton, Six Billion & More, Environmental Ethics 16(1994):103-106.

Cobb, John B., Jr. Is It Too Late? A Theology of Ecology. Revised edition. Denton, TX: Environmental Ethics Books, 1995. First edition published by Bruce, a division of Bensinger, Bruce and Glencoe, in 1972. With minor revisions in the main text and an afterword for the new edition, also an updated bibliography. "Is It Too Late? was one of the very few pioneering works in ecological ethics and theology. It remains richly relevant, indicative of the author's seminal insight and foresight. ... Although written for a general audience, it is also an essential resource for ecophilosophers and ecotheologians." -- James A. Nash, The Churches' Center for Theology and Public Policy. Cobb is professor of philosophy at the School of Theology at Claremont. (v6,#1)

Cobb, John, Jr. "Christian Existence in a World of Limits." Environmental Ethics 1(1979):149-58. The new awareness of limits profoundly challenges dominant habits of mind and styles of life. Although Christians have largely adopted these now inappropriate habits and styles, the Christian tradition has resources for a more appropriate response. Among these resources are Christian realism, the eschatological attitude the discernment of Christ, the way of the cross, and prophetic vision. Finally, faith offers freedom from the burden of guilt of failing to live in a way appropriate to our newly perceived reality. Cobb is at the School of Theology and Claremont Graduate School, Claremont, CA. (EE)

Cobb, John B., Jr., Sustaining the Common Good: A Christian Perspective on the Global Economy. Cleveland, OH: Pilgrim Press, 1995. 128 pages. \$ 12.95. Globalization is destroying our capacity to maintain vital human communities. To avoid catastrophe, we must decentralize by adopting policies that promote relatively self-sufficient local economies. The scale of economic activity in today's world already exceeds that which ought to prevail in a world that limits its uses of resources to sustainable levels. We are robbing future generations in order to improve conditions for ourselves. The self-interested behavior of buyers and sellers in most markets today is an almost insurmountable barrier to the

task of building vital human communities. When workers and owners of capital are taught to seek the largest possible return for their efforts, they make possible the specialization and productivity for which laissez-faire capitalism is famous, but at the expense of constant disruption to the fabric of community. Theologically, Cobb faults the existing economic system for focusing primarily on human production rather than on creation, putting God's gifts of nature at considerable risk of degradation. The Earth is God's and degrading it is evil, a result of economism as an idolatry. Cobb is a well-known theologian, retired from Claremont Graduate School. (v6,#4)

Cobb, John B., Jr. Review of Animal Rights: A Christian Assessment of Man's Treatment of Animals. By Andrew Linzey. Environmental Ethics 2(1980):89-93.

Cobb, John B., Jr. Review of Bent World: A Christian Response to the Environmental Crisis. By Ron Elsdon. Environmental Ethics 4(1982):359-62.

Cobb, John B., Jr. "Against Free Trade," Theology and Public Policy 4(no.2, 1992).

Cobb, John B., Jr., "Toward a Just and Sustainable Economic Order." Journal of Social Issues, vol. 51, no. 4, Winter 1995. (v8,#2)

Cobb, John B., Jr., Sustainability: Economics, Ecology, and Justice. Maryknoll, NY. Orbis Books, 1992. Paper \$ 16.95. Cloth \$ 39.95. Can a liveable society be sustainable? How to move beyond anthropocentrism without surrendering humanity's unique contribution to the globe. Does Christianity have anything to say about living in today's world of limits. Cobb is emeritus professor of theology at Claremont School of Theology. Reviewed in Environmental Ethics 15(1993):359-62. (v3,#3)

Cock, J 1994. Christian witness and ecology. International Review of Mission 83:328, 89-92. (Africa)

Cock, J 1992. Towards the greening of the church in South Africa: Some problems and possibilities. Missionalia 20:3, 1741-85. (Africa)

Cock, Jacklyn, and E. Koch, eds., Going Green: People, Politics and Environment in South Africa. Cape Town: Oxford University Press, 1991. (v6,#3)

Cock, Jacklyn, "Towards the Greening of the Church in South Africa: Some Problems and Possibilities." 26 page typescript, in press, available from the author, who is at the Department of Sociology, University of the Witwatersrand, 1 Jan Smuts Avenue, Johannesburg, South Africa. Probably the principal paper available for assessing the power and prospects for Christianity as a force for environmental conservation, as well as for human development, in South Africa. The author has also formed, with Eddie Koch of the Johannesburg Weekly Mail, GEM, Group for Environmental Monitoring, that seeks to do research in and provide education for environmental issues in South Africa, especially as this affects those who have been the victims of apartheid. (v2,#4)

Cock, Jacklyn. *The War Against Ourselves: Nature, Power and Justice*. Johannesburg: Wits University Press, 2008. Cock claims that we need to reexamine human relationships with nature by questioning binary divisions such nature vs. culture, people vs. animals, and economic growth vs. environmental protection. She argues that we need a new inclusive politics to bring social and environmental justice together with peace.

Cockell, Charles S. "The Value of Microorganisms." Environmental Ethics 27 (2005):375-390. Environmental Ethics has almost exclusively been focused on multicellular organisms. However, because microorganisms form the base of the world's food chains, allowing for the existence of all higher organisms, the complexities of the moral considerability of microorganisms deserve attention. Despite the

impossible task of protecting individual microorganisms—the paradigmatic example of the limitations to a Schweitzerian "reverence for life"—microorganisms can be considered to have intrinsic value on the basis of conation, along with their enormous instrumental value. This intrinsic value even manifests itself at the individual level, although in this case the ethic can only be regulative (an ethical principle). Biocentrism is the most appropriate ethical framework for microorganisms, and the most useful normative framework for implementing the preservation and conservation of microorganisms. This ethic has implications for how we deal with disease-causing microorganisms. (EE)

Cockell, Charles S., "The Rights of Microbes," Interdisciplinary Science Reviews 29(2004):141-150. "A strong case can be made for microorganisms to be accorded special ethical status, as they represent the base of all food chains and of the major biochemical cycles. Without life there is no life, but without microorganisms there can be no higher life forms. The notion of protecting individual microorganisms may be absurd, but microbial communities and ecosystems nevertheless deserve protection, and offer an example of the merits of a population based approach to environmental ethics. I argue that humankind should assume the position of a moral agent to the microbial world, by formally recognizing the intrinsic worth of microorganisms, as well as their utilitarian value to humans and to the rest of life on earth. The practical implications of such an ethic are discussed." Cockell is with the British Antarctic Survey, Cambridge, UK.

Cockell, Charles, "The Rights of Microbes," Interdisciplinary Science Reviews 29(2004):141-150.

Cockell, Charles S. "The Ethical Relevance of Earth-like Extrasolar Planets." Environmental Ethics 28(2006):303-314. The discovery of Earth-sized extrasolar planets orbiting distant stars will merit an expansion of the sphere of entities worthy of moral consideration. Although it will be a long time, if ever, before humans visit these planets, it is nevertheless worthwhile to develop an environmental ethic that encompasses these planets, as this ethic reflects on our view of life on Earth and elsewhere. A particularly significant case would be a planet that displays spectroscopic signatures of life, although the discovery of many lifeless planets might itself intensify the value of life on Earth. A derivation of Schweitzer's general principle of "reverence for life" and similar frameworks are appropriate ethics with which to view extrasolar planets. The development of an ethical framework for extrasolar planets might provide a means to fashion a deeper and more effective environmental ethic for Earth's biosphere. (EE)

Cockell, Charles S., "Environmental Ethics and Size," *Ethics and the Environment* 13(no. 1, 2008):23-39. Environmental policy has a size bias. Small organisms, such as microorganisms, command less attention from environmentalists than larger organisms, such as birds and large mammals. A simple thought experiment involving microscopic polar bears and giant microorganisms illustrates the importance of size in environmental ethics. Given the positive correlation between body size and brain size, there is probably a basis for a size bias in environmental ethics using ethical frameworks based on conations. This paper examines the relevance of the size of organisms in environmental ethics. It emphasizes the need to understand the theoretical reasons for the importance of size, and not to base a size bias merely on a subjective anthropocentric prejudice favouring large organisms. Charles Cockell is Professor of Microbiology at the Open University, UK

Cocklin, Chris, and Meg Keen, "Urbanization in the Pacific: Environmental Change, Vulnerability and Human Security," Environmental Conservation 27(no.4, 2001 Dec 01): 392-. (v.12,#3)

Cocks, Douglas, Use with Care: Managing Australia's Natural Resources in the Twenty First Century. Kensington, N.S.W.: New South Wales University Press, 1992. 344 pages. Cocks is a research scientist with the Division of Wildlife and Ecology, CSIRO (Commonwealth Scientific and Industrial Research Organization) in Canberra.

Code, Lorraine, *Ecological Thinking: The Politics of Epistemic Location*. Oxford Univ Press, 2006. How could ecological thinking animate an epistemology capable of addressing feminist, multicultural, and other post-colonial concerns? Starting from an epistemological approach implicit in Rachel Carson's scientific practice, Code elaborates the creative, restructuring resources of ecology for a theory of knowledge. Drawing on ecological theory and practice, on naturalized epistemology, and on feminist and post-colonial theories, Code analyzes extended examples from developmental psychology, and from two "natural" institutions of knowledge production—medicine and law. These institutions lend themselves well to a reconfigured naturalism. They are, in practice, empirically-scientifically informed, specifically situated, and locally interpretive. With human subjects as their "objects" of knowledge, they invoke the responsibility requirements central to Code's larger project. Code is Distinguished Research Professor, York University, Toronto

Code, Lorraine. "Flourishing," Ethics and the Environment 4(1999):63-72. Commentary on Chris Cuomo, and puzzles about the metaphor of "flourishing," central in Cuomo's book title: Feminism and Ecological Communities: An Ethic of Flourishing" (London: Routledge, 1998). (E&E)

Codling, Rosamunde, "Concepts of Wilderness in the Antarctic," International Journal of Wilderness 3 (no. 3, 1997):35-39. Tourists visiting by ship carry their accommodation and their means of propulsion with them, but while they may be spectators to the wilderness that is the land, they live and move through the wilderness that is the sea. Wilderness needs to be seen in a global context, as part of a continuum of human impact that begins with highly urban areas and ends with remaining pristine regions. Codling is a landscape planner, Scott Polar Research Institute, Cambridge University. (v.8,#4)

Coggins, George Cameron, and Glicksman, Robert L. "Power, Procedure, and Policy in Public Lands and Resources Law," Natural Resources & Environment 10(no.1, Summer 1995):3- . (v6,#4)

Coggins, George C., "Regulating Federal Natural Resources: A Summary Case Against Devolved Collaboration," Ecology Law Quarterly 25(No.4, 1999):602-. (v.10,#2)

Coglianesse, C; Nash, J, "Policy Options For Improving Environmental Management In The Private Sector," Environment 44(no.9, 2002): 10-23.

Coglianesse, Cary, "The Constitution and the Costs of Clean Air," Environment 42(no. 9, Nov. 1, 2000):32- . The U.S. Environmental Protection Agency has issued thousands of regulations and enforcement actions under the authority of the Clean Air Act. But is this act constitutional? (v.12,#2)

Coglianesse, Cary, "The Limits of Consensus: The Environmental Protection in Transition: Toward a More Desirable Future," Environment 41 (no. 3, 1999):28-33. Efforts to develop consensus-based recommendations in environmental policy through a series of dialogues with leaders from industry, government, think tanks, and environmental groups are floundering. It will help to get clear on the limits of consensus in the development of environmental policy. Coglianesse is in Public Policy, John F. Kennedy School of Government, Harvard. (v.10,#2)

Coglianesse, Cary. "Implications of Liberal Neutrality for Environmental Policy." Environmental Ethics 20(1998):41-59. The principle of liberal neutrality requires governments to avoid acting to promote particular conceptions of the good life. Yet by determining who uses natural resources and how, environmental policy makers can affect the availability of resources needed by individuals to carry on meaningful lives and in doing so can effectively privilege some versions of the good life at the expense of others. A commitment to liberal neutrality by implication promotes environmental policy that accommodates competing activities in order to provide a wide range of resources that can support

diversity in individual lives. It also encourages caution with regard to legislation based on deep ecology, the intrinsic value of species, and the fear of impending environmental catastrophe. Coglianese is at Harvard University, School of Government. (EE)

Cohen, Andrew I., "Dependent Relationships and the Moral Standing of Nonhuman Animals," *Ethics and the Environment* 13(no. 2, 2008):1-21. This essay explores whether dependent relationships might justify extending direct moral consideration to nonhuman animals. After setting out a formal conception of moral standing as relational, scalar, and unilateral, I consider whether and how an appeal to dependencies might be the basis for an animal's moral standing. If dependencies generate reasons for extending direct moral consideration, such reasons will admit of significant variations in scope and stringency. Cohen is in philosophy, Georgia state University.

Cohen, Benjamin R., "Escaping the False Binary of Nature and Culture Through Connection: Richard White's *The Organic Machine: The Remaking of the Columbia River*," *Organization and Environment* 18 (no. 4, Dec 2005).

Cohen, Carl and Regan, Tom., eds., *The Animal Rights Debate*. Lanham, MD: Rowman and Littlefield, 2001. Part I. In Defense of the Use of Animals, Carl Cohen. Includes why animals do not have rights, the moral inequality of species, and the good that animal experimentation does. Part II. The Case for Animal Rights, Tom Regan. Defends animal rights, condemns animal exploitation. Cohen is in philosophy, University of Michigan, Ann Arbor. Regan is in philosophy, North Carolina State University. (v.12,#4)

Cohen, Carl, and Tom Regan. *The Animal Rights Debate*. Translators: Yang Tongjin and Jiang Ya. (Beijing: Chinese Politics and Law University Press, 2005). (in Chinese)

Cohen, Jack D., "Preventing Disaster: Home Ignitability in the Wildland-Urban Interface," *Journal Of Forestry* 98 (No. 3, Mar 01 2000): 15- . Fires area major concern at the wildland-urban interface. New research has implications for hazard assessment, risk mapping, effective mitigation, and reducing residential losses. (v.11,#2)

Cohen, Jeremy, *Be Fertile and Increase, Fill the Earth and Master It": The Ancient and Medieval Career of a Biblical Text*. Ithaca, NY: Cornell University Press, 1989 cloth, paper 1991. 375 pages. The history of the famous "subdue and conquer" text in Genesis, from a Jewish perspective and from antiquity through the Reformation, in law, exegesis, homily, theology, mysticism, philosophy, and poetry. Cohen seeks to dispel the notion that the Genesis story must bear responsibility for Western insensitivity to the natural environment. Cohen is professor of Jewish history at The Ohio State University. (v3,#3)

Cohen, Joel E., *How May People Can the Earth Support?* New York: Norton, 1995. 531 pages. An extensive study. Past human population growth. Human population history in numbers and graphs. The uniqueness of the present relative to the past. (Ninety percent of the increase in human numbers since the beginning of time has occurred since 1650, in fewer than 350 years.) Projection methods: The hazy crystal ball. How successful have past predictions been? Scenarios of future population. What do we know for sure about the future of global population. Eight estimates of human carrying capacity. Carrying capacity in an ecological age and applied ecology. Human choices; the distribution of material well-being. Water. Natural constraints and time. How to slow human population growth. Cohen is in the Laboratory of Populations, Rockefeller University. (v9,#2)

Cohen, Joel E., *How Many People Can the Earth Support?* New York: Norton, 1995. 532 pages. Past human population growth. Four evolutions in population growth. The uniqueness of the present relative to the past. Future human population growth. Projection methods. Scenarios of future population. The

human carrying capacity of the earth. Eight estimates. A survey of four centuries. Human choices. Water. Natural constraints and time. (v9,#1)

Cohen, Joel E. "Population Growth and Earth's Human Carrying Capacity." *Science* 269(1995):341-345. Earth's capacity to support people is determined both by natural constraints and by human choices concerning economics, environment, culture (including values and politics), and demography. Human carrying capacity is therefore dynamic and uncertain. Human choice is not captured by ecological notions of carrying capacity that are appropriate for nonhuman populations. Simple mathematical models of the relation between human population growth and human carrying capacity can account for faster-than-exponential population growth followed by a slowing population growth rate, as observed in recent human history. Estimates of how many people Earth can carry have varied widely, from 1 to 100 billion, and estimates published in 1994 alone varied from 3 to 44 billion. The human population may be entering a zone where limits on the human carrying capacity of Earth will be encountered. The statement that "every human being represents hands to work, and not just another mouth to feed" does not specify the cultural, environmental, and economic resources available to make additional hands productive and therefore does not specify by how much the additional hands can increase or decrease human carrying capacity. An excellent, compact, summary article that everyone concerned with population growth ought to read. Cohen is in the Laboratory of Populations, Rockefeller University. (v6,#3)

Cohen, John, "Center Puts Hold on Mangabey Experiments," *Science* 314(3 November, 2006):743-744. Yerkes National Primate Research Center in Atlanta has temporarily withdrawn a request to conduct experiments on sooty mangabey monkeys that could unravel the biochemistry by which HIV causes AIDS. The U.S. Fish and Wildlife Service considers the sooty mangabey an endangered species. SIV, similar to HIV, naturally infects the mangabeys but rarely causes harm. Yerkes has 200 mangabeys and wished to use up to 20 animals for invasive surgery research, requiring eventually killing them. They do routinely draw blood from mangabeys for research. They also still hope to do the research.

Cohen, Jon, "Researchers Urged Not to Inject Virulent HIV Strain into Chimps," *Science* 283(1999):1090-1091. Previous HIV injections produce infections but do not make the chimps sick; newer strains do, and provide (some say) more realistic models of the human disease. A coalition of prominent AIDS researchers and primatologists (including Jane Goodall) have urged researchers not to use such strains "from both a scientific and an ethical standpoint." One researcher says, "The prospect of causing a rapidly progressive and fatal disease in this near-human species is abhorrent." With text of the letter of protest, p. 1117. (v.10,#1)

Cohen, Jon. "NIH to End Chimp Breeding for Research." *Science* Vol. 316, no. 5829 (1 June 2007): 1265. The NIH will end chimp breeding for research, claiming care for the 650 animals is too expensive. There had already been a moratorium on such breeding. Animal welfare groups welcome the decision, even while NIH officials deny that they made the decision on ethical grounds. Many researchers decry the decision, claiming that much benefit to human medicine can yet be gained from chimp research. This captive population will die out, although private facilities also have about 500 chimps.

Cohen, Jon. "The Endangered Lab Chimp." *Science* Vol. 315, no. 5811(26 January 2007): 450-52. A decline in the number of chimpanzees available for biomedical research in the U.S. has sparked a growing debate on the opportunities and costs of studies with our closest relatives. Most primate researchers now consider invasive experiments with chimps unethical, in most circumstances. But medical researchers reply that, nevertheless, primate research has led to enormously valuable medical advances in the past and may well do so in the future. It may also be unethical to forego such research.

Cohen, Jon. "NIH to End Chimp Breeding for Research." *Science* Vol. 316, no. 5829 (1 June 2007): 1265. The US National Institutes of Health (NIH), the world's largest funder of chimpanzees used in

biomedical research, has announced that it will phase out such research.

Cohen, Maurie, Review of Erickson, Kai, A New Species of Trouble: Explorations in Disaster, Trauma, and Community. Environmental Values 5(1996):276-278. (EV)

Cohen, Maurie, and Murphy, Joseph, eds. Exploring Sustainable Consumption: Environmental Policy and the Social Sciences. Amsterdam: Elsevier Science, 2001. Over a dozen contributors. Part III is "Values, Ethics and Sustainable Consumption." (v.12,#4)

Cohen, Maurie J., Review of: Russell J. Dalton et al., Critical Masses: Citizens, Nuclear Weapons Production, and Environmental Destructions in the United States and Russia, Environmental Values 11(2002):513-515.

Cohen, Maurie J., Review of Hajer, Maarten A., The Politics of Environmental Discourse. Reviewed by Maurie J. Cohen. Environmental Values 6(1997):111-113. (EV)

Cohen, Maurie J. "Science and Society in Historical Perspective: Implications for Social Theories of Risk MAURIE." Environmental Values 8(1999):153-176. ABSTRACT: Over the past decade risk society theory has become increasingly prominent within the field of environmental social theory. This perspective contends that conventional political divisions based on class are becoming less salient and are giving way to a politics predicated upon the distribution of risk. There is much in risk society theory, especially its central contention that public anxieties about high consequence-low probability events undermine the legitimacy of science, that has a distinctly German stamp. Through a comparative analysis of how national context has differently shaped science as a public epistemology this paper suggests we should tread carefully in moving to accept the general applicability of this theoretical approach. KEYWORDS: Environmental sociology, public understanding of science, scientific mentality, Germany, Britain. J. COHEN, Department of Geography and Environmental Studies Program Binghamton University Binghamton, NY 13902, USA and Oxford Centre for the Environment, Ethics & Society Mansfield College Oxford OX1 3TF, UK. (EV)

Cohen, Maurie J. "The Spatial Distribution of Toxic Chemical Emissions: Implications for Nonmetropolitan Areas," Society & Natural Resources 10(1997):17.

Cohen, Maurie J. Review of Mary O'Brien. Making Better Environmental Decisions: An Alternative to Risk Assessment. Environmental Ethics 25(2003):211-214. (EE)

Cohen, Maurie J. Editorial Introduction: "Risk, Culture and Social Theory in Comparative Perspective." Environmental Values 8(1999):127-134. (EV)

Cohen, Michael P., "Blues in the Green: Ecocriticism under Critique," Environmental History 9(no. 1, 2004):9-36. "At bottom, ecocriticism needs to import scientific authority in order to combat two positions, 1) that culture can be a refuge from nature, and 2) that nature is merely a cultural construction." (p. 18) Cohen is well-known as an environmental author and is visiting professor of literature and environment at the University of Nevada, Reno.

Cohen, Michael P. The Pathless Way: John Muir and American Wilderness. Reviewed in Environmental Ethics 10(1988):267-70.

Cohen, Michael J., "Integrated Ecology: The Process of Counseling with Nature," The Humanistic Psychologist 21(1993):277-295. Most personal, social, and environmental stress results from estrangement from nature. A new ecology training program address this challenge. Counseling students in natural areas over thirty years has produced nearly a hundred unique nature-connecting activities that

renew fifty inherent sensory fulfillments, for rejuvenation of biological and spiritual integrity. Cohen is with the World Peace University, San Juan Island, Washington. Michael Cohen, P. O. Box 4112, Roche Harbor, WA 98250. (v5,#2)

Cohen, Michael. Reconnecting with Nature. 1995. Contact Project NatureConnect, P. O. Box 1605, Friday Harbor, WA 98250. Phone 360/378-6313. Email: nature@pacificri.net. 262 pages. \$ 19.50. "An integration of ecology and psychology that lets thoughtful sensory contacts with Earth catalyze wellness, spirit and responsibility." (v8,#1)

Cohen, MJ, "Review of: Humphrey, Craig, Tammy L. Lewis, and Frederick H. Buttel. Environment, Energy, and Society: A New Synthesis," Society and Natural Resources 16(no.1, 2003): 83-86.

Cohen, MP, "Blues in the Green: Ecocriticism under Critique", Environmental History 9 (no.1, 2004): 9-36.

Cohen, Stephen and Grace, Damian, "Engineers and Social Responsibility: An Obligation to Do Good," IEEE (Institute of Electrical and Electronics Engineers) Technology and Society Magazine 13 (no. 3, Fall 1994):12-19. With increasing concern about the environment, "social responsibility" has become an integral part of scientific and engineering endeavor. Engineers, both individually and collectively, have not only a duty to minimize harm, but, according to the very nature of their profession, a duty to do good. Includes the code of Ethics, The Institution of Engineers, Australia. Cohen is with the School of Philosophy and Grace with the School of Social Work, University of New South Wales, Sydney, Australia. (v.10,#1)

Cohen, W.B., "Integrating Remote Sensing and Ecology," BioScience 54(no.6, 1 June 2004):483-483(1). (v. 15, # 3)

Cohen, W.B.; Goward, S.N., "Landsats Role in Ecological Applications of Remote Sensing," BioScience 54(no.6, 1 June 2004):535-545(11). (v. 15, # 3)

Cohen, Warren B., Wallin, David O., Fiorella, Maria. "Two Decades of Carbon Flux from Forests of the Pacific Northwest," Bioscience 46(no.11, 1996):836. Estimates from a new modeling strategy. (v8,#1)

Cohen, Warren, ed., Ethics in Thought and Action: Social and Professional Perspectives. New York: Ardsley House, Publishers, 1995. 318 pages. Section 6 is "Ethics and the Environment," and contains a section on acid rain and one on Lao Zi and the Dao de Jing (sic), nothing else, a somewhat curious combination as an introduction to environmental ethics in thought and action. Cohen is in philosophy at the University of Hawaii at Manoa. (v5,#4)

Cohn, Avery, Jonathan Cook, Maragita Fernández, Rebecca Reider, Corrina Steward, eds. *Agroecology and the Struggle for Food Sovereignty in the Americas*. International Institute for Environment and Development, the IUCN Commission on Environmental, Economic and Social Policy, and the Yale School of Forestry & Environmental Studies, 2006. Available online at: <<http://www.iied.org/pubs/pdfs/14506IIED.pdf>>. Contents include: (1) "Sustainability and Social Justice in the Global Food System: Contributions of the Yale Workshop" by Kathleen McAfee, (2) "Food Security and Trade Reconceived" by Corrina Steward and Jonathan Cook, (3) "An Expanding Interface with Agriculture Will Change Global Conservation" by Karl S. Zimmerer, (4) "A Whole-System View of Agriculture, People, and the Rest of Nature" by Richard Levins, (5) "Academia and Social Movements" by Avery Cohn, (6) "Voices From the North and South: Finding Common Ground" by Rebecca Reider, (7) "Case Study: Tales From Guatemala" by Eric Holt-Giménez, (8) "Case Study: Food Sovereignty in the Mixteca Alta" by Phil Dahl-Bredine, (9) "Food Security and Food Sovereignty: Production,

Development, Trade” by Rebecca Reider, (10) “Farming, Forests, and Biodiversity” by Avery Cohn, (11) “New Farmers, New Consumers, New Networks” by Corrina Steward, (12) “Case Study: From Local to National: Scaling Up Agroecology in Brazil” by Jean Marc von der Weid, (13) “Case Study: Living the Amazonian Dream: Breaking Boundaries through Market-Oriented, Small-Scale Agroforestry” by Corrina Steward, (14) “Case Study: Cultivating Community, Food, and Empowerment: Urban Gardens in New York and Havana” by Margarita Fernández, (15) “Food Sovereignty” by Kathleen McAfee, (16) “Farmer Identity, Organizations, and Networks” by Seth Shames, (17) “Changing Pressures on International Trade” by Kelly Coleman, (18) “Relationships Between Export Markets and Local Self-Reliance” by Jonathan Cook, (19) “Urban/Rural and Producer/Consumer Relations and Food Systems” by Alder Keleman, (20) “Education and the Diffusion of Agroecological Practices” by Rebecca Reider, (21) “Practicing Agroecology, Using Local Knowledge” by Margarita Fernández, (22) “New Farmers” by Avery Cohn, (23) “Biodiversity, Conservation, and Ecosystem Services” by Corrina Steward, (24) Interview with Alberto Gómez Flores, National Union of Autonomous Regional Peasant Organizations (UNORCA), (25) Interview with Ronaldo Lec, Mesoamerican Permaculture Institute (IMAP), (26) Interview with Jesús León Santos, Integral Peasant Development Center of the Mixteca (CEDICAM), (27) Interview with José Montenegro, International Center for Sustainable Rural Development (CIDERS), and (28) Interview with George Naylor, National Family Farm Coalition (NFFC).

Cohn, J. P., "Resurrecting the Dammed: A Look at Colorado River Restoration," Bioscience 51(no.12, 2001): 998-1004. (v.13,#2)

Cohn, J. P., "Joint Ventures: A Different Approach to Conservation," Bioscience 55(no. 10, October 2005): 824-827.

Cohn, J. P., "Tiff over Tamarisk: Can a Nuisance Be Nice, Too?" Bioscience 55(no. 8, August 2005): 648-655.

Cohn, Jeffrey P., "Saving the Salton Sea," Bioscience 50 (No. 4, 2000 Apr 01): 295-. (v.11,#4)

Cohn, Jeffrey P., "Urban Wildlife," BioScience 55(no.3, March 2005):201-205(5).

Cohn, Jeffrey P., "Saving the California Condor" Bioscience 49(no. 11, Nov 01 1999):864-. (v10,#4)

Cohn, JP, "Environmental Conflict Resolution," Bioscience 52(no.5, 2002):400-404. (v.13, #3)

Cohn, JP, "Jewel in the Rough: Pristine Prairie on a Working Ranch," BioScience 56 (no. 1, January 2006): 8-11.

Cohn, JP, "Sonoran Desert Conservation," Bioscience 51(no. 8, 2001):606-611. (v.13,#1)

Cohn, Priscilla M., Review of Gary L. Francione, Animals, Property and the Law. Environmental Ethics 19(1997):319-322. (EE)

Cohn, Susan, Green at Work: Finding a Business Career that Works for the Environment, rev. ed. Washington, DC: Island Press, 1995. Includes environmentally focused, nontechnical careers in a wide array of fields--communications, banking and finance, consulting, public policy, and more. Cohn is environmental careers coordinator in the Office of Career Development, New York University. (v6,#4)

Cohn-Sherbok, Dan, "A Jewish Response," Ecotheology No 9 (July 2000):103-106.

Colborn, Theo, Dianne Dumanoski, and John Peterson Myers, Our Stolen Future. New York; Dutton, Penguin Books, 1996. Claims there is a large and growing body of scientific evidence linking synthetic

chemicals in the environment to aberrant sexual development and behavioral and reproductive problems. Much of the evidence studies animals and ecological effects, but there are important implications for human health as well. Leading medical journals point ominously to hormone-disrupting chemicals' effect on human health and fertility. There are low sperm counts, infertility, genital deformities, hormonally triggered cancers of the breast and prostate gland, and neurological disorders in children, such as hyperactivity and deficits in attention, also developmental and reproductive problems in wildlife. The National Academy of Sciences has established an expert panel to assess the threats. With a forward by Vice-President Al Gore. Colborn is a scientist with the World Wildlife Fund; Dumanoski a journalist with the Boston Globe; Myers directs a foundation on global environmental protection and was formerly a zoologist with the National Audubon Society. (v7,#2)

Colborn, Theo, Dumanoski, Dianne, Myers, John Peterson. Our Stolen Future: Are We Threatening Our Fertility, Intelligence, and Survival?--A Scientific Detective Story. New York: Penguin Books USA, 1996. (v.7,#4)

Cole, D. N., "Paradox of the Primeval: Ecological Restoration in Wilderness," Ecological Restoration 18(2000):77-86. (v.12,#4)

Cole, D. N., "Ecological Manipulation in Wilderness: An Emerging Management Dilemma," International Journal of Wilderness 1(no. 1, 1995):12-16. (v.12,#4)

Cole, D.C., R.E.G Upshur, and Gibson, B.L. "Detective Work." Alternatives 25(No.3, Summer 1999):26- . Environmental contaminants are important contributors to ill health, but it is not easy to identify the culprits and measure their effects. (v10,#4)

Cole, David N., "Ecological Manipulation in Wilderness--An Emerging Management Dilemma," International Journal of Wilderness 2, no. 1 (May 1996):15-18. As anthropogenic disturbance of wilderness intensifies, managers must increasingly face the dilemma of choosing between the goals of restoring pristine conditions and avoiding conscious manipulation of ecosystems. At the crux of this dilemma are questions about the value of wilderness as a reference area of baseline and what wilderness should provide a reference to. Cole is a research biologist with the Aldo Leopold Wilderness Research Institute, Missoula, MT. (v7,#2)

Cole, David N., "Wilderness Recreation in the United States--Trends in Use, Users, and Impacts," International Journal of Wilderness 2 (no. 3, December, 1996):14-18. Visitor evaluations of wilderness conditions and their management preferences have been highly stable over time. The vast majority of visitors are extremely satisfied with their wilderness visits and rate trip quality as very good. (v8,#1)

Cole, David N., "Management Dilemmas That Will Shape Wilderness in the 21st Century," Journal of Forestry 99(no.1, 2001 Jan 01): 4-. The future of the wilderness system hinges on how we compromise between recreational access and wilderness protection. (v.12,#3)

Cole, Luke, "The Theory and Reality of Community-Based Environmental Decisionmaking: The Failure of California's Tanner Act and Its Implications for Environmental Justice," Ecology Law Quarterly 25(No.4, 1999):733-. (v.10,#2)

Cole, MA; Elliott, RJ, "Determining the trade-environment composition effect: the role of capital, labor and environmental regulations," Journal of Environmental Economics and Management 46(no.3, 2003):363-383. (v.14, #4)

Cole-King, Adam, "Costal and Marine Conservation in Britain: Ecology and Aesthetics, Land and Sea".

Environmental Values 3(1994):139-153. The long standing division of official responsibility in Britain, between the scientific and aesthetic aspects of environmental conservation has obscured more fundamental distinctions within conservation, such as its many different objectives and ethical bases. Public administration of conservation in Britain has recently been reorganized, but the question of the administrative status of the coast and sea has yet to be properly addressed. Consideration of the diverse needs of environmental conservation shows that traditional perceptions of the coast need to be radically reappraised. KEYWORDS: Conservation, environmental perception, coasts natural heritage, seascape. Cole-King is in maritime studies and international transport at the University of Wales, Cardiff. (EV)

Colebrook, Michael, "Building Bridges: Ernst Haeckel and the New Millennium," Ecotheology No 10 (Jan 2001):85-96.

ColeKing, Adam (Cole-King), "Marine Conservation: A New Policy Area," Marine Policy 17 (no. 3, May, 1993):171-185. The ethical bases for marine conservation, as well as background perceptions of the marine environment, as this affects policies, institutions, and implementation. There is no clear ethical or philosophical basis to guide marine conservation. The principal points of contention in environmental ethics are whether the duty to protect the environment is because it is intrinsically valuable or because it provides for human needs. If ecocentrism and enlightened self-interest require the same practical results, the ethical debate is of academic interest only. If not, it is extremely important. The chances are that it is extremely important, since it seems unlikely, based on past performance, that collective self-interest can ever be sufficiently enlightened to preserve all our future environmental options. Cole-King is in the Department of Maritime Studies and International Transport, University of Wales, Cardiff. (v5,#4)

Coleman, Daniel A., Ecopolitics, Chinese translation, translator: Mei Junjie. Publisher: Shanghai Translation Publishing House, 2002.

Coleman, Earle J. "Is Nature Ever Unaesthetic?" Between the Species 5:138-146. Examines four models of aesthetic appreciation of nature: the contextual-ecosystem model, Kant's phenomenological model, Bosanquet's expressionist model, building to argue for a metaphysical model that provides a more inclusive account of aesthetic experiences of nature. Coleman is in the department of religion and philosophy at Virginia Commonwealth University, Richmond. (v1,#1)

Coleman, Earle J., "Is Nature Ever Unaesthetic?" Between the Species 5 (1989): 138-146. An examination of four models of aesthetic appreciation, all supplying negative answers to the title question. (Katz, Bibl # 2)

Coleman, Jon T., Vicious: Wolves and Men in America. New Haven: Yale University Press, 2005. A historian chronicles three centuries of Europeans interacting with wolves, finding the European view massively a social construction, and also more revealing of a "vicious" dimension in humans than in wolves. Europeans arrived with a millennia long mythological wolf lore, "the big bad wolf," and projected this mythology onto America wolves, which they exterminated as a menacing evil. But they did so with sadistic passion, with "wolf bullets" or meat hooks to ensure slow, tortuous deaths. When they captured wolves alive, they dragged them behind horses, set them on fire, or released them with their mouths and genitals wired shut. Death was not enough; the Europeans insisted on torture. Coleman interprets this as Europeans believing that to conquer a savage wilderness, one must act savagely. So they were licensed and required to act with enthusiastic cruelty. "People are vicious to the core ... Wolf killing confirms people's knack for generating pain and suffering." Meanwhile, of course, these vicious people have restored the wolf to parts of the landscape and repented of their past. Coleman is a University of Notre Dame historian.

Coleman, William G., Mattice, Jack, Brocksen, Robert W. "Soule's Conservation Biology as the

Foundation for Econometric Ecosystem Management," Conservation Biology 10(no.6, 1996):1494. (v8,#1)

Coleman, William D., Atkinson, Michael M., Montpetit, Eric. "Against the Odds: Retrenchment in Agriculture in France and the United States," World Politics 49(no.4, 1997):453. (v8,#3)

Coles, T, "Tourism, Recreation and Sustainability: Linking Culture and the Environment," Land Use Policy 19(no.3, 2002): 269-271.

Coley, Rebekah Levine, Kuo, Frances E., Sullivan, William C. "Where Does Community Grow? The Social Context Created by Nature in Urban Public Housing," Environment and Behavior 29(no.4 1997):468. (v8,#3)

Colfer, C. J. Pierce, Peluso, N., Chung, C. S. Beyond Slash and Burn: Building on Indigenous Management of Borneo's Tropical Rain Forests. Bronx, NY: The New York Botanical Garden, 1997. \$25 cloth. What is the world giving up when tropical rain forests are destroyed? The author ponders this question from the view of the Uma Jalan Kenyah, an indigenous people of eastern Borneo, by taking a look at the complex management systems they have developed for tropical forests. The many uses the Kenyah make of the various states of forest regrowth, the under-recognized benefits gained from the forest, and the forest's value beyond that which is attached to it by outsiders. (v7,#4)

Colfer, Carol J. Pierce. *Human Health and Forests: A Global Overview of Issues, Practice and Policy*. London: Earthscan Publications, 2008. Colfer provides an introduction to issues concerning the relationship between the health of people and the health of forests, particularly in Africa, Asia, and South America.

Collar, N. J., M. J. Crosby, and A. J. Stattersfield, Birds to Watch 2. Washington, DC: Smithsonian Institution Press, 1994. 320 pages. \$ 25.00 paper. 1,200 birds that are globally threatened. Revised from a 1988 edition. (v6,#4)

Collar, N. J., "Beyond Value: Biodiversity and the Freedom of the Mind." *Global Ecology & Biogeography* Vol. 12, no. 4 (2003): 265-69. "Moreover, though the conservation cause be estimable, it is not generally to be ranked alongside the greater immediate struggles for human health, wealth and rights (struggles that are better expressed in the negative against disease, poverty and political repression).... Indeed, where the interests of conservation and human welfare are perceived to be in direct conflict, an almost universal sense of scandalized revulsion attaches to the idea that animals or habitats or landscapes might ever be thought to have legitimacy over people."

Collett, David, "Pastoralists and wildlife: Image and Reality in Kenya Maasailand." Pages 129-148 in Anderson, David and Grove, Richard, eds. Conservation in Africa: People, Policies and Practice. Cambridge: Cambridge University Press, 1989. In Kenya the creation of many National Parks and Game Reserves has had a substantial impact on people who previously used the land for grazing. Some worry whether wildlife ought to take precedence over human welfare.

Collett, Jonathan, and Stephen Karakashian, eds., Greening the College Curriculum: A Guide to Environmental Teaching in the Liberal Arts. Washington, DC: Island Press, 1995. 320 pages. \$ 22.00. Integrating environmental concerns in undergraduate teaching in the various humanistic disciplines. Chapters on anthropology, biology, economics, geography, history, literature, journalism, philosophy, political science, and religion. Each chapter has a rationale for including material on the environment, guidelines for constructing a course or a section of a course, sample course plans, a compendium of annotated resources. Holmes Rolston wrote the chapter on philosophy. Collett teaches humanities at the

State University of New York/College at Old Westbury. Karakashian is with the Rainforest Alliance in New York City. (v6,#4)

Collett, Jonathan and Stephen Karakashian, eds., Greening the College Curriculum A Guide to Environmental Teaching in the Liberal Arts. Washington, DC Island Press, 1996. 320 pages. Paper, \$ 22.00. Cloth, \$ 40.00. Environmental literacy requires integrating environmental issues into disciplines not traditionally thought of as being "environmental" in the liberal arts (and into humanist biology). Rationales, guidelines, sample plans for courses, annotated resources, both print and nonprint. David Orr (Oberlin College), "Reinventing Higher Education"; William Blake (Tulane University), "Anthropology"; David G. Campbell and Vern Durkee (Grinnell College), "Biology"; Gerald Alonzo Smith (Mankato State University), "Economics"; Lisa Naughton-Treves (University of Florida) and Emily Young (University of Texas), "Geography"; John Opie (New Jersey Institute of Technology) and Michael Black (Harvey Mudd College), "History"; Vernon Owen Grumbling (University of New England), "Literature"; Karl Grossman (SUNY/College at Old Westbury) and Ann Filemyr (Antioch College), "Media/Journalism"; Holmes Rolston, III (Colorado State University), "Philosophy"; Michael E. Kraft (University of Wisconsin at Green Bay), "Political Science"; Steven Rockefeller (Middlebury College), "Religion"; Jonathan Collett (SUNY/College at Old Westbury), "Reinventing the Classroom." Collett teaches comparative humanities. Karakashian is coordinator for higher education at The Rainforest Alliance, New York City. (v6,#3)

Collier, Ute, "Sustainability, Subsidiarity and Deregulation: New Directions in EU Environmental Policy," Environmental Politics (Summer 1997):1-. (v.8,#4)

Collier, Ute. "Towards a Sustainable Energy Future?" Environmental Politics 4(Winter 1995):280. (v7,#2)

Collinge, Sharon K., and Chris Ray, eds., Disease Ecology: Community Structure and Pathogen Dynamics. Oxford: Oxford University Press, 2006. Community structure and ecology in the emergence of pathogens. One often has to know as much about the ecology as about the microbes. The editors are at the University of Colorado, Boulder.

Collins-Chobanian, Shari. Review of Faces of Environmental Racism: Confronting Issues of Global Justice. Edited by Laura Westra and Peter S. Wenz. Environmental Ethics 21(1999):325-328.

Collins-Chobanian, Shari. Review of The Struggle for Ecological Democracy: Environmental Justice Movements in the United States. Edited by Daniel Faber. Environmental Ethics 22(2000):319-322.

Collins-Chobanian, Shari. "Beyond Sax and Welfare Interests: A Case for Environmental Rights." Environmental Ethics 22(2000):149-168. In "The Search for Environmental Rights," Joseph Sax argues that each individual should have, as a right, freedom from environmental hazards and access to environmental benefits, but he makes clear that environmental rights do not exist and their recognition would truly be a novel step. Sax states that environmental rights are different from existing human rights and argues that the closest analogy is welfare interests. In arguing for environmental rights, I follow Sax's direction and draw from the work of those who are the most relevant in establishing environmental rights. I consider Joel Feinberg's notion of welfare interests, Henry Shue's notion of basic rights, and James Nickel's right to a safe environment. I draw from Mill's harm principle, the superfund legislation, and the Clean Air Act to illustrate the existing ethical and legal bases for establishing environmental rights. Finally, I discuss positive and negative duties that such rights might carry. (EE)

Collins, Denis and Barkdull, John. "Capitalism, Environmentalism, and Mediating Structures: From Adam Smith to Stakeholder Panels." Environmental Ethics 17(1995):227-244. How can an environmental

ethic be developed that encompasses the concerns of both free market proponents and environmentalists? In this article we approach the environment-market debate using Adam Smith's writings in *The Theory of Moral Sentiments*, *The Wealth of Nations*, and *Lectures on Jurisprudence*. Smith's guiding principle for solving prominent conflicts of self-interest is that government intervention is required when the economic activities of some cause harm to others. The solution that follows from Smith's analysis is a government-funded, independent, democratically controlled, and democratically accountable mediating structure that derives impartial decisions and is authorized to impose its just and fair decisions on affected parties. In practical terms, this analysis provides the ethical foundation for the wide-ranging development of stakeholder panels composed of public interest group representatives and business representatives and empowered to develop solutions to public conflicts arising out of environmental problems. Collins is at the School of Business, University of Wisconsin-Madison. Barkdull is in the department of political science, Texas Tech University, Lubbock. (EE)

Collins, Joseph, Lear, John. "Free Market Miracle or Myth? Chile's Neo-Liberal Experiment", *The Ecologist* (1979) 26(no. 4,1996):156. Chile has been hailed as shining example of the successful application of free market policies. Since the 1970s, the public sector has been privatized, price controls lifted, government spending slashed and markets liberalized. Social and economic realities in Chile, however, are at odds with the rhetoric of the free marketeers. Income disparities between rich and poor have become worsen; the country's health care and welfare system has been dismantled; and control over Chile's natural resources has been concentrated in the hands of wealthy national and foreign interests, to the detriment of the environment.

Collins, N. M. and J. A. Thomas, *The Conservation of Insects and Their Habitat*. London: Academic Press, 1991. (v7,#2)

Collins, N. Mark, Jeffrey A. Sayer, Timothy C. Whitmore, eds., *The Conservation Atlas of Tropical Forests: Asia and the Pacific*. By the World Conservation Union (IUCN). New York: Simon and Schuster, 1991. 256 pages, 55 maps. \$ 95.00. (v3,#4)

Collins, Paul, *God's Earth: Religion as if Matter Really Mattered*. North Blackburn, Victoria, Australia: Dove, 1995. 280 pages. (v7,#1)

Collins, Terry, "Toward Sustainable Chemistry," *Science* 291(5 January 2001):48-49. "Chemistry has an important role to play in achieving a sustainable civilization on Earth ... which current chemistry education essentially ignores. It has become an imperative that chemists lead in developing the technological dimensions of a sustainable civilization." Technological chemistry tends to be simple, nondegradable, and toxic, biochemistry tends to be complex and recyclable. "To achieve such sustainable chemistry requires a sea change in the chemical community." Collins teaches "green chemistry" at Carnegie-Mellon University in Pittsburgh. (EE v.12,#1)

Collins-Chobanian, Shari, ed., *Ethical Challenges to Business as Usual*. Prentice-Hall, 2005 (June 2004). Section 2 is on "Human Rights and Environmental Challenges to Development," Includes such articles as: Thomas Donaldson, "Moral Minimums for Multinationals"; James Nickel, "The Human Right to a Safe Environment"; Shari Collins-Chobanian, "Beyond Sax and Welfare Interests: A Case for Environmental Rights"; and Vandana Shiva, "Development, Ecology, and Women." Collins-Chobanian is a philosopher at Arizona State University West.

Collins-Chobanian, Shari. Book Review of *Democracy and the Claims of Nature*. Edited by Ben A. Minteer and Bob Pepperman Taylor. *Environmental Ethics* 26(2004):433-436. (EE)

Collins-Chobanian (Collins-Chobanian), Shari. Review of *Environmental Injustices, Political Struggles*.

Edited by David E. Camacho. Environmental Ethics 22(2000):319-322.

Colomeda, Lori. See Lambert Colomeda, Lorelei Anne.

Colorado Institute of Public Policy. *Water in 2025: Beliefs and Values as a Means for Cooperation*. Living in the Rocky Mountain West, 2006. Water is the limiting resource in the Rocky Mountain West, and public policy concerning water reflects citizens' beliefs and values. These are diverse, and the way forward is not polarization but recognizing common interests. This document surveys water users, key findings, key agreements and disagreements, water sustainability, and more streamlined and responsive institutions. This document is available online at:
<http://www.cipp.colostate.edu/pdf/CIPP_Water_2025_www_Final2.pdf>.

Colten, CE, "Reintroducing Nature to the City: Wetlands in New Orleans," Environmental History 7(no.2, 2002):226-246. (v.13, #3)

Colvin, RA, "Community-Based Environment Protection, Citizen Participation, and the Albany Pine Bush Preserve," Society and Natural Resources 15(no.5, 2002):447-454. (v.13, #3)

Colwell, Tom, "The Ecological Perspective in John Dewey's Philosophy of Education." Educational Theory 35, no. 3 (Summer 1985): 255-265. Dewey has often been thought of as an anthropocentric social thinker; indeed his pragmatic instrumentalism is cited as an antithesis of an environmental perspective. Colwell argues that a proper understanding of Dewey's sense of organism-environment interaction suggests just the opposite conclusion. "Dewey's position is a unitary conception of nature which includes both ... the human community and the nonhuman biophysical environment" (p. 256). Dewey's naturalism tends to eliminate the old dualism of man and nature, performing a Copernican Revolution that places man firmly in nature. Indeed, for Colwell, Dewey's theory of education is itself ecological: "Education consists of those special human organism-environment interactions that are conducive to an expanding awareness of the situationally related organism-environment conditions that promote growth" (p. 265). (Katz, Bibl # 1)

Colwell, Tom, "The Ethics of Being Part of Nature" Environmental Ethics 9(1987):99-113. Colwell suggests that environmental philosophers rarely take seriously their claim that man is part of nature. Once understood, this idea ends the duality between man and nature, and renders these concepts obsolete. The search for intrinsic value in nature is just another example of this outmoded dualistic thinking. "All values are instrumental. The important intellectual and moral question is which instrumental value is best suited to promoting the activity of environment complexes in ways that are responsive to the life requirements of all its members" (p. 109). (Katz, Bibl # 1)

Colwell, Tom. "The Ethics of Being Part of Nature." Environmental Ethics 9(1987):99-113. Most environmental philosophers acknowledge that humans are part of nature; yet few have grasped the significance of the idea fully, and as a result it remains ambiguous. I argue that when taken to include humans and their culture, the idea supports philosophical naturalism as an alternative to dualism and provides a new approach to environmental ethics capable of meeting popular objections to naturalism in ethics. Naturalism, I conclude, requires a new way of thinking about nature, and by implication greater care in the choice of language used to talk about nature. Colwell is in the department of Cultural Foundation, New York University, NY, NY. (EE)

Committee on Protection and Management of Pacific Northwest Anadromous Salmomids, National Research Council. Upstream: Salmon and Society in the Pacific Northwest. Washington, D.C.: National Academy Press, 1996. 472pp. \$44.95. A wealth of informative graphs and charts and historical perspective to clarify a contemporary issue. Salmon biology and geography; the impacts of human

activities; values, attitudes, and conflicting desires for short-term economic gain and long-term environmental health; and the impact of hatcheries.

Committee on Characterization of Wetlands, National Research Council. Wetlands: Characteristics and Boundaries. Washington, D.C.: National Academy Press, 1995. 328pp. \$37.95. How to define wetlands; a rational, scientific basis for delineating wetlands in the landscape; and recommendations for further action. The book also discusses the diverse and beneficial hydrological and ecological functions of wetlands and examines the controversial no-net-loss policy.

Committee on Scientific Issues in the Endangered Species Act, National Research Council. Science and the Endangered Species Act. Washington, D.C.: National Academy Press, 1995. 288pp. \$39.95. This book analyzes concepts of species and how they have been interpreted for purposes of the ESA, examines conflicts between species when individual species are identified for protection, and assesses extinction risk and decisions under the ESA. It concludes with a look beyond the Endangered Species Act and suggests additional means of biological conservation and ways to reduce conflicts. (v8,#1)

Committee on Environmental Issues in Pacific Northwest Forest Management, National Research Council. Forests of the Pacific Northwest. Washington, D.C.: National Academy Press, 1997. 350pp. \$44.95. Explores the markup role of Pacific Northwest wood products and looks at the implications if other regions should be expected to make up for reduced timber harvests. The book reviews the health of the forested ecosystems of the region, evaluating the effects of past forest use patterns and management practice. It also discusses the biological importance, social significance, and management of old-growth as well as late-succession forests.

Common, M.S., R.K. Blamey and T.W. Norton, "Sustainability and Environmental Valuation." Environmental Values Vol.2 No.4(1993):299-334. ABSTRACT: For economists, sustainability and environmental valuation are connected in two ways. At the micro level, proper environmental valuation is required if projects are to be approved and rejected consistently with sustainability requirements. This is cost-benefit analysis. At the macro level, many take the view that sustainability requires that national income measurement be modified so as to account for environmental damage. Such natural resource accounting is possible only if environmental damage is valued for incorporation into the economic accounts. The paper reviews the techniques that economists have developed for environmental valuation. In regard to cost-benefit analysis and sustainability, it is noted that the technique on which most interest focuses, the Contingent Valuation Method, involves the extension of the domain of consumer demand analysis to include the natural environment. Contributions questioning the appropriateness of this are reviewed, and it is argued that they merit more attention from economists than they have received to date. In regard to natural resource accounting, it is argued that while there is little prospect of it achieving what its proponents claim for it, the modelling that it necessarily implies has the potential both to clarify valuation issues and play an important role in informing the policy process. KEYWORDS: Sustainability, valuation, environment, contingent valuation, natural resource accounting, optimization. Centre for Resource and Environmental Studies, Australian National University, Canberra, ACT 0200, Australia.

Common, Michael, Sustainability and Policy. Reviewed by Richard B. Norgaard. Environmental Values 6(1997):105-106. (EV)

Common, Mick, and Sigrid Stagl, Ecological Economics: An Introduction, Reviewed by Arild Vatn, Environmental Values 15(2006):527-529.

Commoner, Barry, Making Peace with the Planet. New York: Pantheon Books, 1990. \$ 19.95. (v1,#2)

Complete Guide to Environmental Careers, The CEIP Fund, Lee P. DeAngelis, Project Director, et al. Published by Island Press, Washington, D. C. and Covelo, CA. 1989. A 331-page guide to careers in environmental fields. Useful to share with students who are interested in environmental conservation and wondering how to make a living at it, who would like to apply their philosophy and environmental ethics at work. (v1,#1)

Compson, Jane F., Whose Pain, Which Morality? A Defense of the Moral Considerability of Animals Using a Coherence Model of Ethical Justification. M.A. Thesis, Colorado State University, 2005. In a search for a sound theoretical justification for the equal consideration of animals, moral realism and foundationalism are rejected as implausible. First general accounts to raise the moral status of animals (such as those of Peter Singer and Tom Regan) are beset by related difficulties. The coherence approach, demonstrated by second generation ethicists (such as Bernard Rollin and David DeGrazia) is defended. The epistemological differences between the realist and the coherence approach are exemplified with a discussion on value; the coherence approach is more plausible, though it does have to be defended against relativism. The coherence approach is applied to the counter-intuitive arguments of Peter Carruthers, showing that the coherence approach does not lead to a relativist free-for-all, but provides firm evaluative criteria for making moral judgments without having to postulate objective, mind-independent truths. Compson is in philosophy at the University of Central Florida, Orlando.

Comstock, G. L. "An Extensionist Environmental Ethic," Biodiversity and Conservation 4(no.8, Nov. 1995):827- . (v6,#4)

Comstock, Gary, ed. Is There a Moral Obligation to Save the Family Farm? 14(1992):275-78.

Comstock, Gary L., "Is it Unnatural to Genetically Engineer Plants?" Weed Science 46(1998):647-651. Eight arguments against genetic engineering of plants are considered. For example: To engage in plant engineering is to play God. But the argument fails because, if so, playing God is not always a bad thing. For example: To engage in plant engineering is illegitimately to cross species boundaries. But species are regularly transmogrifying themselves to produce new species. For example: To engage in plant engineering is unnatural because it disrupts the integrity, beauty, and balance of creation. This objection has much to commend it, but it is not an intrinsic objection. Plant engineering might have such consequences, but it need not. In sum, those opposed to genetic engineering of plants will have a hard time finding justification for their case in the unnaturalness objection, and they may best help to advance the conversation by focusing instead on consequences. Comstock is in philosophy and religious studies, Iowa State University, Ames. (v.10,#3)

Comstock, Gary, guest editor, Ethics and Agricultural Biotechnology: Opposing Viewpoints, Journal of Agricultural and Environmental Ethics, vol. 4(1991), no. 2.

Comstock, Gary L., "Research with Transgenic Animals: Obligations and Issues," Journal of BioLaw and Business 2(Autumn 1998):51-54. (v.10,#3)

Comstock, Gary L., Vexing Nature? On the Ethical Case Against Agricultural Biotechnology. Dordrecht: Kluwer Academic Publishers, 2000. Comstock earlier opposed transgenics in biotechnology more so than he does now. Now he takes a cautious approach, judging the balance of probable good over harm. (EE v.12,#1)

Comstock, Gary, "The Costs and Benefits of bGH May Not Be Distributed Fairly", Journal of Agricultural and Environmental Ethics 4(1991):121-130. In a debate: Will the costs and benefits of bovine growth hormone be distributed fairly? Also: Tweeten, Luther, "The Costs and Benefits of bGH Will Be Distributed Fairly", Journal of Agricultural and Environmental Ethics 4(1991):108-120. In a debate: Will the costs and benefits of bovine growth hormone be distributed fairly?

Comstock, Gary L. "Do Agriculturalists Need a New, an Ecocentric, Ethic?" Agriculture and Human Values 12 (Winter 1995): 2-16. In 1973, Richard Sylvan began his seminal essay, "Do We Need a New, an Environmental Ethic?" with these words: "It is increasingly said that...Western civilization...stands in need of a new ethic...setting out people's relations to the natural environment." In the intervening years, it has increasingly been said that Western civilization is in need of ecocentrism, an ethic according to which a thing's value is derived from its contribution to the integrity, stability, and beauty of ecosystems. Comstock argues that ecocentrism is an inadequate ethic for agriculturalists, and suggests they look instead to "extensionists," or animal rights philosophers, for guidance regarding our relations to the natural environment. Comstock is Associate Professor of Religious Studies at Iowa State U. and Head of the ISU Bioethics Program. The article is an expanded version of his 1994 presidential address to the Agriculture, Food, and Human Values Society. (v6,#3)

Comstock, Gary, editor, "Might Morality Require Veganism?", Journal of Agricultural and Environmental Ethics, theme issue, vol.7, no.1.

Comstock, Gary L., "Agricultural Ethics." In Craig, Edward, ed., Routledge Encyclopedia of Philosophy. London: Routledge, 1998. (v.10,#3)

Comstock, Gary, "Genetically Engineered Herbicide Resistance, Part Two", Journal of Agricultural Ethics 3(1990):114-146. Should we continue to support publicly funded research on genetically engineered herbicide resistant crops? In Part One, I discussed the difference between science and ethics, presented a brief history of weed control, and explained three moral principles undergirding my environmentalist perspective. I then argued that unqualified endorsement of the research is unjustified, as is unqualified opposition. In Part Two I argue against qualified endorsement and for qualified opposition. Comstock is in philosophy at Iowa State University, Ames.

Comstock, Gary, Vexing Nature: On the Ethical Case Against Agricultural Biotechnology. Reviewed by Sandler, Ronald, Environmental Values 12(2003):403-405. (EV)

Comstock, Gary, L., ed., Life Science Ethics. Ames, Iowa: Iowa State Press, 2002. Part 1. Ethical Reasoning. Part 2. Life Science Ethics. Environment (Lily-Marlene Russow). Food (Hugh LaFollette and Larry May). Animals (Gary Varner). Land (Paul Thompson). Biotechnology (Fred Gifford). Farms (Charles Taliaferro). Part 3. Case Studies. Rare plants, marine mammals. Infant deaths in developing countries. Edible antibiotics in food crops. Veterinary euthanasia. Hybrid corn. Golden rice. Organ transplantation. Magnanimous Iowans. Comstock formerly in philosophy, Iowa State University, is now Director, Ethics Program, and professor of philosophy, North Carolina State University.

Comstock, Gary L., "Theism and Environmental Ethics." In Quinn, Philip L. and Charles Taliaferro, eds., A Companion to Philosophy of Religion, pp. 505-513. Cambridge, MA: Blackwell Publishers, 1997. Theistic metaphysical beliefs that construe God as enemy, owner, and redeemer of nature seem to incline more to an anthropocentric environmental ethic while those that see God as nature's husband, embodiment, or identity seem to lean more to ecocentrism. However, there seems to be little in the way of necessary or logical entailment between one's view of God and one's environmental ethics. The psychological dependence may run in exactly the opposite direction; our intuitions about the environment may do more to shape our views of God than our intuitions about God do to shape our attitudes to nature. Comstock is in philosophy at Iowa State University. (v8,#1)

Comstock, Gary L., (ed.), Life Science Ethics (Iowa State Press, Ames, 2002). Reviewed by Mark W. Fisher., Journal of Agricultural and Environmental Ethics 19(2006):199-201. Fisher is with Kotare Bioethics, Hastings, New Zealand. (JAEE)

Conard, R, "Review of: Matthew Dalbey. Regional Visionaries and Metropolitan Boosters: Decentralization, Regional Planning, and Parkways During the Interwar Years", Environmental History 9 (no.1, 2004): 148-149.

Conca, Ken, Albery, Michael, and Dabelko, Geoffrey D., eds. Green Planet Blues: Environmental Politics from Stockholm to Rio. Boulder, CO: Westview Press, 1995. Ecology and the structure of the international system. Prospects for international environmental cooperation. From ecological conflict to environmental security. Ecological justice. (v8,#2)

Conca, Ken and Geoffrey D. Dabelko, eds., Environmental Peacekeeping. Baltimore: Johns Hopkins University Press, 2002. In conjunction with the Woodrow Wilson Center Press.

Cone, J., A Common Fate: Endangered Salmon and the People of the Pacific Northwest. New York: Henry Holt, 1995.

Cone, Richard A., Martin, Emily. "Corporeal Flows: The Immune System, Global Economies of Food & Implications for Health," The Ecologist (1979) 27(no.3 1997):107. Allergies and autoimmune disorders are increasing in incidence worldwide, especially among the urban poor. Changes in food production, transport and consumption may be contributing to this increase. Research into the connections between diet and the immune system has therefore become urgent; it may suggest ways to reduce the incidence or severity of such disorders by changing what we eat and the global food system. (v8,#3)

Connelly, W. Thomas and Chaiken, Miriam S., "Intensive Farming, Agro-Diversity, and Food Security Under Conditions of Extreme Population Pressure in Western Kenya," Human Ecology 28 (No. 1, 2000 Mar 01): 19- . (v.11,#4)

Congressional Forum on Wetlands Loss, Renewable Resources Journal, Summer 1989. Selected short articles. "Of the more than 200 million acres of wetlands which existed in the lower 48 States when the United States was settled, more than half--nearly 100 million acres--have been converted." "Three-fourths of the remaining wetlands in the continental U. S. are privately owned. Only about 0.5 percent of privately owned wetlands are under some form of conservation protection." See below for wetlands video. (v1,#4)

Conley, Verena Andermatt, Ecopolitics: The Environment in Poststructuralist Thought. London and New York: Routledge, 1997. 188 pages. Poststructuralist European thought, although often thought to have no concern for the environment, actually has complex but hidden ties to ecology. Conley reviews and rejects the disparagements of ecology by Ferry and Baudrillard, emphasizing rather the explicit ecological aspects of Levi-Strauss's thought. She traces ecological themes through H el ene Cixous and Luce Irigaray, defending a feminist perspective. (v8,#3)

Conlon, James, Earth Story, Sacred Story. Mystic, CT: Twenty-Third Publications, 1993. 128 pages. Paper. \$ 12.95. A spirituality of Earth that rediscovers sacred origins and reawakens respect for the planet. Conlon is director of the Institute in Culture and Creation Spirituality at Holy Names College, Oakland, California. (v4,#4)

Conn, P. Michael, and Parker, James, "Animal Rights: Reaching the Public," Science 282(20 November 1998):1417. The lead editorial in this issue of Science. "A misguided cause ... now seeks to end biomedical research because of the theory that animals have rights precluding their use in research. Scientists need to respond forcefully to animal rights advocates, whose arguments are confusing the public and thereby threatening advances in health knowledge and care. There is little logic in emotional

campaigns to end the practice of animal experimentation. A 1990 study found that although 63% of animal rights literature concerns the use of animals in science, such use each year involves 0.003 percent of the number of animals consumed for food. Only half as many animals undergo medical procedures in research as endure surgery ordered by pet owners for cosmetic reasons..."

"Scientists must communicate their message to the public in a compassionate, understandable way--in human terms, not the language of molecular biology. We need to make clear the connection between animal research and a grandmother's hip replacement, a father's bypass operation, a baby's vaccination, and even a pet's shots. ... If good people do nothing, there is a real possibility that an uninformed citizenry will extinguish the precious embers of medical progress." Conn is in physiology and pharmacology at Oregon Health Sciences University, Portland. Parker is public information officer at the Oregon Regional Primate Research Center, Beaverton, OR. (v.9,#4)

Connell, Susan, "Bioethics: ELSI [ethical, legal and social issues]." In J. Bottrill, ed., The Encyclopedia of Life Sciences. London: MacMillan Press, 2002. Volume 3, pp. 179-182. (v.13,#4)

Connelly, J, "Review of: Christopher Belshaw, Environmental Philosophy: Reason, Nature and Human Concern," Environmental Politics 11(no.4, 2002): 131.

Connelly, J., "Review of: Vandana Shiva, Water Wars: Privatization, Pollution and Profit," Environmental Politics 12(no. 2, 2003): 164.

Conniff, Richard, "Fuzzy-Wuzzy Thinking About Animal Rights," Audubon, November 1990. Ignorance about nature is the movement's doctrine. Animal welfare advocates hold that nature is essentially benign and lack any sense of the first law of nature, which is eat and be eaten. The legal skin trade is more likely to save an endangered species than to wipe it out. Citing Peter Singer's Animal Liberation, Conniff claims, "in reality the animal rights movement has elevated ignorance about nature almost to the level of a philosophical principle." (v1,#4)

Connolly, Barbara, Keohane, Robert O. "Institutions for Environmental Aid: Politics, Lessons, and Opportunities." Environment 38(Jun. 1996):12. The success of environmental aid programs depends on defining the problem correctly, getting resources into the right hands, and establishing effective oversight. (v7,#2)

Conradie, EM 1995. A further indexed bibliography on Christian theology and Ecology, Part II. Scriptura 52, 53-64. (Africa)

Conradie, EM 1995. A further indexed bibliography on Christian theology and Ecology, Part I. Scriptura 52, 26-52. (Africa)

Conradie, EM 1994. Waar op dees aarde kan 'n mens nog 'n 'enigste troos in lewe en in sterwe' vind? Ned Geref Teologiese Tydskrif 35:2, 224-250. (Africa)

Conradie, EM 1995. Liefde (en troos) is nog iewers op aarde te vinde! Ned Geref Teologiese Tydskrif 36:2, 211-228.

Conradie, EM 1993. Ecology and Christian theology: An introduction with an extensive, indexed bibliography. Scriptura 47, 52-104. (Africa)

Conservation Biology is another journal that ISEE members should consult regularly. Some representative articles from the September 1990 issue:

Orr, David W., "The Virtue of Conservation Education."

Aldo Leopold, "Standards of Conservation," a previously unpublished manuscript with comment by J. Baird Callicott.

Reed F. Noss, "Can We Maintain Biological and Ecological Integrity?"

James R. Karr, "Biological Integrity and the Goal of Environmental Legislation: Lessons for Conservation Biology."

Michael E. Soulé, "The Onslaught of Alien Species, and Other Challenges in the Coming Decades." (v2,#1)

Conservation Directory, 1997. [=1997 Conservation Directory]. Winchester, VA: National Wildlife Federation, 1997. Order from National Wildlife Federation, P. O. Box 9004, Winchester, VA 22604-9004. 800/477-5560. \$ 55. with discounts for members and students. The most comprehensive listing of organizations, agencies, and officials concerned with environmental conservation. (v7,#4)

Conservation Ecology is a new electronic journal, launched by the Ecological Society of America.

Website address:

<http://www.consecol.org/Journal>

C. S. Holling is editor. The journal will feature interdisciplinary communications and insight. It is available free of charge at the website or by e-mail subscription. To subscribe send an e-mail message to: subscribe@consecol.org

Include "subscribe conservation-ecology" in the body of the e-mail text. (v.9,#3)

Conservation Genetics is a journal that promotes the conservation of genetic diversity, especially the application of genetic methods towards resolving problems in conservation. Both paper and online. Kluwer Academic journal and therefore not cheap. \$ 218 for four issues. One free online copy.

www.wkap.nl/journals/cons_genetics

(v.13,#2)

Conservation of Southern Africa's Resources. Exploitation, Sustainability and Ethics. Proceedings of a one day symposium in May 1995, organised and hosted by the South African Institute of Ecologists and Environmental Scientists, the South African Wildlife Management Association, and the Marine Science Society of Southern Africa. 31 pages. Ten papers dealing with the "consumptive use of wild living resources."

Continuum: Journal of Media and Cultural Studies Vol. 22, no. 2 (2008). The topic of this special issue is "Environmental Sustainability." Contents include: (1) "Environmental Sustainability" by Rod Goblett and Libby Lester (pp. 167-70), (2) "A Sustainable Practice: Rethinking Nature in Cultural Research" by Emily Potter (pp. 171-78), (3) "Crisis and Resilience: Cultural Methodologies for Environmental Sustainability and Justice" by Donna Houston (pp. 179-90), (4) "Contesting Sustainability in Theory-Practice: In Praise of Ambivalence" by Aidan Davison (pp. 191-99), (5) "Open Country: Towards a Material Environmental Aesthetics" by Warwick Mules (pp. 201-12), (6) "'Screen Natures': Special Effects and Edutainment in 'New' Hybrid Wildlife Documentaries" by Phil Bagust (pp. 213-26), (7) "Transforming Citizens? Green Politics and Ethical Consumption on Lifestyle and Television" by Tania Lewis (pp. 227-40), (8) "The Energy of the City: Marshall Berman and New Year's Eve in Sydney" by Hannah Forsyth (pp. 241-53), (9) "Suburban Stories: Dave McComb and the Perth Experience" by Jon Stratton (pp. 255-67), (10) "'Gentlemen of the World Unite!': A Vindication of the Ways of Chappism" by Christopher George (pp. 269-78), and (11) "A Pregnant Man in the Movies: The Visual Politics of Reproduction" by JaneMaree Maher (pp. 279-88).

Continuum: Journal of Media and Cultural Studies Vol. 22, no. 2 (2008). The topic of this special issue is "Environmental Sustainability." Contents include: (1) "Environmental Sustainability" by Rod Goblett and Libby Lester (pp. 167-70), (2) "A Sustainable Practice: Rethinking Nature in Cultural Research" by

Emily Potter (pp. 171-78), (3) "Crisis and Resilience: Cultural Methodologies for Environmental Sustainability and Justice" by Donna Houston (pp. 179-90), (4) "Contesting Sustainability in Theory-Practice: In Praise of Ambivalence" by Aidan Davison (pp. 191-99), (5) "Open Country: Towards a Material Environmental Aesthetics" by Warwick Mules (pp. 201-12), (6) "'Screen Natures': Special Effects and Edutainment in 'New' Hybrid Wildlife Documentaries" by Phil Bagust (pp. 213-26), (7) "Transforming Citizens? Green Politics and Ethical Consumption on Lifestyle and Television" by Tania Lewis (pp. 227-40), (8) "The Energy of the City: Marshall Berman and New Year's Eve in Sydney" by Hannah Forsyth (pp. 241-53), (9) "Suburban Stories: Dave McComb and the Perth Experience" by Jon Stratton (pp. 255-67), (10) "'Gentlemen of the World Unite!': A Vindication of the Ways of Chappism" by Christopher George (pp. 269-78), and (11) "A Pregnant Man in the Movies: The Visual Politics of Reproduction" by JaneMaree Maher (pp. 279-88).

Convention on Biological Diversity, in PDF files and website: <<http://www.biodiv.org/>>

Convened after the 1992 Earth Summit in Rio de Janeiro, the Convention on Biological Diversity has three primary goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources. The main body of the organization's home page is dedicated to disseminating information about upcoming meetings, news, and events, such as the expert meeting on the global strategy for plant conservation and the various constituent groups that make up the Convention. The number of online documents available here is quite prodigious, and is divided into groups that include quarterly reports, global biodiversity outlook reports, and case-study documents. Users may elect to browse through these collections, or choose to use the search engine. On the left-hand side of the site's homepage, visitors can peruse the numerous sections devoted to the convention bodies (along with information about their current status and respective missions), information services provided by the Convention, and a well-developed area on biosafety protocol. (v.14, #4)

Convey, Peter, and Mark I. Stevens. "Antarctic Biodiversity." *Science* Vol. 317, no. 5846 (28 September 2007): 1877-78. The terrestrial and freshwater ecosystems in the 0.3% of Antarctica that is free of ice contain small invertebrates, lower plants, and microbes. These were long thought to have been depleted in glacial ice ages and recolonized in warmer periods. But recent evidence suggests that forms of animal and plant life there have also survived glacial cycles over millions of years and have ancient origins.

Conviser, Richard. "Toward Agricultures of Context." Environmental Ethics 6(1984):71-85. The current mode of agricultural organization produces both political and ecological problems. I explore several deeply-rooted cultural origins of that mode of organization, particularly the movements toward scientism and capitalism; each of these is shown to emphasize abstraction from context. A contrasting set of values, emphasizing holism and localism, is then examined. Several forms of agriculture consistent with these contrasting values, and exempt from previously discussed problems, are described. Conviser is at the Science and Technology Studies Division, Rensselaer Polytechnic Institute, Troy, NY. (EE)

Conway, Jill K., Keniston, Kenneth, and Marx, Leo, eds., Earth, Air, Fire, Water: Humanistic Studies of the Environment. Amherst: University of Massachusetts Press, 1991.

Cook, Annabel Kirschner. "Increasing Poverty in Timber-Dependent Areas in Western Washington," Society and Natural Resources 8(no.2, 1995):97- . (v6,#4)

Cook, Barbara J., ed. *Women Writing Nature: A Feminist View*. Lanham, MD: Rowman & Littlefield, 2007. Contents include: (1) "Introduction: Nature Writing From the Feminine" by Barbara Cook, (2) "Modernist Women, Snake Stories, and the Indigenous Southwest: An Ecofeminist Politics of Creation and Affirmation" by Alex Hunt, (3) "Littoral Women Writing From the Margins" by Susan A.C. Rosen, (4) "Multifaceted Dialogues: Toward an Environmental Ethic of Care" by Barbara J. Cook, (5) "Wild

Women: Literary Explorations of American Landscapes” by Sarah E. McFarland, (6) “Louise Gluck, Feminism and Nature in *Firstborn’s* ‘The Egg’” by Mary Kate Azcuy, (7) “Ecofeminism, Motherhood, and the Post-Apocalyptic Utopia in *Parable of the Sower*, *Parable of the Talents*, and *Into the Forest*” by Heidi Hutner, (8) “Natural Resistance: Margaret Atwood as Eco-Feminist or Apocalyptic Visionary” by H. Louise Davis, (9) “Touching the Earth: Gloria Anzaldúa and the Tenets of Ecofeminism” by Allison Steele, (10) “Teaching the Trees: How to be a Female Nature Writer” by Joan E. Maloof, and (11) “Confessions of an Eco-Feminist” by Rosemarie Rowley.

Cook, Barbara J., ed. *Women Writing Nature: A Feminist View*. Lanham, MD: Rowman & Littlefield, 2007. Contents include: (1) “Introduction: Nature Writing From the Feminine” by Barbara Cook, (2) “Modernist Women, Snake Stories, and the Indigenous Southwest: An Ecofeminist Politics of Creation and Affirmation” by Alex Hunt, (3) “Littoral Women Writing From the Margins” by Susan A.C. Rosen, (4) “Multifaceted Dialogues: Toward an Environmental Ethic of Care” by Barbara J. Cook, (5) “Wild Women: Literary Explorations of American Landscapes” by Sarah E. McFarland, (6) “Louise Gluck, Feminism and Nature in *Firstborn’s* ‘The Egg’” by Mary Kate Azcuy, (7) “Ecofeminism, Motherhood, and the Post-Apocalyptic Utopia in *Parable of the Sower*, *Parable of the Talents*, and *Into the Forest*” by Heidi Hutner, (8) “Natural Resistance: Margaret Atwood as Eco-Feminist or Apocalyptic Visionary” by H. Louise Davis, (9) “Touching the Earth: Gloria Anzaldúa and the Tenets of Ecofeminism” by Allison Steele, (10) “Teaching the Trees: How to be a Female Nature Writer” by Joan E. Maloof, and (11) “Confessions of an Eco-Feminist” by Rosemarie Rowley.

Cook, Cheryl, Enid M. Gorman and Lorette Picciano-Hanson, eds., Directory of Environmental Activities and Resources in the N.A. Religious Community. New York: Joint Appeal by Religion and Science for the Environment, 1992. 172 pages, paper. A directory by religious leaders of all major faiths and many scientists to develop initiatives for protecting and restoring the environment at the national, regional and congregational levels. A resource guide is included. (v7,#2)

Cook, Gavin, Science, Experience, Ethics & Phen: A Phen. of Moral Experience; Moral Controversies & Their Poss. Resolution; Perspectives Relating to the Environment, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.

Cook, Gavin, Science, Experience, Ethics & Phenomenology; A Phenomenology of Moral Experience; Moral Controversies & Their Possible Resolution; Perspectives Relating to the Environment, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Cook, J.A., and S.O. MacDonald, "Should Endemism Be a Focus of Conservation Efforts Along the North Pacific Coast of North America," Biological Conservation 97(no.2, 2001): 207-. (v.12,#3)

Cook, Julie, Review of Plumwood, Val, Feminism and the Mastery of Nature. (London: Routledge, 1993). Environmental Values 6(1997):245-246.

Cook, Julie, Review of Breaking the Boundaries: Towards a Feminist Green Socialism. Environmental Values 3(1994):278-279. (EV)

Cook, Julie. "The Philosophical Colonization of Ecofeminism." Environmental Ethics 20(1998):227-46. There is general agreement among ecofeminists regarding the desirability of a variety of expressions of ecofeminism, but this pluralism is under threat with the emergence of an approach that emphasizes the primacy of a philosophical ecofeminism which claims the authority to prescribe what ecofeminism should be. The recent anthology Ecological Feminism (Karen J. Warren, ed.) is symptomatic of this trend, with contributors who affirm the philosophical significance of ecological feminism by privileging philosophers' voices over those of other ecofeminists, rather than by engaging in critical dialogue with,

and exploring connections between, different ecofeminist discourses. This colonizing strategy actively excludes many women's voices from the creation of an environmental ethic, including those of activist, spiritual, and "Third World" ecofeminists, but fails to offer any adequate philosophical grounds for doing so. Cook is in philosophy, Lancaster University, Lancaster, PA. (EE)

Cook, Julie. Review of Chris Cuomo. Feminism and Ecological Communities: An Ethic of Flourishing. Environmental Values 9(2000):398.

Cook, Julie. Review of Warren, Karen J., Ecofeminist Philosophy: A western Perspective on What it is and Why it Matters. Lanham, MD: Rowman and Littlefield, 2000. Environmental Values 12(2003):131-133. (EV)

Cooke, Roger M., Experts in Uncertainty: Opinion and Subjectivity Probability in Science. New York: Oxford University Press, 1991. 336 pages. \$ 65.00. A criticism of experts' use of subjective probabilities in environmental risk assessment. Cooke shows that environmental risk assessors systematically underestimate the environmental risks to which we are all exposed. (v3,#2)

Cooke, S. J. and Cowx, I. G., "The Role of Recreational Fishing in Global Fish Crises," BioScience 54(no. 9, 2004): 857-859(3). Exploitation of fishery resources has become a major conservation issue on a global scale. Commercial fisheries have been repeatedly blamed for the worldwide declines in fish populations. However, we contend that the recreational fishing sector also has the potential to negatively affect fish and fisheries. Here we present evidence to show that both recreational and commercial fishing sectors deserve consideration as contributors to the exploitation of fish in marine and inland waters. The lack of global monitoring and compiling of statistics on recreational fishing participation, harvest, and catch and release has retarded our ability to understand the magnitude of this fishing sector. Using data from Canada, we estimate that the potential contribution of recreational fish harvest around the world may represent approximately 12 percent of the global fish harvest. Failure to recognize the potential contribution of recreational fishing to fishery declines, environmental degradation, and ecosystem alterations places ecologically and economically important resources at risk. Elevating recreational fishing to a global conservation concern would facilitate the development of strategies to increase the sustainability of this activity. (v.14, #4)

Cooke, Steven J; Cowx, Ian G, "The Role of Recreational Fishing in Global Fish Crises", BioScience 54(no.9, 1 September 2004):857-859(3). Exploitation of fishery resources has become a major conservation issue on a global scale. Commercial fisheries have been repeatedly blamed for the worldwide declines in fish populations. However, we contend that the recreational fishing sector also has the potential to negatively affect fish and fisheries. Here we present evidence to show that both recreational and commercial fishing sectors deserve consideration as contributors to the exploitation of fish in marine and inland waters. The lack of global monitoring and compiling of statistics on recreational fishing participation, harvest, and catch-and-release has retarded our ability to understand the magnitude of this fishing sector. Using data from Canada, we estimate that the potential contribution of recreational fish harvest around the world may represent approximately 12 percent of the global fish harvest. Failure to recognize the potential contribution of recreational fishing to fishery declines, environmental degradation, and ecosystem alterations places ecologically and economically important resources at risk. Elevating recreational fishing to a global conservation concern would facilitate the development of strategies to increase the sustainability of this activity.

Cooke, Steven; Suski, Cory, "Do we need species-specific guidelines for catch-and-release recreational angling to effectively conserve diverse fishery resources?," Biodiversity and Conservation 14(no.5, May 2005):1195-1209(15).

Cookson, Richard, "Welfare Economic Dogmas: A Reply to Sagoff," Environmental Values 5(1996):59-74. This article examines Sagoff's criticisms of Four Dogmas of Environmental Economics (Environmental Values, Winter 1994) and argues that none of them are fatal. Many of the criticisms appear to rest on general misunderstandings about welfare economics. One misunderstanding is that transaction costs are theoretically indistinguishable from regular production costs. The theoretical distinction is that transaction costs vary under alternative policies and institutions whereas production costs are fixed by tastes, technology and endowments. Another misunderstanding is that market failure concerns only Pareto efficiency. Market failure also concerns social efficiency with respect to the social welfare function, a device for making explicit ethical judgments about the interpersonal distribution of welfare. A third misunderstanding is that the rationality assumption drives economic theory. In fact, the explanatory power of economic models comes mainly from explicit assumptions about the constraints facing economic agents. A fourth misunderstanding is that welfare economics is used as a mechanism for making legal and political decisions. Rather, welfare economics is used as a method for informing legal and political decisions by evaluating their outcomes on the basis of individual welfare. Used properly, it can improve the democratic process by bringing hidden costs and difficult issues to the attention of both policy-makers and the wider public. KEYWORDS: Coase theorem, efficiency, transaction costs, utility, welfare economics (EV)

Cooley, D. R., with G .A. Goreham, "Are Transgenic Organisms Unnatural?," Ethics and the Environment 9(no. 1, 2004):46-55. The introduction of transgenic organisms into agriculture has raised a firestorm of controversy. Many view the technology as a pathway to a much better future society, whereas others condemn it for endangering people and the environment. One defective argument against transgenics is the "Unnatural-Is-Unethical" argument (UIU). UIU attempts to prove if transgenic organisms are unnatural and all unnatural things are morally bad, then transgenics are morally bad. However, the argument fails once it is shown that there is no plausible definition for "unnatural." Therefore, UIU should be abandoned in favor of arguments more likely to succeed. Cooley is in ethics in the Department of History and Religion, North Dakota State University. Goreham is in sociology, North Dakota State University. (E&E)

Cooley, D. R., Gary Goreham, and George A. Youngs, Jr., "Practical Moral Codes in the Transgenic Organism Debate," Journal of Agricultural and Environmental Ethics 17(2004):517-544. In one study funded by the United States Department of Agriculture, people from North Dakota were interviewed to discover which moral principles they use in evaluating the morality of transgenic organisms and their introduction into markets. It was found that although the moral codes the human subjects employed were very similar, their views on transgenics were vastly different. In this paper, the codes that were used by the respondents are developed, compared to that of the academically composed Belmont Report, and then modified to create the more practical Common Moral Code. At the end, it is shown that the Common Moral Code has inherent inconsistency flaws that might be resolvable, but would require extensive work on the definition of terms and principles. However, the effort is worthwhile, especially if it results in a common moral code that all those involved in the debate are willing to use in negotiating a resolution to their differences. Keywords: Belmont report, GMO, moral code, moral principle, practical morality, transgenic organisms. The authors are in the Department of History and Religion, North Dakota State University, Fargo, ND. (JAEE)

Coombs, H. C., The Return of Scarcity: Strategies for an Economic Future. Cambridge: Cambridge University Press, 1990. By an Australian economist. \$ 17.95. (v1,#4)

Cooper, D. E., "Is Daoism `Green'?" Asian Philosophy 4(1994):119-125. (Taoism).

Cooper, David, Palmer, Joy, eds., Just Environments. Reviewed by Avner de-Shalit. Environmental Values 6(1997):115-116.

Cooper, David E., Palmer, Joy A., eds. Spirit of the Environment: Religion, Value and Environmental Concern. London: Routledge, 1998. 204 pages. Contains:

- Bilimoria, Purushottama, "Indian Religious Traditions," pp. 1-14.
 - Palmer, Martin, "Chinese Religion and Ecology," pp. 15-29.
 - Bartolomeus (His All-Holiness Bartolomeus), Hertzberg, Arthur (Rabbi), and Khalid, Fazlun, "Religion and Nature: The Abrahamic Faiths' Concepts of Creation," pp. 30-41.
 - Clark, Stephen R.L., "Pantheism," pp. 42-56.
 - Mathews, Freya, "The Real, the One and the Many in Ecological Thought," pp. 57-72.
 - Primavesi, Anne, "The Recovery of Wisdom: Gaia Theory and Environmental Policy," pp. 73-85.
 - Milton, Kay, "Nature and the Environment in Indigenous and Traditional Cultures," pp. 86-99.
 - Cooper, David E., "Aestheticism and Environmentalism," pp. 100-112.
 - Garrard, Greg, "The Romantics' View of Nature," pp. 113-130.
 - Rawles, Kate, "Philosophy and the Environmental Movement," pp. 131-145.
 - Palmer, Joy, "Spiritual Ideas, Environmental Concerns and Educational Practice," pp. 146-167.
 - Smith, Richard, "Spirit of Middle Earth: Practical Thinking for an Instrumental Age," pp. 168-181.
- Cooper is in philosophy, Palmer in education, at the University of Durham, UK. (v9,#1)

Cooper, David E. and Joy A. Palmer, The Environment in Question: Ethics and Global Issues. London: Routledge, 1992. 272 pages. Paper \$ 16.95, cloth \$49.95. Articles: Barry S. Gower, "What Do We Owe Future Generations"; Jennifer Trusted, "The Problem of Absolute Poverty: What Are Our Moral Obligations to the Destitute?"; Mary Midgley, "Towards a More Humane View of the Beasts?"; Robert F. Prosser, "The Ethics of Tourism"; F. G. T. Holliday, "The Dumping of Radioactive Waste in the Deep Ocean: Scientific Advice and Ideological Persuasion"; Philip Neal, "The Ocean Environment: Marine Development, Problems, and Pollution"; Joy A. Palmer, "Destruction of the Rain Forests: Principles or Practices"; Robert Allison, "Environment and Water Resources in the Arid Zone"; Philip Neal, "Air Pollution - with Special Reference to Acid Rain, the Greenhouse Effect and Ozone Layer Depletion"; Holmes Rolston, III, "Challenges in Environmental Ethics"; C. A. Hooker, "Responsibility, Ethics and Nature"; David E. Cooper, "The Idea of Environment"; Joy A. Palmer, "Towards a Sustainable Future"; Vandana Shiva, "Recovering the Real Meaning of Sustainability"; Mark Sagoff, "Technological Risk: A Budget of Distinctions"; Rosemary J. Stevenson, "Thinking, Believing and Persuading: Some Issues for Environmental Activists" and Stephen Sterling, "Rethinking Resources." Cooper is professor of philosophy, Palmer is lecturer in education, at the University of Durham. (v3,#2)

Cooper, David E., "Human Sentiment and the Future of Wildlife." Environmental Values Vol.2 No.4(1993):335-346. ABSTRACT: Identifying what is wrong with the demise of wildlife requires prior identification of the human sentiment which is offended by that demise. Attempts to understand this in terms of animal rights (individual or species) and the benefits of wildlife to human beings or the wider environment are rejected. A diagnosis of this sentiment is attempted in terms of our increasing admiration, in the conditions of modernity and postmodernity, for the 'harmony' or 'at homeness' of wild animals with their environments. The diagnosis is defended against certain misunderstandings, and implications are tentatively drawn from it for environmental education and the management of wildlife. KEYWORDS: Animal ethics, animal rights, environmental education, moral sentiment, species, wildlife. Department of Philosophy, University of Durham, Durham DH1 3HN, UK.

Cooper, David E., and Joy A. Palmer, eds., Just Environments. London: Routledge, 1995. 12 essays. Contains I. G. Simmons, "Nature, Culture and History." Cooper is professor of philosophy, Palmer is lecturer in education, University of Durham. (v6,#4)

Cooper, David E., and Simon P. James, Buddhism, Virtue and the Environment. Ashgate, 2005. Buddhism, one increasingly hears, is an 'eco friendly' religion. It is often said that this is because it promotes an 'ecological' view of things, one stressing the essential unity of human beings and the natural

world. While agreeing that Buddhism is, in many important respects, in tune with environmental concerns, Cooper and James argue that what makes it 'green' is its view of human life. The true connection between the religion and environmental thought is to be found in Buddhist accounts of the virtues - those traits, such as compassion, equanimity and humility, that characterise the life of a spiritually enlightened individual. Central chapters of this book examine these virtues and their implications for environmental attitudes and practice. Buddhism. The authors are at the University of Durham, UK.

Cooper, David and Simon James. Buddhism, Virtue and the Environment (Ashgate, 2004). Buddhism, one increasingly hears, is an 'eco-friendly' religion. It is often said that this is because it promotes an 'ecological' view of things, one stressing the essential unity of human beings and the natural world. This book presents a different view. While agreeing that Buddhism is, in many important respects, in tune with environmental concerns, Cooper and James argue that what makes it 'green' is its view of human life. The true connection between the religion and environmental thought is to be found in Buddhist accounts of the virtues - those traits, such as compassion, equanimity and humility, that characterise the life of a spiritually enlightened individual. Central chapters of this book examine these virtues and their implications for environmental attitudes and practice. Buddhism, Virtue and Environment will be of interest not only to students and teachers of Buddhism and environmental ethics, but to those more generally engaged with moral philosophy. Written in a clear and accessible style, this book presents an original conception of Buddhist environmental thought. The authors also contribute to the wider debate on the place of ethics in Buddhist teachings and practices, and to debates within 'virtue ethics' on the relations between human well-being and environmental concern. Available from Ashgate Publishing in hardback (£50.00, ISBN:0 7546 3909 6) and paperback (£16.99, ISBN: 0 7546 3910 X).

Cooper, David E., "Heidegger on Nature," Environmental Values 14(2005):339-351. The primary purpose of the paper is the broadly exegetical one of explaining and connecting Heidegger's many remarks, made in several different contexts of enquiry, on nature. The three main contexts are those of ontology, scientific methodology, and technology. After showing how Heidegger's central theses in these contexts are related to one another, I argue, in the final section, that his observations on scientific method are pivotal. Unless these are secured, his further claims about ontology and technology lose their essential support. Cooper is in philosophy, University of Durham, UK. (EV)

Cooper, David E., and Simon P. James, Buddhism, Virtue and Environment, Reviewed by Michael Allen Fox, Environmental Values 15(2006):138-140.

Cooper, David E. *A Philosophy of Gardens*. Oxford: Oxford University Press, 2006. Cooper explores the issue of why gardens are significant and mean so much to people. He argues that garden appreciation is distinct from the appreciation of art and the appreciation of nature, and that gardens matter as an epiphany of an intimate co-dependence between creative human activity and the mystery that allows for there to be a world for humans. He also argues that environmental philosophy should not focus on wilderness to the exclusion of the humanly shaped environment that includes gardens, and we should recognize how much gardens contribute to the good life for people.

Cooper, Gregory J., The Science of the Struggle for Existence: On the Foundations of Ecology. Cambridge, UK: Cambridge University Press, 2003. Ecology is interpreted as the science of the struggle for existence, linking it with evolutionary biology. Cooper puzzles about the differences, if any, between ecology and evolutionary biology. He also analyzes the tension between law-like explanations, such as characterize physics and chemistry, and the more historical character of both ecology and evolutionary biology, involving openness and unpredictability. Perhaps ecology is a piecemeal science. This also requires analysis of such ideas as stability, equilibrium, succession, and so forth. A better term than law is "nomic force" which "comes in degrees and is restricted to particular domains" (p. 123, p. 115, p. 181).

"Theoretical explanation does not need laws in the traditional sense, only ... highly resilient generalizations" (p. 194). Cooper brings a sophisticated awareness of issues in the philosophy of science to bear on analysis of the tensions that have characterized ecology over the last century. Cooper is in philosophy and ethics at Washington and Lee University, Lexington, Va.

Cooper, Gregory, "Teleology and Environmental Ethics," American Philosophical Quarterly 35 (no. 2, 1998):195-207. There is a disturbing tendency in the environmental ethics literature to rely on metaphysically rich, but scientifically controversial, ideas from the sciences of ecology and ethology. Three examples are discussed; one from the animal rights camp, a second from the reverence for life perspective, and a third from the ethical holists. In each of these cases, value theory helps itself to a kind of teleology that it is not clear the science is ready to yield. Cooper is at Washington and Lee University, Lexington, VA. (v.13,#2)

Cooper, Gregory, "Generalizations in Ecology: A Philosophical Taxonomy," Biology and Philosophy 13(1998):555-586. There has been uncertainty and controversy over general knowledge in ecology. Perhaps only case by case knowledge is available, no genuine nomothetic knowledge. Philosophers of biology wonder if there are laws anywhere in biology. Cooper provides a framework for such general knowledge claims, with three broad categories--phenomenological, causal, and theoretical. While there are probably no laws as that term is generally understood in philosophy of science, it does not follow that everything in ecology is equally contingent. One can recognize degrees of contingency. This has implications for setting environmental policy based on ecological knowledge. Cooper is in philosophy at Duke University. (v.9,#4)

Cooper, N. S. "Wildlife Conservation in Churchyards: A Case-study in Ethical Judgements," Biodiversity and Conservation 4(no.8, Nov. 1995):916- . (v6,#4)

Cooper, Nigel S., "Wildlife Conservation in Churchyards: A Case-Study in Ethical Judgments," Biodiversity and Conservation 4(1995):916-928. Groups promoting wildlife in churchyards, or other sites, discover that they face normative questions that have no scientific answers. The language of management is used for handling these questions, but this metaphor has unhelpful associations with predetermined goals, a culture of control and self-centeredness. Using a case-study approach, conflicts between conserving natural entities or natural processes (e.g. transplanting scarce plants); between caring for the individual organism or for the system (e.g. felling trees); and between conserving the natural or the cultural heritage (e.g. repointing walls) are examined. These case of conflicts of duty illustrate the value of attention to circumstances, proportionality, and compromise. The social mechanisms of moral debate include legal protection and the power of stories to give meaning and vision. Ethics is a communal activity. By listening to others and attending to nature our sensibilities will become more refined and our ethical judgments will develop. Cooper is a pastor in Rivenhall, Witham, Essex, UK. (v7,#2)

Cooper, Nigel S. "How Natural is a Nature Reserve? An Ideological Study of British Nature Conservation Landscapes," Biodiversity and Conservation 9(no. 8, 2000):1131-1152. Abstract. Areas set apart for nature conservation in Britain are broadly categorised according to their cultural purpose, and names are assigned to these in this paper. Nature reserves may be similar to zoos and botanic gardens in aiming to maintain the diversity of species and if so are termed "biodiversity reserves". This tradition understands nature as a static collection of entities apart from humans. Maintaining traditional management at a site is arguably a good way to sustain species; it also retains old ways in which humans and nature were integrated in the life of the nation and so are called "historic countryside parks". There is growing interest in "wilderness areas", where nature is seen as primarily processes protected from human interference. Despite the strength of each of these, they suffer from attempting to restrict nature to a ghetto, a process that is economically and environmentally costly. "Companion places" are places which set sustainable examples of integrating human life and economic activity with maintaining biodiversity

and offering an opportunity to encounter wild processes at the heart of life. The language of these four types, or vectors, of nature reserves is offered to help the discussion of our place in nature. Key words: biodiversity, historic countryside, language, sustainability, wilderness.

Cooper, Nigel S., "Speaking and listening to nature: Ethics within ecology," Biology and Conservation 9(2000):1009-1027. Abstract. One context for the papers arising from INTEGOL VII in this special issue is the debate over the social construction of science. Some fear that advocates for the social or cultural construction of ecology will undermine attempts to defend nature. But resources are made available in a mediating position of social 'construal', particularly alerting ecologists to the social and ethical dimensions of the conducting of their work. When speaking, ecologists will use living and dead metaphors and these carry connotations which in turn raise ethical questions. Different political interest groups may use a word like biodiversity for different ethical purposes. The position of any one speaker is limited, and so greater knowledge is achieved if scientists listen to the situated knowledges of other, diverse people. Even Nature herself, or creatures, may have aspects of personhood. The good ecologist will listen with empathy as a naturalist to what is being said, giving Nature the respect she deserves. These are some of the ethical implications in the very doing of ecology. Key words: biodiversity, metaphor, personalism, situated knowledge, social construction of science. Cooper is in the Diocese of Chelmsford, and lives at The Rectory, Rivenhall, Witham, Essex. (v.13,#1)

Cooper, Nigel S., "How natural is a nature reserve?: An ideological study of British nature conservation landscapes," Biology and Conservation 9(2000):1131-1152. Abstract. Areas set apart for nature conservation in Britain are broadly categorised according to their cultural purpose, and names are assigned to these. Nature reserves may be similar to zoos and botanic gardens in aiming to maintain the diversity of species and if so are termed 'biodiversity reserves.' This tradition understands nature as a static collection of entities apart from humans. Maintaining traditional management at a site is arguably a good way to sustain species, it also retains old ways in which humans and nature were integrated in the life of the nation and so are called 'historic countryside parks'. There is growing interest in 'wilderness areas'; where nature is seen as primarily processes protected from human interference. Despite the strength of each of these, they suffer from attempting to restrict nature to a ghetto, a process that is economically and environmentally costly. 'Companion places' are places which set sustainable examples of integrating human life and economic activity with maintaining biodiversity and offering an opportunity to encounter wild processes at the heart of life. The language of these four types, or vectors, of nature reserves is offered to help the discussion of our place in nature. Key words: biodiversity, historic countryside, language, sustainability, wilderness, (v.13,#1)

Cooper, Nigel S., and R.C.J. Carling, eds., Ecologists and Ethical Judgments. London: Chapman and Hall, 1996. 176 pages. £ 20. Papers growing out of the Sixth International Congress of Ecology (INTECOL) in Manchester, England, in 1994. Contains: Jane M. Howarth, "Ecology: Modern Hero or Post-modern Villain?"; Andrew Brennan, "Ethics, Ecology and Economics"; Gary L. Comstock, "An Extentionist Environment Ethic"; Alan Holland, "The Use and Abuse of Ecological Concepts in Environmental Ethics"; Calvin B. De Witt, "Ecology and Ethics"; Brent Waters, "Christian Theological Resources for Environmental Ethics"; John P. Barkham, "Environmental Needs and Social Justice"; Susan Power Bratton, "Christianity and Human Demographic Change"; David R. Given, "Forging a Biodiversity Ethic in a Multicultural Context (New Zealand)"; Darrell A. Posey, Graham Dufield and Kristina Plenderith, "Collaborative Research and Intellectual Property Rights (of Indigenous Peoples)"; Rory J. Putman, "Ethical Considerations and Animal Welfare in Ecological Field Studies"; Nigel S. Cooper, "Wildlife Conservation in Churchyards"; Eddie T. Idle, "Conflicting Priorities in Site Management in England." Also published as a special issue of Biodiversity and Conservation, vol. 4, November 1995. (v7,#2)

Cooper, Nigel S., Wildlife in Church and Churchyard: Plants, Animals and Their Management. London:

Church Publishing House (Church House, Great Smith Street, London SW1P 3NZ), 1005. About 65 pages. Chapters on how to manage the churchyard, grassland, stonework habitats, wanted and unwanted wildlife, disturbed ground, trees, hedges, and woodland. Suggestions for action. (v7,#2)

Cooper, Nigel, and Carling, R.C.J., "Ecologists and Ethical Judgements," Biodiversity and Conservation 4(no.8, Nov. 1995):783- . (v6,#4)

Cooper, Nigel S. "Speaking and Listening to Nature: Ethics Within Ecology," Biodiversity and Conservation 9(no. 8, 2000):1009-1027. Abstract. One context for the papers arising from INTECOL VII in this special issue is the debate over the social construction of science. Some fear that advocates for the social or cultural construction of ecology will undermine attempts to defend nature. But resources are made available in a mediating position of social "construal," particularly alerting ecologists to the social and ethical dimensions of the conducting of their work. When speaking, ecologists will use living and dead metaphors and these carry connotations which in turn raise ethical questions. Different political interest groups may use a word like biodiversity for different ethical purposes. The position of any one speaker is limited, and so greater knowledge is achieved if scientists listen to the situated knowledges of other, diverse people. Even Nature herself, or creatures, may have aspects of personhood. The good ecologist will listen with empathy as a naturalist to what is being said, giving Nature the respect she deserves. These are some of the ethical implications in the very doing of ecology. Key words: biodiversity, metaphor, personalism, situated knowledge, social construction of science.

Cooper, Tim, "The Emergence of Christian Ecology in Britain," Firmament, vol. 2, no. 4, Winter 1991. (v2,#1)

Cooper, Tim, Review of, Group of Green Economists, The, Ecological Economics. Environmental Values Vol.2 No.2(1993):178.

Cooper, Tim, Review of Ted Trainer, The Conserver Society. Environmental Values 7(1998):249.

Cooper, Tim, Review of von Weizacker, Ernst U. and Jochen Jesinghaus, Ecological Tax Reform. Environmental Values Vol.2 No.2(1993):177.

Cooper, Tim. Review of Tim Lang and Colin Hines. The New Protectionism: Protecting the Future against Free Trade: (London: Earthscan, 1993). (EV)

Cooper-Driver, Gillian. "Furtherance of African Botany," Conservation Biology 11(no.4, 1997):1040. (v8,#3)

Coops, N. C., and Catling, P. C., "Prediction of the Spatial Distribution and Relative Abundance of Ground-Dwelling Mammals Using Remote Sensing Imagery and Simulation Models," Landscape Ecology 17(no.2, 2002): 173-88. (v.13,#4)

Coote, Belinda. The Trade Trap: Poverty and the Global Commodity Markets. Atlantic Highlands, NJ: Humanities Press, 1996. The complexities and difficulties of the international trade system. Argues that trade agreements must incorporate minimum standards in order to defend poor people's basic social and environmental rights against the impact of unregulated trade. (v7,#1)

Cooter, Robert D., Fikentscher, Wolfgang, "Indian Common Law: The Role of Custom in American Indian Tribal Courts," American Journal of Comparative Law 46 (1998):287-237, Part I, and 509-580, Part II. American Indian ideas about who owns land, care for and neglect of land, reversion, inheritance, environment, examples from Apaches, Hopis, and many others, as these are reflected in tribal courts.

Cooter is in law, University of California, Berkeley. Fikentscher is in law, University of Munich.

Cope, Andy, Doxford, David, and Probert, Christopher, "Monitoring Visitors To UK Countryside Resources. The Approaches Of Land and Recreation Resource Management Organisations To Visitor Monitoring," Land Use Policy 17 (No. 1, Jan 01 2000): 59- . (v.11,#2)

Cope, DR; Pettifor, RA; Griffin, LR; MarcusRowcliffe, J, "Integrating farming and wildlife conservation: the Barnacle Goose Management Scheme," Biological Conservation 110(no.1, 2003): 113-122.

Copland, P; Gillett, G, "The Bioethical Structure of a Human Being," Journal of Applied Philosophy 20(no.2, 2003):123-131. (v.14, #4)

Coppeto, Stephanie; Harcourt, A., "Is a biology of rarity in primates yet possible?," Biodiversity and Conservation 14(no.4, April 2005):1017-1022(6).

Coppola, Nancy. Review of And No Birds Sing: Rhetorical Analyses of Rachel Carson's Silent Spring. Edited by Craig Waddell. Environmental Ethics 24(2002):331-332. (EE)

Coppolillo, Peter B., "The Landscape Ecology of Pastoral Herding: Spatial Analysis of Land Use and Livestock Production in East Africa," Human Ecology 28(no. 4, Dec. 1, 2000):527- . (v.12,#2)

Corash, Michele B., "Consensus Will Be Key to Globalization Environmental Law," Journal of Environmental Law & Practice 7 (No. 3, 2000 Winter): 30- . (v.11,#4)

CorberaElizalde, E, "Review of: Axel Michaelowa and Michael Dutschke (eds.), Climate Policy and Development: Flexible Instruments and Developing Countries," Environmental Politics 11(no.4, 2002): 140.

Corbett, Jim. Goatwalking: A Guide to Wildland Living, A Quest for the Peaceable Kingdom. New York: Penguin, 1991. 237 pages. \$11.00 paper. "Two milk goats can provide all the nutrients a human being needs, with the exception of vitamin C and a few trace minerals." So begins the romantic, Quixotic account of how to live as nomads in the Sonora desert. Corbett is co-founder of the Sanctuary Movement. Included is an appendix is the Saguaro-Juniper Covenant, an association for sustainable living on 130 acres of deeded land and six sections (square miles) of grazing lease. Non-technical, practical; what Thoreau might have written had he lived in the desert. "Cranky, brilliant, unlovable, and true"--Jim Harrison. (v5,#2)

Corbett, Julia B. *Communicating Nature: How We Create and Understand Environmental Messages*. Washington, DC: Island Press, 2006. Corbett discusses how we form environmental beliefs, the links between environmental attitudes and behaviors, and how we communicate with each other about nature in terms of work and consumer culture, the use nature as commodity and entertainment for leisure, the use of nature in advertising, and the presentation of nature in the news media and public relations industry.

Corbin, Greg D. "The United States Forest Service's Response to Biodiversity Science." Environmental Law 29(No. 2, 1999):377- . The National Forest Management Act and its implementing regulations require the United States Forest Service to manage the national forests' biodiversity based on a set of science-based management prescriptions. Mr. Corbin argues that while the Forest Service adopted a regulatory program designed to incorporate the new understanding of biodiversity science into the forest planning process, the agency's litigation posture and proposed regulatory changes in favor of ecosystem management ignore the science of biodiversity to preserve broad regulatory discretion and maximum on-the-ground management flexibility. (v10,#4)

Corbridge, Stuart, "Development Ethics: Distance, Difference, Plausibility," Ethics, Place and Environment 1(no. 1, 1998):35-53. Ethical concern for others at a distance and different from those of us (in developed countries) is both possible and plausible, and this contrary to critics from the right (the New Right) and from the left (the post-Left). Corbridge is in geography, University of Cambridge, UK. (v.13,#4)

Cordell, H. K., and Tarrant, M. A., "Changing Demographics, Values, and Attitudes," Journal of Forestry 100(no.7, 2002): 28-34. (v.13,#4)

Cordell, H. Ken, Carter J. Betz, and Gary T. Green. "Nature-based Outdoor Recreation Trends and Wilderness." *International Journal of Wilderness* Vol. 14, no. 2 (2008): 7-9, 13. Despite media attention to studies claiming that nature-based recreation is in decline, these authors find that this is true of only some forms of such recreation. "[M]any other activities seem to be continuing and some have even demonstrated rather strong popularity growth. One such activity is visiting wilderness and other primitive areas." How to interpret uneven data is a problem, but the authors conclude: "All in all, by taking a broad view of this 21st century, it appears to us that Americans' interest in and appreciation of nature-based recreation and wildlands is up." Cordell is a research scientist with the USDA Forest Service in Athens, Georgia.

Cordell, Ken, Tarrant, Michael A., and Green, Gary T., "Is the Public Viewpoint of Wilderness Shifting?" International Journal of Wilderness 9(no. 2, August 2003):27-32. Shifts since the mid 1990's in the values the public places on wilderness. Public views of the National Wilderness Preservation System were compared from national surveys conducted in 1994 and in 2000. Results show that while more people in 2000 were aware of the Wilderness System, this increase in awareness has not created greater support for additional wilderness acreage. But the levels of importance people place on ecosystem services, existence of wilderness, recreation, and future use options for existing protected wilderness have increased sharply since 1994. Overall, this seems to indicate a need for greater emphasis on nonuse values in setting policy and managing wilderness. Awareness and support for wilderness vary significantly among ethnic, age, and regional groups. It seems as though people do not want more wilderness but they value what they already have designated much more than before. The authors are with the USDA Forest Service and the School of Forestry, University of Georgia, Athens, GA. (v 14, #3)

Corey, Michael A., Evolution and the Problem of Evil. Lanham, MD: University Press of America, 2000. An approach that synthesizes the tenets of modern developmental psychology with the basic concepts of classical theism. The problem of evil, as well as the general fate of humans, is placed in a much larger and more optimistic context than traditionally imagined. (v.12,#3)

Corkeron, PJ, "Whale Watching, Iconography, and Marine Conservation," Conservation Biology 18(no.3, 2004):847-849. (v. 15, # 3)

Corkran, Robert E. "Quality of Life, Mining, and Economic Analysis in a Yellowstone Gateway Community." Society and Natural Resources 9, no.2 (1996): 143. (v7, #3)

Corlett, J. Angelo, "Corporate Responsibility for Environmental Damage," Environmental Ethics 18(1996):195-207. I set forth and defend an analysis of corporate moral responsibility (retrospective moral liability), which, I argue, ought to serve as the foundation for corporate legal responsibility, punishment, and compensation for environmental damage caused by corporations. Corlett is in philosophy, Georgia State University, Atlanta. (EE)

Corley-Smith, Graham E., and Brandhorst, Bruce P., "Preservation of Endangered Species and

Populations: A Role for Genome Banking, Somatic Cell Cloning and Androgenesis?" Molecular Reproduction and Development 55 (no. 3, July 1999):363-367. (v.11,#4)

Cornhett, Zane J., "The Courage to Say "Not Yet" to the Proposed Code of Ethics," Journal of Forestry 98 (No. 7, 2000 July 01): 22- . Until we have engaged each other in debate and anticipated the values we will need in the 21st century, we should just say "Not yet" to the current proposal to revise our Code of Ethics. (v.11,#4)

Cornwell, A. and J. Creedy. Environmental Taxes and Economic Welfare. Review by Amitrajeet A. Batabyal, Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Cornwell, Antonia and John Creedy. Environmental Taxes and Economic Welfare: Reducing Carbon Dioxide Emissions. Cheltenham: Edward Elgar, 1997. Review by Marcello Villena, Environmental Values 10(2001):272. (EV)

Corral-Verdugo, Victor. "Introduction: Environmental Psychology in Latin America: Efforts in Critical Situations," Environment and Behavior 29 (1997): 163. (v8,#1)

Corral-Verdugo, Victor. "A Structural Model of Reuse and Recycling in Mexico." Environment and Behavior 28, no.5 (1996): 665. (v7, #3)

Correa, Sonia. Population and Reproduction Rights: Feminist Perspectives from the South. Atlantic Highlands, NJ: Humanities Press, 1994. Correa analyzes the detrimental effects on women of past and present fertility management policies. Turning to issues of sexual and reproductive health and women's rights, she argues for the indivisibility of health and rights. (v7,#1)

Corrington, Robert S., Nature and Spirit: An Essay in Ecstatic Naturalism. Bronx, NY: Fordham University Press, 1992. 225 pages. \$30.00 cloth, \$ 19.95 paper. An enlarged conception of nature that calls for a transformed naturalism. The spirit operates within a fragmented nature and has its own unique locations. Ecstatic naturalism does not eulogize spirit nor impose a process theodicy upon nature as a whole but carefully describes the ways in which spirit emerges from finite locations in the world. Corrington is professor of philosophical theology at Drew University. (v3,#1)

Corrington, Robert S., Ecstatic Naturalism: Signs of the World. Bloomington, IN: Indiana University Press, 1994. 218 pages. Cloth, \$ 29.95. A new metaphysics, a semiotics of nature, insisting that all signs participate in larger orders of meaning that are natural and religious. Meanings embodied in nature point beyond nature to the mystery inherent in positioned codes and signs. Corrington is professor of philosophical theology at Drew University. (v7,#1)

Corson, Walter H. ed. Citizen's Guide to Sustainable Development, Global Tomorrow Coalition, 1325 G. Street, N. W., Suite 915, Washington, DC 20005-3104, 1989. \$ 5.00. (v1,#2)

Corson, Walter H., "Priorities for a Sustainable Future: The Role of Education, the Media, and Tax Reform," Journal of Social Issues 51 (no. 4, 1995):37-61. Twelve priority actions to alleviate environmental degradation. Ecological and societal literacy may be necessary conditions for change; ecological tax reform may be an important intermediate step. Social marketing media campaigns could catalyze behavioral change and facilitate progress toward a sustainable future. Corson is in environmental politics, George Washington University. (v.10,#2)

Cortner, Hanna J., Moote, Margaret A. The Politics of Ecosystem Management. Covelo, CA: Island Press, 1999. 224 pp. \$50 cloth, \$25 paper. The sweeping and profound changes that will be required of

the American governance system--its political philosophy, institutions, notions of citizenship, and politics, as well as its resource management practices--if the shift to ecosystem management is to be realized. (v.10,#1)

Corwin, Jennifer A. An Evaluation of Kant's Claims Regarding the Non- Rational Nature of Non-Human Animals, M.A. thesis, Colorado State University, fall 2002. It is generally accepted that Kant's ethical theories cannot serve as a basis for a non-anthropocentric environmental ethic because Kant asserts that non-human animals are not owed direct duties from human beings because non-human animals are not rational creatures. But Kant's conception of rational does not permit him to make such a "knowledge claim." At most Kant can only theorize or postulate the non- rationality of animals as a theoretical possibility and not a cognitive certainty. Lacking such knowledge, we can and ought to expand Kant's ethical theories to include direct duties toward non-humans, serving as a basis for a non-anthropocentric environmental ethic. The thesis advisor was Jane Kneller. (v.13,#4)

Costanza, R, "Visions, Values, Valuation, and the Need for an Ecological Economics," Bioscience 51(no. 6, 2001):459-468. (v.13,#1)

Costanza, R., Perrings, C. and Cleveland, C.J. The Development Of Ecological Economics. Cheltenham: Edward Elgar Publishing Ltd, 1997. Reviewed by Simon Niemeyer. Environmental Values 9(2000):113.

Costanza, Robert, Daly, Herman, and Hawken, Paul, "Managing Our Environmental Portfolio," Bioscience. 50 (No. 2, Feb 01 2000): 149- . (v.11,#2)

Costanza, Robert, Daly, Herman, Cumberland, John, Goodland, Robert, Norgaard, Richard. An Introduction to Ecological Economics. Boca Raton, FL: St. Lucie Press, 1997. 288 pp. \$39.95. Beginning with a description of some current problems in society and their underlying causes, then moving on to an historical perspective to explain how world views regarding economics and ecology have evolved, the writers continue by presenting the fundamental principles of ecological economics and outlining a set of policies for creating and implementing a sustainable society. They end with prospects for the future. (v8,#3)

Costanza, Robert, ed., Ecological Economics: The Science and Management of Sustainability. Columbia University Press, 1991. 555 pages. \$ 50.00. (v2,#3)

Costanza, Robert, and twelve others. "The Value of the World's Ecosystem Services and Natural Capital." Nature 387(15 May 1997):253-260. The services of ecological systems and the natural capital stocks that produce them are critical to the functioning of the Earth's life support system. They contribute to human welfare, both directly and indirectly, and therefore represent part of the total economic value of the planet. The authors have estimated the current economic value of 17 ecosystem services for 16 biomes, based on published studies and a few original calculations. For the entire biosphere, the value (most of which is outside the market) is estimated to be in the range of US\$ 16-54 trillion (10¹²) per year, with an average of US\$ 33 trillion per year. Because of the nature of the uncertainties, this must be considered a minimum estimate. Global gross national product total is around US\$ 18 trillion per year.

Costanza admits his group's numbers are "back-of-the-envelope" estimates, but says they are close enough to help set ecosystem usage taxes. Also in this issue is a commentary by Stuart L. Pimm, "The Value of Everything," Nature 387(15 May 1997):231-232. A summary is Wade Roush, "Putting a Price Tag on Nature's Bounty," Science 276(16 May 1997):1029. Some complain that the numbers are worthless; other say the study is important, no matter what the numbers, as they are relatively huge. Another study, by David Pimentel, came up with only \$ 3 trillion by comparison. (v8,#2)

Costanza, Robert, & Bryan G. Norton, eds., "Ecosystem Health: New Goals for Environmental

Management," (trans. by Zeng Huan). Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 3 (September 30, 2000). In Chinese. (EE v.12,#1)

Costanza, Robert, Lisa J. Graumlich, and Will Steffen, eds. *Sustainability or Collapse? An Integrated History and Future of People on Earth*. Cambridge, MA: The MIT Press, 2007. Contents include: (1) "Sustainability or Collapse? Lessons from Integrating the History of Humans and the Rest of Nature" by Robert Costanza, Lisa J. Graumlich, and Will Steffen, (2) "Human-Environment Interactions: Learning from the Past" by John A. Dearing, (3) "Assessing and Communicating Data Quality: Toward a System of Data Quality Grading" by Robert Costanza, (4) "The Rise and Fall of the Ancient Maya: A Case Study in Political Ecology" by Vernon L. Scarborough, (5) "Climate, Complexity, and Problem Solving in the Roman Empire" by Joseph A. Tainter and Carole L. Crumley, (6) "Integration of Climatic, Archaeological, and Historical Data: A Case Study of the Khabur River Basin, Northeastern Syria" by Frank Hole, (7) "The Trajectory of Human Evolution in Australia" by Timothy L. Flannery, (8) "Toward a Comparative Study of Hegemonic Decline in Global Systems: The Complexity of Crisis and the Paradoxes of Differentiated Experience" by Jonathan Friedman, (9) "Group Report: Millennial Perspectives on the Dynamic Interaction of Climate, People, and Resources" by Fekri A. Hassan, Frank Hole, João Morais, Frank Riedel, Vernon L. Scarborough, Joseph A. Tainter, Peter Turchin, and Yoshinori Yasuda, (10) "Revolutionary Weather: The Climatic and Economic Crisis of 1788-1795 and the Discovery of El Niño" by Richard H. Grove, (11) "The Lie of History: Nation-States and the Contradictions of Complex Societies" by Fekri A. Hassan, (12) "Little Ice Age-type Impacts and the Mitigation of Social Vulnerability to Climate in the Swiss Canton of Bern prior to 1800" by Christian Pfister, (13) "Information Processing and Its Role in the Rise of the European World System" by Sander E. van der Leeuw, (14) "Group Report: Integrating Socioenvironmental Interactions over Centennial Timescales—Needs and Issues" by John A. Dearing, Lisa J. Graumlich, Richard H. Grove, Arnulf Grübler, Helmut Haberl, Frank Hole, Christian Ffister, and Sander E. van der Leeuw, (15) "A Decadal Chronology of 20th-Century Changes in Earth's Natural Systems" by Nathan J. Mantua, (16) "Social, Economic, and Political Forces in Environmental Change: Decadal Scale (1900 to 2000)" by John R. McNeill, (17) "Integrating Human-Environment Approaches of Land Degradation in Drylands" by Eric F. Lambin, Helmut Geist, James F. Reynolds, and D. Mark Stafford Smith, (18) "Group Report: Decadal-scale Interactions of Humans and the Environment" by Kathy A. Hibbard, Paul J. Crutzen, Eric F. Lambin, Diana M. Liverman, Nathan J. Mantua, John R. McNeill, Bruon Messerli, and Will Steffen, (19) "Scenarios: Guidance for an Uncertain and Complex World?" by Bert J.M. de Vries, (20) "Evaluating Past Forecasts: Reflections on One Critique of *The Limits to Growth*" by Dennis L. Meadows, (21) "Integrating Global Models" by Robert Costanza, Rik Leemans, Roelof M.J. Boumans, and Erica Gaddis, and (22) "Group Report: Future Scenarios of Human-Environment Systems" by Marianne N. Young, Rik Leemans, Roelof M.J. Boumans, Robert Costanza, Bert J.M. de Vries, John Finnigan, Uno Svedin, and Michael D. Young.

Costanza, Robert. Frontiers in Ecological Economics: Transdisciplinary. Cheltenham: Edward Elgar, 1997, 400pp. Reviewed by Clive Spash. Environmental Values 9(2000):390.

Costanza, Robert; Segura, Olman; and Martinez-Alier, Juan, eds. Getting Down to Earth: Practical Applications of Ecological Economics. Washington, D.C.: Island Press, 1996. 463 pages. \$38 paper. Scientists, managers, and national and international policymakers identify practical strategies for implementing sustainability based on ecological economic principles. Sample articles: Anil Gupta, "Social and Ethical Dimensions of Ecological Economics"; Susan S. Hanna, "Property Rights, People, and the Environment"; Tomasz Zylicz, "Will New Property Rights Regimes in Central and Eastern Europe Serve Nature Conservation Purposes?" Costanza is in environmental studies, University of Maryland. Segura is in economic policy at the National University of Costa Rica. Martinez-Alier is in economics at the Universitat Autònoma in Barcelona, Spain. (v7, #3)
Coste, Michael, "Environmental Takings, Environmental Regulation, and Property: A Lockean

Perspective." Paper given at the Mountain-Plains Philosophy Conference, Oklahoma State University, Stillwater, Oklahoma, 26-28 September 1996. Coste is at Front Range Community College, Fort Collins, Colorado. (v7, #3)

Cothorn, C. R., ed., Handbook for Environmental Risk Decisionmaking. Boca Raton, FL: Lewis Publishers, 1996. (v7,#4)

Cothorn, C. Richard, ed., Handbook for Environmental Risk Decisionmaking. Boca Raton, FL: Lewis Publishers (CRC Press), 1995. 416 pp. \$69.95 The publisher's address is: 2000 Corporate Blvd., NW, Boca Raton, FL, 33431 USA; PH 800-272-7737; FAX 800-374-3401. Among the contributors to the volume are ethicists, decision makers, risk assessors, econonmists, scientists, philosophers, journalists, attorneys, theologians, policy makers, environmentalists, and regulators. Some contributors are: Richard Andrews, Scott Baker, Donald Brown, Thomas Burke, Bayard Catron, Victor Cohn, William Cooper, Douglas Crawford-Brown, William Freudenburg, Douglas MacLean, Hon. Mike McCormack, James Nash, Bryan Norton, Van Rensellear Potter, David Schnare, Virginia Sharpe, and Kristin Shrader-Frechette. The volume resulted from a one-day symposium held at the August 1994 annual meeting of the Environmental Division of the American Chemical Society. The symposium consisted of two keynote speakers and fourteen presentations, although the book has eight more papers to flesh out the topics.

The volume is organized as a supplemental textbook. Sections are: introduction, issues in environmental risk decision making, values and value judgements, commentary and summary.

The editor summarizes the argument of the book as follows: Values and ethics should be included in the environmental decision making process for three reasons; they are already a major component, although unacknowledged; ignoring them causes almost insurmountable difficulties in risk communication; and because it is the right thing to do. The existing models for environmental risk assessment do not contain any explicit mention of values, value judgements, ethics, or perceptions. However, these are often the main bases used in making such decisions. For example:

- alar was banned to protect children
- the linear, no-threshold dose-response curve and use of combined upper 95% confidence limits are based on safety, not science
- the idea of zero discharge is based on the sanctity of the individual
- forests and wetlands are preserved because of stewardship
- sustainable development is based on protecting future generations
- nuclear power is avoided because of fear of a catastrophe.

For more information, contact the editor, Rick Cothorn: PH 202-208-6234 , FAX 202-208-4867, E-mail <rcothorn@nova.umuc.edu>. (v6,#4)

Cottingham, K. L., "Tackling Biocomplexity: The Role of People, Tools, and Scale," Bioscience 2(no.9, 2002): 793-800.
(v.13,#4)

Coufal, James E., "Facing Difficult Questions: Can the SAF Code of Ethics Help?," Journal of Forestry 98 (No. 7, 2000 July 01): 28- . Not trying to answer the tough questions is behaving like the ostrich that sticks its head in the sand. In either case, danger does not just go away. (v.11,#4)

Coufal, James E., and Charles M. Spuches, Environmental Ethics in Practice: Developing a Personal Ethic. Materials for Natural Resources Management Instructors. Syracuse, NY: SUNY College of Environmental Science and Forestry, 1995. 309 pages. Designed especially for professionals affiliated with the Society of American Foresters, the National Association of Professional Forestry Schools and Colleges, and the National Association of University Fisheries and Wildlife Programs. Funded by a USDA Higher Education Challenge Grant, and a SUNY Environmental Science and Forestry Grant.

Field tested in some 20 locations. Copies have been placed with over 60 colleges of forestry, natural resources, and other related programs. Copies available for \$15.00 from Dr. Charles M. Spuches, Coordinator of Instructional Development, SUNY-ESF, 1 Forestry Drive, Syracuse, NY 13210, USA. Phone 315-470-6810. Unit One: An Introduction to the Roots of Environmental Ethics. In 3-ring notebook form. Unit Two: Models for Understanding and Use. Unit Three: Environmental Ethics in Practice: Examples, Reflections and Cases. Includes overhead masters, codes of ethics of selected natural resources organizations, and selected readings on environmental ethics. The readings include: David N. Bengston, "The Nature of Value and the Value of Nature"; Membership Concerns Survey, Situational Ethics Workgroup, American Fisheries Society, "Should We Eat These Fish? A Situation Ethics Survey of AFS Members"; J. Baird Callicott, "The Wilderness Idea Revisited"; and Holmes Rolston, III, "The Wilderness Idea Reaffirmed"; Callicott, "The Land Aesthetic"; James. W. Giltmier, "How Can We be Ethical Conservationists if We are Irrational in the Way We Think?"; Leo McAvoy, "An Environmental Ethic for Parks and Recreation"; Ian S. Moss, "Foresters' Ethics"; Bob Scarfo, "Stewardship: The Profession's Grand Delusion"; Christopher A. Wood, "Ecosystem Management: Achieving the New Land Ethic"; Craig R. Wyant, "The Environmental Role of Landscape Architects." Included in the text is James E. Coufal, "Biodiversity and Environmental Ethics: A Personal Reflection." Case studies: Red-cockaded woodpeckers on private forest land; logging ordinances and aesthetics, corridor design, religious forests and secular forest policies. Yellowstone National Park: To burn or not to burn? Is that the question? Coufal is professor of forestry and environmental studies, and Spuches is instructional developer at SUNY College of Environmental Science and Forestry. Impressive for its mix of theory and practice at the level useful for the forestry and environmental professional. (v6,#2)

Coufal, Jim, "Telling Our Story," Journal of Forestry 103(no.2, March 2005):101-101(1).

Coukell, Allan, "New Zealanders Press Plan for Apes' Rights," NY Times (3/16/99): D3.Human rights for apes. A group of scientists and conservationists in New Zealand is hoping to make this country the first nation in the world to grant basic legal rights to nonhumans. They advocate altering animal welfare legislation now being considered in Parliament to include the right of great apes (i.e., chimpanzees, bonobos, gorillas and orangutans) not to be deprived of life and not to be used in scientific experimentation. In a submission to a committee of Parliament, the group argues that great apes share with humans self-awareness and the ability to reason. The group is affiliated with the Great Ape Project International that formed in 1993 to campaign for a U.N. charter on great apes. (v.10,#1)

Coulombe, MJ, "Exercising the Right to Object: A Brief History of the Forest Service Appeals Process", Journal of Forestry 102 (no.2, 2004): 10-13(4).

Coulson, John, and Nicola J. Crockford, ed., Bird Conservation: The Science and the Action, special supplement to Ibis: The International Journal of the British Ornithologists Union, 137 (1995). Over 250 pages, two dozen authors, the proceedings of a 1994 conference, 220 delegates from 20 countries. Worldwide perspectives. Often developments in botany or entomology (birds eat seeds and insects!) have as much to do with bird conservation as ornithology. As visible as birds are, there is an astonishing lack of information about their conservation. Well over 100 species have become extinct within recent centuries. Give patterns and centers of endemism, the future of a quarter of all birds species on Earth depends solely and uniquely on the success or failure of conservation within a critical 5% of the Earth's land surface. With "Conclusions and Recommendations" drafted during the conference. (v6,#2)

Council for the Environment, An Approach to a National Environmental Policy and Strategy for South Africa. Pretoria: Council for the Environment, 1990. (v6,#3)

Coursen, David F., "The Takings Jurisprudence of the Court of Federal Claims and the Federal Circuit," Environmental Law 29 (No. 4, 1999): 821- . Mr. Coursen analyzes the recent takings jurisprudence of the

Court of Federal Claims and the Federal Circuit. He finds little doctrinal coherence but distills several practical guidelines to the manner in which this forum approaches takings in the wake of *Lucas v. South Carolina Coastal Council*. (v.11,#2)

Courtenay Hall, Pamela Mae, *Ecoholism and its Critics: A Critical Exploration of Holism in Environmental Ethics and the Science of Ecology*, Ph. D. thesis in philosophy, University of Toronto, 1995. 409 pages. ISBN 0-612-07281-9. In the 1970's, Western philosophers such as John Rodman and Kenneth Goodpaster, began to explore the possibility that the individualist framework of modern moral philosophy might be part of the environmental problem. Intrigued by the science of ecology, they took seriously the possibility that the view of humankind as part of a more comprehensively understood nature might bring with it a new, holistic foundation for understanding what has moral significance, and why. This has expanded to include ecoholist themes in more recent work, including deep ecology and ecofeminism. I develop a topography of the types of "ecoholism" thought to support the belief that all of nature is morally significant. I critically assess their support in the science of ecology. Ecology is comprised of a diverse group of research programs none of which is a "holistic" science in the sense required to support ecoholism. In the light of feminist and other critiques of science, the project of seeking to base ethics on science is deeply problematic. The advisor was L. W. Sumner. (v.10,#1)

Cousins, Emily, "Mountains Made Alive: Native American Relationships with Sacred Land," *Cross Currents* 46 (no. 4, Winter 1996/97):497-509. "The phrase 'sacred land' is used frequently these days, both by Native Americans trying to protect land and by non-Natives sensitive to this cause. Yet despite its increased use, the meaning of the phrase remains elusive to many non-Natives, who relate to land mostly through property lines or hiking trails. Traditional Native American cultures, on the other hand, have defined geography through myth, ritual ceremonies, and spirit power. This difference highlights perhaps the widest gulf between the two cultures. It also represents a place where we must meet, as both cultures face environmental crisis." Cousins is a writer and editor living in Missoula, Montana. (v.8,#4)

Covich, Alan P et al., "The Role of Biodiversity in the Functioning of Freshwater and Marine Benthic Ecosystems", *BioScience* 54 (no. 8, 1 August 2004):767-775(9). Empirical studies investigating the role of species diversity in sustaining ecosystem processes have focused primarily on terrestrial plant and soil communities. Eighteen representative studies drawn from post-1999 literature specifically examined how changes in biodiversity affect benthic ecosystem processes. Results from these small-scale, low-diversity manipulative studies indicate that the effects of changes in biodiversity (mostly synonymous with local species richness) are highly variable over space and time and frequently depend on specific biological traits or functional roles of individual species. Future studies of freshwater and marine ecosystems will require the development of new experimental designs at larger spatial and temporal scales. Furthermore, to successfully integrate field and laboratory studies, the derivation of realistic models and appropriate experiments will require approaches different from those already used in terrestrial systems.

Covington, W., Wallace Fule, Peter Z. Vance, and Regina K., "Learning by Doing: Education in Ecological Restoration at Northern Arizona University," *Journal of Forestry* 98(no.10, OCT 01 2000):30-. Northern Arizona University offers an integrated, interdisciplinary program that stresses both the ecological and the social skills that restorationists need. (EE v.12,#1)

Covington, W. Wallace, Fule, Peter Z., Wagner, Michael R. "Restoring Ecosystem Health in Ponderosa Pine Forests of the Southwest," *Journal of Forestry* 95(no.4, 1997):23. (v8,#2)

Coward, H. and Th. Hurka, *The Greenhouse Effect*. Waterloo, Ontario: Wilfrid Laurier University and Calgary Institute for the Humanities, 1993. (v4,#3)

Coward, Harold, ed., Population, Consumption, and the Environment: Religious and Secular Perspectives. Albany: State University of New York Press, 1995. (v.11,#1)

Coward, Harold, ed., Population, Consumption, and the Environment: Religious and Secular Perspectives. Albany: State University of New York Press, 1995. (v10,#4)

Coward, Harold, ed., Traditional and Modern Approaches to the Environment on the Pacific Rim. Albany: State University of New York Press, 1998. (v.11,#1)

Coward, Harold, ed., Population, Consumption, and the Environment: Religious and Secular Responses. Albany, NY: State University of New York Press, 1995. 327 pages. \$ 18.95 paper. Different ways in which the world religions view overpopulation and overconsumption, compared with secular approaches. The historical records of the particular religion's teachings about these issues. Aboriginal spirituality, Judaism, Christianity, Islam, Buddhism, Hinduism, Chinese religions, secular ethics, North-South relations, market forces, the status of women, and international law. Coward is director of the Centre for Studies in Religion and Society at the University of Victoria. (v6,#4)

Coward Harold, "Hindu Spirituality and the Environment," Ecotheology No 3 (July 1997):50-60.

Coward, Harold, "New Theology on Population, Consumption, and Ecology," Journal of the American Academy of Religion 65(1997):259-273. Often religion is never mentioned in these debates, yet it is clear that religions can and do strongly shape people's attitudes to the environment, to practices surrounding fertility and reproductive health, and to the just sharing of Earth's resources. Introducing a theme issue on "Religious Responses to Problems of Population, Consumption, and Degradation of the Environment," resulting from a research project on the topic, the full results of which will be published by SUNY Press. Coward is in Studies in Religion and Society at the University of Victoria, British Columbia. (v8,#3)

Coward, Harold, ed., Traditional and Modern Approaches to the Environment on the Pacific Rim. Albany: State University of New York Press, 1998. (v10,#4)

Coward, Harold and Thomas Hurka, eds., Ethics and Climate Change: The Greenhouse Effect. Waterloo, Ontario: Wilfrid Laurier University Press, 1993. Canadian \$ 35.00. Cloth. (v4,#4)

Coward, Harold, and Maguire, Daniel C., eds., Visions of a New Earth: Religious Perspectives on Population, Consumption, and Ecology. Albany: State University of New York Press, 1999. 248 pages. 13 contributors. Examples:
--Yu (Yü), Chün-fang, "Chinese Religions on Population, Consumption, and Ecology" (China)
--Olupona, Jacob K., "African Religions and the Global Issues of Population, Consumption, and Ecology" (Africa). (v10,#4)

Coward, Harold. "Religious Responses to the Population Sustainability Problematic: Implications for Law," Environmental Law 27(no.4, 1997):1169- . (v9,#2)

Coward, R, "Ecology is a creative act," Ecologist 32(no.1, 2002):9- . (v.13, #3)

Coward, R., "Too Many Babies? What Gives Us the God-Given Right to Reproduce?," Ecologist 32(no.8, 2002): 31. (v.13,#4)

Cowdin, Daniel M., "John Paul II and Environmental Concern: Problems and Possibilities," The Living Light, Fall 1991, vol 28, no. 1. John Paul II's statements in the light of three forms of environmental

ethics: enlightened anthropocentrism, ecocentrism, and geocentrism. John Paul II never moves past an anthropocentric viewpoint. Cowdin suggests moving the tradition forward toward an evaluation of nature for its own sake and not simply for fulfillment of human needs. Cowdin teaches moral theology at the Catholic University of America. (v4,#4)

Cowell, Mark. "Ecological Restoration and Environmental Ethics." Environmental Ethics 15(1993):19-32. Restoration ecology has recently emerged as a branch of scientific ecology that challenges many of the traditional tenets of environmentalism. Because the restoration of ecosystems, "applied ecology," has the potential to advance theoretical understanding to such an extent that scientists can extensively manipulate the environment, it encourages increasingly active human participation within ecosystems and could inhibit the preservation of areas from human influences. Despite the environmentally dangerous possibilities that this form of science and technology present, restoration offers an attractive alternative for human interaction with the environment. I outline the primary claims that have been made for ecological restoration, examine inconsistencies with restorationists' philosophical position, and propose a reassessment of the definition of restoration that may aid in the clarification and development of a system of environmental ethics that recognizes human relationships with the environment as potentially symbiotic and positive. Cowell is in the department of Geography and Planning, Memphis State University, Memphis, TN. (EE)

Cowell, Richard, Review of Hanley, N., Spash, C.L., Cost Benefit Analysis and the Environment. Environmental Values 5(1996):182-183. (EV)

Cowen, Robert C. "A Wake-Up Call to Save the Sea's Shrinking Fish Stocks." The Christian Science Monitor, vol. 89, 11 Feb. 1997, p. 12.

Cowen, Robert C. "Satellites Get a Whiff of Ozone-Eating Chemicals." The Christian Science Monitor, vol. 88, 25 Sept. 1996, p. 14.

Cowen, Robert C. "Mountain Wind Flows Make Waves With Scientists." The Christian Science Monitor 89.92 (8 April 1997): 14.

Cowen, Tyler. "Policing Nature." Environmental Ethics 25(2003):169-182. Utility, rights, and holistic standards all point toward some modest steps to limit or check the predatory activity of carnivores relative to their victims. At the very least, we should limit current subsidies to nature's carnivores. Policing nature need not be absurdly costly or violate common-sense intuitions. (EE)

Cowie, RH; Robinson, AC, "The decline of native Pacific island faunas: changes in status of the land snails of Samoa through the 20th century," Biological Conservation 110(no.1, 2003): 55-65.

Cowling, R. M., and Samways, M. J. "Predicting Global Patterns of Endemic Plant Species Richness." Biodiversity Letters 2, no.5 (1994): 127. (v7, #3)

Cowling, Richard and Dave Richardson, Fynbos: South Africa's Unique Floral Kingdom Vlaeberg: Fernwood Press, 1995. 154 pages. ISBN 1 874590 10 5 Fynbos, a vegetation type unique to South Africa, is the smallest floral kingdom in the world, yet for its size it boasts the largest number of plant species. Nowhere else on earth are so many species crammed into such a small area. This is an extremely attractive presentation in text and photography, not only of the flora but of the fauna it supports. Its conservation is of great concern and one of the leading arguments here is that the solutions to these problems lie in the recognition of fynbos as an economic resource. Cowling is an ecologist at the University of Cape Town and a 1994 winner in the Pew Conservation Award. Richardson is a researcher at the Institute for Plant Conservation, University of Cape Town. (v6,#3)

Cowlshaw, Guy. "Predicting the Pattern of Decline of African Primate Diversity: An Extinction Debt from Historical Deforestation." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):1183- . (v10,#4)

Cox, C. Barry, and Moore, Peter D., Biogeography: An Ecological and Evolutionary Approach, 5th ed. Cambridge MA: Blackwell Scientific Publishers, 1973-1993. Biodiversity in natural history, humans impacts on biodiversity, and biodiversity science in the interest of conservation and human wellbeing and survival. (v.10,#1)

Cox, Cleo, rDNA Genetic Engineering: More of the Same?, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Cox, Cleo, rDNA Genetic Engineering: More of the Same?, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Cox, Damian. "On the Value of Natural Relations." Environmental Ethics 19(1997):173-183. In "A Refutation of Environmental Ethics" Janna Thompson argues that by assigning intrinsic value to nonhuman elements of nature either our evaluations become (1) arbitrary, and therefore unjustified, or (2) impractical, or (3) justified and practical, but only by reflecting human interest, thus failing to be truly intrinsic to nonhuman nature. There are a number of possible responses to her argument, some of which have been made explicitly in reply to Thompson and others which are implicit in the literature. In this discussion I describe still another response, one which takes Thompson's concerns about value seriously, but does not assign nature intrinsic or nonanthropocentric value. I suggest a relational environmental ethic as the basis for a genuinely ethical stance toward nature in which our relations to nature are a principal object of ethical concern. Cox is in the School of Social and Cultural Studies, Edith Cowan University, Joondalup, Western Australia. (EE)

Cox, George W., Alien Species in North America and Hawaii: Impacts on Natural Ecosystems. Washington, D.C.: Island Press, 1999. 400pp. cloth \$60. paper \$30. Comprehensive overview of the invasive species phenomenon, examining the threats posed and the damage that has already been done to ecosystems across North America and Hawaii. Cox is emeritus professor of ecology at San Diego State University. (v10,#4)

Cox, Kenneth. "The Countryside in Ontario: Some Perspectives on Wetlands and Wildlife," Environments 24(no.3, 1997):17. (v8,#3)

Cox, L. Hughes, "On the Uses of Analogy in Land Ethics." In Freedom, Equality, and Social Change, edited by Creighton Peden and James P. Sterba (Lewiston: Edwin Mellen Press, 1989), pp. 324-333. Leopold's argument in "The Land Ethic" is analogical, but it fails because of the disanalogy between human agents who can communicate and natural objects that cannot. Cox claims that Leopold's analogy is meant as a useful moral fiction. A serious mis-reading of Leopold; e.g., Cox claims that Leopold "never uses the organismic metaphor" (p. 331). (Katz, Bibl # 2)

Cox, Paul Alan, Nafauna: Saving the Samoan Rainforest. New York: Freeman, 1999. (v.11,#1)

Cox, Paul Alan, "Will Tribal Knowledge Survive the Millennium," Science 287(7 January 2000):44-45. Tribal knowledge can often seem superstitious, but tribal herbal knowledge has at times given promising leads to new drugs. An example from Western Samoa is an antiviral drug, prostratin. But both the tribal knowledge and the biodiversity on which it is based are being rapidly lost. Cox directs the National Tropical Botanical Garden in Hawaii. (v.11,#1)

Cox, Roger F. "Preserving Contribution Rights in Private CERCLA Response Cost Actions", Journal of Environmental Law & Practice 4(no.3, 1996):50. Parties settling private CERCLA actions must look outside the statute for rules governing preservation of contribution rights.

Cox, Stan, "Big Medicine's Malignant Growth." AlterNet. Posted February 22, 2006, and available at: <http://www.alternet.org/envirohealth/32413/>. Web-based alternative news service AlterNet carried this lively story on Andrew Jameton's work on the "Green Health Center" projects. Cox is a farmer and writer with the Land Institute in Kansas.

Cox, Susan Jane Buck. "No Tragedy of the Commons." Environmental Ethics 7(1985):49-61. The historical antecedents of Garrett Hardin's "tragedy of the commons" are generally understood to lie in the common grazing lands of medieval and post-medieval England. The concept of the commons current in medieval England is significantly different from the modern concept; the English common was not available to the general public but rather only to certain individuals who inherited or were granted the right to use it, and use of the common even by these people was not unregulated. The types and in some cases the numbers of animals each tenant could pasture were limited, based at least partly on a recognition of the limited carrying capacity of the land. The decline of the commons system was the result of a variety of factors having little to do with the system's inherent worth. Among these factors were widespread abuse of the rules governing the commons, land "reforms" chiefly designed to increase the holdings of a few landowners, improved agricultural techniques, and the effects of the industrial revolution. Thus, the traditional commons system is not an example of an inherently flawed land-use policy, as is widely supposed, but of a policy which succeeded admirably in its time. Cox is in the department of Political Science, Northern Arizona University, Flagstaff, AZ. (EE)

Cox, Susan Jane Buck, "No Tragedy of the Commons" Environmental Ethics 7(1985):49-61. An historical analysis shows that Garrett Hardin's model of the tragedy of the commons, the English pasturage system, was not flawed, and did not lead to ruin. In real life, Hardin's model of the self-interested, rational, economic human does not exist. (Katz, Bibl # 1)

Cozic, John, Global Resources. Opposing Viewpoints Series, San Diego: Greenhaven Press, 1998. (v.9,#3)

Cozza, K., Fico, R., Rogers, E. "The Damage-Conservation Interface Illustrated by Predation on Domestic Livestock in Central Italy," Biological Conservation 78(no.3, 1996):329.

Crabb, Charlene, "Rio, the Logical Sea Lion," Discover 14 (February 1993). A sea lion that understands deductive reasoning. The researchers claim that Rio could identify the third connection in a hypothetical syllogism 28 out of 30 times on her first try. (v5,#1)

Craig, Paul P., Harold Glasser and Willett Kempton, "Ethics and Values in Environmental Policy: The Said and the UNCED." Environmental Values Vol. 2 No.2(1993):137--158. ABSTRACT: While citizens often use non-instrumental arguments to support environmental protection, most governmental policies are justified by instrumental arguments. This paper explores some of the reasons. We interviewed senior policy advisors to four European governments active in global climate change negotiations and the UNCED (United Nations Conference on Environment and Development) process. In response to our questions, a majority of these advisors articulated deeply held personal environmental values. They told us that they normally keep these values separate from their professional environmental policy activities. We interpret these findings within the context of the literature on environmental ethics and values. We suggest that environmental policy could be improved if widely held environmental values were articulated, validated, and admitted into the process of policy analysis and deliberation.

KEYWORDS: environment, ethics, values, policy, intrinsic value. Craig and Glasser: Sustainable Futures Group, College of Engineering, University of California, Davis 95616, USA. Kempton: Center for Energy and Urban Policy Research, University of Delaware, Newark, DE 19716, USA.

Craig, Raymond S., "Further Development of a Land Ethic Canon," Journal of Forestry 90 (no. 1, January 1992):30-31. Craig is chair of the Society of American Foresters Committee on Ethics. (v3,#1)

Craig, RK, "Taking the Long View of Ocean Ecosystems: Historical Science, Marine Restoration, and the Oceans Act of 2000", Ecology Law Quarterly 29(no.4, 2003):649-706.

Craig, Robin Kundis. "Of Fish, Federal Dams, and State Protections: A State's Options Against the Federal Government for Dam-Related Fish Kills on the Columbia River." Environmental Law 26, no.1 (1996): 355. Craig examines the possible means for states to bring claims against the federal government for dam-related fish kills. She explores the federal government's sovereign immunity and the interaction between the states' and federal government's interests in the Columbia River Basin. Craig argues in favor of a strict liability remedy against the federal government so that states may obtain damages for the fish kills. (v7, #3)

Craige, Betty Jean, Eugene Odum: Ecosystem Ecologist and Environmentalist. Athens, GA: University of Georgia Press, 2001. 264 pages. \$ 35. The first biography of the father of ecosystem ecology. Craige is University Professor of Comparative Literature, University of Georgia. (EE v.12,#1)

Craige, Betty Jean, Eugene Odum: Ecosystem Ecologist and Environmentalist. Review by David Keller, Ethics and the Environment 6(no. 2, 2001):119-124. (E&E)

Craik, J. C. A., "The Gaia Hypothesis--Fact or Fancy," Journal of the Marine Biological Association of the United Kingdom 69(1989):759-768. Mostly fancy.

Crain, Caitlin Mullan; Bertness, Mark D., "Ecosystem Engineering across Environmental Gradients: Implications for Conservation and Management," BioScience 56 (no.3, March 2006): 211-218 (8). Ecosystem engineers are organisms whose presence or activity alters their physical surroundings or changes the flow of resources, thereby creating or modifying habitats. Because ecosystem engineers affect communities through environmentally mediated interactions, their impact and importance are likely to shift across environmental stress gradients. We hypothesize that in extreme physical environments, ecosystem engineers that ameliorate physical stress are essential for ecosystem function, whereas in physically benign environments where competitor and consumer pressure is typically high, engineers support ecosystem processes by providing competitor- or predator-free space. Important ecosystem engineers alleviate limiting abiotic and biotic stresses, expanding distributional limits for numerous species, and often form the foundation for community development. Because managing important engineers can protect numerous associated species and functions, we advocate using these organisms as conservation targets, harnessing the benefits of ecosystem engineers in various environments.

Cramer, J. C. and Roland, H. E., "Review of: National Research Council. The Drama of the Commons," Society and Natural Resources 16(no. 7, 2003): 665-667.

Crammond, James D. "Leasing Water Rights for Instream Flow Uses: A Survey of Water Transfer Policy, Practices, and Problems in the Pacific Northwest." Environmental Law 26, no.1 (1996): 225. A comprehensive review of instream water right leasing in the Pacific Northwest. Legal hurdles, combined with uncertainty over monitoring and enforcement of instream rights, limit lease opportunities in some watersheds, but lease markets are developing as parties gain experience and as information about opportunities, benefits, and results accumulate. (v7, #3)

Crane, Peter and Ann Kinzig, "Nature in the Metropolis," Science 308(27 May 2005):1225. Editorial. "It seems very likely that our environmental ethic will gradually change. ... Whatever the future of our environmental ethic, one thing is clear: What remains of habitats and biodiversity within the city is of disproportionate importance." The Chicago Wilderness Consortium is commended as an example, 172 public and private organizations working together to protect, restore, manage Chicago's natural resources, and to give urban people access to nature nearby. Crane is director of Royal Botanic Gardens, Kew, UK. Kinzig is in urban ecology, Arizona State University.

Cranor, Carl F., "Collective and Individual Duties to Protect the Environment." Journal of Applied Philosophy 2, no. 2 (1985):243-259. A discussion of the limitations and strengths of so-called generalization arguments in ethics, using pollution control as an example. Cranor finds that our major duties regarding pollution control are political, in that we must create laws or other political mechanisms to insure that people do not pollute. (Katz, Bibl # 1)

Cranor, Carl F., Regulating Toxic Substances: A Philosophy of Science and the Law. New York: Oxford University Press, 1992. Cranor is at the University of California, Riverside. 272 pages. \$ 39.95. (v3,#3)

Crate, Susan Alexandra. *Cows, Kin, and Globalization: An Ethnography of Sustainability*. Walnut Creek, CA: AltiMira Press, 2006. Crate presents the first cultural ecological study of a Siberian people: the Viliui Sakha, contemporary horse and cattle agropastoralists in northeastern Siberia. The author links the local and global economic forces, and provides an intimate view of how a seemingly remote and isolated community is directly affected by the forces of modernization and globalization. She details the severe environmental and historical factors that continue to challenge their survival, and shows how the multi-million dollar diamond industry, in part run by ethnic Sakha, raises issues of ethnic solidarity and indigenous rights as well as environmental impact.

Crawford-Brown, Douglas, and Neil E. Pearce. "Sufficient Proof in the Scientific Justification of Environmental Actions." Environmental Ethics 11(1989):153-67. Environmental actions require a willingness to act, which, in turn, is stimulated partially by the belief that an action will yield the desired consequences. In determining whether an actor was justified in exerting the will to act, therefore, it is essential to examine the nature of evidence offered by the actor in support of any beliefs about the environment. In this paper we explore the points in environmental risk analyses at which evidence is brought to bear in support of inferences concerning environmental effects of regulatory actions. The intent is to provide a framework for discussing the manner in which evidence may provide a sufficient basis for ethically sound decisions for environmental actions. Pearce is at the Wellington Clinical School of Medicine, Wellington, New Zealand. Crawford-Brown is at the School of Public Health, University of North Carolina, Chapel Hill, NC. (EE)

Crawford-Brown, Douglas, and Neil E. Pearce, "Sufficient Proof in the Scientific Justification of Environmental Actions," Environmental Ethics 11(1989):153-167. Focusing on the case of radon exposure, this is an examination of the nature of evidence used in the decision-making and regulatory process of environmental risk. Proves that it is inappropriate to use scientific judgments as the sole determinants in ethical decisions. (Katz, Bibl # 2)

Crawford, Colin, Uprou at Dancing Rabbit Creek: Battling Over Race, Class, and the Environment. Reading, MA: Addison-Wesley, 1996.. How a small, mostly black Mississippi county (Noxubee County) became the target of an entrepreneur looking for a site in which to locate a toxic-waste dump. In their resistance, county residents had to face charges of racism for opposing a project that would have given the poor, black community a (tainted) breath of economic hope (150 jobs). Black elected officials repeatedly voted to approve the dump, and the local NAACP, whose vice-president was hired as a consultant, issued a resolution of approval. Set in courtrooms and living rooms, full of historical digressions and local

color, with a multiracial cast of characters, and pervaded by strong environmental convictions, here is a case study in environmental discrimination. Crawford is an environmental lawyer based in New York City.

Crawford, Donald W. Review of Reconciling Man with the Environment. By Eric Ashby. Environmental Ethics 3(1981):187-88.

Crawford, Jennifer, The Sustainable Self: An Inquiry into the Metaphysics of Sustainability and the Self. Environmental Paper No. 10. Graduate School of Environmental Sciences, Department of Geography and Environmental Science, Monash University, Melbourne, Victoria 3168, Australia. 1993. 70 pages. ISBN 0 909685 51 7. The monograph, developed from a Master's thesis there, considers the meaning of Self realization, introduced into environmental thought by deep ecologists. The term was borrowed from Gandhi and transplanted into Western environmental philosophy, a "conceptual colonization" that has, to the great loss of ecophilosophy, deformed the traditional meaning of both Self realization and the Self. The author argues for a return to Gandhi's concept, against the Western loss of the vertical dimension of being, which leaves an impoverished sense of reality and of self. She critiques the work of deep ecologists. Their deformation of the concept of Self has created confusion and misunderstanding and even been used by some to strengthen the modern Western mind set which they purport to change. Yet the positive significance of deep ecology is acknowledged as potentially providing an opening for the reintroduction of metaphysics into our understanding of ourselves and our relationship with nature. (v4,#1)

Crawford, Ronald L., and Crawford, Don L. Bioemediation: Principles and Applications. New York: Cambridge University Press, 1996. 400 pages. \$90 cloth. The most serious and common environmental contaminants, and the recent application of bioremediation to polluted soil and water. (v7, #3)

Crawley, Michael J., ed., Natural Enemies: The Population Biology of Predators, Parasites and Diseases. Oxford: Blackwell Scientific Publications, 1992. Two dozen contributors. Relationships are usually more complex than we think. Predators may regulate prey populations in some years and in some circumstances; prey, especially herbivores, may be regulated as often by how much food is available or by parasites and diseases. A long-standing generalization is that all trophic levels are regulated by competition for resources, except for herbivores which are regulated by natural enemies. Many, perhaps most, carnivores are food-limited, what prey they can catch. But it does not follow that their prey herbivores are enemy-limited, how many of them are caught; they may be limited in numbers by food too, how much green there is to eat. (cf Crawley's overview, pp. 476-489). Crawley is in biology, Imperial College, London.

Crawley, Michael J., ed., Natural Enemies: The Population Biology of Predators, Parasites and Diseases. Oxford: Blackwell Scientific Publications, 1992. "This book is about death and disease. It is an ecologist's view of Darwin's vivid evocation of Nature, red in tooth and claw. As such, it is definitely not for the squeamish. The aim is to look for broad patterns in the population biology of natural enemies." (p. xi) Crawley is in biology at Imperial College, London.

Creation Spirituality is "a magazine to sustain the earth--with creativity, reverence, celebration and prophetic vision." There are "regular features on creating ritual, art as meditation, mysticism, science, ecology and psychology." Matthew Fox is editor-in-chief. Six issues a year, \$ 20. Contact: Creation Spirituality, 160 E. Virginia Street, # 290, San Jose, CA 95112. (v2,#2)

Creel, S; Fox, JE; Hardy, A; Sands, J; Garrott, B; Peterson, RO, "Snowmobile Activity and Glucocorticoid Stress Responses in Wolves and Elk," Conservation Biology 16(no.3, 2002):809-814. (v.13, #3)

Creel, Scott, et al., "Snowmobile Activity and Glucocorticoid Stress Responses in Wolves and Elk," Conservation Biology 16 (no. 3, 2002):809-814. A study of stress hormones in the feces of elk and wolves in Yellowstone National Park and Voyageurs National Park in Minnesota shows that stress levels rise and fall with the amount of snowmobile traffic. Creel is in ecology, Montana State University. (v.13, #3)

Creel, Scott, "Four Factors Modifying the Effect of Competition on Carnivore Population Dynamics as Illustrated by African Wild Dogs," Conservation Biology 15(no.1, 2001 Feb 01): 271-. (v.12,#3)

Creighton, Sarah Hammond. Greening the Ivory Tower: Improving the Environmental Track Record of Universities, Colleges, and Other Institutions. Cambridge, MA: MIT Press, 1998. 372 pp. Paper \$25. A motivational and how-to-guide for staff, faculty, and students. Offers detailed "greening" strategies for those who may have little experience with institutional change or with the latest environmentally friendly technologies. The author was project manager of Tufts CLEAN. (v.9,#4)

Cremona, Michael A., and Mukunda Goswami, Divine Nature: A Spiritual Perspective on the Environmental Crisis. Foreward by William McDonough. Los Angeles: Bhaktivedanta Book Trust, 1995. 108 pp. Pb. \$ 9.95 U.S.; \$12.95 Canada. Includes a bibliography of environmental books and videos available from the Bhaktivedanta Society. Michael W. Fox of the Humane Society (USA) praises the book as "wonderful." Also the author of the Hanover Principles, McDonough is Dean of Architecture at the University of Virginia. Cremona is a research associate at the Bhaktivedanta Institute, and Goswami is the Director of Communications for the International Society for Krishna Consciousness (ISKCON). Chapters in the book are: Planet in Trouble, Meat and the Environment, Toward a Spiritual Solution, Science Nature and the Environment, A Science of Consciousness, Karma and the Environment, Rural Communities of ISKCON (sub-sections: Ox Power, Karma-Free Diet, Village Life, Sustainable Small Towns, Opportunities for Involvement), and the Environment of the Soul. (v6,#2)

Cremona, Michael A., Goswami, Mukunda. Divine Nature: A Spiritual Perspective on the Environmental Crisis. Los Angeles: The Bhaktivedanta Book Trust, 1995. 108 pp. Practical and spiritual solutions to the ecological crisis, from an (American) Hindu perspective. Case studies of communities using principles of the Vedic lifestyle in harmony with nature. (v7,#4)

Crepaz, Markus M.L. "Explaining National Variations of Air Pollution Levels: Political Institutions and Their Impact on Environmental Policy-Making," Environmental Politics 4(no.3, Fall 1995):391- . (v6,#4)

Crisp, Roger, "Animal Liberation is not an Environmental Ethic: A Response to Dale Jamieson," Environmental Values 7(1998): 476-478. Response to Dale Jamieson's article "Animal Liberation is an Environmental Ethic" in Environmental Values, Vol. 7, No. 1.

Crist, Eileen, Images of Animals: Anthropomorphism and Animal Mind. Philadelphia: Temple University Press, 1998. Seeing a cat rubbing against a person, Charles Darwin described her as "in an affectionate frame of mind"; for Samuel Barnett, a behaviorist, the mental realm is beyond the grasp of scientists and behavior must be described technically, as a physical action only. What difference does this make? In Crist's analysis of the language used to portray animal behavior, the difference "is that in the reader's mind the very image of the cat's 'body' is transfigured ... from an experiencing subject ... into a vacant object." Rejecting the notion that "a neutral language exists, or can be constructed, which yields incontestably objective accounts of animal behavior," Crist argues that "language is not a neutral instrument in the depiction of animals, and, in particular, it is never impartial with respect to the question of animal mind." Crist is at the Center for Interdisciplinary Studies, Virginia Polytechnic Institute. (v9,#2)

Crist, Eileen, "Quantifying the Biodiversity Crisis," Wild Earth 12 (no. 1, 2002):16-19. Quantitative estimates of species lost are necessary, but always inadequate, due to inherent difficulties in obtaining them. Overstatement of such losses, when discovered and exposed by environmental skeptics, can be used to downplay the real seriousness of the biodiversity crisis. The numbers game can backfire. Too much reliance on such estimates can distract from a deeper understanding of the Earth's ecological predicament. Crist is in science and technology studies at Virginia Tech in Blacksburg. (v.13,#2)

Crist, Eileen, Images of Animals: Anthropomorphism and the Animal Mind. Philadelphia: Temple University Press, 2000. "A tension is built into the pursuit of knowledge about animal life, for it is heir to both the Cartesian verdict of an unbridgeable hiatus between humans and animals and the Darwinian affirmation of evolutionary continuity. The consequence of an intellectual and cultural heritage of opposed visions of the relationship between animals and humans is that the problematic of animal mind--whether affirmed or refuted, celebrated or doubted, qualified or sidestepped--is ever present, perhaps even the heart of the matter, in behavioral writings. Representations of animal life whether intentionally or not, are always addressing what is for Western thought a most engrossing mystery--the contentious topic of animal mind or animal consciousness. In this book I address the theme of animal mind through a comparative study of representations of animals in behavioral works. Specifically, I examine the understanding of animal life in behavioral thought, from the writings of Charles Darwin and turn-of-the-century naturalists to works of classical ethology and contemporary sociobiology.

My focus is on the powerful role that language use plays in the portrayal of animals. Even a casual examination of different writings reveals that language, far from being simply a useful, neutral tool for inquiry, plays a formative part in how animals are depicted. While the different works I examine are kindred in their focus on naturally occurring animal behavior, they represent animal life in very discrepant ways. My aim is to elucidate how different portrayures of animals are created. The works I study belong to the genre of behavioral science, in that the authors examined all share the ideal of discovering the realities of the natural lives of animals. It is paradoxical, then, that while they have this common goal of arriving at faithful representations of animals--documenting with great care their life histories, habits, and instincts--they nevertheless often reveal realities that are worlds apart. I approach this paradox of striking discrepancies in the portrayal of animals by focussing on the effects of diverse linguistic mediums" (pp. 1-2) (v.13,#2)

Crist, Eileen, Images of Animals: Anthropomorphism and the Animal Mind. Philadelphia: Temple University Press, 1999.

Crist, Eileen. "Against the Social Construction of Nature and Wilderness." Environmental Ethics 26(2004):5-24. The application of constructivism to "nature" and "wilderness" is intellectually and politically objectionable. Despite a proclivity for examining the social underpinnings of representations, constructivists do not deconstruct their own rhetoric and assumptions; nor do they consider what socio-historical conditions support their perspective. Constructivists employ skewed metaphors to describe knowledge production about nature as though the loaded language use of constructivism is straightforward and neutral. They also implicitly rely on a humanist perspective about knowledge creation that privileges the cognitive sovereignty of human subject over nature. Politically, the constructivist approach fails to take the scientific documentation of the biodiversity crisis seriously; it diverts attention toward discourses about the environmental predicament, rather than examining that predicament itself; and it indirectly cashes in on, and thus supports, human colonization of the Earth. (EE)

Crist, Eileen. "Beyond the Climate Crisis: A Critique of Climate Change Discourse." *Telos* Vol. 141 (Winter 2007): 29-55.

Crist, Eileen. "Beyond the Climate Crisis: A Critique of Climate Change Discourse." *Telos* Vol. 141

(Winter 2007): 29-55.

Critchfield, Richard, Trees, Why Do you Wait? America's Changing Rural Culture. Covelo, CA: Island Press, 1991. \$ 29.95 cloth, \$ 14.95 paper. 270 pages. A history chronicling the changes taking place in rural America. (v2,#3)

Crittenden, Chris, "Self-deselection: Technopsychotic annihilation via cyborg," Ethics and the Environment 7(no. 2, 2002):127-152. The cry that advanced machines will come to dominate human beings resounds from the time of the Luddites up to the current consternation by the chief scientist of Sun Microsystems, Bill Joy. My theme is a twist on this fear: self-deselection, the possibility that humans will voluntarily combine their own bodies with technological additions to the point where it could reasonably be said that our species has been replaced by another kind of entity, a hybrid of human and radical enhancement, whether that enhancement stems from genetic alteration or the affixing of robotic parts. The paper discusses why this danger exists, focusing mainly on perilous psychological and cultural tendencies (though the amazing rate of technological change and its likely course are discussed). It then proceeds with arguments as to why such deselection is a kind of suicide and why this suicide would be a bad thing in the context of early twenty-first-century society. In the last section, ecofeminist theory is employed to generate a therapeutic ethic of social and political relationship that contrasts with a patriarchal model of dominative control through aggressive science. (E&E)

Crittenden, Chris. "Subordinate and Oppressive Conceptual Frameworks: A Defense of Ecofeminist Perspectives." Environmental Ethics 20(1998):247-63. I first demonstrate that Beth Dixon's central arguments challenging Karen Warren's "logic of domination" do not succeed. Second, I argue that the logic of domination not only connects the oppression of women and animals--a possibility that Dixon disputes--but it in fact plays a significant role in connecting these oppressions, and many others besides, in its capacity as a component of a larger oppressive conceptual framework. My negative arguments against Dixon provide a foundation for the positive arguments in the second half of the paper, wherein, in contravention of her project, I establish that humans and animals clearly share emotions in a philosophically interesting sense, that this affective similarity allows us to draw conclusions about the oppression of animals from situations oppressive to humans, and, the main thesis, that the suffering of women, animals, and other oppressed groups is the symptom of a ubiquitous mindset morally untenable, psychologically dysfunctional, and characterized by an ideology of superior/inferior-dominator/dominated thinking. Crittenden is in philosophy, University of Tennessee, Knoxville. (EE)

Croce, Pietro, Vivisection or Science? An Investigation into Testing Drugs and Safeguarding Health. London: Zed Books, 1999. New York: St. Martins Press, 1999. 209 pages. Published in association with Doctors and Lawyers for Responsible Medicine. (EE v.12,#1)

Crocker, David, "Towards Development Ethics," World Development 19(1991):457-483. An influential survey of development ethics.

Crocker, David A., ed., Sustaining the Good Life: The Ethics of Consumption and Global Stewardship. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1997. 544 pp. \$25 paper, \$75 cloth. Two dozen eminent scholars from across the humanities and social sciences examine the causes, nature, and consequences of patterns of consumption. The essays frame the problem of consumption in a variety of ways, challenging readers to see the issue from new perspectives. (v8,#2)

Crocker, David A., "Cross-Cultural Criticism and Development Ethics," Philosophy and Public Policy Quarterly, vol. 24, no. 3, Summer 2004, pp. 2-8. Development ethicists from one society may help understand and evaluate social change in another society. After examining several types of such cross-cultural assessments, the author argues that "insider-outsider hybrids" are the most promising cross-

cultural partners. Crocker is at the Institute for Philosophy and Public Policy, University of Maryland. (v.14, #4)

Crocker, David A. and Toby Linden, eds. Ethics of Consumption. Reviewed by Bart Gruzalski. Environmental Ethics 22(2000):329-332.

Crocker, David, "Functioning and Capability: The Foundations of Sen's and Nussbaum's Development Ethic," Political Theory 20 (1992):584-612. Amartya Sen and Martha Nussbaum base a sustainable development ethic on a "capability ethic," which has advantages over an emphasis on economic growth, commodity production, or meeting basic human needs. (v3,#4)

Crocker, David A., "Development Ethics and Globalization," Philosophy and Public Policy Quarterly 22 (no. 4, Fall 2002):13-20. Development ethics in the light of trends toward globalization, summary of main trends and issues. How much are local peoples likely to benefit from globalization? Should peoples be open to globalization, cross-boundary markets, multinational powers, or should they emphasize instead their local well-being? What is the relationship of desired development to economic growth? Are there development goals and principles valid for all societies, or are such goals particular to particular peoples? Crocker favors a "capabilities" approach. Crocker is at the Institute for Philosophy and Public Policy, University of Maryland.

Crocker, David, "The Hope for Just, Participatory Ecodevelopment in Costa Rica," in Soziale Arbeit und Internationale Entwicklung, eds. Gregor Sauerwald, Wigbert Flock, and Reinhold Hemker (Munster, Hamburg: Lit Verlag, 1992), pp. 121-134. The social democratic developmental model in Costa Rica has been replaced by a neoliberal development emphasizing free trade. Both models have their drawbacks and down sides. A better model emphasizes (1) the satisfaction of basic human needs, (2) democratic self-determination, (3) environmental respect, and (4) the equal opportunity for personal self-realization. Costa Rica has the best chance of any Latin American country to become a model for blending harmony with the environment and development. Crocker is professor of philosophy at Colorado State University. (v3,#4)

Crocker, Thomas D., Review of Fisher, Anthony, C., Environmental and Resource Economics. Environmental Values 6(1997):108-110.

Croll, D. A., et al, "Introduced Predators Transform Subarctic Islands from Grassland to Tundra," Science 307(25 March 2005):1959-1961. Arctic foxes, introduced to the Aleutian Islands by fur traders looking to expand their supply from the 1700's onward, have upset the original grassland ecosystems. Once the islands were grasslands and inhabited by seed-eating Aleutian geese. The foxes drove the geese near extinction and also ate the eggs and hatchlings of puffins, auklets and other ocean feeding seabirds. As the birds faded, so did their excrement, which had been a natural fertilizer for the grasses. The grasses disappeared and left sparse tundra. Despite the foxes, the islands still remain home to 10 million seabirds that nest on cliffs.

Cromartie, Michael, ed., Creation at Risk? Religion, Science, and Environmentalism. Grand Rapids, MI: Eerdmans, 1995. 166 pages. Paper, \$ 15.00. Ten scholars and activists explore and clash over some of the scientific, religious, moral, philosophical, economic, and political claims proposed by contemporary environmentalists. Is green utopianism becoming the new communism? The Rio Climate Convention and the use of failed computer forecasts of temperature changes as the basis for public policy. Global warming. Theological implications of biocentrism. The relative merits of governments and markets in dealing with ecological problems. (v7,#1)

Cromartie, Michael J., ed., Creation at Risk? Religion, Science, and Environmentalism. Grand Rapids,

MI: Wm. B. Eerdmans, 1995.

Cromwell, Elizabeth and Steve Wiggins. Sowing Beyond the State: NGOs and Seed Supply in Developing Countries. Boulder, CO: Westview Press, 1994. 143 pages. \$19.95. (v5,#2)

Cronin, John, and Kennedy, Jr., Robert F., The Riverkeepers. New York: Scribner's, 1997. Critical initiative in action seeking to restore the Hudson River. (v.10,#2)

Cronon, William, ed., Uncommon Ground: Toward Reinventing Nature. New York: Norton, 1995. Environmental historians worrying about the cultural construction of nature. Contains Cronon, "The Trouble With Wilderness; or, Getting Back to the Wrong Nature." Cronon starts out by claiming that our concept of wilderness has to be reinvented in that it is a social construction. Sometimes he seems to adopt the postmodernist claim that there is no reality accessible beyond human words. But by the end of the article he returns to the conservation of wild nature: "I hope it is clear that my criticism in this essay is not directed at wild nature per se, or even at efforts to set aside large tracts of wild land, but rather at the specific habits of thinking that flow from this complex cultural construction called wilderness. It is not the things we label as wilderness that are the problem--for nonhuman nature and large tracts of the natural world do deserve protection--but rather what we ourselves mean when we use that label" (p. 81). "I also think it no less crucial for us to recognize and honor nonhuman nature as a world we did not create, a world with its own independent, nonhuman reasons for being as it is" (p. 87). Sounds like Cronon has gotten right back to wilderness after all.

Other essays: Carolyn Merchant, "Reinventing Eden: Western Culture as a Recovery Narrative"; "James D. Proctor, "Whose Nature? The Contested Moral Terrain of Ancient Forests"; Giovanna Di Chiro, "Nature as Community: The Convergence of Environment and Social Justice." Also a bibliography. Cronon is professor of environmental history at the University of Wisconsin. (v6,#4)

Cronon, William, Changes in the Land: Indians, Colonists, and the Ecology of New England. New York: 1983. Economic ideas, notions of property, and the commodification of the environment in early New England.

Cronon, William Nature's Metropolis: Chicago and the Great West. Norton, 1991. "But the labor theory of value cannot by itself explain the astonishing accumulation of capital that accompanied Chicago's growth. Human labor may have been critical ... but much of the value in such commodities came directly from the first, not second, nature. The fertility of the prairie soils and the abundance of the northern forests had far less to do with human labor than with autonomous ecological processes. ... The abundance that fueled Chicago's hinterland economy thus consisted largely of stored sunshine: this was the wealth of nature, and no human labor could create the value it contained ... "The social relations of production ... themselves depended on still more encompassing ecological relations on consumption. In any ecosystem, only the sun produces. ... Since no organism can make energy, each must do its best to store it, accumulating a stockpile for use when the sun will not be so generous with its gifts. The same is true of human society: most of the labor that goes into 'producing' grain, lumber, and meat involves consuming part of the natural world and setting aside some portion of the resulting wealth as 'capital.' To apply for a moment the language of economy to the ecology of the Great West, Chicago's explosive growth was purchased at the expense of prairies and forests that had spent centuries accumulating the wealth that now made 'free land' so attractive. Much of the capital that made the city was nature's own" (pp. 149-151). (v4,#2)

Cronon, William. Feature article, "An Environmentalist on a Different Path: A Fresh View of the Supposed 'Wilderness' and Even the Indians' Place in It," New York Times, April 3, 1999, p. A15, A17. "The ideal of wilderness is a fantasy and a threat." A fantasy because the American continent was already thoroughly altered by native Americans long before the Europeans came. A threat because wilderness is

no model for the human/nature relations, it sets a stark opposition between nature and culture; the needed model is one where humans are to be in harmony with nature. Gary Snyder is not so impressed: "I must confess I am getting a bit grumpy about the dumb arguments being put forth by high-paid intellectual types in which they are trying to knock Nature, knock the people who value Nature and still come out smelling smart and progressive." Cronon is in environmental history at the University of Wisconsin. (v.10,#1)

Crook, S., "Callicott's Land Communitarianism," Journal of Applied Philosophy 19(no.2, 2002): 175-84. (v.13,#4)

Crosby, Donald A., A Religion of Nature. Albany, NY: State University of New York Press, 2002. Nature as a proper focus of religious commitment and concern. Nature--envisioned as without God, gods, or animating spirits of any kind--is religiously ultimate. Nature is also metaphysically ultimate, that is, self-sustaining and requiring no explanation for its existence beyond itself. Moreover, humans are viewed as an integral part of nature, natural beings in the fullest sense of the term. They are at home in the natural world, their origin, nature, and destiny lie here and not in some transcendent realm, and their moral and religious responsibilities extend not only to one another and to the human community but to the whole of nature and to all living beings.

Crosby urges us to grant to nature the kind of reverence, respect, love, and devotion we in the West have formerly reserved for God. He explores such topics as the concept of nature, the character and status of natural values, commonalities and differences between humans and other forms of life on earth, and the place of humans in the natural order. Finally, he makes a case for a religion of nature by showing how nature can function as an appropriate focus of religious commitment, responding to six basic objections to a religion of nature, and explaining why nature should be regarded as the ultimate source of and impetus toward goodness in the world. Crosby is professor of philosophy, Colorado State University, emeritus. (v.13,#4)

Crosby, Donald A., "From God to Nature: A Personal Odyssey," Religious Humanism 25 (no. 3, Summer, 1991):107-116. "Human beings, therefore, do not transcend nature in their essential being, as had traditionally been thought and as I myself had long believed, but are product and expression of its immanent powers. For a time I had been attracted to religious humanism as an alternative to theism, but now I began to realize that human beings, as one spin-off of the irrepressibly creative workings of nature, should not be regarded as religiously ultimate in themselves but rather as evidencing, along with other forms of emergent life, the ultimacy of an all-encompassing nature." Crosby is professor of philosophy at Colorado State University, Fort Collins. (v3,#1)

Crosby Donald A., A Religion of Nature. Albany, NY: State University of New York Press, 2002. (v.13, #3)

Crosby, Donald A., Hardwick, Charley D. eds. Religious Experience and Ecological Responsibility (Volume 3 in American Liberal Religious Thought). New York: Peter Lang, 1996. 652 pages. \$74.95 hardcover. Contains: Frederick Ferré, "Keeping It Together: Holistic Reflections from a 'Natural Analyst'"; Nancy Frankenberry, "The Earth Is Not Our Mother"; D.W.D. Shaw, "The Wreck of 'The Braer'", Donald A. Crosby, "Experience As Reality: The Ecological Metaphysics of William James"; Susan Armstrong, "An Outline of a Theology of Difference"; J. Edward Barrett, "Ecological Reverence: Or, Religion Rediscovering Reality"; Noel Boulting, "Grounding the Notion of Ecological Responsibility: Peircian Perspectives"; J. Harley Chapman, "The Practice of Natural Piety as a Spiritual Discipline"; Hermann Deuser, "Charles S. Peirce's Contribution to Cosmology and Religion"; Lewis E. Hahn, "A Contextualistic View of Experience and Ecological Responsibility"; Fred W. Hallberg, "Demythologizing Eschatological Environmentalism"; Nancy R. Howell, "The Paradox of Power: An Ecofeminist Reflection upon Diversity"; John Howie, "Personalism and a Holistic Environmental Ethics"; Charles S.

Milligan, "The Eco-Religious Case for Naturalistic Pantheism"; Leslie A. Muray, "Meland's Mystical Naturalism and Ecological Responsibility"; Jerome Stone, "Caring for the Web of Life: Towards a Public Ecotheology"; Douglas Sturm, "Faith, Ecology, and the Demands of Social Justice: On Shattering the Boundaries of Moral Community"; and papers on other themes. Crosby is in philosophy at Colorado State University; Hardwick in religious studies at American University. (v7,#1)

Cross, Frank B. "When Environmental Regulations Kill: The Role of Health/Health Analysis." Ecology Law Quarterly 22(no.4, 1995):729. (v7,#1)

Cross, Frank B., "The Subtle Vices Behind Environmental Values," Duke Environmental Law and Policy Forum 8(1997):151- . The apparent virtues of environmentalism may obscure a darker underside. Public perceptions of risks associated with the environment are often mistaken and should not be relied on for risk regulation. Public perceptions are selfish and people act in their own self interest, not in community interest. Democracy does not compel reliance on public perceptions. (v.10,#1)

Cross, Frank B. "Natural Resource Damage Valuation." Vanderbilt Law Review 42 (March 1989): 269-341. Natural resource destruction results from the status of public lands as a common good in a capitalist system. Establishing accurate means for valuing natural resources transcends the current procedures. Broadly used, the right to recover natural resource damages can force the internalization of many pollution costs and thus create a powerful deterrent to future environmental harm. Government action has achieved some success, but the mechanism has inherent limitations and may always trail behind the creative force of the market and the harm that it may cause. The job of protecting natural resources pertains to government functions that are too large, complex, or widely dispersed for government to perform. Instilling private marketplace decisions with a concern for harm to nature is a vital and necessary complement to government intervention in the market. To be truly effective, however, such recovery must capture the full value of harm done to resources. At present, natural resource valuation seriously understates the true social harm done to natural resources. The author proposes better valuation procedures, with special reference to Superfund. Another good example of an article that philosophers should read before they complain that lawyers do not do their philosophical homework. Cross teaches business law in the Department of Management, University of Texas. (v6,#1)

Crossley, James W. "Managing Ecosystems for Integrity: Theoretical Considerations for Resource and Environmental Managers," Society & Natural Resources 9(no.5, 1996): (v.7,#4)

Crosson, Pierre. "Will Erosion Threaten Agricultural Productivity?" Environment 39(no.8, 1997):4. Despite widespread apprehensions to the contrary, erosion does not pose a serious threat to the global agricultural system's capacity to increase future yields. (v8,#3)

Crotty, Sean, Single Track Mind: Cycling and the Evolution of the American Nature Ideal. M.A. thesis in environmental history, Colorado State University, spring 1999. "Americans have constructed a natural idea in which machines are no longer an intruder in the garden, but rather indispensable tools for uncovering and enjoying nature's wonders." (Introduction). This includes automobiles, freeze-dried foods, Gore-tex jackets, cross-country skis, and mountain bikes. 63% of mountain bikers consider themselves environmentalists. They often drive an hour or more to put a \$ 1,500 bike into the woods. Bicycling has a long history of country cycling, and it can be a means of getting people out of their houses and cars and into more experience of nature, whether on suburban bikeways or mountain trails. The bicycle is, in some situations, "the most benevolent of the machines" (p. 38). "If nature is (socially) constructed, if it is indeed a blank screen awaiting the projection of human values, and if one of those values is technology, then mountain biking has the eco-friendly image that it does because it represents the culmination of an American idea of nature, constructed throughout this century" (p. 59).

Why not then bikes in designated wilderness? Earlier regulations prohibited only "contrivances

powered by a non-living power source," but today "mechanized transport" is prohibited (p. 85). Once it was no motors, now it is no gears. But clothing, pocket knives, axes, stoves, metal frame backpacks are o.k., even guns (where hunting is permitted) Or cellular phones, and satellite location devices. Crotty's conclusion is that the no-bikes-in-the-wilderness rule is justified only by degree of adverse impact, were large numbers of bikers to ride the wilderness trails. For the same reasons, horses or Vibram boots could be banned. There is no question of banning technology from the wilderness for purity of wilderness experience; modern humans cannot and will not go there without it. Crotty was formerly a professional mountain bike racer. (v.10,#1)

Crouch, Martha L. "Biotechnology Is Not Compatible with Sustainable Agriculture." Journal of Agricultural and Environmental Ethics 8(1995):98-111. Biotechnology increases commercialization of food production, which competes with food for home use. Most people in the world grow their own food, and are more secure without the mediation of the market. To the extent that biotechnology enhances market competitiveness, world food security will decrease. This instability will result in a greater gap between rich and poor, increasing poverty of women and children, less ability and incentive to protect the environment, and greater need for militarization to maintain order. Therefore, biotechnology should be discouraged. An active program to protect and strengthen local food production and to decrease reliance on industrial agriculture should be promoted. (JAEE)

Crouch, Martha, "The Very Structure of Scientific Research Mitigates Against Developing Products to Help the Environment, the Poor, and the Hungry", Journal of Agricultural and Environmental Ethics 4(1991):151-158. In a debate: Does the very structure of scientific research mitigate against developing products to help the hungry, the poor, and the environment?

Crow, B., and Sultana, F., "Gender, Class, and Access to Water: Three Cases in a Poor and Crowded Delta," Society and Natural Resources 15(no.8, 2002): 709-24. (v.13,#4)

Crowards, Tom, "Nonuse Values and the Environment: Economic and Ethical Motivations," Environmental Values 6(1997):143-167. ABSTRACT: Nonuse values are a potentially very important, but controversial, aspect of the economic valuation of the environment. Since no use is envisaged by the individual, a degree of altruism appears to be the driving force behind nonuse values. Whilst much of the controversy has focused upon measurement issues associated with the contingent valuation method, this paper concentrates on the underlying motivations, whether ethical or economic, that form the basis for such values. Some fundamental aspects of defining and quantifying economic nonuse values are considered, and possible motives for attributing value to the environment are analysed, making a clear distinction between selfish altruism and selfless altruism. The difference has crucial implications for economic valuation and for assessing individuals willingness to pay for environmental quality. The concept of Safe Minimum Standards is introduced as a means of supplementing purely economic methodology to incorporate ethical concerns into decision making. Centre for Social and Economic Research on the Global Environment (CSERGE), University of East Anglia and University College London. (EV)

Crowley, Eve L. and Carter, Simon E., "Agrarian Change and the Changing Relationships Between Toil and Soil in Maragoli, Western Kenya (1900-1994)," Human Ecology 28(no.3, SEP 01 2000):383- . (EE v.12,#1)

Crowley, K., "The Rise and Rise of the Tasmanian Greens: The State Election of 2002," Environmental Politics 12(no. 1, 2003): 233-240. (v 14, #3)

Crowley, Kate, "Lake Pedder's Loss and Failed Restoration: Ecological Politics Meets Liberal Democracy in Tasmania," Australian Journal of Political Science 34 (no. 3, 1999):409-424. The flooding

of Lake Pedder in South West Tasmania for hydro-electricity in the early 1970's is recognized as one of the world's great ecological tragedies. The hope for its restoration, long held by some, has been given impetus by the activities of Pedder 2000, a nation-wide restoration lobby group founded in 1994. The legitimacy, feasibility and desirability of Pedder's restoration has been acknowledged, if not endorsed, by a recent federal inquiry. Restoration proponents see Pedder's recovery not only as a means of making amends for past follies, but as a new millennium project that offers hope to future generations. This paper reviews Pedder's inundation and the efforts towards its recovery, and finds little support for restoration in the absence of compelling economic and political benefit. This is cause to reflect, it is argued, upon the difficulties that ecological politics has encountered within Tasmania that saw Lake Pedder dammed in the first place. Crowley teaches in the Department of Government at the University of Tasmania, Hobart. (v.11,#1)

Crowley, Kate, "A Failed Greening? The Electoral Routing of the Tasmanian Greens," Environmental Politics 8 (No. 4, 1999 Winter): 186- . (v.11,#4)

Crowley, Kate. "Nature: Reinvention, Restoration or Preservation?", Environmental Politics 5(no.2, 1996):367. Crowley teaches political science at the University of Tasmania, Hobart. (v7,#4)

Crowley, Thomas, "Arne Naess' Complex Legacy." Report on Visit to Arne Naess. International Society for Environmental Ethics Newsletter 17 (no. 3, fall 2006):23-25. The legacy of Arne Naess, contemporary Norwegian interpreters and critics. A visit with Arne Naess at 92 years of age. Crowley is an undergraduate at Yale University, with a special interest in deep ecology.

Crumpacker, DW; Box, EO; Hardin, ED, "Implications of Climatic Warming for Conservation of Native Trees and Shrubs in Florida," Conservation Biology 15(no. 4, 2001):1008-1020. (v.13,#1)

Crutzen, Paul J., 2006. "The Anthropocene." *Earth System Science in the Anthropocene: Emerging Issues and Problems*. Eckart Ehrlers and Thomas Krafft, eds. Dordrecht: Springer, 2006. We now live in a new geological age: "the Anthropocene."

Cruz, Wilfirdo, Munasinghe, Mohan, Warford, Jeremy. "Greening Development: Environmental Implications of Economic Policies." Environment 38(Jun. 1996):6. Policies to promote economic development can have a profound impact on the environment--including the resource base on which development may depend. (v7,#2)

Csete, Marie E., and Doyle, John C., "Reverse Engineering of Biological Complexity," Science 295(1 March 2002):1664-1669. In a symposium on biological systems. There is a "deep and necessary interplay between complexity and robustness, modularity, feedback, and fragility." Maybe "stability" is no longer in vogue in biological systems, but the new replacement seems to be "robustness." A key is "robustness, the preservation of peculiar characteristics despite uncertainty in components or the environment" (p. 1664). As important as modules are "protocols," "rules designed to manage relationships and processes smoothly and efficiently." "A good protocol is one that supplies both robustness and evolvability" (p. 1666). Robustness is continually at the edge of fragility, as pressures to optimize robustness venture mutants that can result in the collapse of the system. Complex human technological systems, such as a Boeing 777, and complex organisms, such as a flying bird, have more in common than is commonly thought. Csete is in developmental biology, University of Michigan Medical School, Ann Arbor; Doyle is in electrical engineering and bioengineering, California Institute of Technology. Pasadena. (v.13, #3)

CSIR (Council on Scientific and Industrial Research) Environmental Services, Building the Foundation for Sustainable Development in South Africa. National Report to the United Nations Conference on

Environment and Development (UNCED) in Rio de Janeiro. Pretoria: Department of Environment Affairs, June 1992. (v6,#3)

Cuaron, Alfredo D., "A Global Perspective on Habitat Disturbance and Tropical Rainforest Mammals.," Conservation Biology 14(no.6, 2000 Dec 01): 1574-. (v.12,#3)

Cubit, S, "Tournaments of Value: Horses, Wilderness, and the Tasmanian Central Plateau," Environmental History 6(no. 3, 2001):395-411. (v.13,#1)

Cudahy, Richard D., "Coming of Age in the Environment," Environmental Law 30 (No. 1, 2000): 15- . Judge Cudahy traces the history of the environmental movement in the United States and concludes with a peek into the future of Environmental law. He questions the direction in which the United States is headed in terms of urban sprawl and also ponders the population dilemma. (v.11,#4)

Cuff, David J., and Andrew S. Goudie, eds. *The Oxford Companion to Global Change*. Oxford: Oxford University Press, 2008. This *Companion* features over 200 entries.

Culhane, PJ, "Research on Society & Natural Resources: A Content Analysis of the First Decade," Society and Natural Resources 14(no.5, 2001):365-384. (v.12,#4)

Cullen, James, A Systems Approach to Environmental Values: Systems Process and the Bifurcation of Nature. Master's thesis, Lancaster University, U.K. 1994. "Our current environmental predicament, it is claimed, is the consequence of what Whitehead called 'the bifurcation of nature'. This crisis is said to have stemmed from Descartes' cogito and to still prevail today. In order to overcome this dualistic worldview, the idea of life as a process is introduced. From this dynamic appraisal, systems thinking is put forward as a fundamentally more organic alternative to mechanistic presuppositions about the world. Non-hierarchical structure is then discussed via an appraisal of the significant relationships that all things have. In conclusion, 'systemic' value is offered as an holistic alternative to the fallacy of simplistic value division and imposition." (v6,#4)

Cullen James T., A Systems Approach to Environmental Values: Sytems Process and the Bifurcation of Nature, Master's Thesis, Department of Philosophy, Lancaster University, September 1994.

Cullen James T., A Systems Approach to Environmental Values: Systems Process and the Bifurcation of Nature, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Cullen, R, "Review of: Conservation Biology By Michael E. Soule & Gordon H. Orians", Natural Resources Journal 43 (no.3, 2003): 915-917.

Cultural Survival Quarterly: World Report on the Rights of Indigenous Peoples and Ethnic Minorities is published by Cultural Survival, Inc., 46 Brattle St., Cambridge, MA 02138-3705. The Summer 1996 issue features: Genes, People, and Property. A furor erupts over genetic research on indigenous groups. Sample articles: Jean Christie, "Whose Property, Whose Rights?"; Ruth Liloqula, "Value of Life: Saving Genes versus Saving Endangered Peoples."

Cummings, Charles, Eco-Spirituality: Toward a Reverent Life. Mahwah, NJ: Paulist Press, 1991. 164 pages. \$ 9.95 paper. An alternative future, a new creation built on universal reverence, integrating the Jewish and Christian scriptures with Catholic and monastic spiritual tradition. (v6,#4)

Cunfer, G., "Review of: Randal S. Beeman and James A. Pritchard, A Green and Permanent Land: Ecology and Agriculture in the Twentieth Century," Environmental History 6(no.4, 2001): 631. (v.13,#2)

Cunningham, Andrew A., and Daszak, Peter, "Extinction of a Species of Land Snail Due to Infection with a Microsporidian Parasite," Conservation Biology 12(1998):1139-1141. The first documentation of an infection wiping out the last of a species. South Pacific snails are rare in nature. In the Society Island chain, 5,000 km. west of Hawaii, residents imported predatory snails from Florida to eat another imported snail that had become a pest. That was in 1986. But the new import preferred native snails. Scientists from the Zoological Society of London captured the last known individuals of Partula turgida to try to save them through a breeding program, in 1991. But, starting about 1994, the population dwindled from about 300 to 10. Scientists became alarmed, but by the time they found out the trouble, it was too late. The snail became extinct. The cause was a new species of a microsporidian protozoan in the genus Steinhausia that had ravaged the snails digestive tracts. So endangered species recovery programs can be hazardous too. A summary story is Ferber, Dan, "Bug Vanquishes Species," Science 282(9 October 1998):215. Cunningham is at the Institute of Zoology, Regent's Park, London. Daszak is in the School of Life Sciences, Kingston University, Surrey, UK. (v.9,#4)

Cunningham, Carol, and Joel Berger. Horn of Darkness: Rhinos on the Edge. New York: Oxford University Press, 1997. (v8,#1)

Cunningham, William P., Terence Ball, Terence H. Cooper, Eville Gorham, Malcolm T. Hepworth, and Alfred A. Marcus, eds. Environmental Encyclopedia. Detroit: Gale Research Inc., 1994. 981 pages. About \$ 175.00. Alphabetical entries, cross-references, appendices, general index. The entry on "Environmental Ethics" is by Christine B. Jeryan, Gale Research Staff, Project Coordinator. Bibliographic articles on Edward Abbey, Aldo Leopold, Theodore Roszak, Kirkpatrick Sale, E. O. Wilson, Peter Singer, Tom Regan, Holmes Rolston, and J. Baird Callicott (the latter two by Ann Causey), and others. Should be in every library. (v5,#1)

Cuomo, Chris J. Feminism and Ecological Communities: An Ethic of Flourishing. London: Routledge, 1998, 168pp. Reviewed by Julie Cook. Environmental Values 9(2000):398.

Cuomo, Chris J. Feminism and Ecological Communities: An Ethic of Flourishing. Reviewed in Environmental Ethics 21(1999):333-336.

Cuomo, Chris J. Review of Ecofeminist Natures: Race, Gender, Feminist Theory and Political Action. By Noël Sturgeon. Environmental Ethics 21(1999):429-432.

Cuomo, Chris, "On Ecofeminist Philosophy," Introduction to Symposium: On Karen Warren's Ecofeminism, Ethics and the Environment 7(no. 2, 2002):1-11.

Cuomo, Chris. J. "Flourishing, Praxis, and Charm," Ethics and the Environment 4(1999):101-106. Cuomo responds to her critics. (E&E)

Cuomo, Christine J. "Unravelling the Problems in Ecofeminism." Environmental Ethics 14(1992):351-63. Karen Warren has argued that environmental ethics must be feminist and that feminist ethics must be ecological. Hence, she endorses ecofeminism as an environmental ethic with power and promise. Recent ecofeminist theory, however, is not as powerful as one might hope. In fact, I argue, much of this theory is based on values that are potentially damaging to moral agents, and that are not in accord with feminist goals. My intent is not to dismantle ecofeminism, but to analyze and clarify some of the philosophical problems with recent ecofeminist work and to point out a more promising direction for ecofeminist ethics. Cuomo is in the department of philosophy, University of Cincinnati, Cincinnati, OH. (EE)

Curnutt, Jordan. "How to Argue For and Against Sport Hunting." *Journal of Social Philosophy* 27, no. 2 (Fall 1996): 65-89. (v8,#2)

Curry, John. "Gender and Livestock in African Production Systems: An Introduction." *Human Ecology* 24(Jun. 1996):149. (v7,#2)

Curry, Patrick, *Ecological Ethics: An Introduction*. Cambridge: Polity Press, Cambridge, 2005. Chapters: The Ecological Crisis, Three Schools of Ethics, Value, Light Green or Shallow Ethics, Mid-green or Intermediate Ethics (including Animal Liberation/ Rights and Biocentrism), Dark Green or Deep (Ecocentric) Ethics (including the Land Ethic, Gaia Theory, Deep Ecology, Deep-Green Theory, Left Biocentrism, the Earth Manifesto and Ecofeminism), Green Ethics as Post-Secular, Moral Pluralism and Pragmatism, Green Citizenship, and Human Overpopulation. Endorsed by Mary Midgley, John Gray and Paul Watson. Curry is senior lecturer, Sophia Centre, Bath Spa University, UK.

Curry, Patrick, "Re-Thinking Nature: Towards an Eco-Pluralism," *Environmental Values* 12(2003): 337-360. Both scientific realism and social constructionism offer unpromising and even destructive ways of trying to understand nature and human-nature relations. The reasons include what these apparent opponents share: a commitment to the (latterly) modernist division between subject/culture and object/nature that results from what is here called 'monist essentialism'. It is contrasted with 'relational pluralism', which provides the basis of a better alternative - ecopluralism - which, properly understood, is necessarily both ecocentric and pluralist. (EV)

Curry, Patrick, "Redefining community: Towards an ecological republicanism," *Biology and Conservation* 9(2000):1059-1071. Abstract. This paper makes some suggestions for a concept of community which arguably satisfies the most important criteria for both human communities, as defined in the social sciences and humanities, and natural communities, as defined in ecology and biology. Beginning with the former, I arrive at two such criteria: (1) a material and social connection, among members, and (2) some kind and degree of awareness of other members. These are then supplemented with a third drawn from civic republicanism, with its focus on citizenship and the common good: communities (3) enable and require certain practices for their maintenance. Turning to ecological definitions of community, I find the dominant (reductionist) one seriously deficient as compared with a more holist and ecosystemic approach. However, I invoke a nonreductive holism to defend the idea of community, and go on to argue that each of the three above-mentioned criteria can be fruitfully extended to include both social and ecological communities in a nonreductionist way--that is, in a way that neither reduces ecosystemic properties to individual organisms nor the reverse. This culminates in a discussion of what I call 'ecological republicanism', which I suggest could have powerfully positive effects on the contemporary crisis of undue human impact on the natural world. Key words: community, ecological republicanism, reductionism, the common good, virtue. Curry lives at 10 Burnand House, Redan Street, London W14 OLW, UK. (v.13,#1)

Curry, Patrick, *Ecological Ethics: An Introduction*. Cambridge: Polity Press, 2006. A wide-ranging and pithy introduction, accessible to those who know little about the field and are willing to think seriously and philosophically. "This book therefore doesn't advocate ethics by 'extension' from human beings through other animals. ... Rather, I start from the belief, or perception, that nature--which certainly includes humanity--is the ultimate source of all value. ... So, as Richard Sylvan and David Bennett put it, 'the ecological community forms the ethical community'." (p. 2). Curry is good at getting some angle on truth from diverse positions and keeping a balancing act as he pursues his way through "light green or shallow (anthropocentric) ethics" (Chapter 6), "mid-green or intermediate ethics" (Chapter 7) to reach a "dark green or deep (ecocentric) ethics" (Chapter 8). He has also a serious interest in an "ecocentric spirituality" (Chapter 9). Curry is at the Sophia Centre, Bath Spa University, UK.

Curry, Patrick, *Ecological Ethics: An Introduction* (Malden, MA: Polity Press, 2007), Reviewed by David Keller in *Ethics and the Environment* 13(no. 1, 2008):153-165.

Curry, Patrick. "Redefining Community: Towards an Ecological Republicanism," *Biodiversity and Conservation* 9(no. 8, 2000):1059-1071. Abstract. This paper makes some suggestions for a concept of community which arguably satisfies the most important criteria for both human communities, as defined in the social sciences and humanities, and natural communities, as defined in ecology and biology. Beginning with the former, I arrive at two such criteria: (1) a material and social connection among members, and (2) some kind and degree of awareness of other members. These are then supplemented with a third drawn from civic republicanism, with its focus on citizenship and the common good: communities (3) enable and require certain practices for their maintenance. Turning to ecological definitions of community, I find the dominant (reductionist) one seriously deficient as compared with a more holistic and ecosystemic approach. However, I invoke a nonreductive holism to defend the idea of community, and go on to argue that each of the three above-mentioned criteria can be fruitfully extended to include both social and ecological communities in a nonreductionist way that is, in a way that neither reduces ecosystemic properties to individual organisms nor the reverse. This culminates in a discussion of what I call "ecological republicanism", which I suggest could have powerfully positive effects on the contemporary crisis of undue human impact on the natural world. Key words: community, ecological republicanism, reductionism, the common good, virtue.

Curry, Patrick. Review of John Barry, *Rethinking Green Politics: Nature, Virtue and Progress*. *Environmental Values* 9(2000):119.

Curry, Patrick. "A Response to Frank W. Derringham's Review of Ecological Ethics." *Environmental Ethics* 30(2008):223-224. (EE)

Curry-Roper, Janel M., "Contemporary Christian Eschatologies and their Relation to Environmental Stewardship," *The Professional Geographer* 42(1990): 157-169. Contemporary Protestant Christians hold differing views that affect their attitudes toward the environment. Dispensationalism tends to use ecological deterioration as a gauge to predict Christ's return and the end of the present age. Postmillennialism teaches that the natural and human world will improve up to Christ's return and puts responsibility on Christians for that improvement. Amillennialism and Historic Premillennialism teach that the possibility of ecological and social improvement is limited in the present age though Christians are to attempt to heal the Earth's wounds to show evidence of a future renewed Earth." Roper is professor of geography at the Central University of Iowa, Pella. (v3,#4) (v2,#1)

Curtin, C. G., "Integration of Science and Community-Based Conservation in the Mexico/U.S. Borderlands," *Conservation Biology* 16(no.4, 2002): 880-86. (v.13,#4)

Curtin, Deane, Review of: James, Simon P., *Zen Buddhism and Environmental Ethics*. Aldershot, Hants., and Burlington, VT: Ashgate, 2004. *Environmental Values* 14(2005):281-283.

Curtin, Deane, *Chinnagounder's Challenge: The Question of Ecological Citizenship*. Bloomington: Indiana University Press, 1999. Environmental ethics with a focus on the third world. The arguments used in the West are often out of context in other cultures. Systematic features of the ways we in the West tend to organize moral experience encourage us to believe we have understood profoundly different cultures when we do not. In result, when we try to help, we fail.

Nature and culture; living at the margins. The British utilitarians and the invention of the "Third World." The politics of agricultural "modernization." Gandhian legacies: indigenous resistance to "development" in contemporary India and Mexico. Recognizing women's environmental expertise. Radical first world environmental philosophy: a new colonialism? Callicott's land ethic. (Callicott is too

monist; not pluralist enough; despite his claimed multiculturalism, in his monist zeal, "Callicott simply wipes entire continents off the map of environmental ethics" (p. 112). Ecosophy T and the Buddhist tradition. Ecological feminism and the place of caring. Democratic discourse in a morally pluralistic world. Putting down roots: ecocommunities and the practice of freedom.

Chinnagounder appears late in the book, a old man, over a hundred years old, in a village in India, who lives in the back of a stable on sheets of cardboard, and asks disconcerting questions. Curtin is in philosophy, Gustavus Adolphus College, St. Peter, MN. (v.12,#3)

Curtin, Deane, "Dogen, Deep Ecology, and the Ecological Self." Environmental Ethics 16(1994):195-213. A core project for deep ecologists is the reformulation of the concept of self. In searching for a more inclusive understanding of self, deep ecologists often look to Buddhist philosophy, and to the Japanese Buddhist philosopher Dogen in particular, for inspiration. I argue that, while Dogen does share a nondualist, nonanthropocentric framework with deep ecology, his phenomenology of the self is fundamentally at odds with the expanded Self found in the deep ecology literature. I suggest, though I do not fully argue for it, that Dogen's account of the self is more sympathetic to one version of ecofeminism than to deep ecology. Curtin is in philosophy, Gustavus Adolphus College, St. Peter, MN. (EE)

Curtin, Deane, "A State of Mind Like Water: Ecosophy T and the Buddhist Traditions," Inquiry 39(no. 2, June, 1996):239-253. Arne Naess has come under many influences, most notably Gandhi and Spinoza. The Buddhist influence on his work, though less pervasive, provides the most direct account of key deep ecological concepts such as Self-realization and intrinsic value. I read Ecosophy T as a rigorously phenomenological branch of Deep Ecology. Like early Buddhism, Naess responds to the human suffering that causes environmental destruction by challenging us to return to the reality of lived experience. This Buddhist reading clarifies, but it also complicates. It reaffirms Naess's essential vision, but it challenges him at two points: first, to affirm that Self-realization is a process of co-realization with all beings, not just with sentient beings. Second, while this reading accepts that humans do not create the value of nature, it questions whether its value is best expressed in terms of the 'intrinsic value' of radical environmental ethicists." Curtin is at Gustavus Adolphus College, St. Peter, MN. (v8,#3)

Curtin, Deane. "Making Peace with the Earth: Indigenous Agriculture and the Green Revolution." Environmental Ethics 17(1995):59-73. Since its inception in the years following World War II, the green revolution has been defended, not just as a technical program designed to alleviate world hunger, but on moral grounds as a program to achieve world peace. In this paper, I dispute the moral claim to a politics of peace, arguing instead that the green revolution is warist in its treatment of the environment and indigenous communities, and that the agricultural practices that the green revolution was designed to supplant principally indigenous women's agriculture are forms of ecological peacemaking, akin to pacifism. I argue, as well, that the warist intentions of the green revolution are characteristic of a form of domination called developmentalism. A complete understanding of domination necessitates linking developmentalism with other forms of domination such as racism, sexism, and naturism. Curtin is with the philosophy department, Gustavus Adolphus College, St. Peter, MN. (EE)

Curtin, Deane. Book Review of Daoism and Ecology: Ways within a Cosmic Landscape. Edited by N. J. Girardot, James Miller, and Liu Xiaogan. Environmental Ethics 26(2004):105-106. (EE)

Curtin, Deane. Review of Anna L. Peterson. Being Human: Ethics, Environment, and Our Place in Nature. Environmental Ethics 25(2003):199-202. (EE)

Curtin, Deane. *Environmental Ethics for a Postcolonial World*. Lanham. MD: Rowman & Littlefield, 2005. Colonial attitudes and environmentalism. Globalization demands that the so-called third world not face their social and environmental issues alone, but with the co-operation and concern of the larger community of nations.

Curtin, Deane. Review of Teaching Environmental Ethics. Edited by Clare Palmer. *Environmental Ethics* 29(2007):403-427. (EE)

Curtis, Allan, Birkhead, Jim, De Lacy, Terry. "Community Participation in Landcare Policy in Australia: The Victorian Experience with Regional Landcare Plans," *Society & Natural Resources* 8(no.5, Sept. 1995):415- . (v6,#4)

Curtis, Allan, De Lacy, Terry, "Landcare, Stewardship and Sustainable Agriculture in Australia," *Environmental Values* 7(1998):59-78. There are over 2,500 Landcare groups with 65,000 members operating across Australia. With considerable evidence of program impact, Landcare is an important example of state sponsored community participation in natural resource management. However, the authors suggest excessive emphasis has been placed upon attitudinal change - the development of landholder stewardship, as the lever for effecting major changes in land management. Analysis of data from a landholder survey failed to establish predicted stewardship differences between Landcare and nonLandcare respondents or between those who joined early/late, or participated more/less in group activities. And there was no relationship between stewardship and adoption for most of the sustainable agriculture practices surveyed. Further analysis clearly linked Landcare participation and concern about the environmental and economic impacts of land degradation. Whilst respondents were significantly more concerned about economic impacts, research findings were consistent with earlier work indicating that most land managers have a strong stewardship ethic. The authors also suggest that concerns that Landcare is not addressing biodiversity conservation are largely unjustified and reflect unrealistic expectations of these voluntary groups. KEYWORDS: Landcare, stewardship ethic, sustainable agriculture, Australia, community participation, rural development. Allan Curtis is at Charles Sturt University. Terry De Lacy is at University of Queensland. (EV)

Curtis, John A., "Ethics in Wildlife Management: What Price?" *Environmental Values* 11(2002):145-161. This paper argues that there may be instances where assessing wildlife for monetary valuation might be quite reasonable and useful for public policy, even when there are strong arguments against valuation of wildlife and nature. A case of deer population management is considered where continued growth of the deer population will lead to more property damage and habitat loss. However, deer population control raises ethical questions on the rights of animals to exist and on the rights of humans to arbitrarily interfere. The contingent valuation methodology (CVM) is used to value preferences for deer management for the purpose of guiding public policy. The valuation estimates show that ethical concerns about killing deer affect the level of willingness to pay in a quite a logical manner. However, for individuals with rights-based preferences, CVM is not appropriate. The survey results also show that individuals with rights-based preferences are a small minority in this particular example. (EV)

Curtis, Mark. "The Ambiguities of Power: British Foreign Policy Since 1945." *The Ecologist* 26, no.1 (1996): 5. Britain's dealings with the Third World are generally assumed to be motivated by a desire to promoting democracy, human rights and economic well-being. However, a close scrutiny of Britain's foreign policy since 1945 reveals a very different story. Far from being benevolent, Britain has consistently contributed to economic and political oppression. (v7, #3)

Curtis, Mark. "Democratic Genocide", *The Ecologist* 26(no.5, 1996):202. (v7,#4)

Curtis, Robert O., and Carey, Andrew B. "Timber Supply in the Pacific Northwest: Managing for Economic and Ecological Values in Douglas-Fir Forests." *Journal of Forestry* 94, no.9 (1996): 4. (v7, #3)

Curtis, Stanley E., "Future Directions of Science and Public Policy", *Journal of Agricultural and Environmental Ethics* 6(1993). The issue of farm animal welfare today is very complex. Increasing the welfare-supportive quality of an animal production system usually increases production cost. In already

adequate animal environments, there is little profit incentive - and likewise little moral imperative - to increase environmental quality. But activists do not seek adequate or optimal remedies; they seek maximal animal well-being. Nevertheless, in reality, this begs compromise, so political debate is inevitable. Advocates on one side tend to let feelings lead them to argue that common sense should suffice to guide lawmakers to regulate production practices strictly, while those on the other side tend to argue that producers are doing as well as possible. Both sides seem to ignore the fact that scientific knowledge of farm animal well-being is attainable and should serve as the basis for discussion. In the United States a political solution may soon determine farm animal care practices and procedures. Instead of this, we need to ask the animals to answer questions such as "how big should the pen be?" through scientific experiments. Until we can answer such questions with authority, we have no business passing laws and writing regulations setting design specifications for animal accommodations. Establishment of such regulations now would be premature. We need more information about what constitutes animal well-being - particularly psychological aspects. It matters not what anyone might think constitutes that state. What it takes is what it takes, regardless of what anybody opines. We need to increase our knowledge of animal well-being so that some day we can formulate design specifications. Curtis is in the Department of Dairy and Animal Science, College of Agricultural Sciences, The Pennsylvania State University, 324 William L. Henning Building, University Park, Pennsylvania 16802.

Curtler, Hugh Mercer, Ethical Argument: Critical Thinking in Ethics. New York: Oxford University Press, 2004. A section of the discussion cases is on "The Environment." Timbering in Oregon, British Columbia, Reserve Mining and dumping into Lake Superior, Nuclear power at Three-Mile Island, acid rain, toxics in groundwater. Cutler is in philosophy, Southwest Minnesota State University.

Curzon, Carrie, "Ecotourism - Conservation Ethics - Profit: Getting it Right in the Eastern Transvaal," Africa - Environment and Wildlife 1(no. 2, July-August 1993):36-42. Four game reserves along the western flank of Kruger National Park--Sabi Sand, Timbavati, Manyeleti, and Klaserie--have luxury lodges for high priced ecotourism and close encounter with wildlife. The lodges try to use local materials, labor, and supplies, and claim that they are committed to sound environmental principles, hoping to give credence to the term ecotourism. Fences have come down between the park and the reserves; animals roam where they will. Reserve managers have been following the advice of ecologists in the restoration of lands once degraded by cattle. Ecotourism is a major factor in earning foreign exchange. Still, there is the criticism of a high paying international elite enjoying wildlife while masses of the poor blacks are not far away. Meanwhile, wildlife viewing is much cheaper at nearby Kruger Park. Curzon is a free lance journalist. (v6,#3)

Cushman, John, "Buried in Measure on Toxic Waste: One Special Offer," New York Times (9/5/97): A1. Superfund revision would prohibit compensation for lost intrinsic value. One of the sticking points in the attempt to reauthorize the Superfund toxic waste law concerns whether companies can be sued for damage to the intrinsic value of natural resources and whether they can be forced to try to restore them. Montana Senator Max Baucus objected to a proposed weakening in the Superfund law by saying it "completely overlooks the intrinsic value of a remote mountain wilderness." The revision would prohibit seeking damages for intangible environmental values that cannot be easily priced. The Assistant Attorney General of New York argues that "unique resources are valuable to society not only for their actual uses as parks, waterways or recreational facilities, but because they just are." A spokesperson for a coalition of industry groups opposed to penalties for long-term environmental restoration says that some lawsuits "are going to attempt to compute the value to the squirrel of having to eat acorns instead of walnuts while restoration is occurring, or the value to a robin of eating bugs instead of worms--and to file claims for the robin's pain and suffering." (v8,#3)

Cushman, John H., Jr., "Courts Expanding Effort to Battle Water Pollution: New Enforcement Tactic," New York Times, National, March 1, 1998, p. 1, p. 16. A hitherto little used provision in the 1972 Clean

Water Act allows states to measure water pollution more broadly, including nonpoint sources, and to impose across-the-board limits on pollution from all sources until clear water standards can actually be met. Courts are now tending to uphold this aspect of the law, which means that all development can be held up until the nonpoint source problem is addressed. (v9,#1)

Cushman, John, "One Million Acres of Wetlands Was Lost From 1985 to 1995, Despite New Protections," New York Times (9/18/97): A18. Wetlands Loss Continues. Despite a nearly decade-old policy of no-net loss of wetlands, between 1985 and 1995, the U.S. lost a total of over 1 million acres of wetlands (1600 square miles). One half of this loss occurred in the Southeast. The ten year loss was 1 percent of total wetlands in the 48 contiguous states, which have lost 50 percent of their wetlands since colonial times. There once were over 200 million acres in the "lower 48 states"; now 100 million acres remain (Alaska has 170 million acres left). Fortunately, the rate of wetland loss is slowing: From 1965 to 1975 the loss was 5 million acres and from 1975 to 1985 the loss was 3 million acres. Still, 100,000 acres are lost a year. Of particular concern are the forested wetlands of the Southeast. In the last decade, 2.5 million acres of swamp were lost, 5 percent of the 50 million acres of swamp remaining. Much of this isn't reflected in the overall loss statistics, because after they are logged, shrubs may remain and this type of wetland (shrub wetland) actually increased in the ten year period, offsetting other losses. Many forested wetlands were drained entirely and converted to pine farms or croplands. Other increases in wetlands include freshwater ponds (e.g., development retention ponds and water traps on golf courses and agricultural fields). Wetlands provide a number of important functions including flood control, pollution filtering, protection from erosion, and wildlife nursery and habitat. (v.8,#4)

Cushman, John H. Jr., "Scientists are Turning to Trees to Repair the Greenhouse," New York Times, March 3, 1998. Planting trees is by no means the whole solution, but it can be an important part of it. (v9,#1)

Cushman, John, "Pollution Policy is Unfair Burden, States Tell E.P.A.," New York Times (5/10/98): A1. Debate over policy to stem environmental racism. A U.S. Environmental Protection Agency (EPA) policy aimed at lessening the disproportionate burden of pollution endured by poor and minority communities has provoked a strong reaction from State environmental agencies and business groups. The EPA's office of civil rights has issued guidelines suggesting that if a pollution permit issued by a state contributes to a pattern of disproportionate pollution in a minority neighborhood, then it may be treated as a violation of the anti-discrimination provisions of the Civil Rights Act of 1964. Thus even if pollution permits that states issue to businesses passes all the ordinary tests of environmental laws, states could face a loss of Federal money or a possible a lawsuit if such permits contribute to environmental injustice. A U.S. Chamber of Commerce official objects that the policy runs counter to Federal programs designed to bring jobs and economic opportunities to low-income and minority areas and that it undermines the effort to clean-up closed contaminated industrial sites and build factories there. Over 50 complaints challenging the location of incinerators, dumps, and factories have been filed over the last 5 years. . Environmental justice advocates think the policy is too weak and should make it clear that discrimination can occur not just by exposure to pollutants but also by increase in health risks, changes in land values, and the stigma of living near undesirable installations. (v.9,#4)

Cushman, John H., Jr. [New York Times News Service], Lexington [KY] Herald-Leader, 10 May 1998, A6. Challenges to the EPA policy against environmental racism. State governments and major industrial groups are challenging the EPA-Clinton administration policy against placing an unfair share of incinerators, dumps, and other sources of pollution in poor and minority neighborhoods. The opponents to the policy claim it will hamstring state and local governments, encourage frivolous lawsuits, and discourage companies from locating in depressed areas. (v9,#2)

Cushman, John H., Jr., "One Million Acres of Wetlands Was Lost From 1985-1995, Despite New

Protections," New York Times, Sept. 18, 1997, p. A18. Wetlands Lost. One million acres of wetlands was lost in the continental U.S. from 1985-1995, despite new protections, according to a U.S. Fish and Wildlife survey. The losses on agricultural lands were especially surprising, 965,000 of these acres, indicating lack of enforcement of wetland protections on the farm. Still, many interpreted the report as good news, since losses in the previous decade, 1975-1985 were three million acres. The loss was about one percent of the wetlands that remain in the lower 48 states, which now have less than half the wetlands that existed in Colonial times. (v8,#3)

Cushman, John, "Cuts Sought in Wasteful Fish Kills," New York Times (1/13/98): B12. Wasteful fishing practices. Because of indiscriminate commercial fishing practices, more than 20 million tons of fish, a quarter of all fish caught worldwide, are wastefully killed and discarded each year. Conservation and sports groups are pushing the National Marine Fisheries Service to reduce the "bycatch" in the American fishing industry by 75% by 2005. Recent changes in fisheries law requires the Federal Government to rebuild all depleted fish populations within 10 years (if biologically feasible), and this includes minimizing by-catch. The groups are calling for severe restrictions on the use of drifting long lines, as well as additional gear for Gulf of Mexico shrimpers, who kill an estimated four pounds of finfish for every pound of shrimp they take in. (v9,#2)

Cutchin, M. P., "Ethics and Geography: Continuity and Emerging Syntheses," Progress in Human Geography 26(no.5, 2002): 656-64. (v.13,#4)

Cutler, Jeffry D., "Implications of Strict Scrutiny of Scientific Evidence: Does Daubert Deal a Death Blow to Toxic Tort Plaintiffs", Journal of Environmental Law and Litigation, 10(No.1, 1995):189. (v7,#1)

Cvetkovich, G; Winter, PL, "Trust and Social Representations of the Management of Threatened and Endangered Species", Environment and Behavior 35(no.2, 2003):286-307.

Cyber Activism: The Potential and the Price, Environmental Action 27 (no. 3, Fall 1995):11-25. Special section on computers and the environment: ecolinking and networks, promoting environmental causes, watching legislation, databases, rich and poor and computing access, the Third World and computers, toxic chemicals in manufacturing chips and where they end up, telecommuting and reduced automobile emissions, though perhaps added urban and rural sprawl, a big Intel plant near Albuquerque, New Mexico, and its environmental problems, energy efficiency on computers, re-cycling of computers and components, computers and paper use and trees lost or saved. Articles by half a dozen authors. Good introduction to the issues in the field.

Czech, B, "A Transdisciplinary Approach to Conservation Land Acquisition," Conservation Biology 16(no.6, 2002): 1488-1497.

Czech, B, "Technological Progress and Biodiversity Conservation: a Dollar Spent, a Dollar Burned," Conservation Biology 17(no.5, 2003):1455-1457. (v.14, #4)

Czech, Brian, and Krausman, Paul R. "Public Opinion on Endangered Species Conservation and Policy." Society & Natural Resources 12(no. 5, July 1999):469- . (v.11,#1)

Czech, Brian, Shoveling Fuel For A Runaway Train: Errant Economists, Shameful Spenders, And A Plan To Stop Them All. Berkeley: University of California Press, Berkeley, 2000. 210p. \$22.50. ISBN 0-520-22508-2. What begins as an academic exercise ends as a public tract designed to trigger a "steady state revolution" in the United States. Shoveling Fuel was written by a Ph.D. wildlife biologist turned

ecological economist. Principles of wildlife science and evolutionary ecology applied to the workings of the human economy. Mainstream or "neoclassical" economic growth theory is fallacious, dangerous, and most likely corrupted at the nexus of academia, corporatism, and government. Debunking Julian Simon's Ultimate Resource 2, Shoveling Fuel includes an overview of ecological economics and some of its leading theorists. Part 2 provides a blueprint for the steady state revolution, which is part academic, part social. Theories of Darwin, Veblen, and Maslow are synthesized to reveal the "liquidator syndrome" afflicting many Americans. Once the motives of the liquidators and the effects of their behavior are revealed, the steady state class will begin to castigate the liquidating class. Increasingly informed by the ecological economics movement in academia, will lead to the establishment of a steady state, sustainable economy. (v.12,#4)

Czech, Brian, and P. R. Krausman. 2001. The Endangered Species Act: History, Conservation Biology, and Public Policy. Baltimore, MD: Johns Hopkins University Press, 2001 240 pp. ISBN 0-8018-6504-2, \$26.00, pb A comprehensive analyses of the Endangered Species Act, using "policy design theory", developed in the 1990s by political scientists Anne Schneider and Helen Ingram. Part 1: Overview of current ESA controversies, followed by a history of species endangerment in the United States and the sociopolitical response. Part 2: A policy design analysis of the ESA, beginning with a layout of the ESA's structure and an assessment of the assumptions of the ESA authors. Next, the allocation of recovery efforts among threatened and endangered species is assessed using a "social construction/political power matrix". The technical legitimacy of the ESA is assessed, with particular attention paid to the prioritization of species for conservation. The socioeconomic context of the ESA is described using an assessment of the causes of species endangerment, and the implications of the ESA to American democracy (and vice versa) are discussed. Special attention is given to property rights. The authors conclude that the ESA is an implicit prescription for a steady state economy of sustainable size. (v.12,#4)

Czech, Brian, et al (20 others, including a study group of the Wildlife Society), "The Iron Triangle: Why The Wildlife Society Needs to Take a Position on Economic Growth," Wildlife Society Bulletin 31(no. 2, 2003):574-577. Powerful forces exist who do not want the public to think there is a conflict between economic growth and wildlife conservation. But there is, and wildlife professionals need to address that conflict. An "iron triangle" exists; one side is special interest groups, one side is supportive political factions, and the third side is professional agencies, usually in the government; the triangle locks out other views. Neoclassical economists typically argue that there is no conflict between economic growth and wildlife conservation, but ecological economists say there is. The Wildlife Society needs to speak up. Czech is a wildlife biologist with the U.S. Fish and Wildlife Service, National Wildlife Refuge System, and chair of The Wildlife Society's Working Group for the Steady State Economy.

Czech, Brian. "The Foundation of a New Conservation Movement: Professional Society Positions on Economic Growth." *BioScience* Vol. 57, no. 1 (2007): 6-7.

Czechoslovakian Philosophical Journal, The. Filozofiky Casopis, volume 37, no. 5 (1989), is a special issue on environmental ethics, "Philosophy and Ecological Problems." Ten articles include such titles as "Philosophy and the Devastation of the Earth," "The Uniqueness and Value of Terrestrial Nature," "Marxism, the Ecological Crisis and the Dominion of Nature," and "Points of Departure of Environmental Ethics." There are English abstracts. Book reviews include an review of Holmes Rolston, Environmental Ethics, and an account of Fritjof Capra's books. A summary of the articles in this issue is Losonsky, Michael, "Philosophy and the Ecological Problem," Environmental Ethics 13(1991):87-93. (v1,#1)

Dabbert, S., A. Dubgaard, L. Slangen and M. Whitby, eds. The Economics of Landscape and Wildlife

Conservation. Review by Peter Stonehouse Journal of Agricultural and Environmental Ethics 11(1999):247-249. (JAEE)

Daedalus: Journal of the American Academy of Arts and Sciences. Theme issue on: "The Liberation of the Environment", 125(no.3, 1996). The authors seem remarkably unfamiliar with environmental philosophy, beginning with the title of the theme issue and continuing throughout, with the exception of Klaus Meyer-Abich. Contains:

- Ausubel, Jesse H. "The Liberation of the Environment" p.1.
- Grubler, Arnulf. "Time for a Change: On the Patterns of Diffusion of Innovation", p.19.
- Kates, Robert W. "Population, Technology, and the Human Environment: A Thread Through Time", p.43.
- Waggoner, Paul E. "How Much Land Can Ten billion People Spare for Nature?" p.73.
- Nakicenovic, Nebojsa. "Freeing Energy from Carbon", p.95.
- Schipper, Lee. "Life-Styles and the Environment: The Case of Energy", p.113.
- Ausubel, Jesse H., Marchetti, Cesare. "Elektron: Electrical Systems in Retrospect and Prospect", p.139.
- Wernick, Iddo K., Herman, Robert, Govind, Shekhar, Ausubel, Jesse H. "Materialization and Dematerialization: Measures and Trends", p.171.
- Frosch, Robert A. "Toward the End of Waste: Reflections on a New Ecology of Industry", p.199.
- Meyer-Abich, Klaus Michael. "Humans in Nature: Toward a Physiocentric Philosophy", p.213.
- Starr, Chauncey. "Sustaining the Human Environment: The Next Two Hundred Years", p.235. (v7,#4)

Daehler, CC; Denslow, JS; Ansari, S; Kuo, HC, "A Risk-Assessment System for Screening Out Invasive Pest Plants from Hawaii and Other Pacific Islands", Conservation Biology 18 (no.2, 2004): 360-368.

Dagget, Dan, "Death for the Bear," Harrowsmith's Country Life, December 1990. High-tech bear hunting, with radio telemetry computerized hounds, high-powered four-wheel drives, high-powered telescopic rifles, infrared night scopes, video-enhanced images, including the latest guerilla weapons, and all the rest. Fair chase? Nobody asks when a fast-paced business executive wants a bear quick over a weekend. Nor do many ask what this is doing to the bear populations. Dagget is conservation chairman of the Sierra Club of Northern Arizona and writes guidebooks for the United States Forest Service. (v1,#4)

Dahl, Arthur Lyon. Ecological Foundations for a New Economics: The Theory of ECOs and Its Implications for New Paradigms. Atlantic Highlands NJ: Humanities Press, Zed Books, forthcoming 1997. Dahl provides the nonspecialist with a readable understanding of scientific ecology's systems approach. In place of traditional paradigms, the author introduces the notion of ECOs. This, he argues, provides a much more accurate portrayal of the real world as a complex 'nested' structure of interacting, dynamic and constantly changing systems. (v7,#1)

Dahlberg, Kenneth A., "The Value Content of Agricultural Technologies and their Effect on Rural Regions and Farmers", Journal of Agricultural Ethics 2(1989):87-96. The premise of this article is that technologies are not neutral in terms of their design objectives, their scale, and the fact that they reflect the physical and social environments in which they have developed. The articles also examines a series of major threats such as climate change that require the rethinking and restructuring of agriculture along more sustainable lines. Dahlberg is in political science at Western Michigan University, Kalamazoo.

Daigle, J. Douglas, The Role of a Planetary Narrative in Environmental Ethics. Master's thesis at Colorado State University, spring 1993. Narrative as forming the larger unitary framework in which to understand nature and the human place in nature, with a sense of present crisis in the planetary store. The concluding chapter is on oceans interpreted as the common heritage of humankind and their role in contributing to a sense of global history. (v3,#4)

Dailey, Gretchen and a dozen others, "Food Production, Population Growth, and the Environment," Science 281(28 August 1998):1291-1292. World population has increased at a historically high average rate of 1.8% annually since 1950, but cereal production has more than kept pace. Global statistics are misleading, however. One has to look at food production through a local lens. The increased production may not be sustainable, and the social costs of such production, counting hidden costs, often exceed the market prices. The purchasing power of the poor may be so weak that they are undernourished, even if there are ample supplies. More green accounting and genuine progress indicators are needed. (v.9,#4)

Daily, G.R., (ed). Nature's Services. Review by Jon Lovett, Environmental Values 7(1998):365.

Daily, Gretchen C., and Ellison, Katherine, The New Economy of Nature: The Quest to Make Conservation Profitable. Washington, DC: Island Press, 2002. The environment generates services that have an economic value. Paying for those services, if you disrupt them, provides an open recognition of the worth of those environments, and the resulting prices provide incentives for conservation. Tradeable permits, with some cautions. Solutions have to be tried, and solutions based on mutual self-interest probably have a better chance of working than moralistic appeals to do the "right thing." (v.13,#4)

Daily, Gretchen C., ed. Nature's Services: Societal Dependence on Natural Ecosystems. Covelo, CA: Island Press, 1997. 416 pp. \$49.95 cloth, \$24.95 paper. Scientists from a variety of disciplines examine the character and value of ecosystem services, the damage that has been done to them, and the consequent implications for human society. (v8,#2)

Daily, Gretchen C. "Restoring Value to the World's Degraded Lands." Science 269(1995):350-354. About 43% of Earth's terrestrial vegetated land has diminished capacity to supply benefits to humans because of degradation, a reduction in benefits of about 10%. If present trends continue the reduction in benefits could reach 20%. Alternatively, with restoration, the reduction in benefits could be only 5%. Capitalizing on natural recovery mechanisms is urgently needed to prevent further irreversible change. (v6,#3)

Daily, Gretchen C., and Katherine Ellison, The New Economy of Nature: The Quest to Make Conservation Profitable. Washington, DC: Island Press, 2002. Natural "labour" has historically been taken to be "free." But the services of nature are worth a great deal. And it can cost a lot of money to forget this. Reviewed by Tim Rosser, Environmental Values 13(2004):139-140. (EV)

Daily, Gretchen and Ellison, Katherine, The New Economy of Nature: The Quest to Make Conservation Biology Profitable. Corvelo, CA: Island Press, 2002. Conserving natural habitats for one year instead of developing them for human use would save humanity \$ 250 billion that year and every year thereafter, according to a group of British and American ecologists. Cost-benefit analysis is a sound basis for environmental policy. (v.13, #3)

Daitch, Vicki, et al., "Personal Environmental Histories: Expressions of Self and Place," Human Ecology Review 3(no. 1, 1996):19-31. Ten individuals interviewed, analyzed, active and passive orientations to the environment, and a distinct array of nature experiences. The authors are at the Institute for Environmental Studies, University of Illinois at Urbana-Champaign. (v.13,#1)

Dalal-Clayton, Barry. Getting to Grips with Green Plans. Covelo, CA: Island Press, 1997. 288 pp. \$30 paper. This book assesses and compares green plans, or sustainable development strategies, carried out by industrialized countries. (v8,#2)

Dale, L, "Wildfire Policy and Fire Use on Public Lands in the United States," Society and Natural

Resources 19 (no. 3, March 2006): 275-284.

Dale, L., Aplet, G. and Wilmer, B., "Wildland Fire Use and Cost Containment: A Colorado Case Study," Journal of Forestry 103(no. 6, July/August 2005): 314-318.

Dale, VH; Joyce, LA; McNulty, S; Neilson, RP; Ayres, MP; Flannigan, MD; Hanson, PJ; Irland, LC; Lugo, AE; Peterson, CJ, "Climate Change and Forest Disturbances," Bioscience 51(no, 9, 2001): 723-734. (v.13,#1)

Dale, Virginia H., et al (8 others), "Ecological Guidelines for Land Use Management." Pages 3-33 in Dale, Virginia H., and Haeuber, Richard A., eds., Applying Ecological Principles to Land Management. New York: Springer, 2001. A report from the Ecological Society of America. "Five principles of ecological science have particular implications for land use and can assure that fundamental processes of the earth's ecosystems are sustained. These ecological principles deal with time, species, place, disturbance, and the landscape. The recognition that ecological processes occur within a temporal setting and change over time is fundamental to analyzing the effects of land use. In addition, individual species and networks of interacting species have strong and far-reaching effects on ecological processes. Furthermore, each site or region has a unique set of organisms and abiotic conditions influencing and constraining ecological processes. Disturbances are important and ubiquitous ecological events whose effects may strongly influence population, community, and ecosystem dynamics. Finally, the size, shape, and spatial relationships of habitat patches on the landscape affect the structure and function of ecosystems. The responses of the land to changes in use and management by people depend on expressions of these fundamental principles in nature" (p. 24). The authors also lament that ecosystem principles are seldom considered in land use decisions affecting private land, with cumulative, detrimental, long-term effects, difficult to reverse.

A longer report is: Dale, Virginia H. et al., "Ecological Principles and Guidelines for Managing the Use of Land," Ecological Applications 10(2000):639-670. (v.12,#4)

Dale, Virginia H. et al., "Ecological Principles and Guidelines for Managing the Use of Land," Ecological Applications 10(2000):639-670. (v.12,#4)

Dale, Virginia H., and Haeuber, Richard A., eds., Applying Ecological Principles to Land Management. New York: Springer-Verlag, 2001. Grows out of the work of a committee established by the Ecological Society of America to study how ecologists can help make effective decisions on land management. Major ecological principles. Guidelines for using the principles. A dozen major case studies: wildlife habitat in the Western U.S.; land management across mixed ownerships; tribal habitats in the Eastern Ghats of India; tiger reserves; riparian restoration of large rivers; farming in the Brazilian Amazon; agricultural watersheds; and more. One motif is that ecological principles alone cannot sustain nature; cultural principles must be included. But equally people without nature are also unsustainable. Dale is with the Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN. (v.12,#4)

Dalling, B., "Administrative Wilderness: Protecting Our National Forestlands in Contravention of Congressional Intent and Public Policy," Natural Resources Journal 42(no.2, 2002): 385-414. (v.13,#4)

Dallmeyer, Dorinda, and Ike, Albert, eds. Environmental Ethics and the Global Marketplace. Athens, GA: University of Georgia Press, 1998. 184 pp. Ike is chair of the Environmental Ethics Certifical Program at the University of Georgia and Associate Vice President for Service and Outreach. Dallmeyer is research director of the Dean Rusk Center for International and Comparative Law, University of Georgia, School of Law. Contents include:

Forward: Andrew Young

--Ferré, Frederick, "Where Are We Going? A Statement of the Problem," pp. 1-6.

--Meyer, Judith, "The Changing State of the Global Environment," pp. 7-15.
 --Hargrove, Eugene, "Taking Environmental Ethics Seriously: The Challenge Before Us," pp. 16-30.
 --Sagoff, Mark, "Is the Economy Too Big for the Environment?," pp. 31-61.
 --Bol, Jan Willem, "Challenging Business Education: The Environment, Ethics, and...?," pp. 62-74.
 --Trzyna, Thaddeus C., "Sustainable Development: Linking Values and Policy," pp. 75-84.
 --Kriesel, Warren, and Centner, Terence J., "Environmental Justice: Establishing Evidence of Discrimination," pp. 85-97.
 McKinney, William J., "On the Value of Thought Experiments in the Industrial Marketplace," pp. 98-113.
 --Oksanen, Markku, "Environmental Ethics and Concepts of Private Ownership," pp. 114-139.
 --Skrbina, David, "The Ethics of Free Trade," pp. 140-152.
 --Daigle, Doug, "Globalization of the Timber Trade," pp. 153-164.
 --Ike, Albert, and Dallmeyer, Dorinda G., "Where Do We Go from Here?," pp. 165-168. (v.9,#3)

Dallmeyer, Dorinda G., Ike, Albert F., eds. Environmental Ethics and the Global Marketplace. Athens, Ga.: The University of Georgia Press, 1998. 208 pp. \$20. Contributors present arguments for creating sustainable global business practices that work in harmony with the environment. (v9,#2)

Dallmeyer, Dorinda G., ed., Values at Sea: Ethics for the Marine Environment. Athens: University of Georgia Press, 2003. Relatively little attention has been given to environmental ethics at sea, but the sea is largely unregulated by law; therefore at sea ethical conviction could be more important than on land. Fifteen papers by an interdisciplinary group of scholars. Marine life; indigenous peoples' knowledge and stewardship, endemic and exotic species, aquaculture, oil spills, species protection. Dallmeyer is in law, University of Georgia.

Dalmiya, Vrinda. "Cows and Others: Toward Constructing Ecofeminist Selves." I examine the kind of alliances and ironic crossing of borders that constitute an ecofeminist subjectivity by appeal to a postcolonial literary imagination and ahistorical philosophical argumentation. I link the theoretical insights of a modern short story "Bestiality" with a concept of "congenital debt" found in the ancient Vedic corpus to suggest a notion of ecological selfhood that transforms into the idea of a "gift community" to encompass nonhumans as well as people on the fringes of society, but without the usual problems associated with such a two-pronged extensionism. Environmental Ethics 24(2002):149-168. (EE)

Dalton, D. and J. Barraclough. One Earth, Two Worlds. Atlantic Highlands, NJ: Humanities Press, 1996. Full-color case studies look at environmental issues from the point of view of the poor, those who depend on the environment more directly and are more immediately affected by its deteriorations. (v7,#1)

Dalton, Michael G. "The Welfare Bias from Omitting Climatic Variability in Economic Studies of Global Warming," Journal of Environmental Economics and Management 33(no.3, 1997):221. (v8,#3)

Dalton, Russell J., The Green Rainbow: Environmental Groups in Western Europe. New Haven: Yale University Press, 1994. 300 pages. \$ 35. What has produced the greening of European politics, and what is the future of the green movement. Environmental groups as important new participants in the contemporary political process. Dalton is at the University of California, Irvine. (v5,#3)

Daly, Erin Moore, and Robert Frodeman, "Separated at Birth, Signs of Rapprochement: Environmental Ethics and Space Exploration," Ethics and the Environment 13(no. 1, 2008):135-151. Although environmental philosophy and the human exploration of space share common beginnings, scholars from either field have not given adequate attention to the possible connections between them. In this essay, we seek to spur the rapprochement and cross-fertilization of philosophy and space policy by highlighting the

philosophic dimensions of space exploration, pulling together issues and authors that have had insufficient contact with one another. We do so by offering an account of three topics: planetary exploration, planetary protection and the search for extraterrestrial life, and terraforming. The resulting synthesis seeks to change our thinking about earthbound environmental ethics as it considers the philosophical dimensions of space exploration, and introduces the possible benefits of a humanities-oriented approach to space policy. Erin Moore Daly is a graduate student in the School of Life Sciences and the Center for Science, Policy, and Outcomes at Arizona State University. Robert Frodeman is chair of the Department of Philosophy at the University of North Texas.

Daly, Herman, "The Perils of Free Trade," Scientific American. November 1993, 50-57. (v6,#2)
Economists regularly ignore its hidden costs to the environment and to the community.

Daly, Herman, Steady-State Economics: Second Edition with New Essays (Corvelo, CA: Island Press, 1991). 300 pages. \$ 34.95 cloth, \$ 19.95 paper. Updated from the celebrated 1977 edition. Daley is an economist with the World Bank. (v2,#2)

Daly, Herman E., "Globalization and its Discontents," Philosophy and Public Policy Quarterly 21(no. 2/3, Spring/Summer 2001):17-21. Globalization, the effective erasure of national boundaries for economic purposes, risks standards-lowering competition, an increased tolerance of mergers and monopoly power, intense national specialization, and excessive monopolization of knowledge. The better alternative to globalization is internationalization, which advocates that the basic unit of community and policy remain the nation. (v.13,#1)

Daly, Herman E. "The Lurking Inconsistency." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 4, August 1999): 693- . (v10,#4)

Daly, Herman E. "Reply to Mark Sagoff." Bioscience 45, no. 9 (October 1995): 621-26. Sagoff's article, "Carrying Capacity and Ecological Economics," is on pp. 610-20. (v6,#3)

Daly, Herman E., and John B. Cobb, Jr. For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future. 2nd ed. Boston: Beacon Press, 1999.

Daly, Herman E., "Allocation, Distribution, and Scale: Towards an Economics that is Efficient, Just, and Sustainable," Ecological Economics 6(1992):185-193. The practical policy of issuing tradeable permits for depletion and pollution requires for its implementation the clear separation of the three basic economic goals of efficient allocation, equitable distribution, and sustainable scale. Economic theory needs to catch up with policy in recognizing that scale issues cannot be reduced to either allocation or distribution. Daly is at the School of Public Affairs, University of Maryland. (v8,#2)

Daly, Herman reviews David Ehrenfeld's Beginning Again: People and Nature in the New Millennium in Conservation Biology 7(1993):736-738. Among his observations: "The case for preserving biodiversity is based on an appeal to some combination of instrumental and intrinsic value. But biology also teaches that the whole show was a big accident and that all the differentiated parts, ourselves included, are little accidents, all produced by random mechanical causation with no purpose or final causation admitted. Is it possible, really, to love an accident? Is it possible to save what we cannot love? If biologists continue to insist that we must substitute the idea of 'Accident' for the idea of 'Creation,' then they really undercut their own pleas for the preservation of biodiversity beyond the most short-run instrumental arguments. If 'biophilia' is really genetically programmed into us, then why are we killing other species wholesale? This is not to deny the important role of chance and necessity, of evolution, in the practical working of Creation. But the assumption that the biologist's 'central dogma' is sufficient to require the substitution of Creation by Accident is past due for serious rethinking. ... I hope that biologists will not, in their

descriptions and explanations of the living world, abstract so completely from the immediate and universal experience of purpose that they are in the end left with no basis in their own science to support their pleas for political action to conserve biodiversity." Daly is an economist with the World Bank's environmental department. (v4,#4)

Daly, Herman E. and John B. Cobb, Jr., For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future. Boston: Beacon Press, 1989, revised edition, 1994). Pp. viii, 482. A major criticism and restructuring of economic and political thinking regarding environmental policies. The book contains extensive recommendations for policy change. The central concern is the shift from an economics based on individual human demands to an economics based on social community. For the student of environmental philosophy, the key argument then focuses upon the definition or extent of community: is the biosphere and its natural entities part of the community for which sustainable and beneficial economic policies will be implemented? Daly and Cobb deny the possibility of the biosphere being a member of the community, but they permit humans to characterize their involvement in the biosphere as a membership in a larger community. This characterization creates a "biocentric vision" that can shape economic policy (pp. 202-03). (Katz, Bibl # 2)

Daly, Herman E. and John B. Cobb, Jr. For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future (Boston: Beacon Press, 1989, revised edition, 1994). This book, jointly authored by an economist and a theologian, was in manuscript the focus of several symposia, and is likely to prove a major contribution to the effort to achieve a sustainable, conservation oriented economy. Daly is now with the World Bank and Cobb is at Claremont School of Theology. (v1,#1)

Daly, Herman E. Beyond Growth: The Economics of Sustainable Development. Boston: Beacon Press, 1996. "Although there is an emerging political consensus on the desirability of something called sustainable development, this term--touted by many and even institutionalized in some places--is still dangerously vague. Apparent agreement masks a fight over what exactly 'sustainable development' should mean--a fight in which the stakes are high" (p. 1). Part I. Economic Theory and Sustainable Development. Part II. Operational Policy and Sustainable Development. Part III. National Accounts and Sustainable Development. Part IV. Population and Sustainable Development. Part V. International Trade and Sustainable Development. Part VI. Two Pioneers in the Economics of Sustainable Development (Frederick Soddy and Nicholas Georgescu-Rogers). Part VII. Ethics, Religion, and Sustainable Development (Biblical economics and the sustainable economy, and how to move from religious insight to ethical principle and public policy). Anything written by Herman Daly is worth reading by philosophers (as well as by economists and everybody else). Daly is in economics at the University of Maryland.

Anyone who doubts the clout of establishment economics should read Daly's note about the history of his manuscript. Solicited by MIT, it was accepted by MIT Press; five reviewers said publish it. But a distinguished economist on their advisory committee killed it, after a contract had been issued (p. 225). (v8,#1)

Daly, Herman E. "On Wilfred Beckerman's Critique of Sustainable Development." Environmental Values 4(1995):49-55. Beckerman's discussion of sustainable development (Environmental Values 3: 191-209) provides some useful clarifications, and a good occasion for making a few more. Since I advocate what he calls the 'sustainability as constraint' position, I will move straight to it..... Daly is in the School of Public Affairs, University of Maryland. (EV)

Daly, Herman E. and John B. Cobb, Jr. For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future. Reviewed in Environmental Ethics 15(1993):85-90.

Daly, Herman E., Beyond the Growth. Chinese translation, translator: Chu Dajian et al. Publisher: Shanghai Translation Publishing House, 2001.

Daly, Herman E. and Kenneth N. Townsend, eds., Valuing the Earth: Economics, Ecology, Ethics. Cambridge, MA: MIT Press, 1993. 14 contributors. This is a successor to the 1973 Toward a Steady State Economy and the 1980 Economics, Ecology, Ethics: Essays Toward a Steady State Economy. A sample of the new essays: Daly: "Sustainable Growth: An Impossibility Theorem." Daly is an economist with the World Bank; Townsend is professor of economics at Hampden Sydney College. (v4,#2)

Daly, Herman E., and Kenneth N. Townsend, eds., Valuing the Earth, Chinese translation, translator: Ma Jix, Zhong Bing and Zhu Youhong. Publisher: the Commercial Publishing Ins. 2001.

Daly Herman E., and John B. Cobb, Jr., "ISEW. The 'Debunking' Interpretation and the Person-in-Community Paradox: Comment on Rafael Ziegler," *Environmental Values* 16(2007): 287-288. Reply to article "Political Perception and Ensemble of Macro Objectives and Measures: The Paradox of the Index for Sustainable Economic Welfare" by Rafael Ziegler in *Environmental Values* vol.16 no.1, pp.43-60. Daly is in the School of Public Policy, University of Maryland, College Park, MD. Cobb is at Claremont School of Theology, Claremont, CA.

Daly, Herman. Beyond Growth: The Economics of Sustainable Development. Reviewed in Environmental Ethics 21(1999):93-96.

Daly, Herman. *Ecological Economics and Sustainable Development: Selected Essays of Herman Daly*. Williston, VT: Edward Elgar Publishing, 2008.

Damania, R., "When the Weak Win: The Role of Investment in Environmental Lobbying," Journal of Environmental Economics and Management 42(no. 1, 2001):1-22. (v.13,#1)

Damania, R; Fredriksson, PG; List, JA, "Trade liberalization, corruption, and environmental policy formation: theory and evidence," Journal of Environmental Economics and Management 46(no.3, 2003):490-512. (v.14, #4)

Damato (D'Amato), Anthony. "Do We Owe a Duty to Future Generations to Preserve the Global Environment?" American Journal of International Law, 1990. 84:195-198. (v8,#3)

Damianos, Dimitri, Dimara, Efthalia, Hassapoyannes, Katharina, and Skuras, Dimitri. Greek Agriculture in a Changing International Environment. Brookfield, VT: Ashgate, 1998. 230 pp. \$63.95. (v9,#2)

Damodaran, A., "The Project Tiger Crisis in India: Moving Away from the Policy and Economics of Selectivity," *Environmental Values* 16(2007): 61-77. This paper discusses the economic and philosophical inadequacies that have characterised the Project Tiger scheme in India. Launched in the 1970s to protect the habitats of the Royal Bengal Tiger, Project Tiger has over time evolved into a management system that has abstracted the tiger from its habitat by highlighting its charismatic functions. However the abstraction has also caused the tiger to be valued for its narrow consumptive uses. By comparison the habitats that have nurtured the tiger have received less attention. The paper critiques partial equilibrium frameworks that have attempted to value a tiger in terms of demand and supply functions rather than as an integral element of an ecosystem. While considering the superiority of the Total Economic Value concept as a value-determining method, the paper also points to the limitation of the concept in not addressing the conflicts between use and non-use values of a tiger. In the light of these facts, the paper advances the theory of complementarity as a valuation approach that considers the tiger and its habitat as a joint resource that needs to be protected and conserved in the larger interests of

biodiversity conservation in India. Damodaran is at the Indian Institute of Management, Bangalore.

Damon, FH, "Review of: Tim Flannery, The Eternal Frontier: An Ecological History of North America and Its Peoples," Environmental History 7(no.4, 2002): 695.

Damro, C. and Mendez, P. L., "Emissions Trading At Kyoto: From EU Resistance to Union Innovation," Environmental Politics 12(no. 2, 2003): 71-94.

Dandy, N, "Review of: Robert A. Fimbel, Alejandro Grajal and John G. Robinson (eds.), The Cutting Edge: Conserving Wildlife in the Logged Tropical Forests," Environmental Politics 11(no.4, 2002): 145.

Dandy, N., "Review of: Tomas M. Koontz, Federalism in the Forest: National Versus State Natural Resources Policy," Environmental Politics 12(no. 2, 2003): 166.

Dandy, Norman, Review of Ghimire, Krishna B., ed., The Native Tourist: Mass Tourism within Developing Countries. London: Earthscan, 2001. Environmental Values 12(2003):266-267. (EV)

Dandy, Norman. Review of: Duffy, Rosaleen, A Trip Too Far: Ecotourism, Politics and Exploitation. London: Earthscan, 2000. Environmental Values 12(2003):408-409. (EV)

Daneel, Inus, "African Independent Churches Face the Challenge of Environmental Ethics," pages 248-263 in David Hallman, ed., Ecotheology: Voices from South and North (Maryknoll, NY: Orbis Press, 1994).

Daneel, ML 1992. Healing the earth: Traditional and Christian initiatives in Southern Africa. In: Koegelenberg, R (ed): Church and development: an interdisciplinary approach. Cape Town: EFSA. (Africa)

Daneel, ML 1992. Africa Independent Church pneumatology and the salvation of all creation. Theologia Evangelica 25:1, 35-55. (Africa)

Daneel, ML 1994. African Christian theology and the challenge of earthkeeping. In: Mouton, J & Lategan, BC (eds): The relevance of theology for the 1990's, 435-476. Pretoria: Human Sciences Research Council. (Africa)

Daneel, ML 1991. Towards a sacramental theology of the environment in Africa Independent Churches. Theologia Evangelica 24:2-26. (Africa)

Daneel, ML 1993. African Independent Churches face the challenge of environmental ethics. Missionalia 21:3, 311-332. (Africa)

Daneel, ML 1993. Healing the earth: Traditional and Christian initiatives in Southern Africa. Journal for the Study of Religion 6:1, 3-30. (Africa)

Daneel, ML 1991. The liberation of creation: African traditional religious and independent church perspectives. Missionalia 19:2, 99-121.

Daneel, ML 1993. Healing the earth: Traditional and Christian initiatives in Africa. In: Balia, D (ed): Perspectives in theology and mission from South Africa. New York: Mellen University Press, 144-175. (Africa)

Daneel, ML 1991. African Christian theology and the challenge of earthkeeping (Part 2). *Neue Zeitschrift für Missionswissenschaft* 47:3, 225-246.

Daneel, ML 1991. African Christian theology and the challenge of earthkeeping (Part 1). *Neue Zeitschrift für Missionswissenschaft* 47:2, 129-142. (Africa)

Daniel, Pete, "Technology and Ethics in Agriculture", *Journal of Agricultural and Environmental Ethics* 6(1993). Using technological changes in wheat harvest, the formation and transformation of the cotton culture, the impact of the Green Revolution in Malaya, and genetic engineering as examples, this article explores the positive and negative impacts of science and technology applied to agriculture. The limited and considered use of science and technology by the Amish suggests an alternative to the uncritical adoption of capital-intensive farming methods that cause human displacement and ecological damage. Larger farm operations and the substitution of technological expertise for husbandry distances farmers from their land and crops and sometimes leaves an ethical void. Daniel is in the National Museum of American History, Washington, DC 20560.

Daniel, Terry C., "Whither Scenic Beauty? Visual Landscape Quality Assessment in the 21st Century," *Landscape and Urban Planning* 54(2001):276-281. A review of the history of efforts systematically to assess the quality of our visual landscape and an appraisal of the future of this scientific and practical enterprise. There is an ongoing tension between the judgments of experts in science and/or aesthetics and the perceptions of residents on landscapes. Emphasis on ecosystem management increasingly figures in landscape quality assessment, and some aspects of this are subject to technological assessment. At a deeper level, traditional landscape approaches are increasingly challenged by deep ecology and green philosophy, which advocate a strongly biocentric approach to land quality assessment. On the opposite side, social/cultural construction models so construe the landscape as the product of socially constructed human interpretation that these leave little or no role for biophysical landscape features and processes. Daniel proposes a psychological approach for more balance between biophysical and human perception/judgment components. Daniel is in psychology, School for Renewable Natural Resources, University of Arizona, Tucson. (v.13, #3)

Daniels, Steven E., Gobeli, Corrine L. and Findley, Angela J., "Reemployment Programs for Dislocated Timber Workers: Lessons from Oregon," *Society & Natural Resources* 13 (No. 2, Mar 01 2000): 135- . (v.11,#2)

Daniels, Tom, Bowers, Deborah. Holding Our Ground: Protecting America's Farms and Farmland. Covelo, CA: Island Press, 1997. 420 pp. \$34.95. The many challenges involved in protecting farmland and how to create a package of techniques that can meet those challenges. (v9,#2)

Daniels, Tom, "Integrated Working Landscape Protection: The Case of Lancaster County, Pennsylvania," *Society & Natural Resources* 13 (No. 3, Apr 01 2000): 261- . (v.11,#2)

Danielson, Peter. Review of The Ethics of War. By Barrie Paskins and Michael Doctrill. *Environmental Ethics* 2(1980):285-88.

D'Antuono, Karen, "The National Park Service's Proposed Ban: A New Approach to Personal Watercraft Use in the National Parks," *Boston College Environmental Affairs Law Review* 27 (No. 2, Wint 2000): 243- . (v.11,#2)

Dantzer, Robert, "Research Perspectives in Farm Animal Welfare: The Concept of Stress", *Journal of Agricultural and Environmental Ethics* 6(1993), Supplement. Research carried out during the last two decades on hormone-behaviour relationships in stressful situations has allowed us to discard the simplistic

stimulus-response model of stress in favour of more sophisticated interactionist models which incorporate as intervening variables the psychological and social resources available to the individual (coping). It is now well-recognized that the response to stress is multidimensional, involving different responses in different systems, individuals, and situations. This complexity cannot be addressed by sticking to the old notion of stress as a non-specific response to every stimulus that threatens homeostasis. A more appropriate perspective is to view stress responses as modular. According to this perspective, the organism is equipped with a number of defence systems that are triggered by specific exteroceptive or interoceptive stimuli, and that lead to defence reactions which involve intricate relationships between physiological and behavioural responses. Although these different defence systems normally function independently from one another, they can also interact due to some commonality in their underlying neural mechanisms and as a result of competition for a final common behavioral pathway. The study of how information is processed within each system and how different systems interact with each other provides new insights about the pathophysiology of stress-related disorders, and may help us to understand how the concept of health, defined as a state of physiological and psychological well-being, can be translated into biological terms. Dantzer is at INRA-INSERM U176, Rue Camille Saint-Saens, 33077 Bordeaux Cedex, France.

Danz, Harold P. Of Bison and Man. Niwot, CO: University Press of Colorado, 1997. 232 pp. \$32.50. The bison's prehistory and natural history, its complex relationship with Native Americans, the bison slaughter and recovery, the establishment of the bison as an industry, and the role bison play today, both as food source and as a wild animal. (v8,#3)

Dardick, Samuel, "Land Use Planning, Communities, and Environmental Limits," Ecology Law Quarterly 25(No.4, 1999):659-. The changing politics of the Northern California Sierra. (v.10,#2)

Dargavel, J, " Review of: Michael Williams. Deforesting the Earth: From Prehistory to Global Crisis". Environmental History 9 (no.1, 2004): 132-133.

Dasgupta, Partha, Human Well-Being and the Natural Environment. New York: Oxford University Press, 2002, 2004. Ways to measure the quality of life, with particular attention to the natural environment. With commentary on the economics of population, poverty traps, global warming, structural adjustment programs, and free trade, particularly in relation to poor countries. Dasgupta is in economics, University of Cambridge. (v.14, #4)

Dasgupta, Partha, "Economic Value of Biodiversity, Overview," Encyclopedia of Biodiversity 2: 291-304. Any assessment of the value of biodiversity should begin with an account of why we need to value it and the reasons market values would not be expected to suffice for the purpose. The first three sections discuss these matters in the wider context of valuing natural resources (biodiversity is but a special case). Following sections discuss the special problems that arise in valuing biodiversity. (v.11,#4)

Dasgupta, Partha, "Population, Poverty, and the Local Environment," Scientific American 272 (2 February, 1995):40-45. (v7,#4)

Dasgupta, Partha, Levin, Simono, and Lubchenco, Jane, "Economic Pathways to Ecological Sustainability," Bioscience 50 (No. 4, 2000 Apr 01): 339- . (v.11,#4)

Dasgupta, Partha, Human Well-Being and the Natural Environment. New York: Oxford University Press, 2002. Methods of valuation and evaluation with the aim of measuring, and searching to improve, the quality of human life. Ways in which the quality of life is known to be tied to the natural environment. Dasgupta is at Cambridge University.

Dasgupta, Partha, Human Well-Being and the Natural Environment. Oxford: Oxford University Press, 2001. Dasgupta is in economics, Cambridge University. (v.14, #4)

Dasgupta, S., Laplante, B. and Mamingi, N., "Pollution and Capital Markets in Developing Countries," Journal of Environmental Economics and Management 42(no.3, 2001): 310-35. (v.13,#2)

Dasgupta, Susmita, Hettige, Hemamala and Wheeler, David, "What Improves Environmental Compliance? Evidence from Mexican Industry," Journal Of Environmental Economics And Management 39 (No. 1, Jan 01 2000): 39- . (v.11,#2)

Daszak, Peter and Andrew A. Cunningham, "Emerging Infectious Diseases: A Key Role for Conservation Medicine." Pages 40-61 in Aguire, A. Alonso, Richard S. Ostfeld, Gary M. Tabor, Carol House, and Mary C. Pearl, 2002. Conservation Medicine: Ecological Health in Practice. Oxford: Oxford University Press. Pathogens travel both ways, from wild animals to humans, producing pandemic diseases, and from humans to wild animals, disabling them with disease and in some cases threatening them with extinction. The authors also raise some interesting practical and ethical concerns about the extinction of parasites, with accompanying references. Daszak is with the Consortium for Conservation Medicine, Wildlife Trust, New York. Cunningham is in wildlife epidemiology, Zoological Society of London.

Daszak, Peter, Cunningham, Andrew A., and Hyatt, Alex D., "Emerging Infectious Diseases of Wildlife--Threats to Biodiversity and Human Health," Science 287(21 January 2000):443-449. Infectious diseases of wild animals spill over into domestic animals and vice versa. They also spill over into humans and vice versa. These diseases threaten biodiversity as well as human health. Increased populations escalate the problem. The Spanish conquistadors brought smallpox and measles into native American peoples; likewise their animals brought wildlife diseases. A classic misfortune, a paradigm for the future, is the African rinderpest epidemic of the 1880's and 1890's, introduced from Asia, and spreading across Africa in ten years, devastating cattle and wild buffalo. Daszak is with the Institute of Ecology, University of Georgia. (v.11,#4)

Daugherty, Steven A. "The Unfulfilled Promise of an End to Timber Dominance on the Tongass: Forest Service Implementation of the Tongass Timber Reform Act." Environmental Law 24 (no. 4, 1994): 1573- Ways that the U. S. Forest Service has failed to carry out the intent behind the Tongass Timber Reform Act; the U. S. Congress should enact further legislation that imposes clearer standards. (v6,#1)

Dauvergne, Peter. Shadows in the Forest: Japan and the Political Economy of Deforestation in Southeast Asia. Cambridge, MA: MIT Press, 1997. 336pp. \$45 cloth, \$22 paper. Dauvergne examines Japan's effect on commercial timber management in Indonesia, East Malaysia and the Philippines. The book is one of the first to examine the environmental impact of Northeast Asian development on Southeast Asian resource management and to analyze the indirect environmental impact of bilateral state relations on the management of South Asian forest resources. (v8,#1)

Dauvergne, Peter. Shadows in the Forest: Japan and the Politics of Timber in Southeast Asia. Cambridge, MA: MIT Press, 1997. 336 pp. \$22. Although Japanese practices have improved somewhat since the early 1990's, Dauvergne maintains that corporate trade structures and purchasing patterns, timber prices, wasteful consumption, import tariffs, and the cumulative environment effects of past practices continue to undermine sustainable forest management in Southeast Asia. (v.9,#4)

Davalos, L., R. Sears, G. Raygorodetsky, B. Simmons, H. Cross, T. Grant, T. Barnes, L. Putzel and A. Luz Porzecanski, "Regulating access to genetic resources under the Convention on Biological Diversity: an analysis of selected case studies," Biodiversity and Conservation 12(no. 7, 2003): 1553-1570. (v 14, #3)

Davenport, M. and Anderson, D., "Getting From Sense of Place to Place Based Management: An Interpretive Investigation of Place Meanings and Perceptions of Landscape Change," Society and Natural Resources 18(no. 7, August 2005): 643-659.

Davenport, Tim R. B., et al, "A New Genus of African Monkey, *Rungwecebus*: Morphology, Ecology, and Molecular Phylogenetics," Science 312 (2 June 2006): 1378-1381. A new species of monkey found in southern Tanzania, related to mangabeys, but different enough to be placed in a new genus. A viable population has been discovered and photographs taken, but only one specimen has been studied, an individual killed in a trap set by a native farmer.

David, J. H., Cury, P., Crawford, R. J., Randall, R. M., Underhill, L. G. and Meyer, M. A., "Assessing Conservation Priorities in the Benguela Ecosystem, South Africa: Analysing Predation by Seals on Threatened Seabirds," Biological Conservation 114(no. 2, 2003): 289-292.

Davidsdottir, Sigrun, "To whale or not to whale?" Ecologist 31(no.10, 2002):64-65.
Sigrun Davidsdottir explains Iceland's attitude to whaling. (v.13, #3)

Davidson, Carlos, "Economic Growth and the Environment: Alternatives to the Limits Paradigm.," Bioscience 50 (No. 2000 May 01): 5- . (v.11,#4)

Davidson, Davy. "Toward Kinship 'Compassionate Communication.'" The Animals' Agenda 16, no.1 (1996): 40. Yelling anti-fur epithets at someone wearing a fur coat is often not effective. Although an angry confrontation may be cathartic for the activist, an empathetic approach offers a better change to convert someone. "Compassion is practical because it is the best method to open hearts and change minds." And it begins with self-acceptance. (v7, #3)

Davidson, Debra J., and Freudenburg, William R. "Gender and Environmental Risk Concerns: A Review and Analysis of Available Research." Environment and Behavior 28, no.3 (1996): 302. (v7, #3)

Davidson, Gary. "Ideas: Changing Policy in Ontario," Environments 24(no.3, 1997):79. (v8,#3)

Davidson, Julie. "Sustainable Development: Business as Usual or a New Way Of Living?" Environmental Ethics 22(2000):25-42. In the eighteenth century, the economic problem was reformulated according to a particular set of politico-economic components, in which the pursuit of individual freedom was elevated to an ethical and political ideal. Subsequent developments of this individualist philosophy together with the achievements of technological progress now appear as a threat to future existence. Extensive environmental degradation and persistent global inequalities of wealth demand a new reformulation of the economic problem. Sustainable development has emerged as the most recent economic strategy for addressing concerns about ecological integrity and social justice. Although there is a recognized continuum of understanding about the concept from conservative to radical it has been argued that only the radical version of sustainable development embodies the ethical capacity to address these concerns. Simultaneously the perennial existential question "How should we live?" has been raised anew along with the novel ethico-moral question: "How should we arrange our systems of production and consumption to ensure the sustainability of the Earth under conditions of conspicuous and pressing environmentally limiting conditions?" Moreover, the strong normative dimension embodied in the radical version of sustainability represents a challenge to liberal democracy and its understanding of individual and collective goods. I argue that the radical approach has the capacity to relieve what is an inherently acute tension of modern life and to reconcile individual autonomy with the wider social and ecological good. (EE)

Davidson, Marc D., "Wrongful Harm to Future Generations: The Case of Climate Change," *Environmental Values* 17(2008):471-488. I argue that governments are justified in addressing the potential for human induced climate damages on the basis of future generations' rights to bodily integrity and personal property. First, although future generations' entitlements to property originate in our present entitlements, the principle of self-ownership requires us to take 'reasonable care' of the products of future labour. Second, while Parfit's non-identity problem has as yet no satisfactory solution, the present absence of an equilibrium between theory and intuitions justifies a precautionary approach, i.e. treating climate damage as a wrongful harm. In addition, a supplementary consideration is described as arising from transcendental needs.

Davidson, P., and Black, R., "Women in Natural Resource Management: Finding a More Balanced Perspective," *Society and Natural Resources* 14(no.8, 2001): 645-56. (v.13,#2)

Davidson, S. M., "On Environmental Thought at the Turn of the Century," *Natural Resources Journal* 42(no.2, 2002): 433-46. (v.13,#4)

Davidson, Stewart, "The Troubled Marriage of Deep Ecology and Bioregionalism," *Environmental Values* 16(2007): 313-332. Bioregionalism is often presented as the politics of deep ecology, or deep ecology's social philosophy. That the ties uniting these doctrines are rarely explored can be put down to a perception amongst commentators that such links are self-evident and therefore unworthy of closer examination. By arguing that the bonds between deep ecology and bioregionalism are more tenuous than has often been assumed, this paper addresses this theoretical lacuna. There is nothing exclusive to the central tenets of deep ecology which provides us with a coherent rationale for a specifically bioregional form of decentralisation. However, deep ecology has nonetheless had an appreciable impact on bioregional thinking. In this context it is argued that bioregionalism's assimilation of aspects of deep ecology, and particularly an emphasis upon cross-species identification, undermines the project in various ways. Davidson is in the Department of Government, University of Strathclyde, Glasgow, Scotland.

Davies, Anna, Review of: Boholm, Åsa, and Ragnar Löfstedt, *Facility Siting: Power and Identity in Land Use Planning*. London: Earthscan, 2004. *Environmental Values* 14(2005):532-536.

Davies, Anna R., Review of Owens, Susan and Cowell, Richard, *Land and Limits: Interpreting Sustainability in the Planning Process*. London: Routledge, 2001. *Environmental Values* 12(2003):136-138. (EV)

Davies, Anna. "What Silence Knows - Planning, Public Participation and Environmental Values," *Environmental Values* 10(2001):77-182. While fraught with ambiguities, support for greater public participation in environmental policy making is experiencing a renaissance amongst sections of government and academia, particularly within the field of land-use planning. There is concern within this cohort that the planning system silences public voices through its current mechanisms for community involvement. Proponents of participation often presuppose that more public participation will produce both 'better' decisions and environmental benefits, but to date research has focused on the front-end, or "processes", of participation rather than the "products" that result. While procedural aspects of public participation are important it is imperative that critical consideration is also given to what emerges from the participation that is being exalted. This paper addresses this concern by focusing on the products of a public participation exercise conducted in Luton, South-east England in order to consider what it is that "silence knows". Keywords: Environmental values, public participation, land-use planning, Luton. Davies is in the Department of Geography, King's College, London. (EV)

Davies, B. R., J. H. O'Keeffe, and C. D. Snaddon, *A Synthesis of the Ecological Functioning*,

Conservation and Management of South African Rivers Ecosystems, 1993. ISBN 1 86845 001 3. Water Research Commission, P. O. Box 824, Pretoria 0001, South Africa. The dedication reads: "To all people that care for the earth, and who regard it as finite resource to cherish, rather than to pillage and to profit from, be the glory!" The conclusion is in the hope that the study will help South Africans to "give love to our rivers."

Davies, G, "Bushmeat and International Development," Conservation Biology 16(no.3, 2002):587-589. (v.13, #3)

Davies, J. Clarence, ed. Comparing Environmental Risks. Washington, D.C.: Resources for the Future, 1996. 150pp. This volume explain the origins of comparative risk and the political context in which it is being put forward, its use in the US, the limitations that might reasonably be imposed upon it, and the way in which both "experts" and the lay public might participate in making risk comparisons. (v8,#1)

Davies, Lincoln L., "Lessons for an Endangered Movement: What a Historical Juxtaposition of the Legal Response to the Civil Rights and Environmentalism Has to Teach Environmentalists Today," Environmental Law 31(no.2, 2001): 229-. The twentieth century's two most important social movements, civil rights and environmentalism, derive from divergent paths but increasingly share a similar trajectory - one in which they are falling out of public favor as problems deemed already solved. In this Article, Mr. Davies examines from a historical perspective the legal treatment of these two movements to illustrate what environmentalists might change in the next century to ensure the accomplishment of their objectives and in turn, the health of our planet. (v.12,#3)

--Davies, Nick B., Cuckoos, Cowbirds and other Cheats. San Diego: Academic Press, 2000. Brood parasites and the evolution of cheating. The arms race between parasites and their prey. Cheating was once thought an exception, but recently it has been discovered to be widespread in many birds, who may parasitize the nests of their own kind. One question to raise with students might be whether cowbird cheating is as morally reprehensible as student cheating! Or maybe whether calling cowbirds cheats is cheating. (v.11,#3)

Davies, Oliver, "Message in a Bottle: The Spirituality of the Welsh," Ecotheology No 3 (July 1997):9-22.

Davies, Terry, "Voluntary Incentives Are No Shortcut to Pollution Abatement," Resources (Resources for the Future), Winter, 1997, p. 18. Summary of an RFF study concluding that no shortcut will be found around the difficult tasks of legislating a better pollution control system in the United States. Any incentives will have to be woven into regulatory law. (v8,#1)

Davion, Victoria, "Anthropocentrism, Artificial Intelligence, and Moral Network Theory: An Ecofeminist Perspective," Environmental Values 11(2002): 163-176. This paper critiques a conception of intelligence central in AI, and a related concept of reason central in moral philosophy, from an ecological feminist perspective. I argue that ecofeminist critique of human/nature dualisms offers insight into the durability of both problematic conceptions, and into the direction of research programmes. I conclude by arguing for the importance of keeping political analysis in the forefront of science and environmental ethics. (EV)

Davion, Victoria. "Itch Scratching, Patio Building, and Pesky Flies: Biocentric Individualism Revisited." Environmental Ethics 28(2006):115-128. Biocentric individualism, the position that all life has intrinsic value, is of no practical help in policy-making contexts. Examples commonly used in discussions of biocentric individualism are themselves alienating and threaten to make environmental philosophy appear irrelevant to policy decisions. Hence, both biocentric individualism and typical discussions of it are problematic for those wishing to make environmental philosophy useful in policy. A recent article by Jason Kawall, in which he attempts to defend biocentric individualism, demonstrates these points. (EE)

Davion, Victoria. "Theoretical Versus Applied Ethics: A Look at Cyborgs," Ethics and the Environment 4(1999):73-78. In this brief comment I will focus on Chris Cuomo's (1998) discussions of theoretical versus applied ethics, and apply this discussion to her suggestion that the cyborg myth as discussed by Donna Haraway, can be a helpful ecological feminist ideal. Although I agree with Cuomo that some aspects of the cyborg myth might be helpful, I will explore some disturbing aspects of cyborgs. Cuomo is certainly aware of the dangers of the cyborg myth, mentioning many of them herself. My aim is to fill out a discussion of such dangers by arguing that cyborgs are nothing new. In fact, I shall argue that key figures involved in the decision to bomb Hiroshima and Nagasaki, including President Truman, identified with the bomb and bomb-centered technology in a cyborgian manner. Obviously, the kind of cyborg identity that could encourage mass murder of the sort involved in our bombings of Japan, and the cyborg ideal that inspires Cuomo are very different. However, Cuomo's discussion of theoretical versus applied ethics clearly indicates that before ecological feminists accept the cyborg as a theoretical ideal, we should examine how real cyborgs, if there have in fact been any, have functioned within society. Hence, if the case can be made that those responsible for the devastating bombings of Japan were cyborgs, this fact is crucial for anyone promoting a cyborg ideal of any sort to consider. Davion is in philosophy at the University of Georgia. (E&E)

Davis, A. and Wagner, J. R., "Who Knows? On the Importance of Identifying "Experts" When Researching Local Ecological Knowledge," Human Ecology 31(no. 3, 2003): 463-489.

Davis, Ann. Review of Peter G. Brown, "Ethics, Economics and International Relations: Transparent Sovereignty in the Commonwealth of Life", Organization and Environment, 15, (No. 4, 2002): 498-501. Davis is a member of the economics faculty at Marist College.

Davis, B., "The Ecology, Land Use and Conservation of the Cairngorms (Scotland)," Biological Conservation 113(no. 2, 2003): 319. (v 14, #3)

Davis, Charles, and Ellison, Brian A. "Change on the Range?: Policy Reforms and Agenda Control." Society and Natural Resources 9, no.4 (1996): 395. (v7, #3)

Davis, DE, "Review of: Suzanne Marshall. "Lord, We're Just Trying to Save Your Water": Environmental Activism and Dissent in the Appalachian South", Environmental History 9 (no.1, 2004): 150.

Davis, Debra Lee, Bradlow, H. Leon. "Can Environmental Estrogens Cause Breast Cancer?," Scientific American (Oct. 1995):166-172.

Davis, Donald Edward. Ecophilosophy: A Field Guide to the Literature (San Pedro, CA: R. & E. Miles, 1989) is an excellent annotated bibliography of nearly three hundred books in environmental philosophy and related areas. There are appendices listing periodicals and organizations. Available for \$ 8.95 plus \$ 1.50 postage and handling from R. & E. Miles Co., P. O. Box 1916, San Pedro, CA 90733. Phone 213/833-8856. (v1,#1) Reviewed in Environmental Ethics 12(1990):369-70.

Davis, Donald. "Ecosophy: The Seduction of Sophia?" Environmental Ethics 8(1986):151-62. In this paper I challenge the reader to witness the environmental and feminist aegis as an epicine confrontation with nature whose main goal is to reconcile a lost partnership with the archetype I have labeled Sophia. Sophia, whose providential origins lie somewhere amid the great pre-Hellenic gnostic cults, can only bring salvation if she is liberated by humanity through the resacralization of nature. It is this change in consciousness that points toward a radical environmental ethic and a total reconceptualization of the becoming process. Davis is in the department of Psychology, West Georgia College, Carrollton, GA. (EE)

Davis, Ellen F., "Torah of the Earth." Pages 183-201 in Getting Involved with God: Rediscovering the Old Testament. Cambridge, MA: Cowley Publications, 2001. "The biblical writers explore the infinitely complex web of relationships, with the earth and the non-human creatures, in which we are embedded. Further, they help us see the degree to which our relationship with God is bound up in our relationships with the other creatures whom God has made" (p. 182). Davis teaches Bible at Duke Divinity School. (v.13, #3)

Davis, FL; Wurth, AH, "Voting Preferences and the Environment in the American Electorate: The Discussion Extended," Society and Natural Resources 16(no.8, 2003):729-740. (v.14, #4)

Davis, George, and Michael Somers, eds., Conservation of Southern Africa's Wild Living Resources: Exploitation, Sustainability and Ethics. Proceedings of a one day symposium in May 1995. Organized and hosted by the South African Institute of Ecologists and Environmental Scientists, the South African Wildlife Management Association, the Marine Science Society of Southern Africa. About forty pages. With short discussions of the sustainable use of wildlife, the ethics/science dichotomy, the need to differentiate scientific statements and value judgments, the consumptive use of wildlife, media involvement and the shaping of popular opinion, culling and killing in the interests of biodiversity, and other matters. With a participant list and addresses of principal contacts in South and southern Africa. (Africa)

Davis, Gregory H. Technology-Humanism or Nihilism. Reviewed in Environmental Ethics 6(1984):87-89.

Davis, Karen. "The Plight of Poultry." The Animals' Agenda 16(Jul. 1996):38. (v7,#2)

Davis, M.. "Biotic Globalization: Does Competition From Introduced Species Threaten Biodiversity?," Bioscience 53(no. 5, 2003): 481-490. (v 14, #3)

Davis, Mackenzie L., and Cornwell, David A., Introduction to Environmental Engineering. Boston: McGraw-Hill, 1998. 919 pages. A major introductory text to environmental engineering, with, early on, a small section on environmental ethics. "The birth of environmental ethics as a force is partly a result of concern for our own long-term survival, as well as our realization that humans are but one form of life, and that we share our earth with other forms of life. ... The acceptable system is one in which we learn to share our exhaustible resources--to regain a balance. This requires that we reduce our needs and that the materials we use must be replenishable. We must treat all of the earth as a sacred trust to be used so that its content is neither diminished nor permanently changed; we must release no substances that cannot be reincorporated without damage to the natural system. The recognition of the need for such adaptation (as a means of survival) has developed into what we now call the environmental ethic" (pp. 33-35). Davis teaches environmental engineering at Michigan State University; Cornwell is with Environmental Engineering and Technology, Inc. (v.9,#4)

Davis, Mary Byrd, ed. Eastern Old-Growth Forests. Covelo, CA: Island Press, 1996. 420 pp. \$50 cloth, \$24.95 paper. Leading experts examine the ecology and characteristics of eastern old growth forests, explore such forests history and value, and make recommendations for forest preservation. (v7,#4)

Davis, Mike. Ecology of Fear: Los Angeles and the Imagination of Disaster. New York: Metropolitan Books, 1998. 484 pages. \$ 25. Los Angeles' tales of disaster resulting from a discrepancy between the genuine natural ecology of southern California--including earthquakes, fires, floods, droughts, and tornadoes--and the nearly delusional stories that have been told to naturalize the region for the many millions who have settled there in the twentieth century. An ecology of catastrophe leads to a sociology

of catastrophe. Even seemingly unrelated troubles can root in ecology. Disaster relief, for example, provided by the government flows most expeditiously to well-to-do neighborhoods, leaving poorer neighborhoods more vulnerable, and prone to riots. And political and economic forces continue to try to normalize such a massive, poorly planned human presence in a place where disaster lies dormant. (v.9,#3)

Davis, Richard S. Review of Responsibilities to Future Generations. Edited by Ernest Partridge. Environmental Ethics 4(1982):75-83.

Davis, SK, "Review of: Silver Fox of the Rockies By Daniel Tyler," Natural Resources Journal 43(no.4, 2003):1287-1290. (v. 15, # 3)

Davis, Steven I., "The least harm principle may require that humans consume a diet containing large herbivores, not a vegan diet," Journal of Agricultural and Environmental Ethics 16(2003):387-394. Regan concludes that humans are morally obligated to consume a vegetarian or vegan diet. We are obligated to consume a vegetarian/vegan diet because in total it would cause the least harm to animals (Least Harm Principle, or LHP) as compared to current agriculture. But is that conclusion valid? The LHP may actually be better served using food production systems that include both plant-based agriculture and a forage-ruminant-based agriculture as compared to a strict plant-based (vegan) system. KEY WORDS: animal production, animal rights, least harm, moral vegetarianism, vegan. (JAEE)

Davis, Susan G., Spectacular Nature: Corporate Culture and the Sea World Experience. Berkeley: University of California Press, 1997. 325 pages. \$ 19.00 paper. An analysis of one of the most ambiguous of American commercial institutions, the nature theme park, with contradictions between a world dedicated to profit and also, supposedly, to public knowledge, compassion, and conservation. Davis teaches communications at the University of California, San Diego. (v.9,#3)

Davis, Susan. Spectacular Nature. Reviewed by G.R. Marvin. Environmental Values 8(1999):521. (EV)

Davis-Berman and Berman, Dene S., Wilderness Therapy: Foundations, Theory, Research. Dubuque, IA: Kendall/Hunt Publishing Co., 1994. 282 pages. \$ 26.00 paper. The definitive analysis of the idea that wilderness experience can have therapeutic value. The authors discuss cultural orientations toward wilderness and wilderness ethics, trends in research and the different orientations of outdoor programs ranging from mental health to enrichment. Theories informing wilderness therapy, and the importance of those theories for basic research, as well as for program development and evaluation. Two chapters contain practical suggestions for wilderness therapy programs. The authors ask for increasing professionalization of the field, including such measures as accreditation of programs and certification of leaders. Much of the focus is on the usefulness of such programs for troubled youth. Two themes are that the least restrictive environment provides the best forum for confronting psychological problems, and that outdoor environments generally make the consequences of actions less ambiguous and more immediate, both favorable to therapy. Both authors are mental health professionals. (v8,#2)

Davison, Aidan, Barns, Ian, Schibeci, Renato. "Problematic Publics: A Critical Review of Surveys of Public Attitudes to Biotechnology," Science, Technology, & Human Values 22(no.3 1997):317. (v8,#3)

Davison, Aidan. Technology and the Contested Meanings of Sustainability. Reviewed in Environmental Ethics 25(2003):329-332. (EE)

Davradow, Maria and Namkoong, Gene, "Science, Ethical Arguments, and Management in the Preservation of Land for Grizzly Bear Conservation," Conservation Biology 15 (no. 3, June, 2001):570-577. Environmental groups advocate the preservation of an area within British Columbia's coastal

temperate rainforest as a sanctuary for grizzly bears (*Ursus arctos horribilis*). Debate among government, industry, and environmental spokespersons has provided arguments but no resolution. We have applied to this issue available biological knowledge on grizzly bears and the arguments of a range of ethical theories. The theories of three professionally trained ethicists were included: Tom Regan, Holmes Rolston III, and Arne Naess. Aldo Leopold's prominent position in the conservation movement justifies his "land ethic" as a fourth ethical theory. All four theories agree that the area should be preserved. Contrary to this fundamental agreement, the theories diverge when tested against a "hard" conservation scenario, the conflict between the protection of the last surviving grizzly bears versus the survival of a culturally distinct human tribe. Application of the principles developed by Regan and Naess recommend that human interests should override the preservation of grizzly bears, whereas Leopold's and Rolston's arguments favor the preservation of the area for the bears. Our work can be used as a model of how the gap between biological sciences, ethical theories, and ecosystem management can be bridged successfully. The authors are in Forest Sciences, University of British Columbia. (v.12,#4)

Davradou, Maria and Paul Wood. "The Promotion of Individual Autonomy in Environmental Ethics." Environmental Ethics 22(2000):73-84. In his book The Morality of Freedom, Joseph Raz argues that the promotion of personal autonomy can serve as a constitutive principle for a comprehensive political theory. He maintains that three conditions are necessary for attainment of individual autonomy: appropriate mental abilities, an adequate range of options, and independence. In this essay, by focusing on Raz's conception of an adequate range of options, we suggest that Raz's theory justifies environmental conservation in general. We present an empirical framework of present-day assaults on personal autonomy, construct a heuristic scenario, and argue against both neoclassical economics and utility maximization as adequate criteria regarding environmental decisions. We conclude that successful environmental policies should directly or indirectly strive to provide the conditions necessary for promoting individual autonomy. (EE)

Davy, Barbara Jane, "An Other Face of Ethics in Levinas," *Ethics and the Environment* 12(no. 1, 2007):39-65. The main threads of Emmanuel Levinas' theory of ethics, developed in his philosophical works, *Totality and Infinity* (1969), and *Otherwise than Being or Beyond Essence* (1998), instruct that ethics require transcendence of being and nature, which he describes in terms of a transcendence of animality to the human. This apparent devaluation of the nonhuman would seem to preclude the development of Levinasian environmental ethics. However, a deconstructive reading of Levinas recognizes a subtext that interrupts the main thread of his argument running against the inclusion of nonhuman others in ethics. Through a critical reconstructive reading of Levinas, I develop an ethic extraneous to Levinas' transcendent ethics, an ethic outside his *Otherwise than being*.

Dawe, NK; Ryan, KL, "The Faulty Three-Legged-Stool Model of Sustainable Development," Conservation Biology 17(no.5, 2003):1458-1460. (v.14, #4)

Dawkins, M. S. Through our eyes only? San Francisco: W. H. Freeman, 1993.

Dawkins, M. S., Animal suffering: The science of animal welfare. New York: Routledge, Chapman and Hall, 1980.

Dawkins, Marian Stamp, "From an Animal's Point of View: Motivation, Fitness, and Animal Welfare," Behavioral and Brain Sciences 13(1990):1-61. To study animal welfare empirically we need an objective basis for deciding when an animal is suffering. Suffering includes a wide range of unpleasant emotional states such as fear, boredom, pain, and hunger. Suffering has evolved as a mechanism for avoiding sources of danger and threats to fitness. Captive animals often suffer in situations in which they are prevented from doing something that they are highly motivated to do. In designing environments for animals in zoos, farms, and laboratories, priority should be given to features for which an animal

continues to work despite increasing costs. The care of animals can thereby be based on an objective, animal-centered assessment of their needs. A "target" article, with commentary by two dozen critics, most eminently Peter Singer. Dawkins is at Oxford University in the department of zoology.

Dawkins, Richard, "Sustainability Doesn't Come Naturally: A Darwinian Perspective on Values." Inaugural Lecture, The Values Platform for Sustainability, The Environment Foundation. Online at: <www.environmentfoundation.net/richard-dawkins.htm>. The Environment Foundation is a UK charitable organization that seeks to put sustainability on the business agenda, here inaugurating a program coupling business values and biological values. Dawkins gave the inaugural address, also with a question and answer session, 14 November, 2001.

"'What comes naturally' is a topic which Darwinism might be expected to illuminate. Darwinian natural selection gives us just about everything else in our nature--our bones, our organs, our instincts. If there is a reason to exclude our values, it had better be a good one. The values of sustainability are important to all of us here and I enthusiastically include myself. We might therefore hope that these too are built into us by natural selection. I shall tell you today that this is not so. On the contrary, there is something profoundly anti-Darwinian about the very idea of sustainability. But this is not as pessimistic as it sounds. Although we are products of Darwinism, we are not slaves to it. Using the large brains that Darwinian natural selection has given us, it is possible to fashion new values that contradict Darwinian values and that is the policy I shall urge upon you" (opening paragraph).

Dawkins claims that we are biologically inclined to pursue short-term self interest, but that our minds can override that with long-term self interest, but still self interest. "From a Darwinian point of view, the problem with sustainability is this: sustainability is all about long-term benefits of the world or of the ecosystem at the expense of short-term benefits. Darwinism encourages precisely the opposite values. Short-term genetic benefit is all that matters in a Darwinian world." "There is a tension between short-term individual welfare and long-term group welfare or world welfare. If it were left to Darwinism along there would be no hope. Short-term greed is bound to win. The only hope lies in the unique human capacity to use our big brains with our massive communal database and our forward simulating imagination." "The answer lies in the fact that brains, although they are the products of natural selection, follow their own rules, which are different from the rules of natural selection."

Can we get past long-term self interest, perhaps to justice, equity, or respect for nature? Dawkins is doubtful but hopeful. In answer to a question by Kate Rawles, an environmental philosopher: "I suppose maybe you were asking because of the hope that one might be able to teach people to forgo short-term selfish gain in the interest of long-term world benefit. I am more optimistic about that. There are an awful lot of people who, either for cultural reasons or educational reasons or I don't know quite what, do seem to be capable of subjugating their selfish desires for the good of humanity as a whole, or even living creatures as a whole. The fact that some people seem to manage to do this gives me hope that more people might." And, continuing, "I suppose I ought to say that, as a passionate Darwinian in the academic sense that I believe Darwinism is the explanation for all of life, I am also a passionate anti-Darwinian when it comes to deriving values for our own life. A pretty good definition of the kind of society in which I don't want to live is a society founded on the principles of Darwinism. That is, in a way, the central message of my lecture." Dawkins is professor of the public understanding of science, Oxford University, and author of The Selfish Gene. (v.13,#1)

Dawkins, Richard, "The Evolved Imagination: Animals as Models of Their World," Natural History 104 (no. 9, September, 1995):8, 10-11, 22-24. "An animal is a model. Any organism is a model of the world in which it lives. ... Imagine a zoologist presented with the body of an animal she has never seen before. ... A good zoologist should be able to reconstruct almost everything about the world in which the animal lived." Some animals seem to have the capacity to model their worlds and project this model into the future. Thinking simulates the future, and humans are especially good at this. "And once natural selection had built brains capable of simulating slight departures from reality into the imagined future, a further capacity automatically flowered. Now it was but a short step to the wilder reaches of imagination

revealed in dreams and in art, an escape from mundane reality that has no obvious limits." (v9,#2)

Dawkins, Richard, *The God Delusion*. Reviewed by Amitrajeet A. Batabyal. *Journal of Agricultural and Environmental Ethics* 20(2007):221-223.

Dawkins, Richard, Unweaving the Rainbow: Science, Delusion, and the Appetite for Wonder. London: Penguin Books, 1998. Some fear that science empties nature of its beauty and wonder. Dawkins argues that science often finds solutions after which there remains the possibility of wonder, indeed science can increase the sense of wonder, and this can inspire further poetry.

Dawkins, Richard. Climbing Mount Improbable. Reviewed by Frank Fisher. Environmental Values 8(1999):114. (EV)

Dawson, C P., N. A. Connelly, and T. L. Brown, "Salmon Snagging Controversy: New York's Salmon River" Fisheries 18(no. 4, 1993):6-10. In salmon snagging the fisherman jerks a large hook through a pod of fish in hopes of snagging one of them. The authors find four reasons to support such snagging, but seven to oppose it. They don't seem to ask, or know, whether the fish suffer, more or less than if caught in other ways. Many fish and wildlife agencies are attempting to phase out snagging. (v5,#4)

Dawson, Jane I., "The Two Faces of Environmental Justice: Lessons from the Eco-Nationalist Phenomenon," Environmental Politics 9(no. 2, Summer 2000):22- . (v.12,#2)

Dawson, Mary R., et al., "Laonastes and the 'Lazarus Effect' in Recent Mammals," Science 311 (10 March 2006): 1456-1461. A new species of squirrel-like rodent (*Laonastes aenigmamus*) has been found living in Laos. It was first described in 2005 as belonging to a new family, but now systematists have found that it belongs to a family thought to be extinct for about 11 million years. The animal has been described from specimens bought in markets and from bones in pellets from owls that eat it, but it has not yet actually been seen alive by the biologists who have described it. Dawson is in vertebrate paleontology, Carnegie Museum of Natural History, Pittsburgh.

de Châtel, Francesca. *Water Sheikhs and Dam Builders: Stories of People and Water in the Middle East*. New Brunswick, NJ: Transaction Publishers, 2007. De Châtel brings together four years of research and travel in the Middle East and North Africa to discuss some of the complexities of identifying the causes of water shortages, the role of water in religions and ideologies, the impacts of water projects on people's perceptions, the politics of water pricing, and the future of water management. Rather than relying upon standard geopolitical, economic, and hydrological analyses, she presents water scarcity issues through the perceptions of local peoples.

de Laplante, K., "Toward a More Expansive Conception of Ecological Science", Biology and Philosophy 19 (2004):263-281

de Laplante, K., "Can You Teach Environmental Philosophy Without Being an Environmentalist?", Worldviews: Nature, Culture, Religion 8 (no. 2, 2004):198-212.

de Laplante, K., "Is Ecosystem Management a Postmodern Science?", in K.E. Cuddington and B.E. Beisner (eds.) Ecological Paradigms Lost: Routes of Theory Change, San Diego: Elsevier Academic Press, 2005, 397-418.

de Laplante, Kevin. "Environmental Alchemy: How to Turn Ecological Science into Ecological Philosophy." Environmental Ethics 26(2004):361-380. Ecological science has been viewed by some philosophers as a foundational resource for the development of metaphysical, epistemological and

normative views concerning humanity's relationship with the natural environment, or what might be called an "ecological philosophy." Analysis of three attempts to infer philosophical conclusions from ecological science shows that (1) there are serious obstacles facing any attempt to derive unique philosophical consequences from ecological science and (2) the project of developing an ecological philosophy relevant to human-environment relations is seriously hindered by a reliance on traditional ecological science that focuses on relations between nonhuman organisms and their environments. However, the search for an ecological philosophy is not inherently misguided because (1) although ecological science may never support a unique philosophical interpretation of ecological theory, empirical evidence can function to narrow the range of possible interpretations, which is a significant epistemic achievement; and because (2) there are several non-traditional branches of ecological science that focus on human-environment relations and that consequently may be better suited to function as conceptual resources for the sorts of problems that concern environmental philosophers. (EE)

de Laplante, K., "Environmental Alchemy: How to Turn Ecological Science into Ecological Philosophy", Environmental Ethics 26 (2004):361-80.

de Waal, Frans. *Primates and Philosophers: How Morality Evolved*. Stephen Macedo and Josiah Ober, eds. Princeton: Princeton University Press, 2006. Contemporary evolutionary biology takes far too dim a view of the natural world, emphasizing our "selfish" genes. Science has thus exacerbated our reciprocal habits of blaming nature when we act badly and label the good things we do as "humane." De Waal is the Yerkes is at the Yerkes National Primate Center at Emory University.

De Marco, P; Coelho, FM, "Services performed by the ecosystem: forest remnants influence agricultural cultures pollination and production", Biodiversity and Conservation 13 (no.7, 2004): 1245-1255(11).

De-Shalit, Avner, Review of Kristin Shrader-Frechette, Environmental Justice: Creating Equality, Reclaiming Democracy, Ethics and the Environment 9(no. 1, 2004):140-144. "This is not an easy book to read-it is more like watching a violent film: it tells us about greediness, cruelty, misery, cynicism, and the like. But just like watching a good film, after reading the book one cannot remain indifferent. This book, then, is not a typical neutral piece of philosophy or social science. Shrader-Frechette has an agenda on her mind, and she claims that not only is it wrong not to do something to stop environmental injustice, but in fact people have a duty to be active, politically speaking. De-Shalit is in politics, Hebrew University of Jerusalem.

De Waal, Frans. *Primates and Philosophers*. Princeton: Princeton University Press, 2007. How primates are the evolutionary basis for ethics. With responses by Peter Singer, Christine M. Korsgaard, Philip Kitcher, and Robert Wright, who press De Waal to clarify the differences between primates and humans.

DeAlwis (De Alwis), Lyn, "Origins, Evolution, and Present Status of th Protected Areas of Sri Lanka," International Journal of Wilderness 5(no. 2, August 1999):37-40. A generally positive picture, with over a million acres in about 150 protected areas, by an author who has spent four decades in wildlife conservation in Sri Lanka. (v.10,#3)

Dean, Cornelia, "Policy to Preserve Coastline Runs Into Reality on Nation's Beaches," New York Times, October 26, 2004, p. D1. People like to live in on prominent shorelines that nature likes to destroy. After recent storms, neither the U.S. government nor private insurers want to insure such property, which makes it impossible to sell, since a mortgage has to have insurance. Such landowners, usually quite wealthy, are seeking exemptions so that their property can be eligible for federal insurance. (v.14, #4)

Dean, Cornelia, Against the Tide: The Battle for America's Beaches. New York: Columbia University Press, 1999. 295 pages. \$ 25. Some 70 to 90 percent of the coastlines of the lower 48 states are eroding,

and leaving nature to take its course is completely unacceptable to residents and developers. The fundamental problem is our collective desire to live on the beach or close to it. There is a bewildering morass of rules that apparently safeguard short-term economic and political coastal interests at the long-term expense of the general public. Dean is science editor of the New York Times. (EE v.12,#1)

Dean, Cornelia, "Red-Footed Falcon Makes its Western Hemisphere Debut," New York Times, August 12, 2004. Birders from all over are hastening to Martha's Vineyard to see the first ever Red-footed Falcon in this hemisphere. It belongs in Russia and Africa. (v. 15, # 3)

Dean, Cornelia, "A Seashore Fight to Harness the Wind," New York Times, November 14, 2004, p. 18. Before a proposal to build the world's largest offshore wind power plant in Nantucket Sound, residents are protesting that the wind turbines would spoil the view on Cape Cod and Martha's Vineyard. They would rather have the view than the environmentally friendly power. (v.14, #4)

Dean, Cornelia, "Time to Move the Mississippi, Experts Say," New York Times online, Sept. 19, 2006. Some scientists and engineers are recommending a massive diversion that will send the Mississippi flooding wholesale into the state's sediment starved-marshes. This could also protect against global climate change that will bring rising seas, accelerating land loss and worse weather.

Deane-Drummond, Celia, "Come to the Banquet: Seeking Wisdom in a Genetically Engineered Earth," Ecotheology No 9 (July 2002):7-37.

Deane-Drummond, Celia, "Wisdom: A Voice for Theology at the Boundary with Science?" Ecotheology No 10 (Jan 2001):23-39

Deane-Drummond, Celia, Creation Through Wisdom: Theology and the New Biology. Edinburgh: T&T Clark, 2000. "The wisdom motif [in the Bible] as a basis for a theology of creation ... one that is grounded in the realities confronting us in the new biology" (p. 2). The author maintains an awareness of suffering in biological creation, promotes an academically grounded, yet earthy spirituality that embrace God's immanence in the world without romanticizing it, preserves the theological coupling of creation with redemption, and promotes a theology capable of supporting a robust ethic from which to address the complex maze of decision-making we encounter in the new biology, from ecology to genetics. She advocates "pansyntheism," that God is with all creation, as preferable to panentheism, that God is in all things and all things are in God.

Deane-Drummond, Celia, "The Earth, Wisdom and the New Ecology," CTNS (Center for Theology and the Natural Sciences) Bulletin 22 (no. 2, 2002):3-9. "Perhaps a return to a virtue ethic--particularly that of wisdom [with reference to Biblical wisdom literature]--offers a way of affirming the earth, while at the same time recognizing it as 'other' than human." Deane-Drummond is in theology and biological sciences at Chester College of Higher Education, Chester, UK.

Deane-Drummond, Celia, "Editorial: Creation Spirituality," Ecotheology Vol 7 (no. 1, July 2002):5-9.

Deane-Drummond, Celia, Wonder and Wisdom: Conversations in Science, Spirituality and Theology. London: Darton, Longman, and Todd, 2006. Also: Philadelphia: Templeton Foundation Press, 2006. With a focus on Christian concepts of nature in the light of biological knowledge, a sense of wonder at the mystery of nature, also often of its wisdom, even in those aspects of nature that seem wasteful and cruel. Deane-Drummond is in theology and biology, University of Chester, UK.

Deane-Drummond, Celia. *Wonder and Wisdom: Conversations on Science, Spirituality and Theology*. London: Darton Longman and Todd, 2006. Joining wonder and wisdom can lead to new understandings of the relation between science and religion including debates about the origin of the cosmos and the wonder arising from these discoveries, the way naturalists have come to appreciate the natural diversity on earth as charged with wonder, how evolutionary convergence and design in the natural world might mesh with a theological understanding of natural wisdom, the notion of God as wisdom, the paradox of Christ's crucifixion demonstrating God's wisdom, and wonder "chastened" in the light of the wisdom of God and the wisdom of the cross.

Deane-Drummond, Celia. "Shadow Sophia in Christological Perspective: The Evolution of Sin and the Redemption of Nature." *Theology and Science* Vol. 6, no. 1 (2008): 13-32. The possibility of morality in animals blurs the traditional divide between moral and natural evil. A possible solution is in the idea of "shadow sophia" capable of holding together a many-layered theodicy, and illuminating the redemption of nature. Deane-Drummond is at the University of Chester (UK). A series of responses to this paper follow in this journal.

DeaneDrummond (Deane-Drummond), Celia E., *The Ethics of Nature* . Oxford: Blackwell Publishing Co., 2004. 1. The Recovery of Virtue for an Ethics of Nature. 2. Environmental Ethics. 3. Animal Ethics. 4. The Ethics of Biotechnology. 5. The Ethics of Cloning. 6. Psychology and Moral Agency. 7. Ethics and Gaia. 8. Feminism and the Ethics of Nature. 9. Towards an Ethic of Wisdom. A virtue ethics centered on wisdom is the most appropriate way to approach the ethics of nature. Deane-Drummond is at University College, Chester, UK.

DeaneDrummond (Deane-Drummond), C., "Sophia: The Feminine Face of God as Metaphor for Ecotheology," *Feminist Theology* 16(1997):11-31. (EE v.12,#1)

DeaneDrummond (Deane-Drummond), Celia E., "Genetic Engineering for the Environment: Ethical Implications of the Biotechnology Revolution," *The Heythrop Journal* 36(1995):307-327. Genetic engineering for agriculture purposes, especially crop plants. The philosophical, theological, and ethical implications of this application of biology are rather different from those pertaining to human beings and deserve separate attention. In particular, this technology has important environmental consequences, both in the short-term and in the long term. There is no a priori reason not to engineer such crops, but it has to be done judiciously and ethically. Deane-Drummond is at Chester College of Higher Education, Chester, UK. (v.10,#1)

Deaon (D' eon), RG; Glenn, SM, "The influence of forest harvesting on landscape spatial patterns and old-growth-forest fragmentation in southeast British Columbia," *Landscape Ecology* 20 (no. 1, January 2005): 19-33.

Dear, C. and Myers, O. E., "Conflicting Understandings of Wilderness and Subsistence in Alaskan National Parks," *Society and Natural Resources* 18(no. 9, October 2005): 821-837.

Dearden, Philip, "Park Literacy and Conservation," *Conservation Biology* 9(1995):1654-1656. Parks play social roles: museums, art galleries, zoos, playgrounds, theatres, cathedrals, generators of income. Parks play ecological roles: banks, reservoirs, laboratories, schoolrooms. This framework may be too anthropocentric, but people who appreciate the multiple functions of parks are more likely to preserve them. Dearden teaches geography at the University of Victoria. (v6,#4)

Dearden, Philip; Chettamart, Surachet; and Tankanjana, Noppawan. "National Parks and Hill Tribes in Northern Thailand: A Case Study of Doi Inthanon." *Society and Natural Resources* 9, no.2 (1996): 125. (v7, #3)

Death On The Range: The Slaughter of the Yellowstone Bison, The Animals' Agenda 16(Mar.1996):24. American bison, symbols of the West, being gunned down with the consent of the same government entrusted with their protection, just yards from the refuge of Yellowstone National Park? Once again, livestock industry interests take priority over wildlife protection. (v7,#2)

dEaubonne (d'Eaubonne), Françoise. "Feminism-Ecology: Revolution or Mutation?" Ethics and the Environment 4(1999):174-178. Brief comment by the author of Feminism--Ecology (ENCRE, Paris, 1978). (E&E)

Deaubonne (d'Eaubonne), Françoise. "What Could an Ecofeminist Society Be?" translated by Jacob Paisain, Ethics and the Environment 4(1999):179-184. Argues the principle that the abolition of patriarchy and the establishment of a relationship with the environment that is finally balanced are not only fundamentally linked, but also can only occur in a post-revolutionary and self-managing society. (E&E)

Deb, D., and Malhotra, K. C., "Conservation Ethos in Local Traditions: The West Bengal Heritage," Society and Natural Resources 14(no.8, 2001): 711-24. (v.13,#2)

DeBakker (De Bakker), Erik, "Integrity and Cynicism: Possibilities and Constraints of Moral Communication," *Journal of Agricultural and Environmental Ethics* 20(2007):119-136. Paying thorough attention to cynical action and integrity could result in a less naive approach to ethics and moral communication. This article discusses the issues of integrity and cynicism on a theoretical and on a more practical level. The first part confronts Habermas's approach of communicative action with Sloterdijk's concept of cynical reason. In the second part, the focus will be on the constraints and possibilities of moral communication within a business context. Discussing the corporate integrity approach of Kaptein and Wempe will provide this focus. Their approach can be considered as a valuable contribution to the question of how to deal with (dilemmas of) conflicting interests, open discussion, fairness, and strategic decision-making in the context of stakeholder dialog. However, it is concluded that Kaptein and Wempe seem to overstretch the concept of corporate integrity by their inclination to make it an all-purpose remedy for corporate dilemmas. Keywords: Business ethics - communicative/strategic action - cynicism - integrity - moral communication - open/hidden agendas - social theory. Bakker is at LEI (Agricultural Economics Research Institute), Public Issues Division, Wageningen UR, The Hague, The Netherlands.

DeBakker (De Bakker), Frank G.A. Review of Aseem Prakash, "Greening the Firm: The Politics of Corporate Environmentalism", Organization and Environment, 15, (No. 3, 2002): 349-52. De Bakker is an assistant professor in strategic management at the faculty of Social Cultural Sciences in the Vrije Universiteit, Amsterdam, The Netherlands. (v.13, #3)

DeBardeleben, Joan and John Hannigan, eds., Environmental Quality and Security after Communism: Eastern Europe and the Soviet Successor States. Boulder, CO: Westview Press, 1994. 256 pages. \$ 55.00 cloth, \$ 19.95 paper. There is increased awareness and activism, but the environmental crisis has not abated since the collapse of communism. The proliferation of new countries and intensified economic problems complicates the search for solutions. Environmental deterioration poses serious threats to the quality of life, stability, and security in the region. Both authors are in East European and Russian studies at Carleton University. (v5,#3)

Debeer (De Beer), H. Omgewingsetiek en omgewingsbewaring: 'n wysgerig-etiese perspektief op bewaringswetgewing, -beleid en strategiee in Suid-Afrika. (Environmental Ethics and Environmental Conservation: A Philosophical-Ethical Perspective on Conservation Law, Policy and Strategies in South Africa) M.A. thesis at the University of Stellenbosch, South Africa, 1998. Promotor: Johan P. Hattingh.

(v.10,#1)

Debinski, D. M.; Ray, C. Saveraid, E. H, "Species diversity and the scale of the landscape mosaic: do scales of movement and patch size affect diversity," Biological Conservation 98(no.2, 2001):179-

(v.12,#4)

Debinski, Diane M. and Holt, Robert D., "A Survey and Overview of Habitat Fragmentation Experiments," Conservation Biology 14 (No. 2, 2000 Apr 01): 342- . (v.11,#4)

Deblonde (DeBlonde), Marian K. "Environmental Economics: The Meaning of an 'Objective' Policy Science." Environmental Values 9(2000):235-248.

Abstract: Environmental economics is a policy science. Environmental economists, however, find that their policy recommendations are often neglected by political officials. Some of them react to this neglect by reproaching public authorities with lack of efficiency: this so-called inefficiency is considered to be a manifestation of government failure. Others propose a redefinition of environmental economics in order to make it fit better with actual political objectives. After briefly outlining the case for an economic paradigm that differs from conventional (i.e. neo-classical welfare) environmental economics, I argue that an alternative paradigm demands a different interpretation of economic 'objectivity'. I claim that economic 'objectivity' ultimately comes down to a non-neutral common consent within a particular community of economic scientists. This interpretation leaves room for a multiplicity of 'objective', but non-neutral economic theories. The fact that the inevitable value ideas underlying a particular theory cannot be made fully transparent, urges us to accept a different conception of the theory's political relevance. Environmental economic theory should be considered not so much a provider of political 'instruments', as of scientific 'insights'. It should not simply be considered a theory that responds to actual political objectives, but one that inspires political objectives. These two latter suggestions of mine are only preliminary recommendations, which require further conceptual analysis. Keywords: Bromley, neutrality, objectivity, Pearce. Marian K. DeBlonde is in Applied Philosophy, Wageningen Agricultural University, Hollandseweg 1, 6706 KN Wageningen, The Netherlands. (EV)

Deblonde, M., R. de Graaff, and F. Brom, "An Ethical Toolkit for Food Companies: Reflections on its Use," *Journal of Agricultural and Environmental Ethics* 20(2007):99-118. Nowadays many debates are going on that relate to the agricultural and food sector. It looks as if present technological and organizational developments within the agricultural and food sector are badly geared to societal needs and expectations. In this article we briefly present a toolkit for moral communication within the food chain. This toolkit is developed as part of a European research project. Next, we discuss what such a toolkit can bring about, given the characteristics of the present day agricultural and food sector and its wider context. We defend that the toolkit can be seen as one of the mechanisms that can help enterprises in the agricultural and food sector to be accountable. It should, however, be complemented with other mechanisms, first, to empower the wider public and, second, to stimulate a dialogue, on a more equal footing, between public authorities, citizens, and economic act. Keywords: CSR (developed form) - empowerment - ethical toolkit - equal dialogue - food sector - moral communication. Deblonde is at Department Environment, Technology & Technology Management, Research Centre for Technology, Energy and Environment — STEM, University of Antwerpen, Antwerp, Belgium.

Deblonde, Marian and Patrick Du Jardin, "Deepening a Precautionary European Policy," Journal of Agricultural and Environmental Ethics 18(2005):319-343. The principle of precaution is hardly linked to the ideal of sustainable development. It should be. Sustainable development is the sense of an ethics of co-responsibility, while precaution is the attitude needed to realize this sense. We comment on some regulatory practices within the European context regarding authorization requests for deliberate releases of genetically modified crops and show some problems that are popping up there, for example, the difficulties in interpreting the meaning of harm and of benefit. The authors are at the Research Centre for

Technology, Energy, and Environment, University of Antwerp, Belgium. (JAEE)

DeBoer, Kristin, "Thomas Berry interviewed by Kristin DeBoer," Wild Earth 10(no. 2, Summer 2000):93- . (v.12,#2)

DeCarolis, Joseph F., Goble, Robert L., and Hohenemser, Christopher, "Searching for Energy Efficiency on Campus: Clark University's 30-Year Quest," Environment 42(no. 4, May 1, 2000):8- . An analysis of 30 years of energy consumption patterns and efforts to reduce energy use illustrates how a small institution can set an example while confronting society's significant challenges. (v.12,#2)

deCatri, Francesco, "Ecology in a Context of Economic Globalization," Bioscience 50 (No. 4, 2000 Apr 01): 321- . (v.11,#4)

Decker, Christopher; Reuveny, Rafael, "Endogenous Technological Progress and the Malthusian Trap: Could Simon and Boserup Have Saved Easter Island?," Human Ecology 33(no.1, February 2005):119-140(22).

Decker, Jonathan P. "Fishermen Flounder As Gill Net Ban Kicks In." The Christian Science Monitor, July 5, 1995, p. 3. (v6,#2)

Deckers, Jan, "Christianity and Ecological Ethics: The Significance of Process Thought and a Panexperientialist Critique of Strong Anthropocentrism," Ecotheology 9(no. 3, 2004):359-387. In recent years, Christian theologians have reconsidered our duties towards nonhuman entities by rethinking the God-humanity relationship. The way in which nonhuman nature is conceived has largely remained unchanged. The key to the development of an adequate ecological ethic lies in the casting aside of materialist and dualist conceptions of matter, and the adoption of panexperientialism. Weak speciesism is the required ethic. It places humans first, yet assigns great significance to other animals. It commits many humans to quasi-veganism. Deckers is Lecturer in Health Care Ethics, School of Population and Health Sciences, The Medical School, University of Newcastle, UK.

Deckers, Jan, "Are Scientists Right and Non-Scientists Wrong? Reflections on Discussions of GM," Journal of Agricultural and Environmental Ethics 18(2005):451-478. While many people have been reported to hold the view that GM is unnatural, many policy-makers and their advisors have suggested that the view must be ignored or rejected, and that there are scientific reasons for doing so. Their accounts fail to mount a convincing critique. In an empirical research project at the University of Newcastle-upon-Tyne, scientists met with non-scientists in a range of facilitated one-to-one conversations (exchanges) on various environmental issues, one of which was on GM. Our findings show that some scientists who rejected the GM is unnatural view struggled to do so consistently. The concerns of those who held the GM is unnatural view rejected the instrumentalization of the nonhuman world. Because the underlying concerns of those who held the GM is unnatural view were not with GM as such, yet with a worldview that was considered to be problematic, policy-makers and their advisors should reflect on the critical worldview of those who claim that GM is unnatural if they want to engage seriously with their concerns. Keywords: biotechnology - deliberative exchange - policy - science - unnatural - worldviews. Deckers is in the School of Population and Health Sciences, University of Newcastle, UK. (JAEE)

Deckers, Jan, "Are Scientists Right and Non-scientists Wrong: Reflections on Discussions of GM," Journal of Agricultural and Environmental Ethics 18(2005):451-478.

Deckha, Maneesha, "Disturbing Images: Peta and the Feminist Ethics of Animal Advocacy," Ethics and the Environment 13(no. 2, 2008):35-76. The author applies a feminist analysis to animal advocacy initiatives in which gendered and racialized representations of female sexuality are paramount. Feminists

have criticized animal advocates for opposing the oppression of nonhuman animals through media images that perpetuate female objectification. These critiques are considered through a close examination of two prominent campaigns by PETA (People for the Ethical Treatment of Animals). The author argues that some representations of female sexuality may align with a posthumanist feminist ethic and need not be read as sexist. Examining PETA's famous anti-fur ads and the more recent Milk Gone Wild campaign, the author identifies where PETA's campaigns are objectionable under a feminist ethic and where they are subversive of an anthropocentric and male-dominated order alike. The article thus recuperates part of PETA's work from feminist critiques, but also reveals the constructions posthumanist advocacy should exclude to avoid elevating the status of nonhuman animals at the expense of women. Maneesha Deckha is an Associate Professor at the University of Victoria Faculty of Law

DeCosse, David E. "Beyond Law and Economics: Theological Ethics and the Regulatory Takings Debate", Boston College Environmental Affairs Law Review 23(no.4,1996):829. (v7,#4)

deDube (de Duve), Christian, Vital Dust: The Origin and Evolution of Life on Earth. New York: Basic Books, 1995. de Duve is a Nobel Prizewinner for discoveries about the functional and structural organization of the cell. This is his philosophical overview: "Life is almost bound to arise in a molecular form not very different from its form on Earth. ... Those who claim that life is a highly improbable event, possibly unique, have not looked closely enough at the chemical realities underlying the origin of life." The stuff of the earth is "vital dust" (p. 292). Of interest to environmental philosopher is a concluding section on "The Future of Life." Life on Earth, a cosmic imperative over the millennia, has recently come under the most serious threat ever, human overpopulation and consumptive appetites degrading the Earth. Science needs more wisdom. "The last twenty years have witnessed a remarkable rise in global responsibility. The ecological movement, in spite of excesses, deserves to be praised" (p. 283). Now emeritus, de Duve taught at the University of Louvain, Belgium, and Rockefeller University, New York. (v7,#4)

Deegan, Mary Jo and Christopher W. Podesch. "The Ecofeminist Pragmatism of Charlotte Perkins Gilman." Environmental Ethics 23(2001):19-36. We read the roots of contemporary ecofeminism through the lens of feminist pragmatism. After indicating the general relation between ecofeminism and feminist pragmatism, we provide a detailed analysis of Charlotte Perkins Gilman's saga *Herland* and *With Her in Ourland* to document the strong connection between these two traditions. Gilman's congruencies with ecofeminism make clear that she was a forerunner and perhaps a foundation for contemporary ecofeminism. However, further analyses are needed to reveal the full import of this link between ecofeminism and "ecofeminist pragmatism," as well as bridge the gap between ecofeminist pragmatism and ecopragmatism, including environmental pragmatism. (EE)

Defenders of Wildlife, Oregon's Living Landscape: Strategies and Opportunities to Conserve Biodiversity. Corvallis, OR: Oregon State University Press, 1998. A state wide assessment of Oregon's biodiversity, pioneering laws and programs, including the beach bill, the bottle bill, and statewide land use planning. Also sponsored by the Nature Conservancy and dozens of public and private cooperators. (v9,#1)

Deffenbaugh, Daniel G., "Toward Thinking Like a Mountain: The Evolution of an Ecological Conscience," Soundings 78(1995):239-261. There is underway an evolution of the ecological conscience, a progressive movement away from thinking like self-interested human beings and toward thinking like a mountain. A review of the history of philosophical reflection in the West reveals why environmental ethics has been regarded as problematic. Very simply, we have inherited a tradition which has been developed from the perspective of egoism. If the human individual is the locus for discerning all value in the world, then ethics will naturally tend to serve those who are doing the valuing. In this case environmental ethics becomes a convenient tool for protecting human interests. A truly holistic environmental ethic involves a conceptual transition from egoism to ecoism, a move that is best facilitated

by an understanding of the ecological sciences. The significant contribution of Aldo Leopold and Holmes Rolston III has been the fundamental realization that nature and not culture should have the last word as to prescriptive duties. Deffenbaugh teaches in the Department of Religious Studies at the University of Tennessee. (v.10,#1)

DeFries, Ruth S. and Thomas F. Malone, eds., Global Change and Our Common Future. Washington, D.C.: National Academy Press, 1989. Twenty-two articles by a variety of scholars and policy makers. Papers from a forum sponsored by the National Academy of Sciences. (v1,#2)

deGeus (de Geus), Marius. Review of: Dobson, Andrew, Citizenship and the Environment. Environmental Values 13(2004):552-554.

DeGeus (De Geus), Marius, "Ecotopia, Sustainability and Vision", Organization and Environment, 15, (No. 2, 2002): 187-201. This article explores whether ecological utopias are capable of providing a useful contribution to our quest for an ecologically responsible future and a sustainable society and, if so, in what specific ways. The author develops a model of ecological utopias as a distant point of orientation, or as a "navigational compass". In this model ecotopias may influence the course of concrete decision making in the direction of a future sustainable society. After an analysis of the current social debate in western Europe on sustainable development, it is argued that ecological utopias can help us to "monitor" environmental problems and that they provide "inspiration" for a cleaner society. Ecotopias also allow us to imagine a "virtual reality" of a possibly ecologically stable society and are a justifiable means of visionary imagery of a better future. De Geus is a lecturer in political and legal philosophy at the University of Leiden. (v.13, #3)

DeGeus (De Geus), Marius. Review of Roland Schaer, Gregory Claeys, Lyman Tower Sargent, (Eds.), "Utopia: The Search for the Ideal Society in the Western World", Organization and Environment 14 (No. 4, December 2001) pp.470-72. De Geus is a lecturer in political theory and legal philosophy at the University of Leiden, Netherlands. (v.13,#2)

deGraaf (de Graaf), Gjalt, "Veterinarians' Discourses on Animals and Clients," Journal of Agricultural and Environmental Ethics 18(2005):557-578.

Veterinarians have obligations towards both the animals they treat and their clients, the owners of the animals. With both groups, veterinarians have complicated relations; many times the interests of both groups conflict. Using Q-methodology as a method for discourse analysis, the following question is answered: How do Dutch practicing veterinarians conceptualize animals and their owners and their professional responsibility towards both? Keywords descriptive ethics - discourse analysis - veterinary medicine - veterinary ethics - Q-methodology. The author is in the Department of Public Administration and Organization Science, Vrije Universiteit, Amsterdam. (JAEE)

DeGraaf, John, Wann, David, and Naylor, Thomas H., Affluenza: The All-Consuming Epidemic. San Francisco, CA: Berrett-Koehler, 2001. London: McGraw-Hill, 2001. 275 pages. The modern world in developed countries has what amounts to a disease of consumption; we are typically consuming three times as much in goods and services as people did a half century ago. Surveys show that we are less happy. The disease is addictive and epidemic. De Graaf is an emeritus professor of economics, Duke University. (v.12,#3)

Degrazia, David, Animal Rights: A Very Short Introduction. Oxford: Oxford University Press, 2002. 144 pages. Models for the understanding of animals' moral status and rights, considering their mental lives and welfare. How we should treat animals in our diet, in zoos, in research. Degrazia is at George Washington University, Washington, DC.

DeGrazia, D. "Animal Ethics Around the Turn of the Twenty-First Century," Journal of Agricultural and

Environmental Ethics 11(1999):111-129. (JAEE)

DeGrazia, David. Taking Animals Seriously: Mental Life and Moral Status. New York: Cambridge University Press, 1996. 380 pages. \$59.95 cloth, \$18.95 paper. Whether equal consideration should be extended to animals' interests. The issues of animal minds and animal well-being examined with a mixture of philosophical analysis and empirical documentation. (v7, #3) (v.8, # 4).

DeGrazia, David. *Animal Rights: A Very Short Introduction.* Translator: Yang Tongjin. (Beijing: Foreign Language Teaching and Research Press, 2007). (in Chinese)

DeGreef (De Greef), Karel, Frans Stafleu and Carolien De Lauwere, "A Simple Value-Distinction Approach Aids Transparency in Farm Animal Welfare Debate," Journal of Agricultural and Environmental Ethics 19(2006):57-66. Public debate on acceptable farm animal husbandry suffers from a confusion of tongues. To clarify positions of various stakeholder groups in their joint search for acceptable solutions, the concept of animal welfare was split up into three notions: no suffering, respect for intrinsic value, and non-appalling appearance of animals. This strategy was based on the hypothesis that multi-stakeholder solutions should be based on shared values rather than on compromises. The usefulness of such an artificial value distinction strategy was tested in a small series of experiments. The results demonstrate that the chosen concept to distinguish between values is effective in a stakeholder context. Farmers' views on doing good to animals appeared to be largely based on their value to prevent suffering and predominantly focused on the provision of regular care. Their priority for this value is clearly shared with other stakeholders, providing a basis for joint solutions. The concept of intrinsic value does not play a discernable role in farmers' considerations. Based on the varying views on welfare, it can be inferred that there is a gradual rather than a principal difference between government legislation and farmers' values, whereas public perception and acceptance of farm practices remains complicated. Distinction between value groups and focusing on a selected notion (such as no suffering) proved to be effective in bringing representatives of stakeholder groups together, but is unlikely to bridge the emotional gap between commercial farm practices and public ideals. Keywords: Animal welfare-farmer ethics-interactive design-intrinsic value-stakeholder views. De Greef is with the Animal Sciences Group of Wageningen UR, The Netherlands. Stafleu is with the Ethics Institute, Utrecht University, The Netherlands. De Lauwere is at the Agricultural Economics Research Institute, Wageningen UR, The Hague, The Netherlands.

Lund, Vonne, and I. Anna S. Olsson, "Animal Agriculture: Symbiosis, Culture, or Ethical Conflict?" Journal of Agricultural and Environmental Ethics 19(2006):47-56. Several writers on animal ethics defend the abolition of most or all animal agriculture, which they consider an unethical exploitation of sentient non-human animals. However, animal agriculture can also be seen as a co-evolution over thousands of years, that has affected biology and behavior on the one hand, and quality of life of humans and domestic animals on the other. Furthermore, animals are important in sustainable agriculture. They can increase efficiency by their ability to transform materials unsuitable for human consumption and by grazing areas that would be difficult to harvest otherwise. Grazing of natural pastures is essential for the pastoral landscape, an important habitat for wild flora and fauna and much valued by humans for its aesthetic value. Thus it seems that the environment gains substantially when animals are included in sustainable agricultural systems. But what about the animals themselves? Objections against animal agriculture often refer to the disrespect for animals' lives, integrity, and welfare in present intensive animal production systems. Of the three issues at stake, neither integrity nor animal welfare need in principle be violated in carefully designed animal husbandry systems. The main ethical conflict seems to lie in the killing of animals, which is inevitable if the system is to deliver animal products. We present the benefits and costs to humans and animals of including animals in sustainable agriculture, and discuss how to address some of the ethical issues involved. Keywords: animal welfare-ethics - killing - sustainability - vegetarianism. The authors are with the National Veterinary Institute, Oslo, Norway.

(JAEE)

deGreus (de Greus), Marius, The End of Over-consumption: Towards a Lifestyle of Moderation and Self-restraint. Utrecht: International Books, 2002. Reviewed by Piers H. G. Stephens. Environmental Values 13(2004):263-266.

deGroot (de Groot), Rudolf, Functions of Nature: Evaluation of Nature in Environmental Planning. Groningen, Netherlands: Wolters-Noordhoff, 1992. Identification of indicators for measuring sustainable use of environmental functions, currently being applied to assessing the Danube and Dniester deltas, the Spanish island of Mallorca, the Greek island of Santorini, the Pantanal wetland in Brazil, and other areas. de Groot is director of the Wageningen Institute for Environment and Climate Research at Wageningen Agricultural University, Netherlands. (v7,#1)

deGroot (de Groot), Kristi, "Highlights from the First Latin American Congress on National Parks and Other Protected Areas" "Primer Congreso Latinoamericano de Parques Nacionales y Otras Areas Protegidas," International Journal of Wilderness 4(no. 2, July 1998):7-11. In Columbia, South America, 650 persons met May 21-18, 1998 to address national parks and protected areas, indigenous peoples, biodiversity threats, land degradation, tourism, and related issues. de Groot is a student in wildlife biology at the University of Montana. (v.9,#3)

DeGruchy (De Gruchy), JW 1990. Easter and the environment. Journal of Theology for Southern Africa 72, 73-78. (Africa)

deHaan (de Haan), Gerhard, "Sustainable Development--Remarks from an Anthropological Point of View," Socijalna Ekologija: Journal for Environmental Thought and Sociological Research 4 (no. 4, 1995):287-300. In Croatian. (v7,#1)

deHart, Allen, Hiking North Carolina's Mountains-to-Sea Trail. Chapel Hill: University of North Carolina Press, 2000. One thousand miles of trail from Clingman's Dome, the highest peak in the Great Smoky Mountains National Park, and past Mount Mitchell, the highest peak east of the Mississippi, down to Jockey's Ridge, the largest dune on the Atlantic Coast. (v.12,#2)

Deist, FE 1991. Die ewige lewe en die lewe van elke dag (Gen 2:4b-3:24). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 62-68. (Africa)

Dejong (De Jong), Mechtild, and Chunglin Kwa. "Ecological Theories and Dutch Nature Conservation," Biodiversity and Conservation 9(no. 8, 2000):1171-1186. Abstract. This paper aims to achieve insight into various ecological theories in the Netherlands which have different, and sometimes opposing, views on the conservation of nature. Interviews, publications and archival research brought to light four separate theories: "vitalistic/holistic", "dynamic", "cybernetic" and "chaos". Diversity is reached through stability according to vitalistic/holistic and cybernetic theories, but through change and instability according to the "dynamic" and "chaos" theories. These two groups are working apart, and continue to have their own ideas. Prediction of the future is only possible with the "vitalistic/holistic" and "cybernetic" theories. Ecologists who adhere to these theories feel responsible and able in different ways to change ecological nature towards desirable end goals. The other two theories, "dynamic" and "chaos", appear to be less activist. Key words: biodiversity, chaos theory, cybernetic theory, dynamic theory, economy, holistic theory, Rio de Janeiro, Second Law of Thermodynamics, signifies.

DeJong, Mechtild, and Kwa, Chunglin, "Ecological theories and Dutch nature conservation," Biology and Conservation 9(2000):1171-1186. Abstract. Insight into various ecological theories in the Netherlands which have different, and sometimes opposing, views on the conservation of nature. Four

separate theories: 'vitalistic/holistic', 'dynamic', 'cybernetic' and 'chaos'. Diversity is reached through stability according to vitalistic/holistic and cybernetic theories, but through change and instability according to the 'dynamic' and 'chaos' theories. These two groups are working apart, and continue to have their own ideas. Prediction of the future is only possible with the 'vitalistic/holistic' and 'cybernetic' theories. Ecologists who adhere to these theories feel responsible and able in different ways to change ecological nature towards desirable end goals. The other two theories, 'dynamic' and 'chaos', appear to be less activist. Key words: biodiversity, chaos theory, cybernetic theory, dynamic theory, economy, holistic theory, Rio de Janeiro, Second Law of Thermodynamics, significs. The authors are in the Department of Science Dynamics, University of Amsterdam, The Netherlands. (v.13,#1)

deJonge (de Jonge), Eccy, Spinoza and Deep Ecology: Challenging Traditional Approaches to Environmentalism. Aldershot: Ashgate, 2004. Reviewed by Alison Stone in Environmental Values 14(2005):524-527.

DeJonge, Eccy, Spinoza and Deep Ecology: Challenging Traditional Approaches to Environmentalism. Aldershot, Hants. UK: Ashgate Publishing Ltd., 2004. Explores deep ecology and the way Spinoza's philosophy has been put to this aim. Only a self-realization, along the lines of Spinoza's philosophy, can afford a philosophy of care which is inclusive of humans and the non-human world, which recognizes the need for civil laws and democratic policies for human flourishing. Claiming that "deep ecology is a muddled polemic" (p. 145), de Jonge criticizes existing versions of deep ecology, especially in that they fail to accept that human concerns are integral to environmental issues. Originally a Ph.D. thesis.

Dekkers, M., Dearest pet: On bestiality. New York: Verso, 1994.

Deknatel, Charles Y. "Questions about Environmental Ethics--Toward a Research Agenda with a Focus on Public Policy." Environmental Ethics 2(1980):353-62. Despite common elements and antecedents of environmental ethics, their implied application to related policy or action is not always clear. This paper attempts to develop a set of questions and a preliminary framework for considering some of the issues raised by environmental ethics as they might appear in public policy. Deknatel is at the College of Architecture, University of Nebraska at Lincoln, Lincoln, NE. (EE)

Del Caro, Adrian. "Nietzschean Considerations on Environment." Environmental Ethics 26(2004):307-321. The superhuman (Übermensch) is a human being attuned to his or her environment in such a way that human and environment function as a whole, in keeping with Zarathustra's prophecy that the superhuman is the meaning of the Earth. Nietzsche's rhetorical embrace of the Earth in *Thus Spoke Zarathustra* is actually grounded in the works of the 1870s, in particular *Human, All Too Human*, which does not receive its due in critical engagement but which requires serious critical revisitation if the ecological Nietzsche is to be heard above his own rhetoric. When Nietzsche's writings are considered from the standpoint of ecology, it emerges that the phrase "the superhuman shall be the meaning of the Earth" is not so much focused on a debatable vision of future humanity, but instead addresses strategies for inhabiting our finite Earth in a spirit of creativity, partnership, and meaningful daily interaction. The hotly debated doctrine of will to power, for example, undergoes clarification and grounding when subjected to ecological standards, resulting in a will to empowerment whose beneficiaries are not only humans who assume proper stewardship of the Earth, but all Earthly life forms insofar as the meaning of Earth must include them. (EE)

Del Castillo LaBorde, Lilian. "Legal Regime of the Rio de la Plata", Natural Resources Journal 36(no.2, 1996):251.

DeLaCourt, Thijs (De La Court), Beyond Bruntland: Green Development in the 1990's (London and Atlantic Highlands, NJ: Zed Books, through Humanities Press in the U.S.), 1990. A highly critical and useful commentary on the Bruntland Report. 128 pages for the modest cost of \$ 39.95 in the U.S.!

Delancey, Craig. "Teleofunctions and Oncomice: The Case for Revising Varner's Value Theory." Environmental Ethics 26(2004):171-188. The view that organisms deserve moral respect because they have their own purposes is often grounded in a specification of the biological functions that the organism has. One way to identify such functions, adopted by Gary Varner, is to determine the etiology of some behavior based on the evolution of the structures enabling it. This view suffers from some unacceptable problems, including that some organisms with profound defects will by definition have a welfare interest in their defects. For example, this view entails that the patented oncomice, intentionally engineered and bred for a genetic defect that leads to extremely high incidence of cancer, would have a welfare interest in the development of tumors. The systems-based theory of biological functions, which refers not to the evolution of structures but rather to their role in the organism, escapes these problems, and shows how a theory of an organism's welfare interest in its purposes can be grounded in a sound naturalistic approach. This approach also has some fruitful corollaries, including an elegant theory of why species may require special moral regard. (EE)

deLaplante (de Laplante), Kevin, Toward a General Philosophy of Ecology, Ph. D. dissertation, Department of Philosophy, University of Western Ontario, 1998. Examines the role that ecological concepts and theories play in environmental philosophy and defends a conception of ecological science that is broad enough to address the philosophical and scientific concerns of environmental philosophers. These aims are consistent with the dominant tradition in contemporary environmental philosophy, but the argument is highly critical of the way the ecology-environmental philosophy relationship is conceived in contemporary environmental philosophy. Rather than view ecology as a conceptual and scientific resource that is relevant to environmental philosophy only insofar as it provides support for the ethical, social and political aims of environmentalism, deLaplante argues that the core problems of environmental philosophy are essentially problems for a general science and philosophy of ecology. The thesis defends the robustness of a conception of ecology that is sufficiently broad to encompass "ecological psychology", "ecological economics", and "ecological anthropology", as well as traditional ecological science.

Part One is a survey and critique of the role of ecology in environmental philosophy. Part Two develops a conceptual framework for a general philosophy of ecology based on developments in complex systems approaches in theoretical ecology and ecological psychology. Part Three explores in greater detail certain issues in the foundations of the relevant complex systems sciences. The supervisor was Kathleen Okruhlik. Kevin de Laplante is now teaching at Iowa State University, Ames. (v10,#4)

Delcourt, Hazel R., Delcourt, Paul A. "Pre-Columbian Native American Use of Fire on Southern Appalachian Landscapes," Conservation Biology 11(no.4, 1997):1010.

deLeeuw (de Leeuw), Dionys. "Angling and Sadism: A Response to Olson." Environmental Ethics 26(2004):441-442. (EE)

deLeeuw (de Leeuw), Dionys. "The Interests of Fish: A Reply to Chipanuiuk and List." Environmental Ethics 20(1998):219-20.

deLeeuw (de Leeuw), A. Dionys, "Contemplating the Interests of Fish: The Angler's Challenge" Environmental Ethics 18(1996):373-390. I examine the morality of sport fishing by focusing on the respect that anglers show for the interests of fish compared to the respect that hunters show for their game. Angling is a form of hunting because of the strong link between these two activities in literature, in management, and in the individual's participation in both angling and hunting, and in the similarity of both activities during the process of pursuing an animal in order to control it. Fish are similar in many ways to animals that are hunted, including their interests in survival and in avoiding pain. These interests need to be considered by anglers for moral reasons. All hunters and anglers value their sport with animals

more than they respect the lives of animals they pursue. Hunters are, therefore, similar to anglers in the respect that they show for the survival interests of their game animals. Hunters, however, are significantly different from anglers in the respect that they show for an animal's interest in avoiding pain and suffering. While hunters make every effort to reduce pain and suffering in their game animals, anglers purposefully inflict these conditions on fish. These similarities and differences have three important consequences. (1) The moral argument justifying the killing of animals for sport in hunting must apply to all of angling as well. (2) Angling, unlike hunting, requires a second justification for the intentional infliction of avoidable pain and suffering in fish. (3) If ethical hunters hold true to their principle of avoiding all suffering in animal that they pursue, then hunters must reject all sports fishing. de Leeuw is a biologist with the British Columbia Ministry of Environment, Lands, and Parks. Williams directs an institute for applied ethics, and teaches philosophy at Saint Thomas University, Fredericton, New Brunswick. (EE)

Delgado, Ana, "Opening Up for Participation in Agro-Biodiversity Conservation: The Expert-Lay Interplay in a Brazilian Social Movement," *Journal of Agricultural and Environmental Ethics* 21(2008):559-577. In science and environmental studies, there is a general concern for the democratization of the expert-lay interplay. However, the democratization of expertise does not necessarily lead to more sustainable decisions. If citizens do not take the sustainable choice, what should experts and decision makers do? Should the expert-lay interplay be dissolved? In thinking about how to shape the expert-lay interplay in a better way in agro-biodiversity conservation, I take the case of the MST (Movimento Sem Terra/Landless People's Movement), possibly the largest rural movement in Latin America. The MST is in a process of turning towards environmentalism. It has adopted agroecology, a democratically oriented knowledge field. However, not all of the farmers were willing to adopt new environmentalist ideas and practices. Through ethnographic research, I analyze how expertise was recognized and redistributed within the MST, attending particularly to the role of MST coordinators and technicians. I explore how participation was framed and put into action. The adoption of agroecology brought to the MST a new and more inclusive map of expertise, but it also influenced new social distinctions within the communities. In part, farmers' knowledge was labeled as ignorance. This may close down possibilities for dialogue as well as for sustainability. The paper suggests that experts' power for discriminating among lay knowledges should come together with a responsibility for opening spaces for dialogue and action. One way of doing so could be by adding "interactional reflexivity" to experts' expertise. Delgado is in the Institute of Environmental Science and Technology, Autonomous University of Barcelona, Barcelona, Spain, also with the Centre for the Study of the Sciences and the Humanities, University of Bergen, Bergen, Norway.

Delind, Laura B., "Of Bodies, Place, and Culture: Re-Situating Local Food." *Journal of Agricultural and Environmental Ethics* 19(2006):121-146. In the US, an increasingly popular local food movement is propelled along by structural arguments that highlight the inequity and unsustainability of the current agri-food system and by individually based arguments that highlight personal health and well-being. Despite clear differences in their foci, the deeper values contained in each argument tend to be neglected or lost, while local innovations assume instrumental and largely market-based forms. By narrowing their focus to the rational and the economic, movement activists tend to overlook (or marginalize) the role of the sensual, the emotional, the expressive for maintaining layered sets of embodied relationships to food and to place. This paper seeks to show that cultural and nonrational elements are fundamental to local food discussions. It proceeds from the assumption that, without them as full partners, the movement cannot be sustained in any felt, practiced, or committed way. To this end, it discusses the concept of place and bodies in place, as well as the connections between the ecological and the cultural, the sensual and the scientific. It offers a new set of questions and conceptual tools with which advocates and activists may "ground," and thereby revalue and restore, the promise and practice of local food. Keywords: bodies - culture - local food - place - United States - values. Delind is at the Department of Anthropology, Michigan State University, East Lansing, MI. (JAEE)

Delind, Laura B., and Jim Bingen, "Place and civic culture: re-thinking the context for local agriculture," *Journal of Agricultural and Environmental Ethics* 21(2008):127-151. This article considers the qualitative concept of place – what it means, how it feels, how it is expressed, and how it is managed across time and space as (1) the appropriate context within which to study and promote local agriculture and (2) the locus of relationships, both cultural and political, that prefigure a local civic culture. It argues that civic as a description of local food and farming is conceptually and practically shallow in the absence of our ability to understand and to practice "being" in place. Using three vignettes from field research in northern Michigan, the article illustrates this interdependence by focusing on the ways in which place provides opportunities for learning, for play, for engagement, for identity formation, and for explicit political and policy initiatives – as prerequisites for civic awareness and action. The authors are in the Department of Anthropology, Michigan State University, East Lansing, MI.

Dellapenna, Joseph W. "Rivers as Legal Structures: The Examples of the Jordan and the Nile", *Natural Resources Journal* 36(no.2, 1996):217. (v7,#4)

DeLopez, TT, "Natural Resource Exploitation in Cambodia: An Examination of Use, Appropriation, and Exclusion," *Journal of Environment and Development* 11(no.4, 2002): 355-379.

Deloria, Jr., Vine, *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact*. New York: Scribner, 1995. 286 pages. Cloth, \$ 23. Taking on scientists from Darwin to Stephen Jay Gould, Deloria claims that white European scientists manipulate data to fit their theories. Native American oral traditions may actually provide better explanations than those of scientists, who struggle to make facts fit predetermined theories. Evolution, planetary history, the origin of humans, natural disasters, and population as explained differently from the white European scientific and the red Native American point of view. Modern science encourages cultural bias and mistaken understandings of the natural world. One of Deloria's targets is the claim by scientists who argue, on the basis of archaeological and paleontological records, that native Americans caused the extinctions of animal species in the Pleistocene period. That claim is nonsense. Deloria is a well-known Native American and professor of history, law, religious studies, and political science at the University of Colorado, Boulder. (v7,#1)

Delovinfosse, I., "Review of: Robert Bent, Lloyd Orr and Randall Baker (Eds.), *Energy: Science, Policy, and the Pursuit of Sustainability*," *Environmental Politics* 12(no. 2, 2003): 168.

delRio (del Rio), Carlos Martinez, Broyles, Bill, "The Sonoran Desert National Park: A Modest Proposal of Extraordinary Scope," *Wild Earth* 10(no. 2, Summer 2000):53- . (v.12,#2)

delSolar, RG; Marone, L, "The "Freezing" of Science: Consequences of the Dogmatic Teaching of Ecology," *Bioscience* 51(no. 8, 2001):683-686. (v.13,#1)

Deluca, Kevin Michael, "Thinking with Heidegger: Rethinking Environmental Theory and Practice," *Ethics and the Environment* 10(no. 1, 2005):67-78. Environmentalism is tired. It is a movement both institutionalized and insipid. In the midst of this melee I want to suggest we reconsider the work of Martin Heidegger. I want to think Heidegger in distress: in the distress of machination; in the distress of the technological enframing of the earth; in the distress of the environmental crisis. Deluca is in speech communication and adjunct in ecology, University of Georgia. (Eth&Env)

DeLuca (De Luca), K. and Demo, A., "Imagining Nature and Erasing Class and Race: Carleton Watkins, John Muir, and the Construction of Wilderness," *Environmental History* 6(no.4, 2001): 541-60. (v.13,#2)

DeLuca, Kevin Michael. "Rethinking Critical Theory: Instrumental Reason, Judgment, and the

Environmental Crisis." Environmental Ethics 23(2001):307-325. Through rethinking the trajectory of critical theory, I suggest the need to reconsider its environmental possibilities. The critical theory of the Frankfurt School, usually overlooked in environmental circles, provides a fecund opening for social and environmental theory with its recognition that the multiple catastrophes of the twentieth century are not extrinsic to civilization but intrinsic to the rationality of the Enlightenment. That is, the promise of the scientific domination of nature and rational forms of social organization simultaneously spawn the perils of environmental crises, fascism, genocide, world wars, and nuclear annihilation. With its theorizing of the domination of nature as involving the interconnection of humans and nature in a shared fate, the Frankfurt School provides a fundamentally ecocentric base for rethinking humanity-nature relations. Further, through its nuanced understanding of reason, critical theory provides a trenchant critique of instrumental reason and suggests judgment as the basis for a new ethic for humanity's interactions with the natural world. (EE)

Delwiche, Charles F, "The Genomic Palimpsest: Genomics in Evolution and Ecology", BioScience 54(no.11, November 2004):991-1001(11). Genomics is the discipline that has grown up around the sequencing and analysis of complete genomes. It has typically emphasized questions that involve the biological function of individual organisms, and has been somewhat isolated from the fields of evolutionary biology and ecology. However, genomic approaches also provide powerful tools for studying populations, interactions among organisms, and evolutionary history. Because of the large number of microbial genomes available, the first widespread use of genomic methods in evolution and ecology was in the study of bacteria and archaea, but similar approaches are being applied to eukaryotes. Genomic approaches have revolutionized the study of in situ microbial populations and facilitated the reconstruction of early events in the evolution of photosynthetic eukaryotes. Fields that have been largely unaffected by genomics will feel its influence in the near future, and greater interaction will benefit all of these historically distinct fields of study.

Demaine, Linda J. and Fellmeth, Aaron X., "Natural Substances and Patentable Inventions," Science 300(30 May 2003):1375-1376. Inventions are patentable but not discoveries of naturally occurring phenomena--that was the classic concept. But subtly and without fanfare this has fallen apart, notably in biology and also in the case of some purified inorganic substances and alloys, which are claimed to undergo a substantial transformation. This is regrettable. Suggestions for getting patent law reconstituted around the classical idea, which is not always easy to translate into current technology. Demaine is a policy analyst with RAND, Santa Monica, CA. Fellmeth is an attorney. (v.14, #4)

Demeny, Paul, McNicall, Geoffrey, eds. The Earthscan Reader in Population and Development. London: Earthscan Publications Ltd., 1996. 288pp. £19.95. This selection of essays cuts through the technical literature to provide an accessible guide to the complex issues surrounding population and development. It is a sourcebook for development studies, sociology, geography and environmental courses. (v8,#1)

Demeritt, D, "What is the `social construction of nature'? A typology and sympathetic critique," Progress in Human Geography 26(no.6, 2002): 767-790.

Demeritt, David, "Ecology, Objectivity and Critique in Writings on Nature and Human Societies," Journal of Historical Geography 20(no. 1, 1994):20-37. A committed postmodern view of ecology, environmentalism, and environmental history. "Inspired by the Green Movement and invoking many of the analytical concepts of ecological science, environmental historians have offered trenchant criticisms of modern society and its relations with nature. Recently however, their position has been eroded on several fronts. Revisionists in ecological science have repudiated the idea of stable, holistic ecosystems used by many environmental historians and other Green critics to measure and assail the environmental damage wrought by society. Various assaults on the authority of science and history to represent nature and the past have also undercut the exclusive claims to knowledge that environmental historians rely upon

to legitimate their critique. I review these various challenges and the responses to them in turn. In the final part of the essay, I advance the position that environmental historians and other Green critics should end their search for foundational authority, be it in science or elsewhere, and appeal instead to diverse moral, political and aesthetic criteria to arbitrate between particular representations of nature in particular situations. This situation does not rule out appropriations from ecological science or other fields of knowledge where they prove useful and convincing, because, ultimately, environmental narratives are not legitimated in the lofty heights of foundational epistemology but in the more approachable and more contested realm of public discourse." Demeritt is in geography, University of British Columbia, Vancouver. (v9,#2)

Democracy and Nature: The International Journal of Politics and Ecology. This journal explores such areas as the philosophy of ecology; the state and an ecological society; ecology, labor, and class; feminism and ecology; socialism and ecology; nationalism and the new world order; green economics; science and technology, to advance the twofold goal of an inclusive democracy and a sustainable, ecological society. Papers invited. The journal was formerly called Society and Nature. Aegis Publications, P. O. Box 637, Littleton, CO 80160-0637. This is the journal of the Institute for Social Ecology, P. O. Box 89, Plainfield, VT 05667. 802/454-8493 (v8,#1)

Dempsey, Carol J., and Butkus, Russell A., eds., All Creation is Groaning: An Interdisciplinary Vision for Life in a Sacred Universe. Collegeville, MN: The Liturgical Press. A Michael Glazier Book. 1999. The editors and eighteen contributors (all but one) are on the faculty at the University of Portland, Oregon. Sample chapters: "Christian Values, Technology, and the Environmental Crisis," "Feeding the Hungry and Protecting the Environment," "Toward an Understanding of International Geopolitics and the Environment," "Development of Environmental Responsibility in Children," "A Sense of Place."

Den Nijs, H. C., D. Bartsch, and J. Sweet, eds., Introgression from Genetically Modified Plants into Wild Relatives. New York: Oxford University Press, 2004. Analysis of the likelihood of genetically modified plants spreading new genes from the cultivated plants into wild relatives. Den Nijs is at the University of Amsterdam.

Denevan, William M., "The Pristine Myth: The Landscape of the Americas in 1492," Annals of the Association of American Geographers 82(no. 3, 1992):369-385. The myth persists that in 1492 the Americans were a sparsely populated wilderness, "a world of barely perceptible human disturbance." There is substantial evidence, however, that the Native American landscape of the early sixteenth century was a humanized landscape almost everywhere. Populations were large. Forest composition had been modified, grasslands had been created, wildlife disrupted, and erosion was severe in places. Earthworks, roads, fields, and settlements were ubiquitous. With Indian depopulation in the wake of Old World disease, the environment recovered in many areas. A good argument can be made that the human presence was less visible in 1750 than it was in 1492. "There are no virgin tropical forests today, nor were there in 1492" (p. 375). Denevan is a geographer at the University of Wisconsin. (v6,#4)

Denfeld, Rene, "Old Messages: Ecofeminism and the Alienation of Young People from Environmental Education," pp. 246-255. Contrasts the romantic eco-radicalism endemic among "difference" or "gender" feminists with the serious and committed environmentalism that it displaces or discourages. Young people, and young women especially, have had deflected their serious interest in environmental questions by the sectarianism, the woolly self-righteousness, and the disdain for science that have characterized ecofeminism. Fortunately, "the message of ecofeminism, and of the environmental movement that adopts it, is unlikely ever to gain widespread support among upcoming generations" (p. 253). Denfeld is the author of The New Victorians: A Young Woman's Challenge to the Old Feminist Order. In Gross, Paul R., Levitt, Norman, and Lewis, Martin W., eds., The Flight from Science and Reason. New York: New York Academy of Sciences, 1996. Distributed by Johns Hopkins University Press. (v9,#2)

Deng Mingying, "On ecological conscience", Studies in Ethics, 2003(2)

Deng Nanhai, Zheng Huan, "Some Turning Points in the Development of Western Eco-ethical Thoughts," Jinan Daxue Xuebao (Journal of Jinan University) 3(1999):25-28. In Chinese. (v.11,#1)

Dennis, R., et al., "Fire, People and Pixels: Linking Social Science and Remote Sensing to Understand Underlying Causes and Impacts of Fires in Indonesia," Human Ecology 33(no. 4, August 2005): 465-504.

Dent, N. J. H. Review of Practical Ethics. By Peter Singer. Environmental Ethics 4(1982):281-84.

Denver University Law Review, vol. 76 (1999), no. 2, is a theme issue on wilderness and the Wilderness Act. The whole issue (300 pages) is available from the publisher, William S. Hein & Co., 1285 Main Street, Buffalo, NY 14209. 800/828-7571. \$ 16 plus \$ 7 shipping. Contains:

--Cheever, Federico, "Introduction--Talking About Wilderness," p. 335

--Aplet, Gregory H., "On the Nature of Wildness: Exploring What Wilderness Really Protects," p. 347

--McCloskey, Michael, "Changing Views of What the Wilderness System Is All About," p. 369

--Glicksman, Robert L., and Coggins, George Cameron, "Wilderness in Context," p. 383

--Anderson, H. Michael, and Moncrief, Alik, "America's Unprotected Wilderness," p. 413

--Nickas, George, "Preserving an Enduring Wilderness: Challenges and Threats to the National Wilderness Preservation System," p. 449

--Morton, Pete, "The Economic Benefits of Wilderness: Theory and Practice," p. 465

--Baden, John A., and Geddes, Pete, "Environmental Entrepreneurs: Keys to Achieving Wilderness Conservation Goals?," p. 519

--Foreman, Dave, "The Wildlands Project and the Rewilding of North America," p. 535

--Sheldon, Karin P. "Water for Wilderness," p. 555

--Hubbard, Kenneth D., Nixon, Marily, and Smith, Jeffrey A., "The Wilderness Act's Impact on Mining Activities: Policy Versus Practice," p. 591

--Ruckel, H. Anthony, "The Wilderness Act and the Courts," p. 611

--Duncan, Richard A., and Proescholdt, Kevin, "Protecting the Boundary Waters Canoe Area Wilderness: Litigation and Legislation," p. 621

--Ochs, Matthew J., "Defining Wilderness: From McCloskey to Legislative, Administrative and Judicial Paradigms," p. 659. (v.12,#4)

deOnis, Juan (de Onis), The Green Cathedral: Sustainable Development of Amazonia. New York: Oxford University Press, 1992. 304 pages. \$ 24.95. (v3,#3)

DePalma, Anthony, "Canada No Safe Haven for Birds or Bears," New York Times, March 13, 1998, p. A1, A8. Canada frequently has a worse record than the United States for conservation. There is a list of 291 endangered animals, birds, and insects, but there is no legislation to protect them. One problem is tension between the provincial and the national governments, with the provinces resisting any national regulation. Another is Canadian perceptions of the hassles over endangered species in the U.S. Another is refusal of Canadians to believe that, in relatively undeveloped Canada, there is a problem. (v9,#1)

DePalma, Anthony, with Romero, Simon, "Super Seeds Sweeping Major Markets, and Brazil May Be Next," New York Times (5/16/00). Herbicide-resistant soybeans, patents, and saving seeds. Monsanto's "Roundup Ready" soybean seeds allow farmers to use greater amounts of the herbicide Roundup without damaging their soybean crop. Farmers who use the genetically-altered soybeans allegedly save on chemicals and labor because they can apply a single herbicide without harming the soy plants. One study suggests they can cut costs by 4 percent. But in the U.S. and Canada, farmers must also pay a special technology fee for each bag of seed they use and they must agree not to save seed for the following year (a longstanding practice of farmers). They must also allow Monsanto investigators to inspect their fields

if they ever stop using the seed. Monsanto's informers' hot line has taken thousands of calls and Monsanto has brought charges against farmers for violating its patent rights. (One Canadian farmer brought to court by Monsanto claims the Roundup Ready plants in his field came from seed blow off passing grain trucks.) Although Monsanto claims its patents on such seeds are essential to its business, it has allowed Roundup Ready seeds to be sold in Argentina even though the country rejected its patent application. Farmers there routinely save the seed and don't have to pay the technology fee. 90 percent of that country's soy crop is now genetically-altered and U.S. farmers feel threatened by the cheaper costs of Argentinian soy producers. Brazil is trying to decide whether to allow transgenic soybeans into the country or to tap the European market for non-transgenic soybeans (European countries prohibit the use of modified seeds). Because U.S., Brazil, and Argentina together account for 80 percent of the world's soybean production and because soybean extracts are added to countless foods, Brazil's decision could have a significant affect on the availability of food free of genetically-modified material. (v.11,#2)

DePalma, Anthony, "Do Fish Have Water Rights?" New York Times, June 25, 2004, p. A22. On the Delaware River, efforts to keep trout in the river (which requires cool water) conflict with a thirsty New York City. The city has reservoirs upstream and if the level of the river drops too low, and the water heats up, the City has to release water to keep the fish cool, water which a thirsty New York needs. New York also has to keep a minimum flow so that Philadelphia and Trenton can have their share of the Delaware. (v. 15, # 3)

Depew, Brian R. Depew, There Is a Moral Obligation to Save the Family Farm, M.A. thesis, Colorado State University, summer 2005. Many persons have an attraction to family farms but without a clear moral argument for them, while family farms flounder. The two live options for agriculture in the United states are a family farm system or an industrial agribusiness system, and they differently affect individual autonomy, environmental stewardship, and community well-being, with the family farm system proving superior. This has significant implications for farm and rural policy. Depew is now pursuing a Ph.D. in rural sociology, also with further work in philosophy, at Michigan State University, East Lansing. The advisor was Michael Losonsky.

Depledge, Joanna. "Coming of Age at Buenos Aires: The Climate Change Regime After Kyoto." Environment 41(No. 7, September 1999):15- . The international community's effort to forestall climate change entered a new phase of maturity at the fourth Conference of the Parties. (v10,#4)

DeQuine, Jeanne. "Development Pushes Animals From Florida Keys." The Christian Science Monitor 89.77 (18 March 1997): 10.

Derby, Pat. "The Abuse of Animal `Actors'." The Animals' Agenda 16(Jul. 1996):16. (v7,#2)

Derman, Bill, Ferguson, Anne. "Human Rights, Environment, and Development: The Dispossession of Fishing Communities on Lake Malawi," Human Ecology 23, no. 2 (June 1995): 125- . (v6,#4)

Derman, Bill. "Environmental NGOs, Dispossession, and the State: The Ideology and Praxis of African Nature and Development," Human Ecology 23, no. 2 (June 1995): 199- . (v6,#4)

Dernbach, John C., "Population Control and Sustainable Industry," Natural Resources and Environment 12 (Fall 1997):101-. (v.8,#4)

DeRoose (De Roose), F. and Van Parijs, Ph., La Pensée écologiste. Essai d'inventaire à l'usage de ceux qui la pratiquent comme de ceux qui la craignent. Brussels: De Boeck, 1991. 203 pages.

DeRoose, Frank, "Towards a Non-Axiological Holist Ethic." Philosophica 39 (1987): 77-100.

Wide-ranging critical review of arguments in favor of holism. De Roose is skeptical about any axiological justification for holism, since no reasonable criterion of value can reconcile holism with individualism. (Katz, Bibl # 2)

Derr, Mark, "It Takes Training and Genes to Make a Mean Dog," New York Times, Feb. 4, 2001, D1, D5. Pit bulls, Rottweilers, German shepherds, mastiffs and other breeds have been selected by breeders for aggressiveness, although they also have to be trained to be aggressive, often by abuse. This does not particularly represent what they are by original wild nature. Any breed can sometimes become aggressive, and dog experts dislike banning any particular breed. Pit bulls and Rottweilers account for more than half of the fatal attacks on humans in the U.S. About 40% of American dog owners get dogs primarily for protection. They often favor such breeds, but are naive or careless about keeping such dogs out of situations where this aggressiveness will erupt in unwanted attacks. (v.12,#3)

Derr, Mark "Alien Species Often Fit In Fine, Some Scientists Contend," NY Times (9/4/01): D4. Exotic species are not so bad after all? Billions of dollars a year are spent to destroy nonnative organisms and prevent their spread. But some are now questioning the assumption that alien species are inherently bad and that they are never acceptable in natural ecosystems. Many now claim that the distinction between exotic and native depends on arbitrarily picking a date and stipulating that organisms that show up after that date are exotic. Others worry about the impossibility of removing all exotics and point out that native species can also be invasive; it may be more important to control them than exotics. Furthermore, there are cases where endangered plants and animals depend on exotic species. According to ecologist Dan Simberloff, of the U.S.'s 150,000 species, 7,000 are alien and about 10% of these are invasive (the other 90% have fit into their environments and are considered naturalized).

Nevertheless, Simberloff argues for taking a precautionary approach toward exotics and claims "you don't want exotics in natural ecosystems." Another scientist has recently challenged the prevailing view that alien species reduce biodiversity, arguing that exotics add to the number of species in an environment and that even if they cause extinction, this will allow new species to evolve. For a provocative discussion of exotics, see Stephen Jay Gould, "An Evolutionary Perspective on Strengths, Fallacies, and Confusions in the Concept of Native Plants," in Joachim Wolschke-Bulmahn, ed., Nature and Ideology: Natural Garden Design in the Twentieth Century, Washington, DC: Dumbarton Oaks Research Library and Collection, 1997, available at <http://www.doaks.org/natur002.pdf>. See also Mark Sagoff, "Why Exotic Species Are Not as Bad as We Fear," Chronicle of Higher Education, Vol. 46, Number 42 June 23, 2000, Also at http://weedeco.msu.montana.edu/class/lres443/Lab/Lab11_exotics.htm. (v.12,#4)

Derr, Mark, "Vanishing Livestock Breeds Leave Diversity Gap," New York Times (11/14/00): D3. Domestic animal diversity. Humans have domesticated about 40 species of animals and created thousands of breeds. Between 1,000 and 1,500 livestock breeds are at risk of extinction, representing about 30 percent of the most important domesticated species of birds and mammals. These animals are reservoirs of genetic diversity, play important roles in a number of ecosystems, and are sometimes central to the history and culture of human communities. 600 breeds of livestock have already gone extinct and another 78 are lost each year. The causes are the increasing industrialization of agriculture (including replacement of draft animals with machines and the loss of family farms), indiscriminate cross breeding, and a narrow focus on certain breeds—like Holsteins for milk—to the exclusion of others. Scientific breeding has produced industrial hens that lay 300 eggs a year compared to 30 for most indigenous birds, broiler chickens bred to mature in 6 to 7 weeks instead of the usual 12 weeks, and a doubling of milk production in Holsteins in the last 40 years. Scientists worry that levels of inbreeding necessary to attain these results reduce genetic diversity within the breeds and can lead to serious health problems. The eight million Holsteins in the U.S. are descendants of just 37 individuals. The greatest potential for losses of livestock diversity are in developing nations which are importing scientifically-improved livestock that replace their indigenous breeds. An example of a threatened breed in the U.S. is the "Gulf Coast native

sheep." Directly descendant from the stock of the first Spanish and French colonists, these sheep have been breeding largely free of human intervention for more than 300 years. They have adapted to the heat and humidity of the Gulf coast and have developed resistance to diseases and parasites that debilitate other breeds. Scientists are trying isolate genes responsible for this resistance in order to introduce them into commercially important breeds. (v.11,#4)

Derr, Patrick G. and McNamara, Edward M., Case Studies in Environmental Ethics. Lanham, MD: Rowman and Littlefield, 2003. 43 cases, typically 3-4 pages each. Hawaiian feral pigs, oil and ANWR, golden rice, Bhopal, monkey-wrenching, great apes, the Delhi Sands fly, and a host of others. Useful for discussion groups in classes in environmental ethics. Derr is in philosophy, Clark University. McNamara is an attorney. (v.14, #4)

Derr, Thomas Sieger, Nash, James A., Neuhaus, Richard John, Environmental Ethics and Christian Humanism. Nashville: Abingdon Press, 1996. A major article by Derr, "Environmental Ethics and Christian Humanism," with two replies: Nash, "In Flagrant Dissent: An Environmentalist's Contentions," and Neuhaus, "Christ and Creation's Longing." Derr holds that a wide range of "ecologists" (including biocentrists, animal rights advocates, and ecofeminists) distort the picture of humanity by submerging human life into "nature," ignoring human transcendence over it. The "spectacles" with which many "ecologists" view the world are badly ground and parts of their vision are distorted.

Nash, in a sharply stated response, claims that Derr does not see the issues clearly. "Derr's position must not stand unchallenged! It represents a widespread and unwarranted distortion of much environmental thought" (p. 105) Derr is too much focused on a confidence on human nature, and, indeed, on the capacity of modern, technological civilization to meet key challenges of the new ecological awareness. Derr has yet to find the correct balance of earth, humanity, and divinity.

Neuhaus agrees with Derr that the balance between the naturalistic and the humanistic dimensions of our world have been too lopsided on the naturalistic side. But he doubts that either Derr or the radical ecologists have a picture of the place of divinity in all this, which can be known only with an adequate Christology. Derr is a Reformed thinker, Nash a "liberal" Methodist, and Neuhaus a "conservative" Roman Catholic. (v9,#1)

Derr, Thomas S., Nash, James A. Neuhaus, John. Environmental Ethics and Christian Humanism. Nashville: Abingdon Press, 1996. 144pp. \$16.95 paper. Crossing swords with biocentrism, the animal rights movement, and ecofeminism Derr argues that Christian ethics requires an environmentalism that depends on good science for its practical judgments on compassion and a lively sense of justice for its social and economic policies, and on faithfulness to our God-given responsibilities as stewards of nature for its energy. James Nash and John Neuhaus offer critical responses to which Derr presents a rejoinder. (v8,#2)

Derr, Thomas Sieger. Ecology and Human Need. Philadelphia: Westminster Press, 1975.

Derrington, Frank W. Review of Environmental Ethics: An Overview for the Twenty-First Century. By Robin Attfield. Environmental Ethics 27 (2005):105-108.

Derrington, Frank W., "Is Coerced Fertility Reduction to Preserve Nature Justifiable?" Philosophy in the Contemporary World 8 (no. 1, Spring 2001):21-30. Human population growth must end, and the sooner the better, for both nature and a humanity that pursues boundlessly increasing affluence. Poisoning of organisms and massive extinctions result, exacerbated by population momentum. Infliction of pain and death largely for trivial reasons constitutes the ignoble denouement of our history. Reducing human numbers would be only one fitting response to recognition of this situation. Reliance on voluntary socio-economic reforms, including even the empowerment of women, appears unlikely to lead to below-replacement-level fertility, since families on average still elect to have more than two children. Discussed

are three reasons for thinking that coercive measures could help to engender a decreasing human population without negating preferable voluntary efforts to the same end. Hence some coercion to reduce fertility is justifiable. Derringham is in the Department of Social Science (Philosophy), New York City Technical College, Brooklyn. (v.13,#1)

Derringham, Frank W. Review of *Ethics of Nature: A Map*. Ethics of Nature. By Angelika Krebs. *Environmental Ethics* 23(2001):99-102. (EE)

Derringham, Frank W. Review of *With Respect for Nature: Living as Part of the Natural World*. By J. Claude Evans. *Environmental Ethics* 29(2007):99-102. (EE)

Derringham, Frank W. Review of *Ecological Ethics: An Introduction*. By Patrick Curry. *Environmental Ethics* 29(2007):323-326. (EE)

Dersch, E, "Feeding the World: A Challenge for the Twenty-First Century," *Society and Natural Resources* 14(no.8, 2001): 725.
(v.13,#2)

derWeele (der Weele), Corvan, "Food Metaphors and Ethics: Towards More Attention for Bodily Experience," *Journal of Agricultural and Environmental Ethics* 19(2006):313-324.

Official Dutch food information apparently tries to avoid images but is implicitly shaped by the metaphor that food is fuel. The image of food as fuel and its accompanying view of the body as a machine are not maximally helpful for integrating two important human desires: health and pleasure. At the basis of the split between health and pleasure is the traditional mind/body dichotomy, in which the body is an important source of evil and bodily pleasure is sinful and dangerous. In the search for alternatives, new metaphors are proposed that integrate mind and body as well as pleasure and health. The relevance of metaphors for ethics is at least twofold. (1) Moral thought and theory are at least partly shaped by metaphors. In the light of this growing recognition, the analysis of morality needs innovation. (2) With regard to food, new metaphors, such as slow food, or the image of enjoyment as an art, enable a new search for morally responsible forms of hedonism, based on more love and respect for human as well as animal bodies. But new metaphors are specific and selective, just like old ones. I argue that a search for the best overall metaphor would be misguided, but that more diverse forms of attention to bodily aspects of life, including experiences related to food, will result in richer vocabularies of the body, the mind, and body/mind relations. This holds a promise of moral progress.

Keywords: enjoyment - food - health - metaphors - mind-body relations. der Weele is in the Applied Philosophy Group, Wageningen University, Wageningen, The Netherlands. (JAEE)

Des Jardins, Joseph R. *Environmental Ethics: An Introduction to Environmental Philosophy*. Translators: Lin Guanmin and Yang Aimin. (Beijing: Peking University Press, 2002). (in Chinese)

Desai, Uday, eds., *Ecological Policy and Politics in Developing Countries: Economic Growth, Democracy, and Environment*. Albany, NY: SUNY Press, 1998. 416 pages. \$ 28.00. (v.10,#2)

deSelincourt, (de Selincourt) Kate. "Intensifying Agriculture--The Organic Way," *The Ecologist* 26(no.6, 1996):271. (v8,#2)

deShalit (de-Shalit), Avner, "From the Political to the Objective: The Dialectics of Zionism and the Environment," *Environmental Politics* 4(no. 1, 1995):70- . In the short history of the Zionist movement in Israel there have already been three interpretations of the concept of the environment, of which two are completely political. The attitude of the first Jewish immigrants to Palestine was one of anxiety. Coming from Europe, this new environment was absolutely unfamiliar to them, and they regarded the sandy

dunes, the desert and the swamps as a threat. They therefore romanticized it and their relationship to it, as is done by children who are afraid of witches, fire, and so forth. They claimed that the reunion of the Jewish soil with the Jewish soul would emancipate the Jews from their bourgeois character. The second interpretation was "conquering" the new environment, which was a way of making it more familiar and human-friendly. The environment which has been described as "nothingness," "emptiness," "desolation," had to be "made to flourish" and "civilized." Zionism adopted different interpretation of the environment in order to create a new type of Jew, or to prove that Zionism was right. A third possibility, now arising, may be to appreciate the environment more objectively, but it is not yet clear whether the environment can be treated non-politically. de-Shalit teaches politics at the Hebrew University, Jerusalem. (v6,#4)

deShalit (de-Shalit), Avner, "Bargaining with the Not-yet-born: Gauthier's Contractarian Theory of Inter-Generational Justice and its Limitations," International Journal of Moral and Social Studies 5(1990):221-234. If one follows the contractarian premises and approach to environmental policies and inter-generational justice, one will not be able to derive obligations to future generations from these principles. Nor will one get help in arriving at any sense of balance between contemporaries and future people. (v5,#2) (Israel)

deShalit (de-Shalit), Avner, Why Posterity Matters. London: Routledge, 1995. A comprehensive examination of our duties to future generations, arguing that our obligations toward future generations are a matter of justice, not of charity or supererogation. We have a duty to consider them when we distribute access to natural resources, decide on environmental policies, and plan budgets. This raises problems for conventional theories of justice and requires a new communitarian theory of intergenerational justice, which can serve as the moral basis for environmental policy. This book is in the Routledge series, Environmental Philosophies, edited by Andrew Brennan. de-Shalit teaches environmental ethics and political policy at the Hebrew University, Jerusalem. (v5,#3)

deShalit, (de-Shalit), Avner, "Environmental Policies and Justice Between Generations," European Journal of Political Research 21(1992):307-316. (v4,#1)

deShalit (de-Shalit), Avner, "Environmental Policies and Justice Between Generations," European Journal of Political Research 21(1992):307-316. In environmental policy, over and above the relations between humans and nature, there are relations between contemporaries and future generations. Many environmental policies can be seen as a matter of distribution of access to goods between contemporaries and future generations. A theory of justice between generations enables political theorists to evaluate environmental problems with a new approach. (v5,#2) (Israel)

deShalit (de-Shalit), Avner, "From the Political to the Objective: The Dialectics of Zionism and the Environment," Political Studies 4: 70-88. Is the argument that we can only conceive of the "environment" in political terms far-fetched? Is an objective understanding of the concept of the "environment" possible? By an analysis of three phases in the relationship between Zionism and the environment, it can be argued, first, that not only the developmental but also the romantic attitudes to the environment regard the latter instrumentally and both constituted political definitions of the environment; and second, that a direct transition from a romantic-ruralist attitude to the environment to a modern, scientifically-based environmentalism is impossible, and that the antithesis of the ethos of development has been necessary for the instrumental and political approach to the environment to be abandoned. (v6,#2)

deShalit (de-Shalit), Avner, The Environment Between Theory and Practice. Oxford: Oxford University Press, 2000. Why do so many environmental activists claim that there is a gap between the questions that environmental philosophers discuss and the issues that motivate environmental activists? The author attempts to answer this question and then to bridge this gap by combining tools of political philosophy

with questions of environmental ethics and politics. He defends a radical position in relations to both environmental protection and social policies in order to put forward a theory, which is not only philosophically sound, but also relevant to the practice of environmental activism. de-Shalit develops and applies what he calls "public reflective equilibrium" as a new method to be used by philosophers who are engaged in applied philosophy. Avner de-Shalit is professor of political and environmental theory, The Hebrew University of Jerusalem, and Associate Fellow, Oxford Centre for Environment, Ethics and Society. (v.11,#3)

deShalit (de-Shalit), Avner, The Environment between Theory and Practice. Oxford: Oxford University Press, 2000. Reviewed by Matthew Humphrey, Environmental Values 12(2003):134-136. (EV)

deShalit (de-Shalit), Avner, and Moti Talias, "Green or Blue and White? Environmental Controversies in Israel," in Environmental Politics 3(no. 2, Summer 1994):273- . Blue and white are the colors of Israel, here contrasted with green. Environmental controversies in Israel are characterized by the dominance of non-anthropocentric modes of reasoning. In that respect they are different from the modes of reasoning in other western countries. We analyze the arguments put forward in favor of conservation in Israel, and claim that this is not accidental, but is related to a profound cleavage between a non-anthropocentric attitude and the Israeli-Zionist ethos of development, which has governed Israeli political thought since the 1930's. (v5,#1) (Israel)

deShalit (de-Shalit), Avner, "Hachevra Ha'ezrachit ber'ei Hasviva" (Civil Society in the Mirror of the Environment), in Yoav Peled and Ophir Adi, eds., Hachevra Ha'ezrachit (Civil Society), forthcoming. (v5,#1) (Israel)

deShalit (de-Shalit), Avner. "Is Liberalism Environment-Friendly?" Social Theory and Practice 21 (no. 2, Summer 1995):287-314. (v6,#4)

deShalit (de-Shalit), Avner, "Liberalism, Europe and the Environment," in Bob Brecher, ed., Liberalism and the New Europe. Aldershot, Hampshire, UK: Avebury, 1993. (v5,#1) (Israel)

deShalit (de-Shalit), Avner, "The Dialectics of Zionism and the Environment," paper given at International Development Ethics Association (IDEA) Conference, University of Aberdeen, Scotland, 1993. (v5,#1) (Israel)

deShalit (de-Shalit), Avner, "Urban Preservation and the Judgment of Solomon," Journal of Applied Philosophy 4(1994):3-13. "Facing heretofore unknown waves of new immigrants, the Israeli Government and the mayor of Jerusalem issued a comprehensive development program, including rapid and massive construction. Cities with historical and aesthetic uniqueness, particularly Jerusalem, are likely to lose their special features and beauty. How can an argument in favor of conservation of the special beauties of such cities be advanced in the light of the urgent need to supply shelter and jobs for their inhabitants? The paper has to aims: to analyze the reason for environmental ethics' failure to discuss urban preservation so far, and to put forward a rationale for urban preservation. The latter derives from the political wisdom of King Solomon and from the notion of anthropocentric intrinsic value. de-Shalit teaches political science and environmental policy at the Hebrew University of Jerusalem. (v5,#2) (Israel)

deShalit (de-Shalit), Avner, Review of Rudig, Wolfgang, ed., Green Politics (Three). Environmental Values 5(1996):371-372. (EV)

deShalit (de-Shalit), Avner, "Community and the Rights of Future Generations: A Reply to Robert Elliot," Journal of Applied Philosophy 9(1992):105-115. de-Shalit accepts Elliot's arguments for

obligations based on the rights of future people, but the main issue is whether balance can be found between these and the rights of present people. The question can be tackled only in terms of welfare rights, which requires a concept of "trans-generational" community, and the theory of justice between generations cannot be purely "rights-based." (Israel)

deShalit (de-Shalit), Avner, "Ruralism or Environmentalism?," Environmental Values 5(1996):47-58. Recent works on the historical sources of the environmental movement neglect environmental philosophy. They therefore fail to distinguish between two different currents of thought: ruralism--the romantic glorification of rural life and environmentalism--a philosophy which is based on scientific information, anti-speciesism and respect for all organisms. These works, therefore, mistakenly identify 'political ecology' with right-wing ideologies. KEYWORDS: Ruralism, environmentalism, biocentrism, greens. (EV)

deShalit (de-Shalit), Avner, "Community and the Rights of Future Generations," Journal of Applied Philosophy, vol. 9, no. 1, pp. 105-115. (v5,#1) (Israel)

deShalit (de-Shalit), Avner. Review of Fairness and Futurity: Essays on Environmental Sustainability and Social Justice. Edited by Andrew Dobson. Environmental Ethics 22(2000):435-438.

Deshalit (de-Shalit), Avner. Review of Nicholas Low, ed., Global Ethics and Environment, London and New York: Routledge, 1999, Environmental Values 10(2001):266. (EV)

DeShalit (de-Shalit), Review of Garner, Robert, Environmental Politics. Environmental Values 6(1997):118. (EV)

DeShalit (de-Shalit), Avner, Review of Cooper, David, Palmer, Joy, eds., Just Environments. Environmental Values 6(1997):115-116.

DeSherbinin, A., Kline, K. and Raustiala, K., "Remote Sensing Data: Valuable Support for Environmental Treaties," Environment 44(no.1, 2002): 20-31. (v.13,#2)

deSilva (de Silva), Padmasiri, Environmental Philosophy & Ethics in Buddhism. Macmillan: London; St. Martin: New York, 1998. (1) Following an introduction to the central theories and issues in Western environmental ethics, de Silva develops an account of Buddhist environmental philosophy, ethics, economics and a Buddhist pedagogy for environmental education. (2) A central claim is that the current environmental crisis is a product of a "thinking disorder, and as mentioned in a recent review, "the author sets to demonstrate that the means of healing this virulent disorder could well come from the developing world, specially from ancient Buddhist teachings." This work is the product of a UNESCO project searching for an environmental ethic across the cultures and religions of the Asian region. (3) The critique of narrow epistemological paradigms, the call for a multi-dimensional pedagogy, the need for an environmental ethics that will actually influence people--these claims are backed by Antonio Damasio's claim that we make bad decisions, when we have no access to "emotional learning." The concept of "ecological sensibility" is another important ingredient of this book. (v.11,#1)

Desilva, (deSilva), Padmasiri. Environmental Philosophy and Ethics in Buddhism. London: Macmillan Press Ltd, 1998, 196pp. Reviewed by Alan Carter. Environmental Values 9(2000):396.

DeSilva (De Silva), Sena S., and Giovanni M. Turchini, "Towards Understanding the Impacts of the Pet Food Industry on World Fish and Seafood Supplies," Journal of Agricultural and Environmental Ethics 21(2008):459-467. The status of wild capture fisheries has induced many fisheries and conservation scientists to express concerns about the concept of using forage fish after reduction to fishmeal and fish

oil, as feed for farmed animals, particularly in aquaculture. However, a very large quantity of forage fish is being also used untransformed (fresh or frozen) globally for other purposes, such as the pet food industry. So far, no attempts have been made to estimate this quantum, and have been omitted in previous fishmeal and fish oil exploitation surveys. On the basis of recently released data on the Australian importation of fresh or frozen fish for the canned cat food industry, here we show that the estimated amount of raw fishery products directly utilized by the cat food industry equates to 2.48 million metric tonnes per year. This estimate, plus the previously reported global fishmeal consumption for the production of dry pet food suggest that 13.5% of the total 39.0 million tonnes of wild caught forage fish is used for purposes other than human food production. This study attempts to bring forth information on the direct use of fresh or frozen forage fish in the pet food sector that appears to have received little attention to this date and that needs to be considered in the global debate on the ethical nature of current practices on the use of forage fish, a limited biological resource. The authors are at the School of Life & Environmental Sciences, Deakin University, Warrnambool, Victoria, Australia.

Desimone, Livio D., Popoff, Frank. Eco-Efficiency: The Business Link to Sustainable Development. Cambridge, MA: MIT Press, 1997. 264pp. \$25. The principles of eco-efficiency with case studies of a number of international companies including 3M and the Dow Company. There is discussion of the value of partnerships--with other companies, business associations, communities, regulators, and environmental and other non-governmental groups. (v8,#1)
DeSimone, L. and Popoff, F. Eco-Efficiency: The Business Link to Sustainable Development. Cambridge: MIT Press, 1997. (v.9,#3)

DeSimone, L.D. and F. Popoff. Eco-Efficiency: The Business Link to Sustainable Development. Reviewed by Andrea Prothero. Environmental Values 8(1999):119. (EV)

DesJardins (Des Jardins), Joseph R., Environmental Ethics, Chinese translation, translator: Lin Guanming and Yang Aiming, Publisher: Beijing Uni. Press, 2002.

DesJardins (Des Jardins), Joseph R. Environmental Philosophy. 2nd ed. Belmont, CA: Wadsworth Publishing Co., 1997. 288 pages. A second edition of a widely-selling introductory text. Added in the second edition are sections on moral pluralism, cost-benefit analysis, sustainable economics, environmental justice, environmental racism, social ecology, and ecofeminism. The work of Callicott, Goodpaster, Bullard, and Rachel Carson is discussed more extensively than in the first edition. The sections on intrinsic/instrumental value and on ecology have been reworked for the sake of clarity and accuracy. Translations of this work into Korean and Chinese are pending. Des Jardins is in philosophy at The College of Saint Benedict/St. Johns University, St. Joseph. MN. (v7, #3)

DesJardins, Joseph, Review of Peter S. Wenz, Nature's Keeper. Environmental Ethics 20(1998):211-13.

DesJardins, Joseph, Environmental Ethics: An Introduction to Environmental Philosophy. 3rd ed. Belmont, CA: Wadsworth/Thomson Learning, 2001. Concise, summary, balanced descriptions of available positions, sketches of historical developments, readable by undergraduates without compromise of serious argument; conclusions are often provisional and open-ended, intended to keep the student on inquiry. New sections on the idea of wilderness, biocentric ethics, and environmental pragmatism. More integration of cases into chapter material. Broadened discussion of the debate over consumption and population, now moving beyond energy policy to philosophical examination of a wider range of ethical responsibilities to future generations. The first edition was in 1993; the second in 1997. Des Jardins is in philosophy at the College of Saint Benedict/St. John's University, St. Joseph, MN. (v.11,#4)

DesJardins, Joseph R. (Des Jardins), Environmental Ethics: An Introduction to Environmental Philosophy. 272 pages, paper. Wadsworth, 1993. Sections on basic ethical concepts, forests, pollution,

climate change, economics, energy, future generations, duties to animals, biocentrism, the land ethic, deep ecology, ecofeminism. Discussions include the spotted owl controversy, monkey-wrenching and the Rio Summit. End of chapter summaries and discussion questions. Makes a particular effort to survey all the areas of the field, yet a reasonably compact text. Des Jardins is professor of philosophy at the College of St. Benedict/St. Johns University, St. Joseph, MN. (v3,#4)

DesJardins, Joseph, ed., Environmental Ethics: Concepts, Policy, Theory. Mountain View, CA: Mayfield Publishing Co., 1999. 620 pages. \$ 42.00 paper. A sizeable anthology that covers the field, and the latest entry into a market with now over two dozen anthologies. This one features many case studies. Sections (Chapters): 1. Philosophical Ethics and Environmental Public Policy. 2. The Environment in Western Thought. 3. Is There an Environmental Crisis? 4. Economics and Environmental Policy. 5. Aesthetics and Spiritual Values. 6. Extensionism and Anthropocentrism. 7. Holism: Ecology and Ethics. 8. Pollution. 9. Ethics and Animals. 10. Ethics and Land. 11. Wilderness Preservation. 12. Growth and Development. 13. Environmental Justice. 14. International Relations and the Environment. 15. Deep Ecology, Social Ecology, and Ecofeminism. 16. Political Theory and the Environment. 17. Multicultural Perspectives on the Environment. 18. Environmental Pragmatism. Should prove a solid contender against comparable such popular anthologies as Botzler and Armstrong, Environmental Ethics: Divergence and Convergence and Pojman, Environmental Ethics: Readings in Theory and Application. DesJardins is in philosophy at College of St. Benedict, Saint Joseph, MN. (v.9,#3)

DesJardins, Joseph R. (Des Jardins), Environmental Ethics: An Introduction to Environmental Philosophy, Reviewed by Holmes Rolston, III in Environmental Ethics 16(1994):219-224.

DesJardins, Joseph R., Environmental Ethics: An Introduction to Environmental Philosophy. 4th edition. Belmont, CA: Thomson/Wadsworth 2006. Now the fourth edition of this quite popular text. This edition tries to connect theories in ethics more directly to contemporary environmental debates. It gives more attention to religious dimensions in environmental ethics, and more to sustainable development. There is also a wider-ranging discussion of social justice issues. DesJardins is in philosophy, College of St. Benedict and St. John's University, St. Joseph, MN.

Desmond, Kevin. *Planet Savers: 301 Extraordinary Environmentalists*. Sheffield, UK: Greenleaf Publishing, 2007. Desmond tells stories about 301 people who, between 1858 and 1997, have spoken up and/or taken action to defend the world from pollution, deforestation, species loss, and climate change.

Desmond, Kevin. *Planet Savers: 301 Extraordinary Environmentalists*. Sheffield, UK: Greenleaf Publishing, 2007. Desmond tells stories about 301 people who, between 1858 and 1997, have spoken up and/or taken action to defend the world from pollution, deforestation, species loss, and climate change.

Desouzafilho (de Souza Filho), Hildo Meirelles. The Adoption of Sustainable Agricultural Technologies. Brookfield, VT: Ashgate, 1998. 190 pp. \$55.95. This is a case study in the state of Espirito Santo, Brazil. (v9,#2)

Dessai, S, "Why Did The Hague Climate Conference Fail?" Environmental Politics 10(no, 3, 2001): 139-144. (v.13,#1)

Desta, S. and Coppock, D. L., "Pastoralism Under Pressure: Tracking System Change in Southern Ethiopia," Human Ecology 32(no. 4, 2004): 465-486(22). (v.14, #4)

Desta, Solomon; Coppock D. Layne, "Pastoralism Under Pressure: Tracking System Change in Southern Ethiopia", Human Ecology 32(no.4, August 2004):465-486(22).

DeStefano, S, "Birds in the Human Landscape," Conservation Biology 17(no.5, 2003):1467-1468. (v.14, #4)

De Tavernier, Johan, and Stefan Aerts, "Introduction to: Special Issue on Animals and their Welfare," Journal of Agricultural and Environmental Ethics 19(2006):3-5. (JAEE)

Deudney, Daniel, "Environmental Security: A Critique." Pages 187-219 in Richard A. Matthew, ed., Contested Grounds: Security and Conflict in the New Environmental Politics. Albany, NY: State University of New York Press, 1999.

Deudney, Daniel H., and Matthew, Richard A., eds., Contested Grounds: Security and Conflict in the New Environmental Politics. Albany, NY: State University of New York Press, 1999. 276 pages. \$ 21.00 paper. 12 contributors. The relationship between international security and the environment. The important, and overlooked, role that environmental factors have played in geopolitics. What are the relationships between environmental change, degradation and protection and traditional national security concepts and organizations? How useful are security concepts and organizations in mobilizing political responses to environmental problems? What role do environmental favors play in stimulating international conflict and cooperation. Deudney is in political science, Johns Hopkins University. Matthew is in social ecology and political science, University of California at Irvine. (v.10,#1)

Deuffic, Philippe, and Jacqueline Candau, "Farming and Landscape Management: How French Farmers are Coping with the Ecologization of Their Activities." Journal of Agricultural and Environmental Ethics 19(2006):563-585. In Europe, an increasing share of public subsidies for food production is being transferred towards the production of goods and environmental services. Today, farmers hesitate between the quest for technical and economic performance, which has been the paradigm of their professional activities since the 1960s, on one hand, and taking account of the environmental concerns that have been imposed since the middle of the 80s, on the other. Is it possible for farmers to continue to work according to the paradigm of the producer of agri-food goods, and how do they react to the ecologization of their activities? In this paper, we will see the difficulties and sources of tension induced by landscape maintenance in the daily professional practice of the farmers. We will see that the professional identity of the farmers is profoundly brought into question by these changes (substitution of strictly "agricultural issues" by more general concerns such as "rural issues," substitution of the farmer by the "ecologized" peasant...). The topic of landscape reveals social strains between farmers. It also raises the question of the legitimacy of farmers to define the sense of their activities by themselves. Finally we will see that environmental orientations do not systematically open up new prospects for all farmers; they sometimes contribute to increase the inequalities between farmers (financial support proportional to land property, marginalization of farmers who are less socially integrated...). Keywords: agri-environment - farmers professional identity - landscape - multifunctionality - rural amenities - social contract. The authors are with Cemagref, UR Agriculture and Dynamics of Rural Areas, Cestas, France. (JAEE)

Deutsch, Claudia H. "A Threat So Big, Academics Try Collaboration." *New York Times* (December 25, 2007). Scholars from different disciplines are crossing lines to share ideas about reducing the threat from climate change. This includes a number of university-sponsored sustainability institutes.

Deutsch, Eliot. "A Metaphysical Grounding for Nature Reverence: East-West." Environmental Ethics 8(1986):293-99. I argue for the possibility of a creative relationship between man and nature which will inform the basic decision makings that confront us in the concrete concerns of environmental ethics today. This relationship, which I call "natural reverence," is essentially an attitudinal one which recognizes the togetherness of man and nature in freedom. Contrasting Kant's treatment of the sublime with certain ideas to be found in Indian philosophy--namely, the idea of a radical discontinuity, thought to

obtain between "reality" and "nature" (maya in Vedanta), and the idea of karman as involving modes of human making--I show the manner in which nature can become value laden and how we can work with nature in a manner analogous to that of an artist working with his/her medium in a kind of creative play. Deutsch is the editor of Philosophy East and West, Honolulu, HI. (EE)

Devall, Bill and George Sessions. "The Development of Natural Resources and the Integrity of Nature." Environmental Ethics 6(1984):293-322. During the twentieth century, John Muir's ideas of "righteous management" were eclipsed by Gifford Pinchot's anthropocentric scientific management ideas concerning the conservation and development of Nature as a human resource. Ecology as a subversive science, however, has now undercut the foundations of this resource conservation and development ideology. Using the philosophical principles of deep ecology, we explore a contemporary version of Muir's "righteous management" by developing the ideas of holistic management and ecosystem rehabilitation. Sessions is at the Philosophy Dept., Sierra College, Rocklin, CA. Devall is at the Sociology Dept., Humboldt University, Arcata, CA. (EE)

Devall, Bill, and George Sessions, Deep Ecology: Living as if Nature Mattered. Salt Lake City: Peregrine Smith, 1985. Pp. xi, 267. The most charitable way to describe Deep Ecology as a philosophical position is that it is an attempt to raise our "ecological consciousness" so that we may see the unity of humanity and nature. Unfortunately, the position, as it has been staked out in the literature, is so vague that it includes a host of seemingly conflicting elements: e.g., both biospecies equality and holism. Devall and Sessions do little to explain the position and argue for it. This is disheartening, for many of the features of Deep Ecology are philosophically significant in the development of an environmental ethic-- particularly the critique of what Devall calls "Reform Environmentalism." But Devall and Sessions seem to be writing for the converted; there is little convincing argument. Argument, however, is possible: witness Session's appendix on Deep Ecology and "fascism" where he defends Deep Ecology and Holism from critics who say it submerges the value of individuals. Unfortunately, the rest of the book is a hodgepodge of many Devall and Sessions papers collected as a book. This should be read as a necessary evil ... but we still need a sustained description and defense of the Deep Ecology position. (Katz, Bibl # 1)

Devall, Bill, "The Deep, Long-range Ecology Movement: 1960-2000--A Review," Ethics and the Environment 6(no. 1, 2001):18-41. Aarne Naess, in a seminal paper on environmental philosophy, distinguished between two streams of environmental philosophy and activism--shallow and deep. The deep, long-range ecology movement has developed over the past four decades on a variety of fronts. However, in the context of global conferences on development, population, and environment held during the 1990s, even shallow environmentalism seems to have less priority than demands for worldwide economic growth based on trade liberalization and a free market global economy. Devall was in sociology, now emeritus, Humboldt State University, Arcata, CA. (E&E)

Devall, Bill, ed., Clearcut: The Tragedy of Industrial Forestry. San Francisco: Sierra Club/Earth Island Books, 1993. A large book designed for visual impact with (when the book is opened) almost poster-sized pictures of clearcut devastation, often with remnants of the forest lingering nearby in their beauty. The book is a product of the Foundation for Deep Ecology. There are some short essays: Warwick Fox, "The Recognition of Intrinsic Value in the Writing of Legislation"; R. Edward Grumbine, "Policy in the Woods"; "The Ecoforestry Declaration of Interdependence"; Chris Maser, "The Twenty-First-Century Forester"; Alan Drengson, "Remembering the Moral and Spiritual Dimensions of Forests"; Reed Noss, "A Sustainable Forest is a Diverse and Natural Forest"; Dave Foreman, "The Big Woods and Ecological Wilderness Recovery"; and others. The book has provoked a response by the American Forest and Paper Pulp Association: Closer Look: An On the Ground Investigation of the Sierra Club's Book: Clearcut. The response claims that the book deliberately misleads readers, blaming clearcutting and industrial forestry for impacts actually caused by wildfire, insect and disease infestation, and other natural disasters. For the

response call 202/463-2756. (v7,#1)

Devall, Bill and George Sessions. Deep Ecology. Reviewed in Environmental Ethics 10(1988):83-89.

Devall, Bill. Review of The Environmental Hustle. By Bernard J. Frieden. Environmental Ethics 3(1981):85-94.

Devall, Bill. Review of Environment, Technology and Health: Human Ecology in Historic Perspective. By Merrill Eisenbud. Environmental Ethics 3(1981):85-94.

Development Southern Africa is a quarterly journal published by the Development Bank of Southern Africa. P. O. Box 1234, Halfway House, 1685, South Africa. A scholarly journal now in its twelfth year, published six times a year. The emphasis is on development, but development that is environmentally sustainable and sensitive. (v6,#3)

Devi Khumbongmayum, A; Khan, ML; Tripathi, R, "Sacred groves of Manipur, northeast India: biodiversity value, status and strategies for their conservation," Biodiversity and Conservation 14 (no. 7, June 2005): 1541-1582.

Devine, Pat. Review of: Martinez-Alier, Joan, The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation. Environmental Values 13(2004):269-274. (EV)

Devos, Yann, Pieter Maesele, irk Reheul, Linda Van Speybroeck and Danny De Waele, "Ethics in the Societal Debate on Genetically Modified Organisms: A (Re)Quest for Sense and Sensibility," *Journal of Agricultural and Environmental Ethics* 21(2008):29-61. Via a historical reconstruction, this paper primarily demonstrates how the societal debate on genetically modified organisms (GMOs) gradually extended in terms of actors involved and concerns reflected. It is argued that the implementation of recombinant DNA technology out of the laboratory and into civil society entailed a "complex of concerns." In this complex, distinctions between environmental, agricultural, socio-economic, and ethical issues proved to be blurred. This fueled the confusion between the wider debate on genetic modification and the risk assessment of transgenic crops in the European Union. In this paper, the lasting skeptical and/or ambivalent attitude of Europeans towards agro-food biotechnology is interpreted as signaling an ongoing social request – and even a quest – for an evaluation of biotechnology with Sense and Sensibility. In this (re)quest, a broader-than-scientific dimension is sought for that allows addressing the GMO debate in a more "sensible" way, whilst making "sense" of the different stances taken in it. Here, the restyling of the European regulatory frame on transgenic agro-food products and of science communication models are discussed and taken to be indicative of the (re)quest to move from a merely scientific evaluation and risk-based policy towards a socially more robust evaluation that takes the "non-scientific" concerns at stake in the GMO debate seriously. The authors are at Ghent University, Belgium.

DeVos, Peter, Calvin DeWitt, Eugene Dykema, Vernon Ehlers, and Loren Wilkinson. Earthkeeping in the Nineties: Stewardship of Creation. (Rev. ed. of Earthkeeping: Christian Stewardship of Natural Resources, 1980.) Grand Rapids: Wm. B. Eerdmans Publishing Co., 1991.

deVries, R. B. M., "Intrinsic Value and the Genetic Engineering of Animals," *Environmental Values* 17(2008):375-392. The concept of intrinsic value is often invoked to articulate objections to the genetic engineering of animals, particularly those objections that are not directed at the negative effects the technique might have on the health and welfare of the modified animals. However, this concept was not developed in the context of genetic engineering. Given this external origin, this paper critically examines the assumption that the concept of intrinsic value is suitable to articulate and justify moral objections more specifically directed at the genetic engineering of animals. I discuss four different theories of

intrinsic value, two of which defend a moral concept of intrinsic value and two a non-moral one. I conclude that only a particular non-moral concept of intrinsic value is suitable to express specific objections to genetic engineering, because these objections can only be defended in the form of indirect duties regarding animals.

DeVries (De Vries), Rob, "Genetic Engineering and the Integrity of Animals," Journal of Agricultural and Environmental Ethics 19(2006):469-493. Genetic engineering evokes a number of objections that are not directed at the negative effects the technique might have on the health and welfare of the modified animals. The concept of animal integrity is often invoked to articulate these kind of objections. Moreover, in reaction to the advent of genetic engineering, the concept has been extended from the level of the individual animal to the level of the genome and of the species. However, the concept of animal integrity was not developed in the context of genetic engineering. Given this external origin, the aim of this paper is to critically examine the assumption that the concept of integrity, including its extensions to the level of the genome and the species, is suitable to articulate and justify moral objections more specifically directed at the genetic engineering of animals. Keywords: animal integrity - duties towards animals - genetic engineering of animals - genetic integrity - species integrity. de Vries is in the Faculty of Science, Department of Philosophy and Science Studies, Radboud University Nijmegen & Centre for Ethics, Nijmegen, The Netherlands. (JAEE)

Devuyst, Dimitri, Hens, Luc, and DeLannoy (De Lannoy), Water, eds, How Green Is the City: Sustainability Assessment and the Management of Urban Environments. New York: Columbia University Press, 2001. Devuyst is with the Fund for Scientific Research, Flanders, Belgium. (v.13,#4)

deWaal (de Waal), Frans B. M., "Survival of the Kindest," Chronicle of Higher Education, August 7, 1998, B4-B5. A summary of de Waal's claims contesting the selfish genes theories, which he has made recently in a number of publications, such as Good Natured (Harvard University Press). There is frequently genuine altruism in animals (and people). "When George Williams ... declared ... that 'natural selection maximizes short-sighted selfishness,' he confused the utilitarian language of evolutionary biology with what actually drives animals and people to act. Selfishness implies an intention to serve oneself, a purpose that depends on knowing what one stands to gain from a particular behavior. Without such knowledge, selfishness is a much more problematic concept than many evolutionary thinkers realize. ... In my work on the evolution of empathy and morality, I have found many instances of animals' caring for one another and responding to one another's distress--evidence so rich that I am convinced that survival depends not only on strength in combat but also at times on cooperation and kindness."

"The helping behaviors shown by dolphins, gorillas, or people toward strangers in need probably evolved in the context of close knit group life, in which most such actions benefited relatives and companions able to return the favor. The impulse to help was therefore never totally without self-interest and survival value to the individual displaying it. But, as so often is the case, the impulse became divorced from the consequences that shaped its evolution. This permitted it to express itself even when payoffs were highly unlikely. In this sense, the impulse became genuinely unselfish." De Waal is in psychology and primate behavior at Emory University. (v.9,#3)

deWaal (de Waal), Frans, Good Natured: The Origins of Right and Wrong in Humans and Other Animals. Cambridge, MA: Harvard University Press, 1996. The extent to which requisites of morality can be recognized in other animals, especially primates. de Waal strenuously objects to a current tendency among biologists to ascribe various negative descriptions to animals, such as their being "selfish," or "cheaters" or "deceiving" or "greedy" or "having enemies," or "murdering" with a simultaneous refusal to ascribe various positive traits to them. Biologists go to great lengths, unnecessarily so, to argue away all evidence of animal altruism, interpreting it as disguised selfishness, or kin selection, or nepotism, and so on. Animals, particularly those close to us, display an enormous spectrum of emotions and different kinds of relationships. It is only fair to reflect this fact in a broad array of terms. If animals can have

enemies, they can have friends. If they can cheat, they can be honest. If they can be spiteful, they can also be kind and altruistic. Semantic distinctions between animal and human behavior often obscure fundamental similarities; a discussion of morality will be pointless if we allow our language to be distorted by a denial of benign motives and emotions in animals. de Waal works at the Yerkes Regional Primate Center in Atlanta, Georgia. (v7,#1)

deWaal (de Waal), Frans. Good Natured: The Origins of Right and Wrong in Humans and Other Animals. Review by Anna Peterson, Environmental Ethics 20(1998):437-40.

deWaal (de Waal), Frans B. M., "A Century of Getting to Know the Chimpanzee," Nature 437(1 Sept. 2005):56-59. "Humans do occupy a special place among the primates, but this place has increasingly to be defined against a backdrop of substantial similarity." de Waal is in primate research, Yerkes National Primate Research Center, Emory University.

DeWael (De Wael), Jos. "Ecological Aspects of Green Areas in Urban Environments, IFPRA World Congress." Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Dewar, Heather, "Everglades to Be Restored, Sort of," Lexington Herald-Leader, 18 June 1998, B9
Everglades restoration plan (Draft) to cost \$7.5 billion. In June 1998, the US Army Corps of Engineers completed its draft plan for undoing the damage it did to the Everglades in the late 1960s. That was when the Corps finished the 1600-mile long network of levees and canals that drain the swamps and marshes, creating space for urban development and 750,00 acres of farmland. The canals deprive the Everglades of 20% of its natural waterflow. Now wading birds are gone from many regions, and some species are down to about one-twentieth their pre-canal numbers. The canal project cost \$252 million. The restoration is estimated to cost \$7.5 billion. South of Lake Okeechobee, the Corps will dig 100 wells, each a thousand feet deep, that will store water during the rainy season. Then during the dry season, the water will be pumped into dry areas, restoring an estimated 40-60,000 acres of wetlands. The technology has never been tested on this grand a scale. Another alternative, costing far less but politically unacceptable, would be to rip out the levees and allow the natural flow of water across the region. Originally more than 1.5 million acres in size, the Everglades has been reduced by more than half. Ecologist John Ogden of the South Florida Water Management District, a member of the team drafting the proposal, laments that the remnant cannot function naturally without human assistance and intrusive high-technology. Restoring the Glades will give the Corps something to do for at least fifteen years. The draft proposal will be officially presented for public comment in October 1998 and then will go to Congress for funding in July 1999. The draft plan is being supported by the Audubon Society. (v9,#2)

DeWitt, Calvin B., ed., The Environment and the Christian: What We Can Learn from the New Testament. Grand Rapids, MI: Baker Book House, 1991. The ethics of environmentalism and its place in Christian teaching are joined in the teaching of Jesus about the Kingdom of God. Calvin DeWitt is professor of environmental studies at the Institute for Environmental Studies, University of Wisconsin. He directs work at the Au Sable Institute of Environmental Studies. (v2,#4)

DeWitt, Calvin B., "Biodiversity and the Bible," Global Biodiversity 6(no. 4, 1997):13-16. (v.12,#4)
DeWitt, Calvin B. "Ecology and Ethics: Relation of Religious Belief to Ecological Practice in the Biblical Tradition," Biodiversity and Conservation 4 (no.8, Nov. 1995):838- . (v6,#4)

DeWitt, Calvin B. and Ghilleen T. Prance, eds., Missionary Earthkeeping. Macon: GA: Mercer University Press, 1992. Hardbound, \$ 30.00. Paper, \$ 16.95. Christian missions for better and worse as encouraging earthkeeping in third world countries. Dewitt is in environmental studies at the University of Wisconsin, Madison. Prance is Director of the Royal Botanical Gardens, Kew. Essays by Dennis E.

Testermann, a forester with mission experience in Nigeria and Pakistan; Robert Clobus, a Catholic priest in Ghana; Mutombo Mpanya, from the mission field in Zaire; James W. Gustafson, in Thailand. Originally a forum at the Au Sable Institute of Environmental Studies. (v3,#4)

DeWitt, Calvin B., Caring for Creation: Responsible Stewardship of God's Handiwork. Grand Rapids: MI: Baker Books, and Washington, CD: The Center for Public Justice, 1998. 105 pages. With responses by Richard A. Baer, Jr., Thomas Sieger Derr, and Vernon J. Ehlers. DeWitt is professor of environmental studies at the University of Wisconsin, Madison, and perhaps the most prominent and insightful of conservative Christian defenders of the natural world. (v9,#2)

DeWitt, Calvin, Earth-Wise: Reclaiming God's Creation: A Biblical Response to Environmental Issues. Grand Rapids, MI: CRC Publications, 1994. \$ 6.50. We should not panic about the state of the environment; its final maintenance and care rests in God's divine hands. At the same time, God has appointed humans the stewards of creation and requires us to consider what consequences our actions may impose on God's creation. DeWitt is professor of environmental studies at the University of Wisconsin-Madison. (v5,#4)

DeWitt, Calvin B. "Creation and God's Judgment." Perspectives on Science and Christian Faith 48, no.3 (1996): 182. (v7, #3)

DeWitt, Calvin B., The Just Stewardship of Land and Creation. Grand Rapids, MI: Reformed Ecumenical Council, 1996.

DeYoung (De Young), Raymond. "Some Psychological Aspects of Reduced Consumption Behavior: The Role of Intrinsic Satisfaction and Competence Motivation." Environment and Behavior 28, no.3 (1996): 358. (v7, #3)

DeYoung, T, "Review of: Glennon, Robert J., Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters," Natural Resources Journal 42(no.4, 2002):978-980.

Dezember, Ryan. "Beach Boars Thrive." *Mobile (AL) Press Register* (December 10, 2007). On the Alabama Gulf Coast, the feral hog population is on the rise, even on the condo-lined, urbanized beaches. Hogs have been variously released and escaped for three hundred years. Once they escape, their wildness returns in a few generations. Their tails uncurl, their shoulders broaden, their snouts elongate and they grow tusks reaching up to five inches. Their numbers across the US, mostly in the lower tiers of states, reach into the millions. They root up the soil, destroying native vegetation.

Dharmadasa, K.N.O., and Samarasinghe, S.W.R. de A., eds., The Vanishing Aborigines: Sri Lanka's Veddas in Transition. New Delhi: Vikas Publishing House, 1990. In Sri Lanka, the extremely poor Vedda people were relocated in the Mahaweli Development Scheme, which called for a forest and wildlife reserve in some of their best hunting and food gathering areas.

DHondt, Steven, Rutherford, Scott, and Spivack, Arthur J., "Metabolic Activity of Subsurface Life in Deep-Sea Sediments," Science 295(15 March 2002):2067-2069. There is a surprising amount of life buried deep in marine sediments (to one kilometer), mostly microorganisms (procaryotes) that may constitute from one-tenth to one-third of Earth's biomass. But most of it is quite low in metabolic activity (most in the first few centimeters) and lower down the organisms are mostly inactive--just there in a suspended state until conditions change that permit metabolic activity. The authors are in oceanography, University of Rhode Island. (v.13,#2)

Dial, Kenneth P.; Randall, Ross J.; Dial, Terry R., "What Use Is Half a Wing in the Ecology and Evolution of Birds?," BioScience 56 (no.5, May 2006): 437-445 (9). The use of incipient wings during

ontogeny in living birds reveals not only the function of these developing forelimbs in growing birds' survival but also the possible employment of protowings during transitional stages in the evolution of flight. When startled, juvenile galliform birds attempt aerial flight even though their wings are not fully developed. They also flap their incipient wings when they run up precipitous inclines, a behavior we have described as wing-assisted incline running (WAIR), and when they launch from elevated structures. We argue that avian ancestors may have used WAIR as an evolutionary transition from bipedal locomotion to flapping flight.

Diamond, Adam, Book review of Lisa Nicole Mills, Science and Social Context: The Regulation of Recombinant Bovine Growth Hormone in North America (Montreal: McGill-Queens University Press, 2002). Journal of Agricultural and Environmental Ethics 18(2005):509-513. (JAEE)

Diamond, Eliezer. Book Review of Judaism and Environmental Ethics: A Reader. Edited by Martin D. Yaffe. Environmental Ethics 26(2004):213-216. (EE)

Diamond, Irene and Seidenberg, David, "Sensuous Minds and the Possibilities of a Jewish Ecofeminist Practice," Ethics and the Environment 4(1999):185-196. Diamond is in political science, University of Oregon. (E&E)

Diamond, Irene and Gloria Felman Orenstein, eds., Reweaving the World: The Emergence of Ecofeminism. San Francisco: Sierra Club Books, 1990. 320 pages. \$ 14.95 paper. 26 essays, including essays by Carol P. Christ, Susan Griffin, Charlene Spretnak, Ynestra King, Michael E. Zimmerman, Starhawk, and Catherine Keller. (v1,#4)

Diamond, Irene, and Gloria Feman Orenstein, eds., Reweaving the World: The Emergence of Ecofeminism. San Francisco: Sierra Club Books, 1990. Pp. xv, 320. Excellent collection of ecofeminist thought, divided into three section concerning history, politics/ethics, and practical policy. The middle section is the most "philosophical" in the traditional sense of argument and scholarship, with chapters by Susan Griffin, Carolyn Merchant, Ynestra King, Lee Quinby, and Judith Plant. Of special interest are two articles focusing on the split between deep ecologists and ecofeminists: Marti Kheel, "Ecofeminism and Deep Ecology: Reflections on Identity and Difference," and Michael E. Zimmerman, "Deep Ecology and Ecofeminism: The Emerging Dialogue." Contains a good selected bibliography. (Katz, Bibl # 2)

Diamond, Irene. Fertile Ground: Women, Earth, and the Limits of Control. Boston: Beacon Press, 1994. (v7, #3)

Diamond, Jared, Guns, Germs, and Steel: The Fates of Human Societies. New York: Norton, 1997. Diamond examines the environmental factors that influenced the shift from hunter-gatherers to farming-based cultures, to provide a better understanding of how human societies came to be. Societies with the advantages of reliable food sources and domesticated animals tended to develop writing, technology, government, and organized religion as well as military weapons, resulting in their expansion at the expense of less sophisticated societies. Location and environment, not superior culture, are the deciding factor in the construction of dominant civilizations. So superiority is an illusion, it's all a matter of environmental good fortune. Diamond is a UCLA physiologist and cultural ecologist, who does research among New Guinea tribes. (EE v.12,#1)

Diamond, Jared, The Third Chimpanzee: The Evolution and Future of the Human Animal. New York: HarperCollins, 1992. 407 pages. Diamond claims that the golden age of indigenous peoples of the past never was. Preindustrial societies exterminated species, destroyed habitats, exploited their resources, and undermined their own existence for thousands of years, and archaeological finds at Polynesian, American Indian, Madagascar, Easter Island, Maya, Aztec, and other sites demonstrate this. The native peoples

were not particularly either gentle or nature-loving. But they were more ignorant than we. "Tragic failures become moral sins only if one should have known better from the outset." Our scientific knowledge enables us to know that we are engaging in "self-inflicted ecological disasters." It is "beyond understanding to see modern societies repeating the past's suicidal ecological mismanagement." Diamond is a UCLA physiologist, cultural ecologist, and anthropologist, who spends half the year in New Guinea among tribes that were still living in the Stone Age until fifty years ago. (v5,#1)

Diamond, Jared, *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking, 2005. By the author of *Guns, Germs and Steel*. Hit the NY Times best seller list for several weeks. Examines reasons for social collapse, ranging over several fairly ancient societies, such as Easter Island, the Mayans and Norse Greenland, to contemporary societies such as Haiti, China, and Australia, and to global industrial society. Diamond persistently asks why societies make decisions which turn out to be disastrous, as well as what this means for us today. In the end, he discusses twelve sets of environmental problems now confronting global society, where the failure to resolve any one of which will likely lead down the road of global social collapse. "No cure is even under serious discussion for these problems, which will only get worse" (p. 500). Quite a goad to further action. (Thanks to Andrew McLaughlin.)

Diamond, Jared, *Collapse: How Societies Choose to Fail or Succeed*. Reviewed by Udo E. Simonis, *Environmental Values* 16(2007):133-135.

Diamond, Jared. "Playing God at the Zoo." *Discover*, March 1995, pp. 79-85. Should we feed live lambs to tigers? When zoo directors put the interests of animals first, they find themselves facing thorny moral questions. Diamond is a UCLA physiologist, cultural ecologist, and anthropologist. (v6,#1)

Dias De Oliveira, ME; Vaughan, BE; Rykiel, EJ, "Ethanol as Fuel: Energy, Carbon Dioxide Balances, and Ecological Footprint," *BioScience* 55 (no. 7, July 2005): 593-602. The major contributor to global warming is considered to be the high levels of greenhouse gas emissions, especially carbon dioxide (CO₂), caused by the burning of fossil fuel. Thus, to mitigate CO₂ emissions, renewable energy sources such as ethanol have been seen as a promising alternative to fossil fuel consumption. Brazil was the world's first nation to run a large-scale program for using ethanol as fuel. Eventually, the United States also developed large-scale production of ethanol. In this study, we compare the benefits and environmental impacts of ethanol fuel, in Brazil and in the United States, using the ecological footprint tool developed by Wackernagel and Rees.

Diaz, Nancy and Dean Apostol, Forest Landscape Analysis and Design. USDA Forest Service, Pacific Northwest Region. R6 Eco-TP-043-92. USGPO 1993-583-588. A process for developing and implementing land management objectives for landscape patterns. Landscapes as ecological systems; landscape analysis/design and the management process. This book is getting considerable attention in the U.S. Forest Service. Diaz is an ecologist, Mt. Hood and Gifford Pinchot National Forests. Apostol is a landscape architect, Mt. Hood National Forest.

Dibble, AC and Rees, CA, "Does the Lack of Reference Ecosystems Limit Our Science? A Case Study in Nonnative Invasive Plants as Forest Fuels," *Journal of Forestry* 103 (no. 7, Oct/Nov 2005): 329-338.

Dicastrì (Di Castri), Francesco, Younos, Talal, eds. Biodiversity, Science and Development: Towards a New Partnership. New York: Oxford University Press, 1996. 668pp. \$95. An anthology of 61 papers by international experts. A major review and synthesis of current thinking on biodiversity for scientists and policy-makers. (v8,#1)

Dick, Ronald E., "Subsistence Economics: Freedom from the Marketplace", Society and Natural Resources, 9(No.1, 1996):19- . (v7,#1)

Dickens, Peter, Reconstructing Nature: Alienation, Emancipation and the Division of Labour. London: Routledge, 1996. 217 pages. £14 paper. Social constructivism takes many forms. From a Marxist, and hence materialist, point of view the wholesale deconstructivism favored by "postmoderns" and discourse analysts goes too far. Dickens wants to correct an environmentalism he regards as "characterised by a profound failure to understand their relations with nature" (p. 149). He also rejects the idea that nature is "a purely social construction with no references to real and material processes 'out there.'" Dickens targets what he refers to as "strong" social constructivism. He wants this label to apply equally to both those explicitly constructivist critics of environmental discourses who regard "nature" as simply a product of human social practices and those environmentalists who entirely reject this view and wish to retain (and in his terms reify) a pure nature untouched by human hands. The former he regards as idealists in the sense that they come to regard "nature" as an infinitely plastic creation of the human mind. The latter are idealists in the different sense of being unwitting dupes who accept a romanticized picture of the human/natural relations without recognizing it for the social construction it really is. Dickens is in urban studies and social policy at the University of Sussex, UK. Reviewed by Mick Smith, "What's Natural? The Socio-political (De)construction of Nature," Environmental Politics 6 (no. 2, Summer 1997):164-168. (v9,#1)

Dickens, Peter, Society and Nature: Towards a Green Social Theory. Philadelphia: Temple University Press, 1992. 203 pp. Paper and cloth. Dickens starts with Marx and the claim that work is the main source of human separation from nature, then builds on Anthony Giddens' social theory, and critiques deep green and deep ecology movements. Dickens is in urban studies and social policy at the University of Sussex, UK. (v3,#4)

Dickens, Peter. Reconstructing Nature: Alienation, Emancipation and the Division of Labour. Review by Nick Hunt, Environmental Values 7(1998):247.

Dickinson, James, "In Its Place: Site and Meaning in Richard Serra's Public Sculpture," Philosophy and Geography 3 (1998): 45-72. Dickinson is professor of sociology at Rider University. (P&G)

Dicks, Lynn, "Too Close for Comfort," New Scientist, 18 October 2003. The effects of inbreeding are more insidious than anyone expected, with implications for the conservation of species with limited genetic pools. "We should change the way we try to protect endangered species and stop wasting time trying to rehabilitate sick [inbred] animals who will only fall ill again." (v.14, #4)

Dickson, Barnabas. "The Ethicist Conception of Environmental Problems." Environmental Values 9(2000):127-152. Abstract: Ethicist assumptions about the causes and solutions of environmental problems are widely held within environmental philosophy. It is typically assumed that an important cause of problems are the attitudes towards the natural environment held by individuals and that problems can be solved by getting people to adopt a more ethical orientation towards the environment. This article analyses and criticises these claims. Both the highly mediated nature of the relationship between individuals and the natural environment and the pervasive pressure on firms in market economies to reduce their costs provide reasons to question the ethicist assumptions. KEYWORDS: Ethicism, environmental ethics, environmental problems, solutions. Barnabas Dickson resides at Holmsgarth, Blackheath, Wenhaston, Suffolk IP19 9ET, UK. (EV)

Dickson, Barnabas. "The Precautionary Principle in CITES: A Critical Assessment." Natural Resources Journal 39(No. 2, Spring 1999):211- . (v10,#4)

Diehm, Christian, "Identification with Nature: What it Is and Why it Matters," Ethics and the Environment 12(no. 2, 2007):1-22. This essay examines the content and significance of the notion of "identification" as it appears in the works of theorists of deep ecology. It starts with the most frequently

expressed conception of identification-termed "identification-as-belonging" -and distinguishes several different variants of it. After reviewing two criticisms of deep ecology that appear to target this notion, it is argued that there is a second, less frequently noticed type of identification that appears primarily in the work of Arne Naess-"identification-as-kinship." Following this analysis, it is suggested that identification-as-kinship may be less vulnerable to the criticisms that are aimed at identification-as-belonging. Diehm is in philosophy, University of Wisconsin, Stevens Point.

Diehm, Christian, "Arne Naess, Val Plumwood, and deep ecological subjectivity: A contribution to the 'deep ecology ecofeminism debate'," Ethics and the Environment 7(no. 1, 2002):24-38. (E&E)

Diehm, Christian. "Arne Naess and the Task of Gestalt Ontology." Environmental Ethics 28(2006):21-35. While much of Arne Naess's ecosophy underscores the importance of understanding one's ecological Self, his analyses of gestaltism are significant in that they center less on questions of the self than on questions of nature and what is other-than-human. Rather than the realization of a more expansive Self, gestalt ontology calls for a "gestalt shift" in our thinking about nature, one that allows for its intrinsic value to emerge clearly. Taking such a gestalt shift as a central task enables Naess to avoid some common criticisms of his view. (EE)

Diekemper, Tracy A. "Abrogating Treaty Rights Under the Dion Test: Upholding Traditional Notions that Indian Treaties Are the Supreme Law of the Land." Journal of Environmental Law and Litigation 10, no.2 (1995): 473. (v7, #3)

Diekmann, Andreas and Franzen, Axel, "The Wealth of Nations and Environmental Concern." Environment and Behavior 31(no.4, July 1999):540- . (v.11,#1)

Diemer, Joel A. and Alvarez, Rossana C., "Sustainable Community, Sustainable Forestry: A Participatory Model," Journal of Forestry 93(no. 11, Nov. 1995):10- . (v6,#4)

Dieterle, J. M. "Unnecessary Suffering." Environmental Ethics 30(2008):51-67. The philosophical literature on the ethical treatment of animals is largely divided between two distinct kinds of approaches: (1) the rights-based approach; and (2) the utilitarian approach. A third approach to the debate is possible. The general moral principle "It is wrong to cause unnecessary pain or suffering" is sufficient to render many human activities involving nonhuman animals morally wrong, provided an appropriate account of unnecessary is developed to give the principle its force. The moral principle can be easily applied to several general areas of human activity: food, research, and entertainment. (EE)

Dietrich, Gabriele, "The World as the Body of God: Feminist Perspectives on Ecology and Social Justice," Ecotheology No 5/6 (Jul 98 / Jan 99):25-50.

Dietz, JM; Aviram, R; Bickford, S; Douthwaite, K; Goodstine, A; Izursa, JL; Kavanaugh, S; MacCarthy, K; Oherron, M; Parker, K, "Defining Leadership in Conservation: a View from the Top". Conservation Biology 18 (no.1, 2004): 274-278.

Dietz, Thomas, Ostrom, Elinor, and Stern, Paul C., "The Struggle to Govern the Commons," Science 302(12 December 2003):1907-1912. Governing the commons, a dilemma first posed by Garrett Hardin in 1968 is still an unsolved problem. Human institutions sometimes succeed locally; but often fail, especially when rapid change occurs. There is no satisfactory global governance, although some international institutions hold promise. Much needed is "adaptive governance in complex systems." "Sound science is necessary for commons governance, but not sufficient. Too many strategies for governance are designed in capital cities or by donor agencies in ignorance of the state of the science and local conditions. The results are often tragic, but at least these tragedies are local. As the human footprint

on the Earth enlarges, humanity is challenged to develop and deploy understanding of large scale commons governance quickly enough to avoid the large-scale tragedies that will otherwise ensue" (p. 1910). Dietz is in environmental science and policy, Michigan State University. Ostrom is in institutions, population, and environmental change, Indiana University. Stern is in social and behavior sciences, The National Academies, Washington.

Diffenderfer, Mark, Birch, Dean. "Bioregionalism: A Comparative Study of the Adirondacks and the Sierra Nevada," Society & Natural Resources 10(1997):3.

Diffey, T. J., "Natural Beauty without Metaphysics," in Salim Kemal and Ivan Gaskell, eds. Landscape, Natural Beauty and the Arts (Cambridge: Cambridge University Press, 1993), pp. 43-64. Diffey is at the University of Sussex, U.K. (v7,#2)

Dijk, T., "Scenarios of Central European Land Fragmentation," Land Use Policy 20(no. 2, 2003): 149-158. (v 14, #3)

Dileva (Di Leva), Charles, "Developing Countries and the Global Nature of Environmental Issues Demand Responsible Involvement of the International Community," Journal of Environmental Law & Practice 7 (No. 3, 2000 Winter): 27- . (v.11,#4)

Dill, Starla K., "Animal Habitats in Harm's Way: Sweet Home Chapter of Communities for a Great Oregon v. Babbitt," Environmental Law 25 no. 2 (1995): 513- . Dill criticizes the majority opinion in Sweet Home III. She argues that, pursuant to the Chevron doctrine, the majority should have held the Fish and Wildlife Service interpretation of harm as habitat modification a reasonable interpretation of the Endangered Species Act and concludes that the Supreme Court should reverse Sweet Home III and declare the Fish and Wildlife Service regulation valid. (v6,#2)

Dillin, John, "Whistle-Blowers on Safety Risks Betrayed by Nuclear Agency," The Christian Science Monitor 86 (29 July 1994):1, 4. NRC admits telling TVA utility the names of its employees who warned of problems. (v5,#3)

Dillingham, Maud. "Wanted: Tons of Sand to Fill Miami Beaches." The Christian Science Monitor, vol. 89, 7 Jan. 1997, p. 12.

Dillingham, Maud. "The 'Ansel Adams of the Everglades.'" The Christian Science Monitor, vol. 88, 22 Nov. 1996, p. 10-11.

Dillingham, Terese, "Playing Reindeer Games: Native Alaskans and the Federal Trust Doctrine." Boston College Environmental Affairs Law Review 26(No. 3, Spring 1999):649- . The Reindeer Industry Act of 1937 gave native Alaskans a monopoly over reindeer, helping native Alaskans to become self-sufficient. But a 1997 court decision has opened the reindeer industry to non-natives, and this threatens the U. S. federal governments obligation to the native Alaskans. (v10,#4)

Dillinham, Maud. "Will a Weevil From Down Under Find Melaleuca Finger-Lickin' Good?" The Christian Science Monitor, vol. 88, 29 Oct. 1996, p. 13.

Dillon, John, "Tiny Mussel Endangers a Giant Nuclear Complex," The Christian Science Monitor 86 (20 July 1994): 1, 6. (v5,#3)

Dilsaver, Larry M. and Craig E. Colton, eds., The American Environment: Historical Geographic Interpretation of Impact and Policy. Lanham, MD: Rowman and Littlefield, 1992. 288 pages. \$ 22.95

paper, \$ 60.00 cloth. The authors regret that historical geographers have over recent decades left the study of nature-culture interactions to others, such as environmental historians and philosophers, and hope to reaffirm the importance of geography in this discussion. There is a long but thinly attended past scholarship here, and a rapidly accelerating research agenda. Nine authors. Dilsaver is in geography at the University of South Alabama, Colton is in history and geography at Sangamon State University, Springfield, IL. (v3,#4)

Dimendberg, Edward, "Henri Lefebvre on Abstract Space," Philosophy and Geography 2 (1998):17-47. Dimendberg is a philosophy and editor at The University of California Press. (P&G)

DiMento, Joseph F.C., and Pamela M. Doughman, eds. *Climate Change: What It Means for Us, Our Children, and Our Grandchildren*. Cambridge, MA: The MIT Press, 2007. Contents include: (1) "Introduction: Making Climate Change Understandable" by Joseph F.C. DiMento and Pamela M. Doughman, (2) "A Primer on Global Climate Change and Its Likely Impacts" by John Abatzoglou, Joseph F.C. DiMento, Pamela M. Doughman, and Stefano Nespore, (3) "Climate-Change Effects: Global and Local Views" by John Abatzoglou, Joseph F.C. DiMento, Pamela M. Doughman, and Stefano Nespore, (4) "The Scientific Consensus on Climate Change: How Do We Know We're Not Wrong?" by Naomi Oreskes, (5) "Climate Change: How the World Is Responding" by Joseph F.C. DiMento and Pamela M. Doughman, (6) "Climate Change as News: Challenges in Communicating Environmental Science" by Andrew C. Revkin, (7) "Climate Change and Human Security" by Richard A. Matthew, and (8) "Climate Change: What It Means for Us, Our Children, and Our Grandchildren" by Joseph F.C. DiMento and Pamela M. Doughman.

Dimitrov, R. S., "Water, Conflict, and Security: A Conceptual Minefield," Society and Natural Resources 15(no.8, 2002): 677-92. (v.13,#4)

Dimitrov, RS, "Confronting Nonregimes: Science and International Coral Reef Policy," Journal of Environment and Development 11(no.1, 2002):53-78. (v.13, #3)

Dimmick, Walter Wheaton, Michael J. Ghedotti, and Pennock, David S., "The Importance of Systematic Biology in Defining Units of Conservation." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 3, June 1999):653- . (v10,#4)

Dinar, S; Dinar, A, "Recent Developments in the Literature on Conflict Negotiation and Cooperation over Shared International Fresh Waters," Natural Resources Journal 43(no.4, 2003):1217-1286. (v. 15, # 3)

Dinerstein, David, Olson, Douglas J., Graham, Avis L., Webster, Steven A., Marnie P. Primm, Bookbinder, and George Ledec, A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean. Reviewed by Eldon Kenworthy, Environmental Ethics 20(1998):325-28.

Dinerstein, Eric, et al., A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean. Washington, DC: World Bank and World Wildlife Fund, 1995. 129 pages. Reviewed by Eldon Kenworthy in Environmental Ethics 20(1998):325-328. (v.9,#3)

Ding, C., "Land Policy Reform In China: Assessment and Prospects," Land Use Policy 20(no. 2, 2003): 109-120. (v 14, #3)

diNorcia (di Norcia), Vincent, "Environmental and Social Performance," Journal of Business Ethics 15(1996):773-784. If an organization cares for nature it will so act as not to harm the ecosystems it affects, or when it cannot so act at the moment it will commit itself to such action over time. Credible commitment requires an action plan with specified targets determining the best ecologically beneficent

pollution abatement and ecosystem improvements. Four direct environmental performance measures are analyzed: pollutant loads, pollutant concentrations, ecosystem impacts, and ecosystem restoration. A model of ecologically beneficent performance that is microscopic in detail and regional in scope. Economics and ecology should be mutually reinforcing, just as sustainable development suggests. di Norcia is in environmental management, University of Sudbury, Sudbury, Ontario. (v.10,#2)

Dinsdale, E and Mark Fenton, D, "Assessing Coral Reef Condition: Eliciting Community Meanings," Society and Natural Resources 19 (no. 3, March 2006): 239-258.

Dion, Michel. "A Typology of Corporate Environmental Policies." Environmental Ethics 20(1998):151-62. Although many small businesses and a great number of large enterprises have environmental policies, the contents of such policies vary widely according to their emphases either on technical rationality and technocentrism/technocracy or on ecological rationality and ecocentrism/ecocracy. I present them in four categories: with regard to strong anthropocentrism, (1) the neo-technocratic enterprise and (2) the techno-environmentalist enterprise; and with regard to weak anthropocentrism, (3) the pseudo-environmentalist enterprise and (4) the quasi-environmentalist enterprise. Such a typology can be useful for business managers to write and/or review their environmental policies. However, it only reflects the "ideal values" of the enterprise, not the corporate story with regard to environmental issues. Dion is in theology and philosophy, Université de Sherbrooke, Sherbrooke, Quebec. (EE)

DirksEdmunds (Dirks-Edmunds), Jane Claire, Not Just Trees: The Legacy of a Douglas-fir Forest. Pullman, WA: Washington State University Press, 1999. An ecologist who has loved the Oregon Coast Range for more than sixty years recalls the forests and their changes, lamenting all that we lose when we destroy old-growth forests. Dirks-Edmunds served for more than thirty years as professor of biology, Linfield College, McMinnville, OR. (v.10,#1)

Disco, C, "Remaking `Nature': The Ecological Turn in Dutch Water Management," Science Technology and Human Values 27(no.2, 2002):206-235. (v.13, #3)

DiSilvestro, Roger L., Reclaiming the Last Wild Places: A New Agenda for Biodiversity. New York: John Wiley, 1993. (v7,#1)

DiSilvestro (Di Silvestro), Roger. "Steelhead Trout: Factors in Protection," Bioscience 47(no.7 1997):409. The federal government may list this salmon species this summer, amid a cauldron of conflicting concerns. (v8,#3)

DiSilvestro, Roger L., Reclaiming the Last Wild Places: A New Agenda for Biodiversity. New York: John Wiley & Sons, 1993. 266 pages. "This is a book about boundaries. ... Territorial boundaries are ancient; they are artifacts dating from a primordial world. They are, in essence, established for the exploitation of the earth. ... Only in the past century has humanity begun to set the protection of wildlands as a broad social goal, creating national parks, national forests, wildlife refuges, even protected wilderness areas. This is something truly new under the sun, and every protected wild place is a monument to humanity's uniqueness. The greatest qualitative difference between us and nonhuman animals is not that we can change and modify our environment. Practically every living creature does that, from the AIDS virus that destroys its own habitat, to herds of hoofed animals that trim grasslands, to chimpanzees that make spoons from leaves, to birds that build nests, to ants and termites living in teeming arthropod cities. But we are the first living things, as far as we know, to make a choice about the extent to which we will apply our abilities to influence the environment. We not only can do, but we can choose not to do. Thus, what is unique about the boundaries we place around parks and other sanctuaries is that these boundaries are created to protect a region from our own actions. ... No longer can we think of

ourselves as masters of the natural world. Rather, we are partners with it" (pp. xiii-xv). The final chapter is "Ethics, Economics, and Ecosystems."

Disinger, John F. Review of Gregory A. Smith. Education and the Environment: Learning to Live with Limits. (Albany: State University of New York Press, 1992). (EE)

Dix, Mary Ellen, Akkuzu, Erol, Foster, John E. "Riparian Refugia in Agroforestry Systems," Journal of Forestry 95(no.8, 1997):38. (v8,#3)

Dixon, Ben, "Darwinism and Human Dignity," *Environmental Values* 16(2007): 23-42. James Rachels argued against the possibility of finding some moral capacity in humans that confers upon them a unique dignity. His argument contends that Darwinism challenges such attempts, because Darwinism predicts that any morally valuable capacity able to bestow a unique dignity is likely present to a degree within both humans and non-human animals alike. I make the case, however, that some of Darwin's own thoughts regarding the nature of conscience provide a springboard for criticising Rachels's claim here. Using Darwin's thoughts regarding conscience, I begin the project of grounding a revised account of human dignity in the human tendency to enshrine products of conscience within institutions. Specifically, I argue that this new account of human dignity is partly contingent upon humans creating institutions morally respectful of the values present within non-human nature. Dixon is in philosophy, University of Maryland, Baltimore County, Baltimore.

Dixon, Beth A., "The Feminist Connection between Women and Animals," Environmental Ethics 18(1996):181-194. Comparison of similarities between women and animals does not necessarily show that animals are oppressed, much less that they are oppressed by patriarchy. Moreover, by seeking to establish symbolic connections, ecofeminists run the risk of essentializing women as emotional and bodily and closer to nature than men. Feminists have little to gain by concentrating exclusively on how the concepts of woman and animal overlap. Likewise, there is little to be gained for animal liberation by comparing women and animals in theory and practice. Feminists have obligations to liberate animals to the degree that they have obligations to liberate any oppressed population, but not because there are either theoretical, practical, or symbolic connections between women and animals. Dixon is in philosophy, State University of New York at Plattsburgh. (EE)

Dixon, Beth, "Animal Emotions," Ethics and the Environment 6(no. 2, 2001):22-30. Recent work in the area of ethics and animals suggests that it is philosophically legitimate to ascribe emotions to non-human animals. Furthermore, it is sometimes argued that emotionality is a morally relevant psychological state shared by humans and nonhumans. What is missing from the philosophical literature that makes reference to emotions in non-human animals is an attempt to clarify and defend some particular account of the nature of emotion, and the role that emotions play in a characterization of human nature. I argue in this paper that some analyses of emotion are more credible than others. Because this is so, the thesis that humans and nonhumans share emotions may well be a more difficult case to make than has been recognized thus far. Dixon is in philosophy, State University of New York, Plattsburgh. (E&E)

Dixon, Beth A. "On Women and Animals: A Reply to Gruen and Gaard." Environmental Ethics 20(1998):221-22.

Dixon, Dougal, Man after Man: An Anthropology of the Future. New York: St. Martin's Press, 1990. Nature evolved man in the past, but, in the future, man will design himself. Speculations on the human forms from 200 years hence to 5 million years hence.

Dixon, Martin, Review of J. Cameron, J. Werksman, P. Roderick, Improving Compliance with International Environmental Law. Environmental Values 7:(1998):376.

Dixon, Thomas-Homer. "Strategies for Studying Causation in Complex Ecological-Political Systems." The Journal of Environment and Development 5, no.2 (1996): 132. (v7, #3)

Dizard, Jan E., Going Wild: Hunting, Animal Rights, and the Contested Meaning of Nature. Amherst: University of Massachusetts Press, 1994. 182 pages. \$ 12.95 paper. Boston's water agency, the Metropolitan District Commission, owns and operates the Quabbin Reservoir and its watershed of 55,000 acres. The area is a preserve, and wildlife flourishes there. Deer flourish, welcomed for decades, but then overpopulate and begin to degrade the forest. The Commission opens the area to hunting, under controversial debate that moves across most of the key issues in environmental ethics: nature undisturbed by humans and the proper role of human management, whether nature can take care of itself in a reserve of this kind, whether hunting is an acceptable management tool, conservation and preservation. Chapter titles: What's Wild; Let Nature Be; Taking Care of Nature; Sport, Management or Murder, Ambiguity and Ambivalence in Modern Hunting; Nature's Rights and Human Responsibility; Constructing Nature. Dizard is in sociology and American studies at Amherst College. (v6,#4)

Dizard, Jan E. Going Wild: Hunting, Animal Rights, and the Contested Meaning of Nature. Reviewed by H. Sterling Burnett. Environmental Ethics 18(1996):105-109. (EE)

diZerega, Gus, "Social Ecology, Deep Ecology, and Liberalism," Critical Review 6 (nos. 2-3, 1992):305-370. Extensive critique of Murray Bookchin, representative of left environmentalism, from the author's perspective, which he calls "evolutionary liberalism." This involves an appreciative assessment of deep ecology. Bookchin attempts a social ecology that unites the leftist critique of liberal democratic society with contemporary environmental concerns. His work is undermined, however, in part by the dubious comparisons he makes between market systems and ecosystems, in particular by his failure to understand how these systems operate by impersonal principles of self-organization, combining both cooperation and competition. But the market system, whatever its merits, does promote an instrumental human relation to nature. Free market environmentalism cannot incorporate an appreciation for creatures that have intrinsic value but no instrumental value for human beings, nor for the intrinsic values of things that do have such instrumental value. Deep ecologists are therefore right to criticize the unwillingness of market societies to appreciate the intrinsic value of nature. This can be addressed with an evolutionary liberalism. Here property rights, for example, would be taken up with a sense of stewardship of values in the natural world. The deep ecological principle that should not be compromised is that property rights should reflect not just efficiency in meeting human desires, but also the value of the nonhuman world. We can achieve a harmony between humans and the natural world under the guidance of the rules of self-organizing systems. diZerega is with the Institute of Government Studies, University of California, Berkeley. (v5,#4)

diZerega, Gus. "Empathy, Society, Nature, and the Relational Self: Deep Ecology and Liberal Modernity." Social Theory and Practice 21 (no. 2, Summer 1995):239-269. (v6,#4)

DiZerega, Gus. "Individuality, Human and Natural Communities, and the Foundations of Ethics." Environmental Ethics 17(1995):23-37. An ecologically informed view of ethics focuses upon individuals considered in relation to the communities within which they live. Such a view holds that ethics is rooted in the fundamental relationships characterizing particular types of communities. From this perspective, the different communities of the polity, family, and ecosystem superficially appear to have very different ethical systems. In fact, however, all are characterized by respect for community members. Respect is the fundamental ethical insight. This view suggests a way of harmonizing modern society's relationship with the natural world and of bringing ethical theory into closer harmony with humankind's most timeless insights. Dierega is with the Foundation for Research for Economics and the Environment, Seattle. (EE)

Doak, Daniel, "Spotted Owls and Old Growth Forest Logging in the Pacific Northwest," Conservation Biology 3(4) (1989):389-396. (v1,#3)

Dobb, Edwin, "Reality Check: The Debate Behind the Lens," Audubon 100 (no. 1, January-February 1998):44-51, 98-99. Ethical and related issues in wildlife photography. Our ability to separate photographic fact from fiction is a thing of the past. What hope remains for faithful, credible images of wildlife? New photographic technologies have provoked a debate over the ethics of digital manipulation, the use of captive or posed animals, the harassment of wildlife, and various artifices that stretch the truth. (v.8,#4)

Dobbins, Jeffrey C. "The Pain and Suffering of Environmental Loss: Using Contingent Valuation to Estimate Nonuse Damages." Duke Law Journal 43 (1994): 879-946. The various economic, philosophical, and legal arguments posed against the validity of contingent valuation will continue for some time to come. Despite uncertainties in contingent valuation methodologies, however, agencies and courts should permit contingent valuation to serve as one piece of evidence in the effort properly to assess the value of natural resource damages. The consistently positive response to contingent valuation studies and our own experience indicate that many of us do place a value on the mere existence of natural places and organisms. The difficulties involved in translating this value into monetary terms do not justify the complete rejection of a method that has the potential for reporting useful information. Although a significant body of criticism regarding the mechanics of contingent valuation methodology has been developed, caution in design and administration can resolve most of the difficulties. To the extent that even well-conducted contingent valuation studies remain doubtful, they involve questions regarding the appropriateness of inserting these sorts of cash values into the litigation and policymaking process. The decision then is a political, moral, and legal one. Are existence values the sorts of things that we consider an important part of natural resource damage recovery? Do we want to reduce such values to cash as a common denominator or does ethics reject common denominators as a vehicle by which values are compromised. (v6,#1)

Dobbyn, Paula. "Hunters Target Bears to Feed Asian Appetite." The Christian Science Monitor 89.93 (9 April 1997): 3.

Dobkowski, Michael N., and Wallimann, Isidor, eds. The Coming Age of Scarcity: Preventing Mass Death and Genocide. Syracuse, NY: Syracuse University Press, 1997. 384 pages. \$ 35.00. Fourteen articles. If present trends persist, such as population growth, loss of land resources, increased energy consumption, and limited energy resources, then the world's population cannot be sustained. The result will be ecological catastrophes, scarcity, social conflicts, and threats to human life, including the potential for mass death. (v.8,#4)

Dobkowski, Michael N., and Wallimann, Isidor, eds., The Coming Age of Scarcity: Preventing Mass Death and Genocide in the Twenty-first Century. Syracuse, NY: Syracuse University Press, 1998. 14 contributions. 350 pages. Paper, \$ 35.00. Ominous, though not fatalistic. All the contributors agree that present-day population growth, land resources, energy consumption, and per capita consumption cannot be sustained without leading to catastrophes. Includes Cobb, John B., Jr., "The Threat to the Underclass"; Lewis, Chris H., "The Paradox of Global Development and the Necessary Collapse of Modern Industrial Civilization"; Abernethy, Virginia, "Defining the New American Community: A Slide to Tribalism," and many others. Part III is case studies of scarcity and mass death: Rwanda, Bosnia, Somalia, and Haiti. Dobkowski is in religious studies at Hobart and William Smith Colleges. Wallimann is in sociology at the School of Social Work in Basel, Switzerland. (v9,#1)

Dobson, A, "Review of: Ben A. Minteer and Bob Pepperman Taylor (eds.), Democracy and the Claims of Nature: Critical Perspectives for a New Century," Environmental Politics 11(no.4, 2002): 150.

Dobson, A, "Changing Places? Humans and Other Animals," Environmental Politics 12(no.3, 2003):150-154. (v.14, #4)

Dobson, A., "Review of: Barry Holden, Democracy and Global Warming," Environmental Politics 12(no. 2, 2003): 159.

Dobson, A., J. P. Rodriguez, W. M. Roberts, and D. S. Wilcove, "Geographic Distribution of Endangered Species in the United States," Science 276 (January 24, 1997):550- . Species listed by the federal government are distributed in regional "hot spots." "The amount of land that needs to be managed to protect currently endangered and threatened species in the United States is a relatively small proportion of the land mass." With several replies in Science 276 (April 25) objecting that the "hot spots" approach is biased and does not adequately represent desirable conservation priorities, including one letter by all three editors of Conservation Biology (David Ehrenfeld, founding editor; Reed F. Noss, editor; and Gary K. Meffe, incoming editor) that the report is likely to be misused if protection is granted to these "hot spots," and development allowed elsewhere without attention to conservation priorities on the landscape as a whole. (v8,#2)

Dobson, Andrew P., and Rodriguez, Jon Paul, "Conservation Biology, Discipline Of" Encyclopedia of Biodiversity 1: 855-864. Conservation biology is one of the fastest-growing fields of modern scientific research. It is an applied discipline that integrates principles of natural and social sciences with the objective of achieving the long-term persistence of biodiversity on Earth. This article reviews current trends in conservation biology, using a hierarchical organization to present the principle domains of research. These domains range from the largest level of ecosystems and communities, to the intermediate level of species and populations, and down to the smallest level, that of the individual and genes. (v.11,#4)

Dobson, Andrew, Review of Atkinson, Adrian, Principles of Political Ecology. Environmental Values Vol.1 No.1(1992):86.

Dobson, Andrew, Citizenship and the Environment. Oxford: Oxford University Press, 2003. Reviewed by Marius de Geus, Environmental Values 13(2004):552-554.

Dobson, Andrew P., Carper, E. Robin. "Infectious Diseases and Human Population History," Bioscience 46(no.2, Feb.1996):115. Throughout history the establishment of disease has been a side effect of the growth of civilization. (v7,#1)

Dobson, Andrew, Green Delusions: An Environmentalist Critique of Radical Environmentalism. Reviewed in Environmental Values 3(1994):81-82. (EV)

Dobson, Andrew, Review of Anderson, Terry, and Leal, Donald, Enviro-Capitalists: Doing Good While Doing Well. Environmental Values 7:(1998):488.

Dobson, Andrew, Review of Martin O'Connor, Is Capitalism Sustainable?, Environmental Values 7:(1998):488.

Dobson, Andrew, "Drei Konzepte oekologischer Nachhaltigkeit" (article in german). Three conceptions of environmental sustainability. Natur und Kultur, Vol. 1/2, 2000, pp. 62-85. Abstract: The concept of environmental sustainability is usually approached either definitionally or discursively. Both these approaches have their limitations. Better is an analytical strategy revolving around the distillation from the literature of the questions to which any theory of environmental sustainability would have to have an answer. This produces a framework for analysis that can be transformed into a typology by grouping the

answers to those questions into "conceptions of sustainability". Two "diagnostic packages" are proposed for determining the causes of, and solutions to, unsustainability. (v.11,#4)

Dobson, Andrew, ed. Fairness and Futurity: Essays on Environmental Sustainability and Social Justice. Reviewed by Avner de-Shalit. Environmental Ethics 22(2000):435-438.

Dobson, Andrew, ed., The Green Reader: Essays Toward a Sustainable Society. London, André Deutsch, 1991; San Francisco: Mercury House, 1991. 280 pages. Dozens of extracts and short essays from environmentalists. Sections: The Green Critique; The Green Society; Green Economics; Green Political Strategies; Green Philosophy. The Green Philosophy section has selections from Tom Regan, Aldo Leopold, Arne Naess, Richard and Val Routley, Carolyn Merchant, and others. (v4,#3)

Dobson, Andrew, "Genetic Engineering and Environmental Ethics," Cambridge Quarterly of Healthcare Ethics (Cambridge University Press) 6 (1997):205-221. We can splice genes, but ought we to do so. Even to decide to do so some of the time assumes ethical decisions. Relevant factors include human welfare, but also the integrity (perhaps rights) of animals and plants. The really novel dimensions of environmental ethics, however, involve duties toward species, ecosystems, and even Earth. Genetic engineering (transgenics) differs from genetic selection (as in agriculture). Genetic engineering represents a quantum leap in terms of advances in manipulation that make possible practices of which we have no ethical experience. Genetic engineering could be the ultimate "technological fix". That we seek to patent the results of genetic engineering shows our sense of absolute ownership. Genetic engineering interferes with the "telos" of animal and plant life. One cannot treat the transgenic organism as the species from which it has been engineered. So far as genetic engineering results in a re-designed biosphere, it represents dissatisfaction with Earth as our home planet. Environmental ethics suggests establishing limits in unusual places, places that go to the heart both of genetic engineering and our relationship with the natural world. Dobson is in politics at Keele University, England. (v.13, #3)

Dobson, Andrew and Paul Lucardie, eds., The Politics of Nature: Explorations in Green Political Theory. London and New York: Routledge, 1993. 240 pages. Twelve essays, including Wouter Achterberg (Philosophy, University of Amsterdam), "Can Liberal Democracy Survive the Environmental Crisis? Sustainability, Liberal Neutrality and Overlapping Consensus"; and Paul Lucardie, "Why Would Egocentrists Become Ecocentrists?" Dobson is in politics at the University of Keele. Lucardie is Research Associate at the Documentation Center of Dutch Political Parties, University of Groningen. (v4,#3)

Dobson, Andrew, "Genetic Engineering and Environmental Ethics," Cambridge Quarterly of Healthcare Ethics (Cambridge University Press) 6(1997):205-221. Dobson is in politics at Keele University, England. (v.13,#2)

Dobson, Andrew, Justice and the Environment: Conceptions of Environmental Sustainability and Theories of Distributive Justice. Oxford: Oxford University Press, 1998. Dobson is in politics at Keele University. (v.12,#4)

Dobson, Andrew, Conservation and Biodiversity. San Francisco: W.H. Freeman, 1995. 256 pages. \$ 32.00. A broad overview of the scientific issues in preserving biodiversity. (v8,#2)

Dobson, Andrew, Citizenship and the Environment. New York: Oxford University Press, 2004. Ecological citizenship cannot be fully articulated in terms of the two great traditions of citizenship--liberal and civic republican. Dobson develops a "post-cosmopolitan" theory of citizenship and argues that ecological citizenship is an example and an inflection of it. Ecological citizenship focuses on duties as well as rights, and these duties are owed non-reciprocally by those individual and communities who occupy unsustainable amounts of ecological space to those who occupy too little.

Dobson, Andrew, "Nature (and Politics)," *Environmental Values* 17(2008):285-301. This paper addresses the leitmotif of Alan Holland's work, which is argued here to be a defence of the existence and worth of nonhuman nature. Definitions of politics have always depended on the idea of nature as a contrasting non-political realm, usually turning on the centrality of speech. Referencing the work of Aristotle, Kant and Bentham, I suggest that the instability of the distinction between the human and the nonhuman means that politics, as 'thing and activity', must itself be unstable. The question of whether there can be a politics without nature is explored through an analysis of the work of Latour, and the conclusion is reached that listening may well be just as important as speaking.

Dobson, Andrew, and Robyn Eckersley, eds. *Political Theory and the Ecological Challenge*. Cambridge: Cambridge University Press, 2006. Contents include: (1) "Conservatism" by Roger Scruton, (2) "Liberalism" by Marcel Wissenburg, (3) "Socialism" by Mary Mellor, (4) "Feminism" by Val Plumwood, (5) "Nationalism" by Avner de-Shalit, (6) "Communitarianism" by Robyn Eckersley, (7) "Cosmopolitanism" by Andrew Linklater, (8) "Democracy" by Terence Ball, (9) "Justice" by James P. Sterba, (10) "The state" by Andrew Hurrell, (11) "Representation" by Michael Saward, (12) "Freedom and rights" by Richard Dagger, (13) "Citizenship" by Andrew Dobson, and (14) "Security" by Daniel Deudney.

Dobson, Andrew. "Biocentrism and Genetic Engineering." *Environmental Values* 4(1995):227-239. I consider the contribution that a biocentric perspective might make to the ethical debate concerning the practice of genetic engineering. I claim that genetic engineering itself raises novel ethical questions, and particularly so when confronted with biocentric sensibilities. I outline the nature of these questions and describe the biocentric basis for them. I suggest that fundamentalist opposition to projects of genetic engineering is unhelpful, but that biocentric claims should now be a feature of ethical consideration. I conclude, though, that while environmental ethicists can contribute powerfully to debates concerning the future of genetic engineering, the ultimate direction it takes is likely to be beyond their control. KEY WORDS: Environmental ethics, biocentrism, genetic, engineering, species. Dobson is in the politics department, Keele University, UK. (EV)

Dobson, Andrew. "Deep Ecology." *Cogito* 3:1 (1989): 41-46. This article begins as an introduction to the basic ideas and problems of deep ecology, but then concludes with the criticism that deep ecology is too concerned with philosophical speculation and contemplation to develop a meaningful political praxis. The lack of political involvement is an important criticism, since deep ecologists often answer their philosophical critics with the claim that deep ecology is a political movement, not a doctrine. Dobson identifies two strands of deep ecology: the search for intrinsic value and the alteration of consciousness, but only the second is generally identified with deep ecology. A reply to Dobson was written by Robin Attfield, "Deep Ecology and Intrinsic Value: A Reply to Andrew Dobson," *Cogito* 4:1 (1990). (Katz, Bibl # 2)

Dobson, Andrew. *Green Political Thought*. Translator: Huan Qingzhi. (Jinan: Shandong University Press, 2005). (in Chinese)

Dobson, Andy P., et al., A. D. Bradshaw, and A.J.M. Baker, "Hopes for the Future: Restoration Ecology and Conservation Biology." *Science* 277(1997):515-522. See under theme issue, *Science*, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Dobson, F. Stephen, Jinping Yu, and Andrew T. Smith, "The Importance of Evaluating Rarity," *Conservation Biology* 9(1995):1648-1651. The first two authors are in zoology and wildlife science at Auburn University, the last in zoology at Arizona State University. (v6,#4)

Dodds, Walter K., "The Commons, Game Theory, and Aspects of Human Nature that May Allow Conservation of Global Resources," Environmental Values 14(2005): 411-425. Fundamental aspects of human use of the environment can be explained by game theory. Game theory explains aggregate behaviour of the human species driven by perceived costs and benefits. In the 'game' of global environmental protection and conservation, the stakes are the living conditions of all species including the human race, and the playing field is our planet. The question is can we control humanity's hitherto endless appetite for resources before we irreparably harm the global ecosystem and cause extinction of even more species? The central problem is that some proportion of the individuals or groups will behave selfishly. The inducement for using more than a fair share, or 'cheating', increases as that resource becomes rarer, thus the benefits of cheating increase. In addition, the total number of people is increasing, so the proportion of cheaters must decrease to even keep total resource use constant. Cost benefit analysis of the effect of regulation and incentives on potential cheaters may provide a rational approach to controlling environmental problems. While it is debatable that environmental values are constant across cultures, communal use of resources seems to follow global rules. Cooperative use and punishment of those who use more than their share appear to be ubiquitous in human societies. Schemes for controlling human impact on the global environment must take into consideration basic behaviours including development of social norms and the positive feedback created because resources become more valuable with increasing rarity leading to more incentive for consumption. Dodds is in biology, Kansas State University, Manhattan, KS. (EV)

Dodds, WK; Gido, K; Whiles, MR; Fritz, KM; Matthews, WJ, "Life on the Edge: The Ecology of Great Plains Prairie Streams", BioScience 54 (no.3, 2004): 205-216(12). Great Plains streams are highly endangered and can serve as model systems for studying disturbance ecology and related issues of resistance and resilience in temperate freshwaters. The future for Great Plains streams is bleak, given the land-use changes and water-use patterns in the region and the large areas required to preserve intact, ecologically functional watersheds.

Doeleman, J. A. "On the Social Rate of Discount: The Case for Macroeconomic Policy." Environmental Ethics 2(1980):45-58. Concern for the rapidly growing scale and intensity of the human exploitation of the environment, in particular the alienation of natural ecosystems, but also resource exhaustion, pollution, and congestion, leads one to wonder about the short time horizons allowed for in decision making. Time preference is dictated by the rate of interest, allowing in practice a horizon often not exceeding several decades. I argue that this is unsatisfactory. Some minimal social rate of discount should not be enforced. Instead, it is more feasible to set absolute environmental standards, thereby introducing quantity constraints on our decision making, within which time preference can be permitted to find its own level. This acknowledges that the myopia of human vision may not be a flaw but rather a biological design which has served us well in evolution. It may, therefore, be better to change the rules by introducing self-imposed collective constraints than to try to change the shortsightedness of people in their day-to-day grass-roots decision making. Doeleman is in the department of economics, University of Newcastle, New South Wales, Australia. (EE)

Doherty, B., Paterson, M., Plows, A., and Wall, D., "The Fuel Protests of 2000: Implications for the Environmental Movement in Britain," Environmental Politics 11(no.2, 2002): 165-73. (v.13,#4)

Doherty, Brian, de Geus, Marius, (eds). Democracy and Green Political Thought. Review by Michael Freeden, Environmental Values 7(1998):251.

Dol, Marcel, Kasanmoentalib, Soermini, Lijmbch, Susanne, Rivas, Esteban, van den Bos, Ruud. Animal Consciousness and Animal Ethics: Perspectives from the Netherlands. Assen: Van Gorcum, 1997. 249 pp. Paperback Dfl. 59.90/ US \$ 33.00. Reviewed by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1998):68-71.

Dol, Marcel, Kasanmoentalib, Soemini, Lijmbach, Susanne, Rivas, Esteban, Bos, Ruud van den, eds. *Animal Consciousness and Animal Ethics: Perspectives from the Netherlands*. Assen, The Netherlands, Van Gorcum Publishers, 1997. 264 pp. \$34. Philosophy and animal consciousness, science and animal consciousness, and ethics and animal consciousness. (v8,#3)

Dol, Marcel, Soemini Kasanmoentalib, Susanne Lijmbch, Esteban Rivas, Ruud van den Bos. *Animal Consciousness and Animal Ethics: Perspectives from the Netherlands*. Review by Hugh Lehman, *Journal of Agricultural and Environmental Ethics* 11(1999):68-71. (JAEE)

Dolan, Coby C. "The National Grasslands and Disappearing Biodiversity: Can the Prairie Dog Save Us From an Ecological Desert." *Environmental Law* 29(no. 1, 1999):213- . Mr. Dolan examines the current condition of the national grasslands and the role the prairie dog may play in the preservation of this disappearing ecosystem. He analyzes the Forest Service's planning process for federally protected grasslands and the inadequacy of the current regulatory structure both to protect species and to allow court review of agency actions. Dolan argues in favor of using the prairie dog as a keystone species because of its unique role in preserving grassland health. (v.11,#1)

Dolan, Kevin, *Ethics, Animals, Science*. Oxford: Blackwell Science, 1999. 287 pages. (EE v.12,#1)

Dolan, Kevin. *Ethics, Animals and Science*. Review by Lantz Miller, *Journal of Agricultural and Environmental Ethics* 10(2001):459-462. (JAEE)

Do»□ga, J. M. & Czartoszewski, J. W. (eds.), *Ochrona Ńrodowiska w filozofii i teologii (Environmental Protection in Philosophy and Theology)*, Warszawa: Wydawnictwo ATK (ATK Press), 1999.

Do»□ga, J. M. & Czartoszewski, J. W. (eds.), *Ochrona Ńrodowiska w filozofii i teologii (Environmental Protection in Philosophy and Theology)*, Warszawa: Wydawnictwo ATK (ATK Press), 1999. (v.13,#1)

Dolezal , Joshua A., "Literary Activism, Social Justice, and the Future of Bioregionalism ," *Ethics and the Environment* 13(no. 1, 2008):1-22. Whereas the political battle between literary activists and industry over the tenets of bioregionalism in the American West has ignored the question of social justice, effectively silencing a sizeable population—the working poor—by creating an economic situation in which labor must choose between two oppressors, mutual aid as championed by Petr Kropotkin offers more potential for reform than the model of political competition has yielded thus far. If literary activists were to extend Jared Diamond's call to social action in *Collapse* by becoming advocates of laborers injured by industrial catastrophes, and if eco-activists were to imagine economic alternatives to the policies they oppose, then bioregionalism could hope to gain more ground as a grassroots movement. Joshua Dolezal is Assistant Professor of English at Central College in Iowa.

Dolins, Francine L., *Attitudes to Animals: Views in Animal Welfare*. New York: Columbia University Press, 1999. Dolins is at Centre College, Kentucky. (v.13,#4)

Dombrowski, Daniel, "Individuals, Species, Ecosystems: A Hartshornian View." *Between the Species* 4 (1988): 3-10. A defense of a metaphysics of individualism applied to animals, species, and the natural world. For a comment on this paper see Eric Katz, "Methodology in Applied Environmental Ethics," same issue, pp. 20-23. (Katz, Bibl # 2)

Dombrowski, Daniel A. Hartshorne and the Metaphysics of Animal Rights. Reviewed in *Environmental Ethics* 11(1989):373-76.

Dombrowski, Daniel A., Not Even a Sparrow Falls: The Philosophy of Stephen R. L. Clark. East Lansing: Michigan State University Press, 2000. Clark, argues Dombrowski, is a brilliant and overlooked philosopher. Clark ranges widely over the philosophy of religion and over the human treatment of animals, as well as social philosophy. A synthesis of both is challenging, especially as Clark is sometimes locally obscure but globally clear. Three parts of the book analyze: (1) God, (2) animals, and (3) polis. Clark's dipolar theism has awesome originality, if also problems. Clark's treatment of animals places them in a theistic metaphysics. True community differs from mere society, the latter is the lair of liberalism. In the formation of true community, Clark returns to religion. Clark will eventually be seen as a philosopher who is very important for our generation, but the furious intensity of some of Clark's polemics as well as the broadness of some of his brush strokes sometimes get in the way of our ability to appreciate his greatness as a thinker. Dombrowski is at Creighton University. (v.13,#2)

Dombrowski, Daniel A. The Philosophy of Vegetarianism. Reviewed in Environmental Ethics 9(1987):273-76.

Dombrowski, Daniel A., "Is the Argument from Marginal Cases Obtuse?," Journal of Applied Philosophy 23 (no.2, May 2006): 223-232 (10).

Dombrowski, Daniel A., "Bears, Zoos, and Wilderness: The Poverty of Social Constructionism," Society and Animals 10(no. 2, 2002):195-202. Dombrowski is in philosophy, Seattle University, WA. Defends Holmes Rolston's realism vs. social construction, using bears in zoos as a case in point. There is a difference between a bear in a zoo and a bear in the wild. This difference legitimates the belief that the former is an attenuated version of the latter. The danger posed by a bear in the wild is not due to an overly active imagination. The experience of sublime beauty (in contrast to mere cuteness) in the presence of a wild bear is only partly of one's own doing. Although our frameworks (theories, zoos, etc.) are social constructs, the real world against which we test and evaluate them is not a social construct. Good zoos are better than bad ones, but naturalistic zoo environments for bears are not nearly natural ones, no matter what social constructionists may say about the matter. Dombrowski is in philosophy, Seattle University, WA.

Dombrowski, Daniel. Review of Corporal Compassion: Animal Ethics and Philosophy of Body. By Ralph Acampora. Environmental Ethics 29(2007):331-334. (EE)

Domosh M.; Duncan N.; Rose G., "Rose, G. 1993: Feminism and geography: the limits of geographical knowledge," Progress in Human Geography 28(no.3, 1 June 2004):363-368(6). (v. 15, # 3)

Domosh, Mona, "Sexing feminist geography," Progress In Human Geography. 23 (No. 3, 1999): 437- . (v.11,#4)

Dompka, Victoria. "Environment and the United Nations World Population Conference." The Journal of Environment and Development 4 (no. 1, 1995): 155-

Domsy, Darren, "Keeping a Place for Meta Ethics: Assessing Elliot's Dismissal of the Subjectivism/Objectivism Debate in Environmental Ethics," Metaphilosophy 35 (5), (October 2004): 675-94. Robert Elliot claims that the meta ethical distinction between subjectivism and objectivism is unimportant in environmental ethics. He argues that because a sufficiently sophisticated subjectivist can accommodate all of the intrinsic value an objectivist can, even in apparently problematic situations where humans either do not exist or do not have the relevant values, and because meta ethical commitments fail to have any normative or motivational impact on rational debate, it makes no difference whether an environmental ethicist is a subjectivist or an objectivist. Elliot's dismissal, however, is unjustified. As it

turns out, objectivists argue differently than subjectivists, are motivated differently than subjectivists, and are able to make a greater range of intrinsic value claims than subjectivists. If Elliot's arguments have any appeal at all, it is only because he blurs the fundamental meta ethical distinction in the first place and defends a subjectivism so objectivist that it is almost unrecognizable as subjectivism. Domsy is visiting assistant professor of philosophy at Auburn University, Alabama.

Domsy, Darren. "The Inadequacy of Callicott's Ecological Communitarianism." Environmental Ethics 28(2006):395-412. J. Baird Callicott defends a communitarian environmental ethic that grounds moral standing in shared kinship and community. This normative theory is unacceptable because it is out of synch with our considered moral judgments as environmental philosophers. Ecological communitarianism excludes in advance entities that would obviously qualify for moral standing, and scuttles itself in the process. (EE)

Domsy, Darren. "Evaluating Callicott's Attack on Stone's Moral Pluralism1," Environmental Values 10(2001):395-415. J. Baird Callicott is well known in environmental philosophy for his attack on Christopher D. Stone's moral pluralism. Although his attack has drawn attention from critics and has been labelled problematic for various reasons, I argue that it fails entirely. Each of Callicott's three distinct criticisms proves to be not only weak on its own terms, but, perhaps surprisingly, as effective against Callicott's own communitarian position as it is against Stone's pluralist one. I show that Callicott's attack is not only wholly ineffective in targeting Stone, but that even if it were so effective it would on every count be just as effective in targeting its own originator. Keywords: J. Baird Callicott, Christopher D. Stone, moral pluralism, communitarianism, ethical monism, environmental ethics. Darren Domsy is in the Department of Philosophy York University, Toronto, Ontario, Can. (EV)

Donahue, Amy K., "All-Risk Response: A Qualitative Study of the Capacity of the Wildland Fire Service," Journal of Forestry 104 (no.3, March 2006): 136-142 (7).

Donahue, Brian, Reclaiming the Commons: Community Farming and Forestry in a New England Town. New Haven: Yale University Press, 1999. 288 pages. \$ 27.50. Donahue was a founder of Land's Sake, a community farm in Weston, Massachusetts, and teaches at Brandeis University. (v.9,#4)

Donahue, John M., and Johnston, Barbara Rose, eds., Water, Culture, and Power: Local Struggles in a Global Context. Washington, DC: Island Press, 1998.

Donald, Paul F., Fiona J. Sanderson, Ian J. Burfield, Stijn M. Bierman, Richard D. Gregory, and Zoltan Waliczky. "International Conservation Policy Delivers Benefits for Birds in Europe." *Science* Vol. 317, no. 5839 (10 August 2007): 810-13. The European Union's Birds Directive has produced results that suggest that supranational conservation policy can bring measurable conservation benefits in increased populations of endangered birds.

Donaldson, Thomas and Patricia H. Werhane, Ethical Issues in Business: A Philosophical Approach. Englewood Cliffs, NJ: Prentice-Hall, 1993. 494 pages. A new text, with a section on the environment. Case study of the Exxon Valdez spill; William T. Blackstone, "Ethics and Ecology"; Mark Sagoff, "At the Shrine of Our Lady of Fatima, or Why Political Questions are Not All Economic"; Tom Regan, "The Nature and Possibility of An Environmental Ethic." Donaldson is at Georgetown University. Werhane is at Loyola University, Chicago. (v3,#4)

Donato, D. C., et al., "Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk," Science 311(20 January 2006):352. Postfire or salvage logging is often claimed not only to use such wood economically but also to reduce further fire risk; it may also be claimed that forests will not adequately regenerate without intervention. But these authors find the opposite, studying regeneration after the 2002

Biscuit Fire, Oregon, in a largely Douglas fir forest, where some areas were salvage logged and others not. Unexpectedly, by disturbing the soil, salvage logging reduced conifer seedling regeneration by 73 percent. Also loggers left behind brush and added kindling to the forest floor, making low level surface fires more likely. The authors are largely with the Department of Forest Science, Oregon State University. But the article produced a fire at Oregon State, when another group of faculty members (and some from the U.S. Forest Service) tried to delay print publication claiming that the article had serious shortcomings. Stokstad, Erik, "Salvage Logging Research Continues to Generate Sparks," Science 311 (10 February 2006): 761.

Doniger, David D., Antonia V. Herzog, Daniel A. Lashof, "An Ambitious, Centrist Approach to Global Warming Legislation," Science (3 November 2006):764-765. The longer we wait to do something about global warming the more difficult it becomes. A slow start leads to a crash finish. These authors, with the National Resources Defense Council, Washington, propose a system of legislated economic incentives that they claim is aggressive and feasible.

Donlan, CJ; Martin, PS, "Role of Ecological History in Invasive Species Management and Conservation", Conservation Biology 18 (no.1, 2004): 267-269.

Donlan, Josh, et al (half a dozen, including Dave Foreman, Michael Soulé), "Re-wilding North America," Nature 436 (18 August, 2005): 913-914. Bring back the Pleistocene. A plan to restore charismatic megafauna (horses, camels, asses, cheetahs, elephants, lions) that disappeared 13,000 years ago from Pleistocene North America, proposed as an alternative conservation strategy. Where the megafauna to be restored no longer exist elsewhere in the world, closely related proxies will be used--as with the elephants and lions. The plan starts small and is experimental and incremental (for example, with reintroduction of the Bolson tortoise, which can weigh 100 pounds, once common in the U.S. and now found rarely in Mexico). Next step might be on some (well-fenced) 200,000 acre private ranch in the U.S. Southwest.

Donnelley, S., "Natural Responsibilities: Philosophy, Biology, and Ethics in Ernst Mayr and Hans Jonas," Hastings Center Report 32(no.4, 2002): 36-42. (v.13,#4)

Donnelley, Strachan, "Trout, Salmon, and Rivers: Saving the Human and Natural Future." A report from an exploratory meeting of the Hastings Center, Trout, Salmon, and Rivers Project. The salmon problem, besides its immediate interest and relevance, with many natural and social values at stake, is a bellwether for further environmental conflicts and their resolution. Contact Strachan Donnelley, The Hastings Center, 255 Elm Road, Briarcliff Manor, NY 10510, USA. (v6,#2)

Donnelley, Strachan, ed., "Nature, Polis, Ethics: Chicago Regional Planning," The Hastings Center Report 28 (no. 6, Nov.-Dec. 1998):supplement. Contains:

--Donnelley, Strachan, "Civic Responsibility and the Future of the Chicago Region"

--Adelmann, Gerald W., "Reworking the Landscape, Chicago Style"

--Heltne, Paul, "Basic Concepts of Ecology and Evolutionary Biology" (with reference to the Chicago region)

--Engel, Joan Gibb, "Who Are Democratic Ecological Citizens?"

--Engel, J. Ronald, "The Faith of Democratic Ecological Citizenship"

Articles are products of a four-year symposium of ethicists and Chicago civic leaders on long-term responsibilities to humans and nature in the Chicago metropolitan region. The key ethical concept proposed is that of "democratic ecological citizenship" understood within an evolutionary and ecological conceptual framework. (v.10,#1)

Donnelley, Strachan, Charles R. McCarthy, and Rivers Singleton, Jr., "The Brave New World of Animal Technology," Hasting Center Report 24, no. 1 (1994), special supplement, pages S1-S31. New

biotechniques manipulate the very character of animal being, with the power to alter nature radically. Are these manipulations ethically legitimate? Biotechnological manipulations threaten the fundamental character of animal species that have arisen in historically deep evolutionary and ecological contexts. Like the recombinant DNA technology that preceded them, transgenic organisms are probably unbounded in potential application. However, from a strictly scientific perspective, there seems to be nothing radically novel about transgenic organisms. Humans have bred animals for millennia. All living organisms are in an evolutionary sense transgenic to the extent that they share common genes. My dog and I share common genetic information. But modern technology allows us to accelerate the process of genetic diversification and to cross much broader evolutionary boundaries.

Individually and collectively we do not live in a single morally harmonious world, rather we confront an ineradicable moral plurality, each claiming attention and not readily coordinated with the others. In much science, there is no serious concern with the moral significance of animals, thought to be without intrinsic value. But there is sometimes a conviction that natural systems run to their own amoral rhythms that for pragmatic reasons we should not significantly undermine. Also, there is growing a direct moral concern for intrinsic values in these forms of life. Nature in a crucial sense is the all-inclusive domain of domains, the context of contexts, and what must finally be protected. Nevertheless, nature is no realm of essentialist perfection. Rather, our biosphere is an extraordinary, historically particular and "chaotically orderly" realm of dynamic and systemically related "imperfections"; individual organisms more or less well-adapted to worldly life, changing in evolutionary/ecological time. We should understand ourselves and our embedded existence in an animate nature that is ultimately significant, yet imperfectly good. The authors are with the Hastings Center.

Donnelley, Strachan. "Bioethical Troubles: Animal Individuals and Human Organisms." The Hastings Center Report 25(no.7, 1995):21. (v7,#1)

Donnelly, R; Marzluff, Jm, "Importance of Reserve Size and Landscape Context to Urban Bird Conservation," Conservation Biology 18(no.3, 2004):733-745. (v. 15, # 3)

Donner, Wendy, "The Self and Community in Environmental Ethics," pages 375-389 in Warren, Karen J., ed., Ecofeminism: Women, Culture, Nature (Bloomington, IN: Indiana University Press, 1997). "The critique of reason, rationality, and universal principles as male concepts is a familiar theme in many environmentalist, feminist, and ecofeminist writings. This critique rarely sorts out the forms of rationality and universalizability that are of legitimate concern for feminists and environmentalists from those that are valuable or essential to retain. ... It makes no more sense to condemn rationality in general because it has been ill used to attempt to justify domination and aggression than it makes sense to condemn emotion in general because hate and hatred have been the impetus for genocide and torture." Donner is in philosophy at Carleton University in Ottawa. (v.9,#4)

Donner, Wendy. "Inherent Value and Moral Standing in Environmental Change," pages 52-74 in Hampson, Fen Osler, and Reppy, Judith, Earthly Goods: Environmental Change and Social Justice (Ithaca, New York: Cornell University Press, 1996). Donner criticizes the animal rights/welfare theories of Tom Regan and Peter Singer; the land ethic of Aldo Leopold and J. Baird Callicott; deep ecology; and the ecofeminism of Karen Warren, Val Plumwood, and others. Regan and Singer do not have an environmental ethic, only an ethics for using the environment to satisfy the preferences of sentient animals, including humans. Of Callicott's land ethic: "The result is an uneasy mixture that neither quells the concerns of critics nor provides clear guidelines for cases of conflict" (p. 61). "Thus there are serious problems with the land ethic: an analysis of value that does not support the value claims of the theory; a lack of guidance on how weightings of very different elements are to be carried out; and decisions that are troubling at best, horrifying at worst" (p. 65).

Of ecofeminism: "Consensual decision is ... welcome when it works. But when consensus does not work, and we are faced with genuine and painful conflict, then ecofeminism provides little guidance in particular cases if the conflicting claims are all seen as being of equal value" (p. 69). "Can one who

has serious concerns for the well-being of the environment trust the human capacity to care more than the human capacity to reason and value? (p. 70). Deep ecology has an unworkable concept of a self indistinguishable from the environment. Environmental ethics needs a concept of self-in-relationship. "There is no fusion of two into one but a complement of two entities acknowledged as separate, different, independent, yet in relationship" (quoting Karen Warren) (p. 74). Donner teaches philosophy at Carleton University in Ottawa. (v8,#1)

Doogue, Edmund, "Poverty's Toll" (Report on the UN World Summit for Social Development, March 1996 in Copenhagen), One World (Geneva, Switzerland, World Council of Churches) No. 205, May 1996, pages 4-6. From UN figures, twenty percent of the world's population, the world's richest people, own almost 83 percent of the world's wealth and another twenty percent, the world's poorest people, own only 1.4 percent of the world's wealth. Over the past 30 years, the distribution of wealth has become more unequal. The Summit produced many resolutions and demands for reform, but "the check came back from the bank of justice marked 'insufficient funds.'"

Dooming, Daryl, "Evolution, Evil and Original Sin," America 185(November 12, 2001):14-21. "There is virtually no known human behavior that we call 'sin' that is not also found among nonhuman animals."

Doppelt, Bob, Mary Scurlock, Chris Frissel, and James Karr, Entering the Watershed: A New Approach to Save America's River Ecosystems. Washington: Island Press, 1993. \$ 27.50 paper. \$ 55.00 hardcover. 510 pages. A study of ecological integrity in rivers to develop new federal riverine protection and restoration policy alternatives. (v4,#3)

Dore, Mohammed H. I., "The Problem of Valuation in Neoclassical Environmental Economics," Environmental Ethics 18(1996):65-70. In this paper I argue that the criterion of valuation in neoclassical economics is flawed because it is not an invariant measure of value. It is invariant only when unrealistically restrictive conditions are imposed on the class of admissible utility functions, which in fact makes it a special case. The only sensible alternative is to turn to classical value theory based on real sacrifices or opportunity costs. Dore is in economics, Brock University, Ontario, Canada. (EE)

Doremus, H. and Pagel, J. E., "Why Listing May Be Forever: Perspectives on Delisting under the U.S. Endangered Species Act," Conservation Biology 15(no.5, 2001): 1258-68. (v.13,#2)

Doremus, H; Tarlock, AD, "Fish, farms, and the clash of cultures in the Klamath Basin," Ecology Law Quarterly 30(no.2, 2003):279-350. (v.14, #4)

Doremus, Holly, "Preserving Citizen Participation in the Era of Reinvention: The Endangered Species Act Example," Ecology Law Quarterly 25(No.4, 1999):707-. (v.10,#2)

Doremus, Holly, "The Purposes, Effects, and Future of the Endangered Species Act's Best Available Science Mandate," Environmental Law 34 (Spring, 2004): 397-450.

Doremus, Holly D, and A. Dan Tarlock. *Water War in the Klamath Basin: Macho Law, Combat Biology, and Dirty Politics*. Washington, DC: Island Press, 2008. During a drought in the summer of 2001, the United State Bureau of Reclamation made history by shutting down the headgates of the Klamath Irrigation Project in southern Oregon's Upper Klamath Basin to conserve water to protect endangered species. This led to farmers taking direct action to protest the loss of their water rights and a war of rhetoric between farmers, environmentalists, and government officials. Doremus and Tarlock reconstruct the history of this conflict and draw lessons for future natural resource conflicts by focusing on the legal institutions that contributed to the Klamath conflict.

Dorr, Donal, The Social Justice Agenda: Justice, Ecology, Power, and the Church. Orbis, 1991. 201 pages. \$ 9.95. The role that the institutional church can play in responding to issues of justice, ecology, and the social forces of power. (v2,#4)

Dorsey, K., "Review of: George M. Warecki, Protecting Ontario's Wilderness: A History of Changing Ideas and Preservation Politics, 1927-1973," Environmental History 7(no.3, 2002): 524. (v.13,#4)

Dotto, Lydia, "Proof or Consequences," Alternatives 26 (No. 2, Sprg 2000): 8- . Skeptics say we should wait for proof before taking action on climate change. If they turn out to be right, we'll have saved a lot of bother. But if they're wrong... (v.11,#2)

Dotto, Lydia, Ethical Choices and Global Greenhouse Warming. Waterloo, Ontario: Wilfrid Laurier University Press, 1993. Canadian \$ 15.00. Paper. (v4,#4)

Dougherty, Alan P., Review of: Colin Mortlock, Beyond Adventure: An Inner Journey, Environmental Values 11(2002):516-518.

Douthwaite, Julia V., The Wild Girl, Natural Man, and the Monster: Dangerous Experiments in the Age of Enlightenment. Chicago: University of Chicago Press, 2002. Questions of gender, the wild, the civilized, nature and society, body and mind, will and morality, human perfectibility.

Douthwaite, R. Short Circuit: Strengthening Local Economies for Security in an Unstable World. Totnes: Green Books, 1996, 386pp. Reviewed by Tony Clayton. Environmental Values 9(2000):117.

Dovers, Stephen, ed. Australian Environmental History. Oxford, 1995. 288 pp. \$35. This book explores past interactions between humans and the Australian environment and offers insights into current environmental debates. (v8,#2)

Dovers, Stephen, ed. Australian Environmental History: Essays and Cases. New York: Oxford University Press, 1995. 288pp. \$39. Three overview essays explore the nature of Australian landscapes, the ways in which they have been used and abused, and attitudes and perceptions about them. Seven case studies explore the history of the Australian human-environment interaction. Included are analyses of small districts, large regions, and national resource centers, from the great reefs to the arid center. (v8,#1)

Dow, Kirsten, and Tom Downing. *The Atlas of Climate Change: Mapping the World's Greatest Challenge*. Berkeley: University of California Press, 2006. This atlas contains both maps and text.

Dowdeswell, Julian A., "The Greenland Ice Sheet and Global Sea-Level Rise," Science 311 (17 February 2006): 963-964. Glacier flow draining the Greenland Ice Sheet is accelerating. This combined with increased melting, suggests existing estimates of future sea-level rise are too low. Dowdeswell is at the Scott Polar Research Institute, Cambridge.

Dower, Nigel, Review of Sachs, Wolfgang, ed., The Development Dictionary. Environmental Values Vol.2 No.1(1993):86.

Dower, Nigel, "Does Global Citizenship Require Modern Technology?" CPTS Ends and Means (Journal of the University of Aberdeen Centre for Philosophy, Technology and Society), 5(no. 1, spring 2001): 9-24. Yes and no, with a lot of highly contentious issues in between. Yes, if one seeks to be someone who can effectively exercise global responsibility in the modern world. No, if (like Stoics of old, without technology) one has a conception of self identity and human being that accepts a global citizenship. "Modern technology is necessary for the actualisation of the idea of global citizenship in the modern world (though it is not necessary for the idea itself)" (p. 11). "Global citizenship then requires modern technology, not in the sense of needing it as it is, but in the sense of its being grounded in the facts of modern technology. We have seen this in at least three ways: as the causal context of our global problems, as that which enables global citizenship to be effectively expressed in action, but also as something to be controlled, modified and developed in the light of our global values. Perhaps we could conclude by saying that technology needs a global human face, but at the same time that global citizenship needs a flexible but strong technological backbone" (p. 24) Dower is in philosophy, University of Aberdeen, Scotland. (v.12,#3)

Dower, Nigel, "Worth Sustaining? Reply to Attfield and Wilkins." Environmental Values 3(1994):159-160. Robin Attfield and Barry Wilkins take me to task for suggesting that 'sustainable' means 'worthy of being sustained'. The burden of their criticism is that in defining it this I am making it cover too much and thus robbing 'sustainable' of its normal and serviceable meaning 'capable of being sustained'. What I meant to convey, but now I realize did not make clear enough, was that 'sustainable' in the evaluative sense was not a rival or substitute sense but an additional sense. Dower is at the Department of Philosophy, University of Aberdeen, U.K. (EV)

Dower, Nigel, World Ethics - The New Agenda. Edinburgh: University of Edinburgh Press, 1998. As world citizens we have duties that are global in scope and the relations between states should be governed by this cosmopolitan ethic. Dower (a) explores the nature of world ethics, by identifying the different ways of thinking about ethics which underlie both the rejection of world ethics and the endorsement of it; (b) defends a normative cosmopolitan theory that steers a middle way ("solidarity with diversity") between traditional objectivism and a modern "liberal" paradigm; (c) applies the theory to war and peace,

world poverty, the environment and the United Nations.

Chapters: 1. Introduction

2. World Ethics - an Ethical Taxonomy

3. International and Global Scepticism

4. Internationalism and Communitarianism

5. Cosmopolitan Theories

6. Cosmopolitanism and Community

Part II: Application

7. Peace and War

8. Aid, Trade and Development

9. The Environment

10. Which Way Forward? Globalisation, Global Governance and Global Ethics

Dower is Senior Lecturer in the Department of Philosophy, University of Aberdeen and has been active in the International Development Ethics Association. (v.10,#1)

Dower, Nigel, ed., Ethics and Environmental Responsibility (London:Gower Publishing Co., Avebury Imprint, 1989, Pounds 32.00; available in U.S. from Gower Publishing Co., Old Post Road, Brookfield, VT 05036, 160 pages for the modest price of \$ 58.95!). Contents: What is environmental ethics?; The metaphysics of environmentalism; Do future generations matter?; Animal rights and human wrongs; Democracy and environmental change; After Chernobyl: the ethics of risk-taking; Bibliography. Nigel Dower is Lecturer in Philosophy at the University of Aberdeen. (v1,#3)

Dower, Nigel, ed., Ethics and Environmental Responsibility. Aldershot, UK: Gower Publishing, 1989. Pp. 155. A slim and over-priced (\$58.95) collection of six original essays on various aspects of environmental ethics. The first two essays, by Nigel Dower and Eric Matthews, concern general theoretical questions about value and the nature of environmental ethics. The other four chapters are more specific: J. R. Cameron on future generations; Hugh LaFollette on animal rights; Peter Wenz on environmental policy and democratic decision-making; and Daniel Shaw on risk analysis in the nuclear power industry. Useful, selected bibliography. (Katz, Bibl # 2)

Dower, Nigel, "Against war as a response to terrorism," Philosophy and Geography 5 (No. 1, 2002): 29-34. Contribution to a symposium on the events of September 11, 2001 in New York City. Dower is at the Center for Philosophy, Institute of the Environment, Philosophy, and Public Policy at Lancaster University. (P&G)

Dower, Nigel. "Human Development - Friend or Foe to Environmental Ethics?"

Environmental Values 9(2000):39-54. ABSTRACT: This article is premised on the assumption that in order for us adequately to protect our environment, significant adjustments need to be made to the ways we pursue and think about development - adjustments not merely to technologies but also to life-styles. In this respect the emphasis in much recent development literature on human development is to be welcomed as a useful corrective to definitions of development in terms of economic growth, though there is still a danger of anthropocentric assumptions. It is argued that, given suitable interpretations or conceptions of development and environment, environmental care can be, and should be, integrated into authentic human development. Proposals for such conceptual alignment stem both from seeing the relevant community in which development qua desirable change is to take place as the biotic community, and from seeing development as desirable change in the total environment, both natural and artificial, regarded as a social field of significance. Such conceptual adjustments are a significant part, but of course only a part, of what needs to be done to bring public policy more into line with proper care for the environment. KEYWORDS: community, development, environment, evaluation, field of significance, growth, human, rationality, sustainability. Dower is in the Department of Philosophy University of Aberdeen, U.K. (EV)

Dower, Nigel. "Biotechnology and the Third World," CPTS Ends and Means 1 (Autumn 1996): 26-31. This is a journal published by the Centre for Philosophy, Technology, and Society, Aberdeen (Scotland) University, also available as an electronic journal. Several issues are identified regarding biotechnology and the third world: (1) Import substitution, (2) promotion of new genetically engineered seeds or animals which creates dependency in farmers using them, marginalizes farmers who do not, and threatens biodiversity, (3) Northern dominance in the global economy, reinforced by the patent system, (4) expropriation of genetic material from the Third World and then the return of it with value-added to the Third World. Dower is in philosophy at the University of Aberdeen. (v.8,#4)

Dower, Roger, Ditz, Daryl, Faeth, Paul, et al., Frontiers of Sustainability, Environmentally Sound Agriculture. Washington, D.C.: World Resource Institute, 1997. 415pp. \$35.00 paper. The authors examine environmental performance and trends in four key economic sectors: agriculture, electricity generation, transportation, and pulp and paper manufacturing. They map out the implications of potentially dangerous developments and detail methods for reducing or managing these threats without inhibiting American technical and economic prowess. (v8,#1)

Dower, Roger; Ditz, Daryl; Faeth, Paul; Johnson, Nels; Kozloff, Keith; and MacKenzie, James. Frontiers of Sustainability: Environmentally Sound Agriculture, Forestry, Transportation, and Power Production. Washington, DC: Island Press, 1997. Tables, figures, index. 415 pages. \$ 34 U.S. paper. ISBN 1-55963-546-0. The authors are researchers at the World Resource Institute, and their essays build on the recommendations of the President's Council for Sustainable Development. All analyses are new and interdisciplinary. Much-needed rules and measurements are presented regarding progress toward sustainability for the U.S. The book is aimed at environmental professionals; business people who work in agriculture, forestry, transportation, and power production; students; and federal, state, and local policymakers. (v.8,#4)

Dowie, Mark, Losing Ground: American Environmentalism at the Close of the Twentieth Century. Cambridge, MA: MIT Press, 1995. 317 pages. \$25. Dowie argues that the national environmental movement is risking irrelevance because the people leading its largest organizations are too white, too male, too elite, too polite, and too involved with Washington. For instance, CEOs often sit on boards of environmental organizations like the National Wildlife Federation and the Sierra Club. The environmental movement is losing its strong grassroots support. The so-called Wise Use Movement--a loose coalition of property owners, ranchers, small-business executives, and municipal officials--has gained considerable clout with the grassroots. "American land, air, and water ... would be in far better condition had environmental leaders been bolder, more diverse in class, race, and gender; less compromising in battle; and less gentlemanly in their day-to-day dealings with adversaries." For a contrasting book, published at the same time, see Easterbrook, Gregg, A Moment on the Earth. Dowie is a former editor and publisher for Mother Jones magazine. (v6,#2)

Downs, Thomas M., Morrison, Alexia. "Responding to Search Warrants and Grand Jury Subpoenas in Environmental Criminal Cases." Journal of Environmental Law & Practice 3(May 1996):4. The potential dangers associated with grand jury subpoenas and search warrants and advice on how best to prepare for and respond to them. (v7,#2)

Downs, Willard and Newton, Kelley Ann, "Legal Implications in Development and Use of Expert Systems in Agriculture", Journal of Agricultural Ethics 2(1989):53-58. Applications of Artificial Intelligence, particularly Expert Systems, are rapidly increasing. This science promises to give computer-based systems the capability of reasoning and decision making in near "human-like" fashion. The legal issues surrounding Expert Systems have not yet been fully tested and defined by the courts. Developers and users of Expert Systems must consider these factors for each particular application. Downs is in

agricultural engineering, Oklahoma State University, Stillwater. Newton is an independent consultant in Los Angeles.

Doyal, Len and Gough, Ian and Max-Neef, Manfred, Review of Zadek, Simon, A Theory of Human Need and Human Scale Development. Environmental Values 3 (1994):83-85.

Doyle, David, Deeper Ecology: Essays on Ecological Spirituality. Eureka: CA: Wild Side Publishing Co., 1996 75 pages. \$ 9.95 + \$ 3 shipping. Restoration of wildlife populations and ecosystems, curbing human exploitation. A plan for a global ecology. Order from: Wild Side Publishing Co., P. O. Box 5241, Eureka, CA 95502. Doyle is a wildlife ecologist.

Doyle, Martin W., Emily H. Stanley, David G. Havlick, Mark J. Kaiser, George Steinbach, William L. Graf, Gerald E. Galloway, and J. Adam Riggsbee. "Aging Infrastructure and Ecosystem Restoration." *Science* Vol. 319, no. 5861(18 January 2008): 286-87. Aging dams, bridges, sewers, surfaced roads, and offshore oil/gas platforms often need to be decommissioned, and this presents opportunities for ecosystem restoration. Access restrictions to military installations have made military bases some of the richest ecological reserves of any of the US's public lands. Four hundred such sites have been closed, and some of them have become National Wildlife Refuges. Doyle is at the University of North Carolina at Chapel Hill.

Dragomirescu, Simina, Cristina Muica, and Turnock, David. "Environmental Action during Romania's Early Transition Years." Environmental Politics 7(no.1, Spring 1998):162- . (v10,#4)

Dragun, A.K and Jakobsson, K.M. Sustainability and Global Environmental Policy: New Perspectives. Cheltenham: Edward Elgar, 1997, 336pp. Reviewed by Simon Snedden. Environmental Values 9(2000):256.

Drake , J. M. and Keller, R. P., "Environmental Justice Alert: Do Developing Nations Bear the Burden of Risk for Invasive Species?," BioScience 54(no. 8, 2004): 718-719(2). (v.14, #4)

Drake, Deanne C., and Robert J. Naiman, "An Evaluation of Restoration Efforts in Fishless Lakes Stocked with Exotic Trout," Conservation Biology 14(no.6, 2000 Dec 01): 1807-. (v.12,#3)

Drake, F; Purvis, M, "The Effect of Supersonic Transports on the Global Environment: A Debate Revisited," Science Technology and Human Values 26(no. 4, 2001):501-528. (v.13,#1)

Drake, J. M. and Bossenbroek, J. M., "The Potential Distribution of Zebra Mussels in the United States," BioScience 54(no. 10, 2004): 931-941(11). The range expansion of zebra mussels (*Dreissena polymorpha*) in North America has been rapid and costly in both economic and ecological terms. Joint social, political, and scientific ventures such as the 100th Meridian Initiative aim to reduce the spread of zebra mussels by eliminating the unintended transport of the species and preventing its westward expansion. Here we forecast the potential distribution of zebra mussels in the United States by applying a machine learning algorithm for nonparametric prediction of species distributions (genetic algorithm for rule set production, or GARP) to data about the current distribution of zebra mussels in the United States and 11 environmental and geological covariates. Our results suggest that much of the American West will be uninhabitable for zebra mussels. Nonetheless, some catchments along the West Coast and in the southeastern United States exhibit considerable risk of invasion and should be monitored carefully. Possible propagule dispersal to these places should be managed proactively. (v.14, #4)

Drake, JE, "Contractual Discretion and the Endangered Species Act: Can the Bureau of Reclamation Reallocate Federal Project Water for Endangered Species in the Middle Rio Grande?" Natural Resources Journal 41(no. 2, 2001):487-528. (v.13,#1)

Drake, John M; Bossenbroek, Jonathan M, "The Potential Distribution of Zebra Mussels in the United States", BioScience 54(no.10, 1 October 2004):931-941(11). The range expansion of zebra mussels (Dreissena polymorpha) in North America has been rapid and costly in both economic and ecological terms. Joint social, political, and scientific ventures such as the 100th Meridian Initiative aim to reduce the spread of zebra mussels by eliminating the unintended transport of the species and preventing its westward expansion. Here we forecast the potential distribution of zebra mussels in the United States by applying a machine-learning algorithm for nonparametric prediction of species distributions (genetic algorithm for rule-set production, or GARP) to data about the current distribution of zebra mussels in the United States and 11 environmental and geological covariates. Our results suggest that much of the American West will be uninhabitable for zebra mussels. Nonetheless, some catchments along the West Coast and in the southeastern United States exhibit considerable risk of invasion and should be monitored carefully. Possible propagule dispersal to these places should be managed proactively.

Drake, John M; Keller, Reuben P, "Environmental Justice Alert: Do Developing Nations Bear the Burden of Risk for Invasive Species?" BioScience 54 (no. 8, 1 August 2004):718-719(2).

Dramstad, Wenche, Olson, James, Forman, Richard. Landscape Ecology Principles in Landscape Architecture and Land-Use Planning. Covelo, CA: Island Press, 1996. 80 pp. \$17.95 paper. A concise handbook that lists and illustrates key principles in the field, and presents specific examples from around the world of how those principles can be applied across a range of scales and diverse types of landscapes. (v7,#4)

Draney, Michael L., "Ethical Obligations toward Insect Pests," Ethics and the Environment 2(no. 1, 1997):5-23. This paper examines the implications of considering the values and rights of insect pests in determining which insect control efforts to pursue. This consideration will depend on the scale of the control effort, that is, whether the control operates at the level of individual pest organisms, populations, or the entire pest species. I argue that an individual organism's rights cannot be taken into account in planning insect control, because of the practical impossibility of granting it anything but infinitesimal moral significance. However, in harming populations of insects, numbers become important and effects on local ecosystems should be considered. Given this, it still may be right to control or even eliminate a population if its negative value to humans is sufficiently high in relation to its ecological value. Eradication of a species involves irrevocable loss. I propose that species are unique individual entities (as opposed to abstract classes of organisms) and that our ethical obligations to insect pests lie in acknowledging the right of these species to continued, if controlled, existence. At this level, they must receive moral consideration in any actions taken. Draney is in the Ph.D. program in entymology at the University of Georgia. (E&E)

Draper, AE, "Conservation Easements: Now More Than Ever-Overcoming Obstacles to Protect Private Lands," Environmental Law 34(no.1, 2004):247-282. (v. 15, # 3)

Draper, Elaine, Risky Business. Cambridge, UK: Cambridge University Press, 1991. Many persons in industry are currently arguing that certain environmental toxic substances are not hazardous in general, but hazardous only to particularly susceptible individuals. Hence they argue for genetic screening to avoid hiring genetically susceptible individuals, instead of lowering work-place exposure to toxic chemicals. Draper argues against this view and, in an excellent book, takes on the entire chemical industry.(v3,#2)

Draper, Elaine, Risky Business (New York: Cambridge University Press, 1991). This is a study in occupational diseases, caused by industrial environments that put employees at risk. Draper, a sociologist, claims there is what amounts to "genetic testing" in the workplace. She analyzes the

fundamental underlying reasons, social and economic, for this phenomenon. Chemical corporations are aware of the high cost of litigation and compensation when employees are harmed on the job, those who manufacture and transport chemicals. So they attempt to screen those who are more susceptible and deny them employment. This can include women who are, or may become, pregnant. (v3,#3)

Drechsler, M., "A model-based decision aid for species protection under uncertainty," Biological Conservation 94 (No. 1, 2000): 23- . (v.11,#4)

Dreifus, Claudia, "Friends Matter for Reclusive Creature of African Forest," New York Times, October 12, 2004, p. D4. The rare and endangered okapi in eastern Congo. An okapi is quite small, has the hindquarters of a zebra, the body of an antelope, and the face of a giraffe. It is quite elusive, shy, lives in deep forests, and looks like something you wouldn't believe. The Wildlife Conservation Society in Congo seeks to preserve them. (v.14, #4)

Dreifus, Claudia, "A Conversation with Luis F. Baptista: A Birdman Ponders the Songs of Sparrows," New York Times (5/16/00). Aesthetic sense of birds and humans are similar. Luis Baptista, curator of ornithology for the California Academy of Sciences, claims that "we can actually show that birds have an aesthetic sense similar to ours. If you take female great reed warblers, stick them with female hormones, put them in a soundproof box and play for them recordings of male songs--some beautiful and some yuckie--you will see that they solicit copulation more from the beautiful songs than the yuckie ones. That means that the females actually prefer beautiful songs, even what humans consider beautiful." Woodpeckers are "instrumentalists": They peck for bugs but also to "make music because they don't have vocal songs like song birds." They find a log that makes the correct sound and then pound on it with a specific rhythm. Hermit thrushes sing in the pentatonic scale used in Far Eastern music and the canyon wren sings in the chromatic scale. Baptista also suggests that birds sometimes sing for pleasure, if they are well fed and relaxed. Birds communicate messages with sound as well. Chickens, if shown a picture of a racoon, will make a clucking sound quite different from the sound that they make when shown a picture of a falcon, and other chickens will look around or up depending on the sound. Bird dialects, Baptista argues, are determined by what sound will carry best in the bird's home environment: Oak forest bird songs carry farther in oak forests than in coniferous forests (and vice versa for songs produced by birds that live in coniferous forests). (v.11,#2)

Drengson, Alan R. Review of Deep Ecology. By Bill Devall and George Sessions. Environmental Ethics 10(1988):83-89.

Drengson, Alan R. "Technocratic versus Person-Planetary." Environmental Ethics 4(1982):93-94. (EE)

Drengson, Alan R. "A Critique of Deep Ecology? Response to William Grey." Journal of Applied Philosophy 4 (1987): 223-227. A response to a criticism of deep ecology by William Grey, "A Critique of Deep Ecology," Journal of Applied Philosophy 3 (1986): 211-216. Drengson emphasizes that the purpose of deep ecology is a broadening of consciousness and the creation of new paradigms for understanding our relationship to nature. (Katz, Bibl # 2)

Drengson, Alan R. "Shifting Paradigms: From the Technocratic to the Person-Planetary." Environmental Ethics 2(1980):221-40. In this paper I examine the interconnections between two paradigms of technology, nature, and social life, and their associated environmental impacts. The dominant technocratic philosophy which now guides policy and technological power is mechanistic. It conceptualizes nature as a resource to be controlled fully for human ends and it threatens drastically to alter the integrity of the planet's ecosystems. In contrast, the organic, person-planetary paradigm conceptualizes intrinsic value in all beings. Deep ecology gives priority to community and ecosystem integrity and seeks to guide the design and applications of technology according to principles which

follow from ecological understanding. I describe this shift in paradigms and how it affects our perceptions, values, and actions. Drengson is in the department of philosophy, University of Victoria, Victoria, B.C., Canada. (EE)

Drengson, Alan R., Beyond Environmental Crisis: From Technocrat to Planetary Person. New York: Peter Lang, 1989. Pp. xii, 259. Drengson is editor of The Trumpeter, a journal of ecophilosophy with an emphasis on deep ecology. This book is a greatly revised version of Drengson's 1983 text, Shifting Paradigms: From Technocrat to Planetary Person. It is a detailed exploration of the process of ecophilosophy, illustrating how a committed individual can develop an ecological "planetary" consciousness. Drengson combines scholarly philosophical literature with ecological thought, philosophy of technology, and Eastern philosophy to present a method for the transformation of consciousness. This book is not the presentation of a system, nor an argument for its acceptance, but an analysis of the deepest structures of Western thought that have engendered the environmental crisis. "The fundamental purpose of this book is to exemplify a philosophy of appropriate philosophizing as both a pure and applied art that can be practiced as a way to the realization of The Way, which is not only the Way of Nature but the great spiritual path taught as the core of all authentic paths" (p. 5). The strength of the book is an analysis of the dominant technological paradigm in which Western society is embedded. Even for those unwilling to follow Drengson on "the way," the critical analysis of contemporary consciousness is extremely worthwhile. Contains an excellent bibliography and a series of appendices that provide accessible charts and diagrams of the main points. (Katz, Bibl # 2)

Drengson, Alan and Yuichi Inoue, eds., The Deep Ecology Movement: An Introductory Anthology. Berkeley, CA: North Atlantic Books, 1995. 293 pages. \$ 14.95. Contributors include Arne Naess (multiple articles), George Sessions, Gary Snyder, Alan Drengson, Bill Devall, Freya Mathews, Warwick Fox, David Rothenberg, Michael E. Zimmerman, Patsy Hallen, Dolores LaChapelle, Pat Fleming, Joanna Macy, John Rodman, and Andrew McLaughlin. Drengson taught philosophy at the University of Victoria and edited The Trumpeter until his recent retirement. Inoue teaches environmental studies at Sangyo University, Nara, Japan, and is translating the anthology into Japanese. (v7,#2)

Drengson, Alan, The Practice of Technology: Exploring Technology, Ecophilosophy, and Spiritual Disciplines for Vital Links. Albany, NY: State University of New York Press, 1996. 232 pages. \$ 19.95 paper. Modern industrial technology has an underlying agenda: to redesign the human and natural worlds to conform to the monoculture models of Western society. In contrast, ecological and social responsibility should be built into the design of new technology, based on ecosophy, which enables humans to harmonize with their specific places and ecological contexts. Our current problems, such as the environmental crisis, violence, social injustice, dehumanization, and alienation cannot be diagnosed, let alone cured, without understanding the role of technological forces and practices in contemporary civilization. Drengson taught philosophy at the University of Victoria and edited The Trumpeter until his recent retirement. (v7,#2)

Drengson, Alan. The Practice of Technology: Exploring Technology, Ecophilosophy, and Spiritual Disciplines for Vital Links. Albany, NY: State University of New York Press, 1995. 232 pages. \$ 20.00 paper. Modern industrial technology seeks to redesign the human and natural worlds to conform to the monoculture models of Western society. But ecological and social responsibility should be built into the design of new technology, practices based on ecosophy (ecological wisdom). Our current problems cannot be solved without understanding the role of technological forces in modern civilization. Drengson teaches philosophy at the University of Victoria. (v6,#3)

Drengson, Alan. "Way of Wild Journeying," Wild Earth 7(no.1, 1997):70. (v8,#2)

Drenthen, Martin, and Kockelkoren, Petran, "Het milieu van de filosofen; 20 jaar milieu filosofie in

Nederland [in Dutch: The environment of the philosophers; an overview of the major environmental philosophical issues in the Netherlands in the last 20 years]," Filosofie & Praktijk, 20/4 (winter 1999), pp. 197-191. Petran Kockelkoren is a philosopher at Twente University, the Netherlands. E-mail: P.J.H.Kockelkoren@wmw.utwente.nl

Drenthen, Martin, Bordering wildness; The desire for wilderness and the meaning of Nietzsche's critique of morals for environmental ethics. [In Dutch: Grenzen aan wildheid: wildernisverlangen en de betekenis van Nietzsches moraalkritiek voor de actuele milieu-ethiek] 2003 Budel: Damon, Dissertation (University of Nijmegen) With a summary in English (page 313-316). Full text version is available online at: http://webdoc.ubn.kun.nl/mono/d/drenthen_m/grenaawi.pdf

Environmental ethicists, each in their own way, struggle with the moral sense of nature. Whether or not this is explicitly admitted, each normative position within the debate turns out to rely on a particular normative concept of nature. However, the use of any of these particular normative interpretations cannot be legitimized. The starting point of this inquiry is the assumption that today's environmental crisis is intrinsically related to this ambiguity with regard to the normative meaning of nature. This ambiguity has a foundational character, and the conflicts and dilemmas that stem from it cannot be solved easily.

In order to clarify this relation between the environmental crisis and the crisis in morality, we analyze the relation between nature and morality in the work of the late 19th century German philosopher Friedrich Nietzsche, and ask whether his philosophy can help us clarify the problematic relationship between nature and morality in contemporary environmental ethical debates.

From Nietzsche's viewpoint, environmental ethics appears as a paradoxical undertaking, on the one hand, interested in nature in so far as it transcends human seizures of power (wildness as a critical concept), on the other hand restricted in its possibility to model this interest on anything else than yet another interpretative appropriation. That is to say, we can only articulate the moral significance of nature "itself" by interpreting it, but each interpretation inevitably implies a moment of appropriation. However, some environmental ethicists appear to do more justice to this profound problematic character of our relationship with nature by explicitly acknowledging the inaccessibility and radical otherness of wild nature. The newly developed perspective is tested on its fruitfulness for the Dutch case of "new nature development". In this debate on ecological reconstruction, the concept of wildness functions as a moral concept, albeit a paradoxical one. This idea of wildness is hermeneutically elaborated. In a time where "real" wildernesses no longer seem to exist, we are fascinated by the idea of wildness as something beyond our ability to control and appropriate. Wildness thus poses a (moral) limit to human appropriations of nature, it is a critical border concept that puts the human, moral order in perspective.

Drenthen, Martin, "De natuur als strijd van interpretaties [Nature as a struggle of interpretations; on the relation between nature and morality in the work of Friedrich Nietzsche]." In: Al het goede uit de natuur: Ethiek op de tweesprong tussen zijn en behoren. CEKUN-cahier 4, CEKUN, Nijmegen 1998, pp. 23-36. Nietzsche's philosophy shares a common characteristic of ancient stoic philosophy in the sense that it does not presuppose a distinction between facts and values. (v.11,#1)

Drenthen, Martin, "Maakbare natuur, waanzinnige oase of wonderlijke wereld? [Makeable nature, wild oasis or wonderful world?]." In: H. Geerst (ed.) Maakbaarheid, macht en matigheid (Annalen van het Thijmgenootschap). Nijmegen: Valkhof Pers, 1998, pp. 41-46. I argue that both proponents and opponents of environmental restoration--the reconstruction of "natural landscapes" in the Netherlands--share a common concept of nature in which nature is defined as absence of human activity. In the work of the Dutch writer Koos van Zomeren, however, a concept of nature can be discerned, in which nature is fully penetrated with stories, meanings, histories and plays as such a key role in human life. (v.11,#1)

Drenthen, Martin, "Onze schizofrene benadering van de natuur [In Dutch: Our schizophrenic approach to nature; On sustainability, science and conceptions of life], in: V. Poels (eindred.), Het milieu als

offerplaats; Over milieuproblematiek, levensbeschouwing en duurzame ontwikkeling, Damon, Best 1998, pp. 195-219. I argue that we can only understand the factual use of the notion of sustainability within political debates on environmental issues, when we take into account the different moral meanings of "nature" that are implied in the different worldviews and conceptions of good life. A distinction should be made between an anthropocentric use of the term sustainability, where nature is seen as a limited resource that should be saved for future generations, and a second, more vague use of the term, that has a more "non-anthropocentric" character. In this second approach, nature is seen as a moral framework: to live in a sustainable way, means to live in accordance with the "way of nature", to respect the rhythm of nature and so on. I show that this second type of moral reasoning has become problematic in our pluralistic age. On the other hand, I argue, the modern approach to these kinds of moral experiences, in which these experiences are treated as if they only reflect singular, subjective individual preferences, does not articulate these experiences adequately. Understanding the different moral meanings of nature that factually play a role in current debates, requires an openness for the factual ambivalence of our moral experiences of nature. (v.11,#1)

Drenthen, Martin. "The Paradox of Environmental Ethics: Nietzsche's View of Nature and the Wild." Environmental Ethics 21(1999):175. In this paper, I offer a systematic inquiry into the significance of Nietzsche's philosophy to environmental ethics. Nietzsche's philosophy of nature is, I believe, relevant today because it makes explicit a fundamental ambiguity that is also characteristic of our current understanding of nature. I show how the current debate between traditional environmental ethics and postmodern environmental philosophy can be interpreted as a symptom of this ambiguity. I argue that, in light of Nietzsche's critique of morality, environmental ethics is a highly paradoxical project. According to Nietzsche, each moral interpretation of nature implies a conceptual seizure of power over nature. On the other hand, Nietzsche argues, the concept of nature is indispensable in ethics because we have to interpret nature in order to have a meaningful relation with reality. I show that awareness of this paradox opens a way for a form of respect for nature as radical otherness. (EE)

Drenthen, Martin. "Het zwijgen van de natuur [in Dutch: The silence of nature]," Filosofie & Praktijk 17/4 (winter 1996), pp. 187-199. The environmental philosophical community in the Netherlands is being divided by a controversy between postnaturalistic postmodern constructivism and a more phenomenology-oriented, hermeneutic approach to nature. I show that the postmodernist critique of traditional environmental philosophy rightfully points to a problem that until recently has been neglected by Dutch environmental philosophers: the problem that there exist a plurality of normative notions of nature. Next, I show that the postnaturalistic position itself rests on a contradiction. Postnaturalism claims neutrally to facilitate the democratic debate between different normative approaches to nature, but in fact, itself implicitly presupposes a particular (modern) concept of nature, that is: it favors one of the voices within the debate. Finally, I argue that these controversies are the inevitable result of a fundamental ambiguity within our current moral understanding of nature, that should be reflected adequately. Drenthen is philosopher at the Center for Ethics of the University of Nijmegen, the Netherlands. (v.11,#1)

Drenthen, Martin. "Nietzsche and the Paradox of Environmental Ethics: Nietzsche's View of Nature and Morality." *New Nietzsche Studies* Vol. 5, no. 1/2 (2002): 12-25. This is a slightly adapted version of "The Paradox of Environmental Ethics: Nietzsche's View on Nature and the Wild" (*Environmental Ethics* Vol. 21, no. 2 (1999): 163-75).

Drenthen, Martin. "New Wilderness Landscapes as Moral Criticism: A Nietzschean Perspective on our Fascination with Wildness." *Ethical Perspectives* Vol. 14, no. 4 (2007): 371-403. In moral debates about the human relationship with nature, one often hears references to nature's wildness. Apparently, postmodern city dwellers seem to be deeply fascinated by wild nature; for them, wildness somehow seems to have strong moral significance. How should we interpret this fascination? Moral meanings of

nature come into play as soon as we start articulating our relationship with the world. In this process, we transform the neutrality of space into a meaningful place; that is, through interpretation we make mere environment into a meaningful and inhabitable world that we can live in. However, there is something peculiar with experiences of wild nature that seems to go beyond this hermeneutical framework. The word "wilderness" refers to the sphere that lies beyond culture, a part of the world that is not subject to human intervention and that is not (and can never be made) our home. Does this mean that wildness cannot be part of a meaningful world? Drenthen argues that Nietzsche's account of nature can help elucidate today's fascination with (the value of) wilderness as a place of value beyond the sphere of human intervention.

Drenthen, Martin. "Wildness as a Critical Border Concept: Nietzsche and the Debate on Wilderness Restoration." *Environmental Values* Vol. 14, no. 3 (2005): 317-37. How can environmental philosophy benefit from Friedrich Nietzsche's radical critique of morality? In this paper, Drenthen argues that Nietzsche's account of nature provides us with a challenging diagnosis of the modern crisis in our relationship with nature. Moreover, his interpretation of wildness can elucidate our concern with the value of wilderness as a place of value beyond the sphere of human intervention. For Nietzsche, wild nature is a realm where moral valuations are out of order. In his work, however, we can discern a paradoxical moral concern with this wildness. Wildness is a critical moral concept that reminds us of the fact that our moral world of human meanings and goals ultimately rests on a much grander, all-encompassing natural world. Nietzsche's concept of wildness acknowledges the value of that which cannot be morally appropriated. Wild nature confronts us with the limits of human valuing. Wildness as a concept thus introduces the "beyond" of culture into the cultural arena of values.

Dretske, Fred, "Machines, Plants and Animals: The Origins of Agency," *Erkenntnis* 51(1999):19-31. This is a theme issue of *Erkenntnis* on "Animal Minds." (v10,#4)

Drew, Christopher, and Richard A. Oppel, Jr., "Friends in the White House Come to Coal's Aid," *New York Times*, August 9, 2004, A 1, A11. Mountaintop mining, with reduced safety proposals are now being proposed by David Lauriski. When he first proposed the changes he was top executive of a Utah mining company, and his proposals got nowhere because of objections by union officials and safety experts. But now the proposals are again being made by David Lauriski, himself head of the Mine Safety and Health Administration. (v. 15, # 3)

Drew, Simon, *The Modern Self and Environmental Philosophy*, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Drew, Simon, *The Modern Self and Environmental Philosophy*, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Drexler, Madeline, *Secret Agents: The Menace of Emerging Infections*. Washington, DC: Joseph Henry (National Academy), 2002. We are under siege from microbes, germs invade our bodies. "The most ceaselessly creative bioterrorist is still Mother Nature. And her microbial operatives are still around us, thriving in the shadows, ready to pounce when conditions are right" (dust jacket). Militaristic metaphors abound in an otherwise well-organized and detailed account. And there is genuine concern for emerging diseases, partly from their rapid transportation in modern societies, partly from their evolving of resistance to drugs.

But the relation between humans and microbes is much more subtle, and the metaphor needs analysis. Tony McMichael, in a review in *Science*, concedes "the ecological imperatives that microbes, like all other species, display. Though the unplanned hit-or-miss processes of biological evolution, microbes often take advantage of changes in human ecology: meat-eating, livestock herding, urban living, storing of food, transfusing of blood, and so on." But "it's time to stop the war metaphor." "This

perspective maligns microbial intent. ... Mother Nature does not deliberately brew bioweapons. Rather, we humans are only one species among countless millions on Earth, and most of those millions are microbes. ... 90% of the cells in our body are bacteria, many of which pay for their board by rendering useful biological support services. Without microbes, we could not ferment the fibrous component of our morning muesli, and cows could not eat grass, and termites could not chew wood. If we are to achieve a new equilibrium with an increasingly globalized microbial world, then we must think in terms of ecological balance, not ambush and arms race." Review in Science 295 (22 February 2002):1469. (v.13,#2)

Driesen, David M., "Choosing Environmental Instruments in a Transnational Context.," Ecology Law Quarterly 27 (No. 1, 2000): 1- . (v.11,#4)

Driesen, M. David. "Don't Allow Dirty Air to Be the Victor." The Christian Science Monitor, vol. 89, 3 March 19978, p. 19.

Driscoll, Cathy, and Mark Starik, "The Primordial Stakeholder: Advancing the Conceptual Consideration of Stakeholder Status for the Natural Environment," Journal of Business Ethics 49(# 1, 2004):55-73. Stakeholder analysis in managerial decision-making typically includes only humans but it ought to include the natural environment as well. Analysis of who and what can count as a stakeholder; detailed survey of the literature. In addition to considerations of power, legitimacy, and urgency, a fourth dimension is proximity. By a comprehensive account the natural environment is the primary and primordial stakeholder of the firm. Driscoll is in management, Sobey School of Business, Saint Mary's University, Halifax, Nova Scotia. Starik is in strategic management and public policy, George Washington University School of Business and Public Management, Washington.

Driver, B. L., ed., Contributions of Social Sciences to Multiple-Use Management: An Update (Fort Collins, CO: Rocky Mountain Forest and Range Experiment Station, October 1990), USDA Forest Service, General Technical Report RM-196. Articles on the ways in which social sciences can enable a better valuing of nature and natural resources. (v1,#4)

Driver, Beverly, Dustin, Daniel, Baltic, Tony, Elsner, Gary, Peterson, George, eds. Nature and the Human Spirit: Toward an Expanded Land Management Ethic. State College, PA: Venture Publishing, Inc., 1996. 467pp.

Contains:

- Editors, "Nature and the Human Spirit: Overview".
- Elsner, Gary, Lewis, Darrell, Snell, Frank, Spitzer, William, "The Role of Public Lands in Maintaining and Rejuvenating the Human Spirit".
- Rolston, Holmes, III. "Nature, Spirit, and Landscape Management".
- Peterson, George. "Four Corners of Human Ecology: Different Paradigms of Human Relationships with the Earth".
- Kaza, Stephanie. "Comparative Perspectives of World Religions: Views of Nature and Implications for Land Management".
- Roberts, Elizabeth. "Place and Spirit in Public Land Management".
- Schroeder, Herbert. "Psyche, Nature, and Mystery: Some Psychological Perspectives on the Values of Natural Environments".
- Goodale, Thomas, Godbey, Geoffrey. "Hard-to-Define Values as Dimensions of Leisure".
- Montes, Sharon. "Uses of Natural Settings to Promote, Maintain, and Restore Human Health".
- Kopper, Philip. "Against Uniformity: Prehistoric Language Lessons for Modern Land Managers".
- Redmond, Louis. "Diverse Native American Perspectives on the Use of Sacred Areas on Public Lands".
- Bagby, Rachel. "African American Naturifocal Values".
- Garcia, Maria Teresa. "Hispanic Perspectives and Values".

--Henderson, Karla. "Feminist Perspectives, Female Ways of Being and Nature".

--Madson, Chris. "In the Open: Wild Places and the American Character".

--Budd, Bob. "Lessons for the Cinnamon Mare".

--Tims, Doug. "The Perspective of Outfitters and Guides".

--Driver, Susan. "Values of Nature for Artists and Artists' Interpretations of These Values for Society".

--Rey, Mark. "Private Forest Landowners and an Emerging Land Management Ethic".

--Birckhead, Jim. "'Dreaming' Down Under: The Cultural Politics of People and 'Country'".

--Sidaway, Roger. "Current Environmental Issues in Urban Western Europe and their Relevance to a New Land Management Ethic".

--Reunala, Aarne. "Cultural and Spiritual Forest Values in Scandinavia".

--Grumbine, Ed. "Beyond Conservation and Preservation in American Environmental Values".

--Friesen, Jennifer. "Nature, the Human Spirit, and the First Amendment".

--Wondolleck, Julia. "Incorporating Hard-to-Define Values into Public Lands Decision Making: A Conflict Management Perspective".

--Baltic, Tony. "Technology and the Evolution of Land Ethics".

--Stynes, Daniel, Peterson, George. "Adapting Management Frameworks to Better Account for Hard-to-Define values of Public Lands".

--Magary, Frank. "A Few Observations on Design for Spiritual Values".

--Greene, Thomas. "Cognition and the Management of Place".

--Bacon, Warren. "Multisensory Landscape Aesthetics".

--Bruno, Don, Stokowski, Patricia. "Sustaining Opportunities to Experience Early American Landscapes".

--Lee, Martha, Tainter, Joseph. "Managing for Diversity in Heritage Values".

--McAvoy, Leo, Lais, Greg. "Hard-to-Define Values and Persons with Disabilities".

--Hammond, Herb, Judy, Stephanie. "Belief, Wholeness, and Experience: Sensitizing, Professional Land Managers to Spiritual Values".

--Roggenbuck, Joseph, Driver, B.L. "Public Land Management Agencies, Environmental Education, and an Expanded Land Management Ethic".

--Mannell, Roger. "Approaches in the Social and Behavioral Sciences to the Systematic Study of Hard-to-Define Human Values and Experience".

--Davis, John. "An Integrated Approach to the Scientific Study of the Human Spirit".

--Driver, B. L., Ajzen, Icek. "Research Needed on Hard-to- Define Nature- Based Human Experiences".

--Stynes, Daniel, Stokowski, Patricia. "Alternative Research Approaches for Studying Hard-to-Define Nature-Based Human Values".

--List, Peter, Brown, Perry. "Moving Toward an Expanded Land Management Ethic". (v7,#4)

Drolette, Dan, "Wide Use of Rabbit Virus Is Good News for Native Species," Science 275(1997):154. A virus deliberately and recently released is having dramatic results killing Australia's introduced European rabbits. Showy groundsel has returned, and, unexpectedly, the numbers of western grey kangaroos are increasing. A dozen rabbits were released in the 1840's and now there are 300 million. The response in recovered vegetation is impressive. A virus introduced in the 1950's lost its effectiveness. Some fear the virus may jump species, but there is no evidence of this so far. Feral cats, also a pest, which fed on the rabbits, may also have been reduced, and it does not seem that the cats are switching prey to native species. (v8,#1)

Drucker, Claudia. "Hannah Arendt on the Need for a Public Debate on Science." Environmental Ethics 20(1998):305-16. I discuss Arendt's claim that science and its uses should become a matter of political discussion. The suggestion that science can be discussed and monitored by lay people is based on her interpretation of modern science. Modern science results from a flight from the human condition, which in her view should be reversed by means of the public debate. I conclude that Arendt's political approach should in fact be called a moral approach. Arendt's arguments can be reduced to a traditional humanistic critique of science, interpreted as a version of Kant's antinomy between the cognitive and the moral

interests of reason, according to which scientists must be prevented from treating human beings as a natural species like any other. Drucker is in philosophy, Universidade de Brasilia, Brasilia, Brazil. (EE)

Drucker, Merrit P. "The Military Commander's Responsibility for the Environment." Environmental Ethics 11(1989):135-52. I argue that military commanders have professional responsibilities for the environment in both peace and war. Peacetime responsibilities arise out of the commander's general responsibilities as an agent of the state. Wartime responsibilities are part of the commander's responsibility to protect noncombatants and to protect an environment that is the inherently valuable heritage of mankind. Commanders must assume some risk to protect the environment. I conclude that we must stop not only the environmental damage caused by war, but also war itself if we are to remain a viable species. Drucker is a major in the U.S. Army. (EE)

Drucker, Merrit. P., "The Military Commander's Responsibility for the Environment," Environmental Ethics 11(1989):135-152. A familiar discussion of utility vs. inherent worth of the environment, but in a totally unique context for environmental ethics. The comparison is made between the environment and artwork, and the military's responsibility to protect both, even at the risk of human life (as happened in World War II). Drucker is a Major in the United States Army and has taught philosophy at West Point. (Katz, Bibl # 2)

Drucker, Peter, The Ecological Vision. New Brunswick, NJ: Transaction, 1992. (v4,#1)

Drury, Jr., William Holland (1921-1992). Chance and Change: Ecology for Conservationists. Edited by John G. T. Anderson. Berkeley: University of California Press, 1998. 223 pages. \$ 25. Most of the environmental movement has ignored or rejected the changes in thinking that have infiltrated ecological theory since the 1970's. Disorder is what makes the natural world work, and clinging to the romantic notion of nature's grand design only saps the strength of the conservation movement. Humans tend to impose more structure and order on landscapes, when they interpret them, than is in fact there. What is actually there is a vital and dynamic collection of organisms, each with its own strengths and weaknesses, each selected over vast periods of time to do as well as possible under a conflicting array of changes. Evolution can involve a tendency toward greater and greater liberation from environmental constraints, including other organisms, rather than the ever-stronger dependencies proposed by community ecologists. Natural selection is not so much bleak in extreme, "nature red in tooth and claw," as a source of continuous hope and possibility. Drury, an ornithologist and botanist, taught biology at the College of the Atlantic, Bar Harbor, Maine. (v.9,#3)

Dryzek, John S., Review of: Humphrey, Matthew, Preservation versus the People? Nature, Humanity, and Political Philosophy. Environmental Values 13(2004):125-126. (EV)

Dryzek, John S. "Political and Ecological Communication." Environmental Politics 4(Winter 1995):13. (v7,#2)

Dryzek, John, Downes, David, Hunold, Christian, Hernes, Hans-Kristian, and Schlosberg, David, Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany, and Norway. New York: Oxford University Press, 2003. The end of the green social movement is a transformation of the state and society on a par with earlier transformations that gave us first the liberal capitalist state and then the welfare state. Such a transformation is now most likely in Germany, and least likely in the United States, which has lost the status of environmental pioneer that it gained in the early 1970's. Dryzek is at Australian National University. (v.14, #4)

Dryzek, John S., The Politics of the Earth: Environmental Discourses. Oxford, UK, and New York: Oxford University Press, 1997. 220 pages. An analysis of the main discourses that have dominated

environmental affairs during the last three decades. Sample chapters: "Making Sense of Earth's Politics: A Discourse Approach"; "Leave It to the People: Democratic Pragmatism"; "Industrial Society and Beyond: Ecological Modernization"; "Save the World through New Consciousness: Green Romanticism"; "Save the World through New Politics: Green Rationalism": and Dryzek's conclusion: a reinvigorated "Ecological Democracy." Dryzek teaches political science at the University of Melbourne, Australia. (v.9,#4)

Dryzek, John and David Schlosberg, eds., Debating the Earth: The Environmental Politics Reader, 2nd ed. Oxford: Oxford University Press, 2005.

Dryzek, John S., Rational Ecology: Environment and Political Economy. New York: Basil Blackwell, 1987. Pp. x, 270. A work in political theory rather than environmental philosophy, this book concerns the analysis of "social choice mechanisms"---the "means through which a society ...determines collective outcomes" (p.7). Dryzek develops a concept of "ecological rationality," the ability of human and natural systems to deal with environmental problems, and then applies this to mechanisms of social choice to produce a more enlightened model of decision-making. One result is the need to incorporate "practical reason"---i.e., consideration of ends---into social choice mechanisms. (Katz, Bibl # 2)

Dryzek, John S. *The Politics of the Earth: Environmental Discourses*. Translators: Lian Xuechun and Guo Chengxing. (Jinan: Shandong University Press, 2007). (in Chinese)

Dryzek, John, "Green Reason: Communicative Ethics for the Biosphere," Environmental Ethics 12(1990):195-210. Dryzek argues that the current criticism of instrumental rationality by environmental philosophers is justifiable, but that the adoption of an alternative conception of "ecological spirituality" as a replacement for rationality is a mistake. He suggests the development of a rationality based on the "communicative" model developed by the Frankfurt school. This is a subtle and provocative argument with good criticisms of the standard positions in environmental ethics. Dryzek's proposals for the development of "green reason" are admittedly sketchy, and seem to be based too much on a Gaia-like hypothesis, in which the Earth is seen as an agent. (Katz, Bibl # 2)

Dryzek, John S. "Green Reason: Communicative Ethics for the Biosphere." Environmental Ethics 12(1990):195-210. Exclusively instrumental notions of rationality not only reinforce attitudes conducive to the destruction of the natural world, but also undermine attempts to construct environmental ethics that involve more harmonious relationships between humans and nature. Deep ecologists and other ecological critics of instrumental rationality generally prefer some kind of spiritual orientation to nature. In this paper I argue against both instrumental rationalists and ecological spiritualists in favor of a communicative rationality which encompasses the natural world. I draw upon both critical theory and recent scientific intimations of agency in nature. Dryzek is in the department of Political Science, University of Oregon, Eugene, OR. (EE)

Dryzek, John, *The Politics of the Earth*. Reviewed by John Barry, *Environmental Values* 16(2007):269-272.

Dua, Kamal Kumar, Bhagavad Gita and Environment. Delhi, India: Koshal Book Depot (3611/5, Narang Colony, Tri Nagar, Delhi 110 035, India), 1988. ISBN 81-86050-07-8. Indian rupees 400. US\$ 60.00. Dua is in the Department of Zoology, Dayalbagh Education Institute, Dayalbagh, Agra, India.

Dubos, René J., "Humanizing the Earth," Science 179(23 February 1973):769-772. The disastrous ecological consequences of many past and present human activities point to the need for greater knowledge and respect of natural laws. But "Nature knows best" is not really meaningful or wise advice. The symbiotic interplay between humans and nature can general ecosystems more diversified and more

interesting than those occurring in the state of wilderness. Dubos was a biologist at Rockefeller University.

Duchesne, M., Cote, S.D. and Barrette, C., "Responses of woodland caribou to winter ecotourism in the Charlevoix Biosphere Reserve, Canada," Biological Conservation 96(no.3, 2000):311- . (EE v.12,#1)

Duchin, Faye, Glenn-Marie Lange, Knut Thgonstad and Annemarth Idenburg, The Future of the Environment: Ecological Economics and Technological Change. New York: Oxford University Press, 1995. \$29.95. Applies economic principles to the environment and concludes that present plans for recycling, fuel efficiency, and pollution abatement don't do enough. (v6,#2)

Duchin, Faye. Structural Economics: Measuring Change in Technology, Lifestyles, and the Environment. Washington, D.C.: Island Press, 1998. \$35. 208 pp. (v9,#2)

Duchrow, Ulrich and Liedke, Gerhard. Shalom: Biblical Perspectives on Creation, Justice and Peace. Geneva, Switzerland: WCC Publications, 1989.

Duchrow, Ulrich, and Franz J. Hinkelammert. *Property for People, Not for Profit: Alternatives to the Global Tyranny of Capitalism*. Geneva: World Council of Churches. Distributed by: London: Zed Books, 2006. How property and money dominate the human community, perpetuating and escalating injustice and the devastation of the natural environment. Alternatives that are workable, just, and sustainable. Duchrow is an economist, and Hinkelammert is a theologian. Originally published in German.

Duckworth, J.; Poole, C.; Tizard, R.; Walston, J.; Timmins, R., "The Jungle Cat *Felis chaus* in Indochina: a threatened population of a widespread and adaptable species," Biodiversity and Conservation 14(no.5, May 2005):1263-1280(18).

Duda, Mark Damian, Bissell, Steven J., and Young, Kira C., Wildlife and the American Mind: Public Opinion on and Attitudes toward Fish and Wildlife Management. Harrisonburg, VA: Responsive Management, 1998. (Responsive Management National Office, 130 Franklin St., P. O. Box 389, Harrisonburg, VA 22801). Overview of the human element in fish and wildlife management, measuring public opinion, marketing, agencies, laws, law enforcement, the value of wildlife, wildlife levels and cultural carrying capacity, threatened, endangered, and nongame wildlife, large predator reintroduction, nuisance animals and animal damage, consumptive uses of wildlife, animal rights, animal welfare, habitat protection, landowner issues, fishing and the angler, and much more. Duda is executive director of Responsive Management, Bissell was long with Colorado Division of Wildlife, now retired. (v.11,#1)

Duda, Mark Damian, Bissell, Steven J., Young, Kira C., "Factors Related to Hunting and Fishing Participation in the United States," Transactions of the 61st North American Wildlife and Natural Resources Conference, 1996, pp. 324-337. Findings of a three year study, said to be the most exhaustive review, data collection, and analysis of any nationwide study of hunting and fishing to date. Hunting, and, to a slightly lesser degree, fishing are primarily activities that can be understood as sociological phenomena centered on and about the American family. Biological considerations are of importance, but wildlife and fishery management programs that focus on the resource itself, rather than the hunter and the angler, will not promote continued utilization, but may contribute to the decline in participation and reduced satisfaction. Duda and Young are with Responsive Management, Harrisonburg, Virginia; Bissell with the Colorado Division of Wildlife. (v8,#1)

Dudley, J. P., and Woodford, M. H., "Bioweapons, Biodiversity, and Ecocide: Potential Effects of Biological Weapons on Biological Diversity," Bioscience 52(no.7, 2002): 583-92. (v.13,#4)

Dudley, Joseph P, "Global Zoonotic Disease Surveillance: An Emerging Public Health and Biosecurity Imperative", BioScience 54(no.11, November 2004):982-983(2).

Dudley, Joseph P., "Bird Flu Outbreak in United Kingdom Reveals Global Vulnerabilities," BioScience 56 (no.3, March 2006): 182-183 (2).

Dudley, Joseph P. "Paleontological and Cultural Perspectives on Livestock Grazing in Southwestern Rangelands: Response to Brown and McDonald," Conservation Biology 11(no.1, 1997):267. (v8,#2)

Dudley, Joseph P. "Biodiversity in Southern Africa", Wild Earth 6(no.3, 1996):26. (Africa)

Dudley, JP; Ginsberg, JR; Plumptre, AJ; Hart, JA; Campos, LC, "Effects of War and Civil Strife on Wildlife and Wildlife Habitats," Conservation Biology 16(no.2, 2002):319-329. (v.13, #3)

Dudley, Nigel, Gilmour, Don, and Jeanrenaud, Jean Paul, Forests for Life. Gland, Switzerland: World Wildlife Fund, 1996. Problems facing the world's forests. Often pessimistic, but the many possible positive steps being taken are also highlighted. (v7,#4)

Dudley, Nigel, Elliott, Chris, Stolton, Sue. "A Framework for Environmental Labeling," Environment 39(no.6, 1997):16. Certification schemes for organic agriculture and forestry offer valuable lessons about environmental labeling. (v8,#3)

Dudycha, Jeff, and Kevin Geedey, Ethical Issues in Ecology: Case Studies Washington, DC: Ecological Society of America, 2004. The authors present a series of thought-provoking fictional scenarios to highlight the ethical dilemmas faced by ecologists and other research scientists today. Linked commentaries give general guidance to group leaders and teachers. Based on the popular "ethical issues" series in the ESA's journal Frontiers in Ecology. Can be ordered online at www.esa.org.

Duerr, William A., "Forestry's Upheaval," Journal of Forestry 84 (no. 1, January 1986):20-26. Advances in Western civilization are redefining the profession. "What matters is not biological but social renewability. ... The public forest preserved from logging is timber used up, just as really as though the land had been cleared and paved with asphalt." In the future, "in recreation, emphasis on wilderness will be softened in favor of less elitist resources." Duerr was Distinguished Professor of Forestry, State University of New York, Syracuse, and has more recently been at Virginia Tech, Blacksburg. (v3,#1)

Duffin, Stephen J. "The Environmental Views of John Locke and the Maori People of New Zealand." Environmental Ethics 26(2004):381-401. In recent years, the trend in environmental ethics has been to criticize the traditional Western anthropocentric attitude toward nature. Many environmentalists have looked toward some of the views held by indigenous peoples in various parts of the world and argue that important ecological lessons can be learned by studying their beliefs and attitudes toward nature. The traditional Western viewpoint has been labeled as a form of shallow environmentalism, allowing few rights for anything other than human life. In contrast, indigenous peoples are seen as respecting all things. Thus, the claim is made that the latter's ecological views are deeper than those of Western views. John Locke is often placed at the center of this tradition that is associated with indifference to the environment. Yet, a comparison of the fundamental beliefs that drive the environmental ethics of the Maori people with those of John Locke reveals surprising similarities. It may well be the case that any adoption by the West of another culture's view would be too difficult given that there are so many foundational beliefs that are alien to the West, but which are nevertheless required to drive such an ethic. Nevertheless, if we can find similarities between various views, such as those of the Maori and Locke, we may have a greater appreciation of one another's beliefs and hence less reluctance to adopt them if they will benefit the environment. Our efforts could then perhaps be directed toward putting environmental ethics into practice

rather than fighting over which doctrine is the correct one. (EE)

Duffus, David A., and Philip Dearden, "Recreational Use, Valuation, and Management of Killer Whales (*Orcinus orca*) on Canada's Pacific Coast," Environmental Conservation 20 (no. 2, Summer):149-156. Killer whales are among the most spectacular of all animals to see in the wild, and recreational watching of them has increased dramatically. The authors analyze surrounding issues: the experiences people have, economic benefits to communities, possible harassment of the whales, management issues, and whether the Canadian experience can be a model for whale and dolphin watching elsewhere. The authors are in geography at the University of Victoria, British Columbia. (v5,#4)

Duffy, David Cameron and Albert J. Meier, "Do Appalachian Herbaceous Understories Ever Recover from Clearcutting?" Conservation Biology 6(1992):196-201. The answer is no--at least for a very long time. In a study of sites from 45 to 87 years later, the understory was only one-third as abundant as in the original primary forest. This article was featured in a story in the New York Times, "Study Casts Doubt on Belief in Self-Revival of Cleared Forests," by Catherine Dold, September 1, 1992, p. B9. (Thanks to Doug Daigle.) (v3,#3)

Duffy, Doril M., Roseland, Mark, Gunton, Thomas I. "A Preliminary Assessment of Shared Decision-Making in Land Use and Natural Resource Planning", Environments 23(No.2, 1996):1- .

Duffy, Rosaleen, A Trip Too Far: Ecotourism, Politics and Exploitation. London: Earthscan, 2000. Reviewed by Norman Dandy, Environmental Values 12(2003):408-409. (EV)

Dugan, Patrick, ed., Wetlands: A World Conservation Atlas. New York: Oxford University Press, 1993. 200 pages, 180 photos, 30 maps. \$ 35.00. (v4,#4)

Dugatkin, Lee Alan. "The Evolution of Cooperation," Bioscience 47 (no.6, 1997): 355. Four paths to the evolution and maintenance of cooperative behavior. (v8,#2)

Dugger, Celia W., "W.H.O. Supports Wider Use of Malaria vs. Malaria," New York Times online, September 16, 2006. DDT is the most effective insecticide and poses no health risk when sprayed in small amounts on the inner walls of people's homes.

Dukas, Reuven, ed. Cognitive Ecology: The Evolutionary Ecology of Information Processing and Decision Making. Chicago: University of Chicago Press, 1998. 420pp. cloth \$95, paper \$30. The intersection of cognitive psychology and behavioral ecology. Neural networks, recognition of bird song, spatial memory, and foraging decisions. Reviews of current research intended to produce a coherent view of a new field. (v10,#4)

Duke, Lynne, "Limited Trade in Ivory Approved," Washington Post 6/20/97: A16. CITES approves limited trade in ivory. The U.N. Convention on International Trade in Endangered Species (CITES) downgraded the protected status of elephants in three southern African nations, allowing some trade in ivory for the first time in nearly a decade. The ban was put in place in 1989 after rampant poaching had reduced the elephant population by 50% during the 1980s. Since the ban, the African elephant population has grown from 50,000 to 60,000. Zimbabwe, Namibia, and Botswana will use the moneys from selling an annual quota of their ivory stockpile to fund "sustainable use" conservation and development programs in communities affected by the elephant's protected status. The U.S. opposed the lifting of the ban. Reflecting a widespread sentiment, one African official described the decision as "a victory for African sovereignty and their right to the utilization of their natural resources in a sustainable manner without dictation from the industrialized countries." Japan's and Norway's request to lift hunting and trade restrictions on commercial whaling was turned down. For a provocative editorial supporting the lifting of

the ban, see Wendy Marston, "The Misguided Ivory Ban and the Reality of Living with Elephants," Washington Post (6/8/97): C2. (v8,#2)

Dunayer, Joan, *Animal Equality: Language and Liberation* (Derwood, MD: Ryce Publishing Co., 2001). Reviewed by Richard Haynes, *Journal of Agricultural and Environmental Ethics* 20(2007):533-542.

Dunayer, Joan, *Speciesism* (Derwood, MD: Ryce Publishing Co., 2004). Reviewed by Richard Haynes, *Journal of Agricultural and Environmental Ethics* 20(2007):533-542.

Dunayer, Joan, Animal Equality: Language and Liberation. Reviewed by Fox, Michael Allen, in Environmental Values 12(2003):400-402. (EV)

Duncan, BW; Schmalzer, PA, "Anthropogenic influences on potential fire spread in a pyrogenic ecosystem of Florida, USA", Landscape Ecology 19 (no.2, 2004): 153-165(13).

Duncan, Colin A. M., "On Identifying a Sound Environmental Ethic in History: Prolegomena to Any Future Environmental History," special issue: The Moral Sense of Nature, Environmental History Review, vol. 15, no. 2, Summer 1991. (v2,#3)

Duncan, Ian J.H., "Welfare is to do with What Animals Feel", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. Although it is not possible to give the term "welfare" a precise scientific definition, nevertheless it is a useful term which describes a distinct phenomenon. It is argued that it is only appropriate to consider the welfare of sentient animals such as the vertebrates and higher invertebrates. Sentient is defined as "capable of feeling" and the view is expressed that welfare may be all to do with what animals feel. The "pine tree argument" is developed, according to which one questions whether or not the phenomenon suspected of being welfare can be applied sensibly to pine trees; if it can, then it is not welfare. Application of the pine tree argument leads to the conclusion that welfare is not simply health, absence of stress, or biological fitness. It is concluded that welfare is indeed all to do with what animals feel. The consequence of this conclusion is that methods to assess welfare should be aimed at asking animals what they feel about the conditions under which they are kept and the procedures to which they are exposed. Duncan is in the Department of Animal and Poultry Science, University of Guelph, Guelph, Ontario Canada N1G 2W1.

Dundon, Stanislaus J., "Development Aid: The Moral Obligation to Innovation", Journal of Agricultural and Environmental Ethics 4(1991):31-48. The prominent, though not exclusive, role of basic needs strategies to attain ethically acceptable development goals raises the question of the ability of development agencies to find and employ basic needs strategies. The obligation to prevent severe human suffering leads to the obligation to employ basic needs strategies to attain basic needs goals. The history of failure by development agencies in finding and employing basic needs tools leads to a further obligation to cultivate bureaucratic environments which foster profound innovation. This requires not only new tools but also new bureaucratic behaviour. An understandable obstacle to simultaneously technological and bureaucratic innovation lies in the tension between "responsible behaviour" and "behaviour promoting fundamental change." Since this tension is based on the unpredictability of creative change, a series of axioms and corollaries which reduce the unpredictability is given. They include: (1) an obligation to seek innovation; (2) a clear statement of basic needs goals and intent to use some basic needs tools; (3) increase in effective knowledge of the poor and their survival strategies; (4) bureaucratic learning flexibility; (5) participatory development and allied emphasis on sustainable resource technologies. The embodiment of these in the "learning" process approach is illustrated.

Dunkiel, Brian S. "Should Tax Policy be Subject to NEPA?", Environment 38(No.10, 1996):16. Although tax policy has significant impacts on the environment, neither the U. S. Treasury nor the IRS routinely do environmental assessments. (v7,#4)

Dunlap, Julie and Kellert, Stephen R., "Zoos and Zoological Parks" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 184-87. (v6,#2)

Dunlap, Julie Jeanette, Ethical Reasoning about Animal Treatment and its Relationship to Moral Development. Ph.D. dissertation. New Haven, CT: Yale University, 1987. Kohlberg's moral development extended to pets and wildlife. A study of some 80 boys in the eighth and twelfth grade in Connecticut. Are boys capable of using consistent patterns of reasoning about animal treatment dilemmas? Yes. Are there different levels of reasoning? Yes. Do these levels advance during maturation? Yes, but the advance is faster with ethical issues about humans, and faster regarding higher animals than lower ones. Does the amount of environmental interaction influence this thinking? No, and suburban boys may be more advanced than rural boys.

Dunlap, Riley E., Xiao, Chenyang, and McCright, Aaron M., "Politics and Environment in America: Partisan and Ideological Cleavages in Public Support for Environmentalism," Environmental Politics 10 (Winter, 2001): 23-48. (v.12,#4)

Dunlap, Riley E., George H. Gallup, Jr., and Alec M. Gallup, "Of Global Concern: Results of the Health of the Planet Survey," Environment 35(November, 1993):7-15, 33-39. The first journal article reporting results from the Gallup Institute's 1992 Health of the Planet Survey. The survey was taken in 24 nations and involved over 30,000 respondents worldwide in face-to-face interviews, the poor as well as the wealthy. The largest environmental survey ever conducted. Results challenge the conventional view that residents of the less-economically developed nations are less concerned about environmental quality than their counterparts in wealthier countries. Dunlap is professor of sociology at Washington State University. (v4,#4)

Dunlap, Riley E., "Trends in Public Opinion Toward Environmental Issues," Society and Natural Resources 4 (July-September 1991):285-318. (v2,#4)

Dunlap, Riley E., Van Liere, Kent D., Mertig, Angela G., and Jones, Robert Emmet, "Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale." Journal of Social Issues 56(Fall, 2000):425-442. This article provides a revised and expanded "NEP Scale" that replaces the one originally published in 1978 that has become the most widely used measure of endorsement of an ecological paradigm or worldview. Dunlap is in environmental sociology, Department of Sociology and Department of Rural Sociology, Washington State University, Pullman, WA. E mail: dunlap@wsu.edu or dunlapr@earthlink.net. (v.12,#2)

Dunlap, Riley E. and Angela G. Mertig, eds., American Environmentalism: The U. S. Environmental Movement, 1970-1990. Philadelphia: Taylor and Francis, 1992. Eight papers, tracking and interpreting environmentalism in the United States over two decades. Samples: Robert Cameron Mitchell, Angela G. Mertig, and Riley E. Dunlap, "Twenty Years of Environmental Mobilization: Trends Among National Environmental Organizations"; Bill Devall, "Deep Ecology and Radical Environmentalism"; Lynton K. Caldwell, "Globalizing Environmentalism: Threshold of a New Phase in International Relations"; Michael McCloskey, "Twenty Years of Change in the Environmental Movement: An Insider's View." Both authors are sociologists at Washington State University, Pullman. (v4,#1)

Dunlap, Riley E. and Rik Scarce, "The Polls--Poll Trends: Environmental Problems and Protection," Public Opinion Quarterly 55(Winter, 1991): 713-734.

Dunlap, Riley E., "Public Opinion in the 1980's: Clear Consensus, Ambiguous Commitment," Environment 33(October, 1991): 10-15, 32-37. (v2,#4)

Dunlap, Riley E., Xiao Chenyang, and McCright, Aaron M., "Politics and Environment in America: Partisan and Ideological Cleavages in Public Support for Environmentalism," Environmental Politics 10(no. 4, 2001):23-48. Early environmentalism was often non-partisan, but the staunch anti-environmentalism of Reagan destroyed all pretense of environment being non-partisan. The current Bush administration, at least in the conservative wing, is strongly opposed to environmental protection. The gap between Republican and Democratic support for environmental legislation has grown substantially. But the mass public is less polarized on these issues than are political elites. Dunlap is in environmental sociology, Washington State University. (v.13,#2)

Dunlap, Riley E. and Michelson, William, Handbook of Environmental Sociology. Westport, CT: Greenwood Press, 2002. An overview of the first quarter century of American environmental sociology. Sociological study of the built environment; energy, society, and environment; natural hazards and disasters; risk, technology, and society; human dimensions of global environmental change. (v.13,#2)

Dunlap, Riley E., "Show Us the Data: The Questionable Empirical Foundation of 'The Death of Environmentalism' Thesis," Organization and Environment, 19 (no 1, March 2006).

Dunlap, Thomas R., "Finding Value in Nature," Environmental Values 15(2006): 331-341. This paper explores the idea that a proper valuing of natural environments is essential to (and not just a natural basis for) a broader human virtue that might be called 'appreciation of the good'. This kind of valuing can explain, without any commitment to a metaphysics of intrinsic values, how and why it is good to value certain natural phenomena for their own sakes. The objection that such an approach is excessively human-centred is considered and rebutted. (EV)

Dunlap, Thomas R. ed. *DDT, Silent Spring, and the Rise of Environmentalism: Classic Texts*. Seattle: University of Washington Press, 2008. Contents include: (1) "The Ecological Foundations of Applied Entomology" by Stephen A Forbes, (2) "The War against Insects" by Leland O. Howard, (3) "A Study of the Effects of Lead Arsenate Exposure on Orchardists and Consumers of Sprayed Fruit" by Paul Neal et al., (4) "Toxicity and Potential Dangers of Aerosols, Mists, and Dusting Powders Containing DDT" by Paul Neal et al., (5) "How Magic is DDT?" by Brigadier General James Stevens Simmons, (6) "Aerosol Insecticides," (7) "Achievements and Possibilities in Pest Eradication" by Clay Lyle, (8) "The Food and Drug Administration Looks at Insecticides" by Paul B. Dunbar, (9) "DDT and Its Effect on Fish and Wildlife" by Clarence Cottam and Elmer Higgins, (10) "Notes on Some Ecological Effects of DDT Sprayed on Elms" by Roy J. Barker, (11) Editorial from Bird Study, (12) "The Status of the Peregrine in Great Britain" by Derek A. Ratcliffe, (13) Robert Rudd, Pesticides and the Living Landscape, (14) Interview with Joseph J. Hickey by Thomas R. Dunlap, (15) "Backfire in the War against Insects" by Robert S. Strother, (16) "'Heroin' of FDA Keeps Bad Drug Off Market" by Morton Mintz, (17) "A Fable for Tomorrow" by Rachel Carson, (18) Use of Pesticides, President's Science Advisory Committee, (19) "Communications Create Understanding" by Robert H. White-Stevens, (20) "The Myth of the 'Pesticide Menace'" by Edwin Diamond, (21) "DDT: Its Days are Numbered, Except Perhaps in Pepper Fields" by Robert Gillette, (22) "Intended Consequences" by Thomas Sowell, (23) "Rereading Silent Spring" by Thomas R. Hawkins, and (24) "If Malaria's the Problem, DDT's Not the Only Answer" by May Berenbaum.

Dunlap, Thomas R. ed. *DDT, Silent Spring, and the Rise of Environmentalism: Classic Texts*. Seattle: University of Washington Press, 2008. Contents include: (1) "The Ecological Foundations of Applied Entomology" by Stephen A Forbes, (2) "The War against Insects" by Leland O. Howard, (3) "A Study of the Effects of Lead Arsenate Exposure on Orchardists and Consumers of Sprayed Fruit" by Paul Neal et al., (4) "Toxicity and Potential Dangers of Aerosols, Mists, and Dusting Powders Containing DDT" by Paul Neal et al., (5) "How Magic is DDT?" by Brigadier General James Stevens Simmons, (6) "Aerosol Insecticides," (7) "Achievements and Possibilities in Pest Eradication" by Clay Lyle, (8) "The Food and

Drug Administration Looks at Insecticides” by Paul B. Dunbar, (9) “DDT and Its Effect on Fish and Wildlife” by Clarence Cottam and Elmer Higgins, (10) “Notes on Some Ecological Effects of DDT Sprayed on Elms” by Roy J. Barker, (11) Editorial from Bird Study, (12) “The Status of the Peregrine in Great Britain” by Derek A. Ratcliffe, (13) Robert Rudd, Pesticides and the Living Landscape, (14) Interview with Joseph J. Hickey by Thomas R. Dunlap, (15) “Backfire in the War against Insects” by Robert S. Strother, (16) “‘Heroine’ of FDA Keeps Bad Drug Off Market” by Morton Mintz, (17) “A Fable for Tomorrow” by Rachel Carson, (18) Use of Pesticides, President’s Science Advisory Committee, (19) “Communications Create Understanding” by Robert H. White-Stevens, (20) “The Myth of the ‘Pesticide Menace’” by Edwin Diamond, (21) “DDT: Its Days are Numbered, Except Perhaps in Pepper Fields” by Robert Gillette, (22) “Intended Consequences” by Thomas Sowell, (23) “Rereading Silent Spring” by Thomas R. Hawkins, and (24) “If Malaria’s the Problem, DDT’s Not the Only Answer” by May Berenbaum.

Dunlap, Thomas R., Saving America's Wildlife. Princeton: Princeton University Press, March 1991. 238 pages. Cloth: \$ 35.00. Paper: \$ 9.95. A history of wildlife preservation in America by a historian at Virginia Polytechnic Institute and State University. (v1,#4)

Dunlap, Thomas R., "Environmentalism, a Secular Faith," Environmental Values 15(2006):321-330. Much of American environmentalism's passion and political power, as well as shortcomings and tactical failures, have their origin in the movement's demands for new attitudes toward nature as well as new laws and policies. A full understanding of environmentalism requires seeing it as a secular faith, movement concerned with ultimate questions of humans' place and purpose in the world. This perspective explains much about its development, its emphasis on individual action, the vehemence of its opposition, and its political failure in the last generation. Comparisons with other national environmental movements, not considered here, constitute an important topic for further research. (EV)

Dunn, D. Kevin, and Wood, Jessica L. "Substantive Enforcement of NEPA Through Strict Review of Procedural Compliance: Oregon Natural Resources Council v. Marsh in the Ninth Circuit." Journal of Environmental Law and Litigation 10, no.2 (1995): 499. (v7, #3)

Dunn, James R., and Kinney, John E., Conservative Environmentalism. Westport, CT: Quorum Books, 1996. 275 pp. Environmentalism from the right: Chapters: Agriculture and Soil. Forests, Trees, and Floral Diversity. Wildlife. Water and Water-Related Resources. Sanitation and Disease. The Environment, Rich and Poor (Chapter 7). A sample from Chapter 7: America's environmental problems are usually measured in parts per million, billion, or trillion, often impossible to measure and the public must be told of their existence. They are mostly media events. The Third World's environmental problems are desperate and the poor, hungry, and diseased feel them every day. Morale: Conserve (and improve) our way of life; fix theirs. Chapters, continued: Wealth and the Environment Quantified. Sustainable Development versus Resource Multiplication. Politics and the Environment. Causes of Public Confusion. Regulations and Environmental Priorities. The Cultural-Environmental War. Toward a Better Environment. Thirty-one Environmental Principles. Principle 31, with emphasis: Virtually every human activity we see as needed to improve the environment is opposed or not acknowledged by leftist environmentalism. (p. 241). Toward a Better World for Future Generations. A bibliography is divided into "Left-Compatible or Liability Culture Books" (such as Rachel Carson and Al Gore), and "Conservative-Compatible or Asset Culture Books" (such as Gregg Easterbrook). Some extracts will make useful class readings and discussion material. Dunn was a longtime professor of environmental geology at Rensselaer Polytechnic Institute, now a consultant. Kinney is an environmental consultant and engineer. (v8,#2)

Dunn, Steve, Friedman, Robert, and Baish, Sarah, "Coastal Erosion: Evaluating The Risk," Environment 42(no. 7, Sep. 1, 2000):36- . Severe storm events and global warming contribute to seacoast degradation

and destruction. Scientists and policy makers are trying to develop strategies to alleviate the damage. (v.12,#2)

Dunsmore, Roger, Earth's Mind. Albuquerque, NM: University of New Mexico Press, 1997. Thirteen essays on Native American literature. Mind is something larger and more pervasive in nature than the Western tradition has usually considered and this suggests respect for nature and Earth's mind as central to survival and conveys the essential wildness of mind. Dunsmore teaches in the Liberal Studies Department, University of Montana. (v.10,#1)

Dunstone, N, "Desert Puma: Evolutionary Ecology and Conservation of an Enduring Carnivore," Biological Conservation 108(no.1, 2002):129- . (v.13, #3)

DuPlessis (Du Plessis), PGW 1988. Omgewingsetiek - 'n derde alternatief. Die Kerkblad 11-15. (Africa)

DuPlessis (Du Plessis), IJ 1991. Die God wat skep en herskep - ekologie en menseverhoudinge in Kolossense. Skrif en Kerk 12:2, 194-213. (Africa)

DuPlessis (Du Plessis), IJ 1991. Die God wat skep en herskep - ekologie en menseverhoudinge in Kolossense. Skrif en Kerk 2, 194-213. (Africa)

Dupré, John, Humans and Other Animals. Oxford: Oxford University Press, 2002. The ways in which we characterize animals, including humans. It is a mistake to think that each organism has an essence that determines its necessary place in a unique hierarchy. We should reject the misguided concepts of a universal human nature and normality in human behavior. We must take a pluralistic view of biology and of human life. Dupré is at the University of Exeter, UK.

DuPreez (Du Preez), J 1991. Reading three "enthronement psalms" from an ecological perspectives. Missionalia 19:2, 122-130. (Africa)

DuPreez (Du Preez), J 1990. Mission perspectives in an Old Testament procession song: Psalm 24. Missionalia 1:3, 330-343. (Africa)

DuPreez (Du Preez), J 1992. Eschatology and ecology: Perspectives from the book of revelation. Pretoria: ISWEN, University of Pretoria. (Africa)

DuPuis, E. Melanie and Peter Vandergeest, eds., Creating the Countryside: The Politics of Rural and Environmental Discourse. Philadelphia: Temple University Press, 1995. 346 pages. What does it mean to save nature and rural life? Do people know what they are trying to save and what they mean by "save"? As the answers to these questions become more and more unclear, so, too, do the concepts of "environment," "wilderness," and "country." Ten contributors on people in and out of nature, constructing rurality, why people make artificial distinctions between nature and culture, and generally complaints about dualistic categories that limit our ability to think about environmental and rural problems and hamper our ability to formulate practical, realistic, and just solutions. DuPuis is an analyst of environmental policy with the New York State Department of Economic Development. Vandergeest is on the faculty of environmental studies at York University. (v7,#2)

DuPuis, E.N., and Vandergeests, P. eds., Creating the Countryside: The Politics of Rural and Environmental Discourse (Philadelphia: Temple University Press, 1996). Reviewed by Jan Van Der Straaten. Environmental Values 6(1997):242-243. (EV)

DuRand (Du Rand), JA 1993. Dwergmuishondjies en die betekenis van Golgota? Enkele teologiese en

ekologiese perspektiewe. *Skrif en Kerk* 14:2, 176-186. (Africa)

Durbin, Andrea C. "Trade and the Environment: The North-South Divide," *Environment* 37(no.7, Sept. 1995):16- . Trade and environment issues within the Uruguay Round of the General Agreement on Tariffs and Trade highlight the difficulties in overall North-South relations. (v6,#4)

Durbin, P. T., "Review of: Aidan Davison, Technology and the Contested Meanings of Sustainability," *Science Technology and Human Values* 27(no.4, 2002): 530-32. (v.13,#4)

Durland, Karann. "The Prospects for a Viable Biocentric Egalitarianism." *Environmental Ethics* 30(2008):401-416. At a minimum, a satisfactory biocentric egalitarianism must satisfy three constraints: (1) it must demand enough to deserve the name biocentric; (2) it must not require so much that it makes a worthwhile or at least a recognizably human life impossible; and (3) it must not be incoherent or internally inconsistent. Neither rule-based forms of biocentric egalitarianism nor virtue theory versions meet all three requirements. The rule-based accounts that Paul Taylor and James Sterba introduce contain serious defects, and many of these problems appear in any rule-based biocentric egalitarianism, making all such approaches untenable. The egalitarian virtue theories suggested by Albert Schweitzer, Kenneth Goodpaster, and Jason Kawall are too promissory to be useful or fully assessed, but an overlooked virtue-based account that Taylor defends is more detailed and fatally flawed. Since its difficulties appear in any fully developed virtue-ethic version of biocentric egalitarianism, virtue-based approaches fare no better than rule-based ones. Given the problems that both rule-based and virtue theory forms of biocentric egalitarianism face, the prospects for a viable biocentric egalitarianism are bleak. (EE)

Durning, Alan, How Much Is Enough? The Consumer Society and the Future of the Earth. New York: W. W. Norton. \$ 8.95. 200 pages. 1992. The richest one-fifth of humanity causes vastly disproportionate environmental damage because of its growing demand for material goods. The consumption gap between industrialized and developing countries is 18 to 1 for chemicals, 10 to 1 for timber and energy, 3 to 1 for grain and fresh water. Groundwater in the U.S. is being pumped 25 times faster than the normal rate of replenishment. Meanwhile, surveys show there has not been any noticeable increase in personal satisfaction or happiness. (v3,#3)

Durning, Alan B. Apartheid's Environmental Toll. Reviewed in *Environmental Ethics* 14(1992):87-91.

Durning, Alan B., Apartheid's Environmental Toll. Worldwatch Paper 95. May 1990. 50 pages. \$ 4.00. Worldwatch Institute, 1771 Massachusetts Ave., N. W. Washington, DC 20036. A startling paper. "Apartheid reveals with exceptional clarity the way unfairness within the human estate extends its damage into the natural estate as well." "Forced relocations and natural increase combine to give the homelands an average population density higher than all but three countries on the continent." "Air and water near mining and smelting operations are little monitored, and what monitoring is done is not reported." "Aside from oil exporters and the notoriously inefficient centrally planned economies, South Africa is the most energy-intensive country in the world." "On a per person basis, white South Africans are the world's worst greenhouse offenders." "The bantustan system leaves South Africa with a pattern of land ownership more skewed than any on the seven continents." (v1,#4)

Durrenberger, Robert W., Environment and Man: A Bibliography. Palo Alto, CA: National Press Books, 1970. 118 pages. Paper. 2,225 entries. An older bibliography now mostly of historical interest. Durrenberger is at San Fernando Valley State College.

Dustin, Daniel L., and Leo H. McAvoy. "The Decline and Fall of Quality Recreation Opportunities and Environments?" *Environmental Ethics* 4(1982):49-57. User satisfaction as the ultimate goal of recreation

planning and management is contested by a discussion of human adaptability which makes it possible for people to adjust to a progressively lower quality of recreation opportunities without loss of satisfaction. Recreation planning and management based on such satisfaction levels are then shown to perpetuate a deterioration in the quality of recreation environments themselves. To arrest this trend, a new goal for recreation planning and management is proposed based on the equation of quality of opportunity with diversity of environmental settings. The article concludes with a discussion of this goal in light of the Recreation Opportunity Spectrum (ROS) concept developed recently by members of the U. S. Forest Service. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is in the department of Recreation, San Diego State University, San Diego, CA. (EE)

Dustin, Daniel L., and Leo H. McAvoy. "Hardening National Parks." Environmental Ethics 2(1980):39-44. The "tragedy of the commons" argument developed by Garrett Hardin is applied to problems associated with the increasing use of the national parks in the United States. The relevance of his argument to such problems is illustrated by a discussion of the proposals included in the recent Draft General Management Plan for Yosemite National Park. Implications for the future management of Yosemite and other public recreation resources conclude the article. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is in the department of Recreation, San Diego State University, San Diego, CA. (EE)

Dustin, Daniel L., and Leo H. McAvoy. "Toward Environmental Eolithism." Environmental Ethics 6(1984):161-66. We apply two contrasting principles of human workmanship, the principles of design and eolithism, to the issue of responsible environmental stewardship. Both principles are described and analyzed in an environmental context with an emphasis on the weaknesses of the more popular design principle and the strengths of the lesser known eolithic principle. We conclude with a discussion of the principles' complementary potential for environmental planning and management. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is in the department of Recreation, San Diego State University, San Diego, CA. (EE)

Dustin, Daniel L., and Leo H. McAvoy, "Toward Environmental Eolithism," Environmental Ethics 6(1984):161-166. Eolithism is defined as the process of finding and using "junk." This, the authors argue, rather than a principle of design, should be the guiding metaphor of environmental management. (Katz, Bibl # 1)

Dustin, Daniel L., The Wilderness Within: Journeys in Self-Discovery. San Diego, CA: Institute for Leisure Behavior, San Diego State University. 1993. 153 pages. \$ 6.95. ISBN 1-882708-52-0. Dustin finds that journeys he takes to places "out there" to the exterior world of mountains, forests, deserts, and tundra become journeys he takes "in here" in his interior world. "To me wilderness is the logical place, indeed the ideal place, to marvel at life's unfolding, to live at life's edge. It is in wilderness that we can best discard the protective armor that shields us from life itself. It is in wilderness that we can best get down to earth, that we can best open up and receive the world around us. It is in wilderness that we can best rejoice in the here and now. But the way wilderness is managed these days tends to undermine this opportunity." (p. 5) Thoughtful reflections of interest to those who ask what happens to people in wilderness. Dustin is Distinguished Professor in San Diego State University's Department of Recreation, Parks, and Tourism. (v4,#3)

Dutcher, DD; Finley, JC; Luloff, AE; Johnson, J, "Landowner Perceptions of Protecting and Establishing Riparian Forests: A Qualitative Analysis", Society and Natural Resources 17 (no.4, 2004): 329-342(14).

DuToit (Du Toit), DSR 1991. Die sabbat as teken van harmonie (Ex 20:8-12). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 69-80. (Africa)

DuToit, J. T., "Wildlife Harvesting Guidelines for Community-Based Wildlife Management: A Southern African Perspective," Biodiversity and Conservation 11(no.8, 2002): 1403-16. (v.13,#4)

Duval, R. Shannon, and David Edward Shaner. "Conservation Ethics and the Japanese Intellectual Tradition." Environmental Ethics 11(1989):197-214. A systematic philosophy that presupposes an ecocentric world view, rather than a homocentric or egocentric world view, can be a viable resource for investigating issues in environmental philosophy and conservation ethics. Generally speaking, the Japanese philosophical and religious tradition represents a commitment to ecocentrism. This philosophical orientation is in concert with the world view of many naturalists. We explore one example of ecocentrism by unveiling the crosscultural connection between the naturalistic philosophy of Louis Agassiz, a nineteenth-century French-American biologist, and the early writings of Nishida Kitaro, a twentieth-century Japanese philosopher. We suggest that the central player in understanding the ecocentric connection between Agassiz and Nishida is American philosopher/psychologist William James. James was once a student of Agassiz and his writings influenced Nishida's early work. Related issues concerning conservation ethics and the Japanese intellectual tradition are also addressed. Shaner is at the Philosophy Dept., Furman University, Greenville, SC. Duval is a Dana Foundation Research and Teaching Assistant at Furman University, Greenville, SC. (EE)

Duvenage, JJ s.a. Natuurbewaring - 'n noodsaaklikheid. Instituut vir die bevordering van Calvinisme Studiestuk nr 23. Potchefstroom: IBC. (Africa)

Duvick, Donald N. "Biotechnology Is Compatible with Sustainable Agriculture." Journal of Agricultural and Environmental Ethics 8(1995):112-125. Biotechnology can provide appropriate new tools for use in solution of specific problems in sustainable agriculture. Its usefulness will depend in large part on the degree to which sustainable agriculturists understand the utility of biotechnology and apply it toward ends they deem important. Biotechnology can give little assistance to sustainable agriculture in the short term. It can be more useful in the medium term, and it could be highly useful in the long term as an integral part of the art and science of plant breeding and other components of sustainable agriculture systems. (JAEE)

Duvick, Donald N., "Our Vision for the Agricultural Sciences Needs to Include Biotechnology", Journal of Agricultural and Environmental Ethics 4(1991):200-206. In a debate: Should our vision for the agricultural sciences include biotechnology?

Dwivedi, O. P., ed., World Religions and the Environment. New Delhi, India: Gilanjal Publishing House, 1989. 461 pages. There are nine essays by Canadian and Indian authors, covering seven religions: Christianity, Islam, Zoroastrianism, Hinduism, Buddhism, Jainism, and Sikhism (v3,#3)

Dwivedi, O. P., "Environmental Stewardship: Our Spiritual Heritage for Sustainable Development," Journal of Developing Societies 12 (no. 2, 1996). Dwivedi teaches at the University of Guelph, Canada. (v8,#3)

Dwivedi, O.P., "Vedic Heritage for Environmental Stewardship" Worldviews: Environment, Culture, Religion, vol.1, no.1. (v8,#2)

Dworkin, Ronald, Life's Dominion: An Argument about Abortion, Euthanasia, and Individual Freedom. New York: Knopf, 1993. Mostly medical bioethics, but Dworkin sometimes ventures into environmental concerns. We have an obligation to protect species that goes beyond our own well-being; we think we should admire and protect them because they are important in themselves, and not just if or because we or others want to enjoy them. "Someone might say: we protect endangered species because we want the pleasure of continuing to see animals of each species, or because we want the useful information we

might gain by studying them, or because it is more interesting for us that there be more rather than fewer species. But none of these arguments rings true. Many--perhaps most--of the people who consider endangered species important ... struggle to protect the species simply because they think it would be a shame if human acts and decisions caused its disappearance. So this is another important example of something many of us take to be of intrinsic rather than instrumental value" (p. 75).

Dworkin, Ronald. Life's Dominion: An Argument about Abortion, Euthanasia, and Individual Freedom. New York: Alfred A. Knopf, 1993. 273 pages. Dworkin's main argument is that debates here are fundamentally religious disagreements, and so he asks, in Chapter 3, "What Is Sacred?" He is led to some reflections on intrinsic value in nature: "In our culture, we tend to treat distinct animal species (though not individual animals) as sacred ... another important example of something many of us take to be of intrinsic rather than instrumental value" (p. 75). "Our concern for the preservation of animal species is also based on respect for the way they came into being rather than for the animals independently of that history. The natural processes of evolution and development themselves have a normative significance for us and this is not because the species they generated--the rhinoceros or the horned owl, for example, are superior on some independent test of animal worth to others that might have evolved if they had not, but because we consider it wrong, a desecration of the inviolable, that a species that evolution did produce should perish through our acts. Geneticists have created plants that we find instrumentally valuable: they produce food and may save lives. But we do not think artificially produced species are intrinsically valuable in the way that naturally produced species are" (pp. 78-79). Dworkin does not undertake to defend this position but rather to recognize it as a plausible and widespread conviction, one that any just law must take into account. Dworkin is professor of law at New York University and at Oxford University. (v6,#1)

Dwyer, Johanna, and Loew, Franklin M., "Nutritional Risks of Vegan Diets to Women and Children: Are They Preventable?", Journal of Agricultural and Environmental Ethics 7(1994):87-110. Women and children are at higher risk of malnutrition from consumption of unsupplemented vegan diets than are adult males. Those who are very young, pregnant, lactating, elderly, or who suffer from poverty, disease or other environmentally induced disadvantages are at special risk. Fortunately, the risk of dietary deficiency disease can be avoided and the potential health benefits of vegan diets can be realized when diets for these groups are planned in line with the Recommended Dietary Allowances so that nutrient intakes reach or exceed recommended levels. Dwyer is in nutrition at the Tufts University Schools of Medicine and Nutrition, New England Medical Center, Boston. Loew is at the Tufts University School of Veterinary Medicine and Tufts Biotechnology Corporation, Boston and North Grafton.

Dwyer, Lynn E., and Murphy, Dennis D. "Fulfilling the Promise: Reconsidering and Reforming the California Endangered Species Act." Natural Resources Journal 35, no.4 (1995): 735. (v7, #3)

Dwyer, Michael J., Sea of Heartbreak: The Extraordinary Account Of A Newfoundland Fishing Voyage. Toronto, Canada: Key Porter Books, Toronto, Canada, 2001. ISBN 1-55263-303-9. Going fishing for turbot with gill nets is to participate in a marine massacre. Dwyer's personal environmental ethics perhaps might be designated as a form of "progressive anthropocentrism." He is not opposed to killing wildlife for a living, e.g. fishing, or hunting for food, but he signs on board a ship he comes to call "our ship of death" (p. 191), and reaches the conviction that a civilization with such a profligate attitude towards the non-human inhabitants of the marine world does not deserve to survive. Thanks to David Orton. (v.12,#4)

Dwyer, Peter D., "The Invention of Nature," Pages 157-186 in Ellen, Roy, and Fukui, Katsuyoshi, eds., Redefining Nature: Ecology, Culture and Domestication. Oxford, UK: Berg, 1996. "Modern thought treats nature as separate from culture and has assigned ontological priority to the former. This is analogous to the separation of environment and organism that informs much of biology. ... We are easily taught that nature is other than culture or that environment is other than organism; that cultures, like

organisms, are emergent products. These understandings mesh comfortably with a tradition of thought that, for more than a century, has been underlain by an evolutionary perspective. I wish to revise, and to some extent up-end this tradition. ... I shall argue, in the domain of human affairs [that] culture should be taken as prior, nature as emergent. The sad truth may be that the idea of 'wilderness' -- that supposed last refuge of nature--is no more than an attempt to represent an imaginary place as a concrete symbol. 'Nature' as Westerners know it is an invention, an artefact" (p. 157). Dwyer is a zoologist at the University of Queensland, Brisbane, with anthropological interests in subsistence peoples in Papua New Guinea. (v.13,#1)

Dyar, JA; Wagner, J, "Uncertainty and species recovery program design", Journal of Environmental Economics and Management 45(no.2, 2003):505-522.

Dybas, C. L., "Florida's Indian River Lagoon: An Estuary in Transition," Bioscience 52(no.7, 2002): 554-59. (v.13,#4)

Dybas, Cheryl Lyn, "Invasive Species: The Search for Solutions The Search for Solutions," BioScience 54(no.7, 1 July 2004):615-621(7). (v. 15, # 3)

Dybas, Cheryl Lyn, "Ode to a Codfish," BioScience 56 (no.3, March 2006): 184-191.

Dybas, CL, "Dead Zones Spreading in World Oceans," BioScience 55 (no. 7, July 2005): 552-558.

Dybas, CL, "From Biodiversity to Biocomplexity: A Multidisciplinary Step toward Understanding Our Environment," Bioscience 51(no. 6, 2001):426-431. (v.13,#1)

Dycus, Stephen. National Defense and the Environment. Hanover, NH: University Press of New England, 1996. 306pp. \$19.95 paper. In a study of the issues raised when US military might collides with environmental laws, Dycus writes, "in preparing for a fight, we must not destroy the very thing we would fight to protect."

Dykaar, BB; Schrom, DA, "Public Ownership of US Streambeds and Floodplains: A Basis for Ecological Stewardship", Bioscience 53(no.4, 2003):428-239.

Dyke, Charles. Review of Ethics, Efficiency, and the Market. By Allen E. Buchanan. Environmental Ethics 8(1986):275-76.

Dyke, Charles. Review of Corporations and the Environment. Edited by David L. Brunner, Will Miller, and Nan Stockholm. Environmental Ethics 6(1984):363-65.

Dyke, Charles. Review of Ethical Issues in Government. Edited by Norman E. Bowie. Environmental Ethics 4(1982):373-75.

Dyson, Tim, Population and Food: Global Trends and Future Prospects. Reviewed by Gene Wunderlich. Journal of Agricultural and Environmental Ethics 10(1997):95-98. (JAEE)

E/Environmental Magazine, Special Issue, "Can Religion Save the Environment?", vol. 13, no. 6, Nov./Dec. 2002. Articles by Jim Motavalli, John Grim, Paul Gorman, Mary Evelyn Tucker.

Eade, D. and Williams, S., with contributions from Oxfam Staff. The Oxfam Handbook of Development

and Relief. Atlantic Highlands, NJ,: Humanities Press, 1996. This is the product of over fifty years' experience of Oxfam in their work in over seventy countries around the world. It analyzes policy, procedure, and practice in fields as diverse as health, human-rights, emergency relief, capacity-building, and agricultural production. (v7,#1)

Eads, George C. "Envisioning our Automotive Future," Environment 39(no. 1, 1997):28. Policymakers and politicians need to place prospects for revolutionary changes in automobile design and fuel efficiency in context, according to this review of a report from the Office of Technology Assessment. (v8,#1)

Eagan, David J. and David W. Orr, eds., The Campus and Environmental Responsibility. Theme issue of New Directions for Higher Education, No. 77, Spring 1992. 133 pages. San Francisco: Jossey-Bass Publishers, 1992. Single copies \$ 14.95, Jossey-Bass Publishers, 350 Sansome St., San Francisco, CA 94104. Eleven articles on making a campus green. Campus environmental audits at UCLA; environmental literacy and action at Tufts University, campus energy management at the University of Rochester, making Brown University green, the environmental ombudsman at the University of Kansas, campus environmental stewardship at the University of Wisconsin-Madison, procuring locally grown foods at Hendrix College, Arkansas, the campus and the biosphere initiative at Carleton and Saint Olaf colleges, student environmental organizations, and campus recycling. Ways to find a college, if you can, that does the least damage to the environment. About 7,000 copies have gone to subscribers at colleges and universities, largely college administrators. Eagan is at the University of Wisconsin, Madison; Orr is at Oberlin College. (v4,#1)

Eagles, P.F.J. and McCool, S. F., Tourism in National Parks and Protected Areas: Planning and Management. New York: Oxford University Press, 2002. Eagles is at University of Waterloo, Canada; McCool is at the University of Montana.

Eames, Mark A., "The Endangered Species Act, the Federal Columbia River Power System, and the National Marine Fisheries Service," Environmental Law 25 no. 2 (1995): 389- . (v6,#2)

Earle, Sylvia Alice, Sea Change: A Message of the Oceans. New York: G. P. Putnam's Sons, 1995. 361 pages. Illustrated. \$25.95. This book is a plea for the preservation of the oceans. A distinguished biologist specializing in marine ecosystems, Earle was chief scientist for the National Oceanic and Atmospheric Administration from 1990-92, where she discovered that U.S. commits only \$11 million per year to marine sanctuaries compared to \$1.4 billion to national parks. (v6,#2)

Earley, Jay, Transforming Human Culture: Social Evolution and the Planetary Crisis. Albany, NY: State University of New York Press, 1997. How social evolution has led to remarkable achievements and also to moral horrors and the current world crisis as well. Certain ground qualities were present at the beginnings of our social evolution, such as natural living, belong, vitality, community, and equality, and over the span of human history certain emergent qualities developed to give us greater power in the world, such as technology, social organization, and rational thinking. In developing these emergent qualities, we have suppressed the ground qualities--but at the expense of our health and wholeness. The next step in our evolution is to take conscious charge of our future by integrating ground qualities with emergent qualities. (v.8,#4)

Earley, Lawrence S., "Celebrating a Conservation Classic" (Leopold's Sand County Almanac)," Wildlife in North Carolina 63 (no. 9, September 1999):14-19. Fifty years of Leopold's land ethic, with interviews with Pete Bromley and Phil Doerr, both in zoology and forestry, North Carolina State University, about whether the land ethic is being practiced in North Carolina. (v.10,#3)

Earley, Lawrence S., "Disturbing News for Wildlife," Wildlife in North Carolina 64 (no. 9, September

2000):12-19. Part I. "A Case for Management," 64 (no. 10, October 2000):14-19. Part II. As North Carolina's mountain forests age, many wildlife species have been left without habitat. A scarcity of early successional habitat is having detrimental effects on many wildlife species--bobwhite quail, indigo buntings, prairie warblers, towhees, yellow-breasted chats, and cottontail rabbits. North Carolina formerly had such habitats, by some accounts as a result of logging, or, earlier, of Indian fires, by others accounts up to a quarter of the forests were naturally early succession as a result of storms and natural fires. One habitat of particular interest is the "balds" (grassy areas without forests) on over forty of the high Appalachians. What caused these areas is unknown, but they are now disappearing. Prescribed fire is only part of the answer. Elk are being reintroduced to the Great Smoky Mountains to restore grazing. Some now argue that more forests need to be cut to re-create this habitat, but environmentalists wonder. Managers face a dilemma: "We seek to conserve a natural world that must change and we often interject human management into ecosystems that we would ideally like to see human free" (Part II, p. 16). (v.11,#3)

Earp, David J. "The Regulation of Genetically Engineered Plants: Is Peter Rabbit Safe in Mr. McGregor's Transgenic Vegetable Patch?" Environmental Law 24 (no. 4, 1994): 1663- . Recent changes in federal regulations of genetically engineered plants, with a conclusion that they generally provide adequate environmental protection but, because the science is outpacing the laws, the Department of Agriculture needs additional statutory authority to prevent all risks. (v6,#1)

Earth Ethics is a recently launched periodical in environmental ethics, published by the Public Resource Foundation, 1815 H Street, NW, Suite 600, Washington, DC 20006. There is no fixed subscription price; a contribution of \$ 10 or more is encouraged. The format is short articles and brief notes, around the theme of evolving values for an Earth community. Sara Ebenreck is editor, to whom editorial correspondence should be directed, 3451 Sixes Road, Prince Frederick, MD 20678. (v1,#2)

Earth Ethics, vol. 8, nos. 2-3, Winter/Spring 1997, contains several articles on the proposed UN Earth Charter:

--"The Earth Charter, Benchmark Draft"

--Rockefeller, Steven C., "The Earth Charter Process"

--Clugston, Richard M., "A Common Ground for Global Earth Ethics?"

--Jaaffar, Mehdi Ahmed, "The Earth Charter--The Oman Report" (a report from the Sultanate of Oman)

--Burford, Grace, Sallie King, Paul Knittier, and Jay McDaniel, "A Buddhist-Christian Contribution to the Earth Charter" (two authors are Buddhists; two are Christians)

--Dwivedi, O. P., "India's Heritage of Environmental Stewardship"

and a forum with contributions by Vaclav Havel, Brendon Mackey, David McCloskey, also excerpts from the report of a working group of the Commission on Sustainable Development.

There is also a section on "Common Critiques of the Earth Charter," and response. The critiques are:

1. The Earth Charter is a norther, environmental document that does not take into account the realities of the global south.
2. The Earth Charter's romantic animism and "new age" thinking are not defensible scientifically, despite repeated historical attempts to assert an organicist or vitalist world view.
3. The Earth Charter is a step backward. The language is feeble because it fails to integrate and assert the best language already in place in existing documents, crafted in the nearly endless series of UN Summits, from Rio through Rome.
4. The Earth Charter is not poetic, spiritual or moving enough. Too much has been written by committee, resulting in a hodge-podge of poetry, philosophical musings, and UN bureaucratic language.

All the articles are short and concentrated. The draft Charter and these discussions can make stimulating class materials. (v8,#3)

Earth is a newly launched magazine, by the editors of Astronomy, devoted to the geology and evolution

of the Earth. "Our magazine focuses on the magnificence of our world as a planet ... the Earth. We will explore this ever-changing, vital, awesome body of great force and beauty." -- Robert Burnham, Editor. Address: 21027 Crossroads Circle, P. O. Box 1612, Waukesha, WI 53187-1612. (v2,#1)

Earthkeeping News is a newsletter of the North American Conference on Christianity and Ecology, recently launched. Address: North American Conference on Christianity and Ecology, 1522 Grand Ave., #4C, St. Paul, MN 55105. (v2,#4)

Earthwork is a magazine for people pursuing careers in conservation and environmental affairs. Job listings and advice on launching a conservation career. Published by the Student Conservation Association, Inc., dedicated to fostering conservation careers since 1957. Contact Earthwork, P. O. Box 550, Charlestown, NH 03603. Phone 603/543-1700. (v4,#2)

Earthworks Group, The, especially John Javna. Fifty Simple Things Kids Can Do To Save the Earth. Kansas City: Andrews and McMeel, 1990. 4900 Main Street, Kansas City, MO 64112. Environmental ethics for kids. Start them early. (v1,#4)

EarthWorks Group, The. 50 Simple Things You Can Do To Save the Earth, Earthworks Press, 1400 Shattuck Avenue, Berkeley, CA 94709, 1989. \$ 4.95. Printed on recycled paper, this book topped the sales of all other paperback nonfiction titles in the week of February 25th to March 24th. (v1,#2)

Easley, A. T., Joseph F. Passineau, and B. L. Driver, compilers, The Use of Wilderness for Personal Growth, Therapy, and Education. USDA Forest Service, General Technical Report RM-193. July 1990. 197 pages. Published at Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO 80526. 32 papers, from the Fourth World Wilderness Congress, Estes Park, Colorado, in September 1987. Papers are summary, cover the field, are state of the art and full of references. Easley is at Sir Sandford Flemming College, Lindsay, Ontario; Passineau is at the Central Wisconsin Environmental Station, Amherst Junction, WI; and Driver at the Rocky Mountain Forest and Range Experiment Station, Fort Collins. (v2,#2)

Easter-Pilcher, Andrea. "Implementing the Endangered Species Act." Bioscience 46, no.5 (1996): 355. Assessing the listing of species as endangered or threatened. (v7, #3)

Easterbrook, Greg, "Greenhouse Common Sense: Why Global Warming Economics Matter More than Science," U.S. News and World Report, December 1, 1997, pp. 58-62. More than 2,500 economists, including eight Nobel prizewinners, endorsed a statement by the organization Redefining Progress saying that "sound economic analysis" shows that greenhouse emissions can be cut "without harming American living standards." Easterbrook remains rather much of a free market environmentalist. (v.8,#4)

Easterbrook, Gregg, A Moment on the Earth: The Coming Age of Environmental Optimism. New York: Viking, 1995. 745 pages. \$27.95. It's been only 25 years since the first Earth Day. Easterbrook argues that the past quarter-century has been nothing short of revolutionary: diminished air pollution, cleaner drinking water than before the first factory was built, hundreds of laws against toxic waste, thousand of towns recycling garbage, endangered species protected by law, littering and smoking--very recently common in America--are now both despised. Although environmentalists are often pessimists, Easterbrook gives them a pat on the back. In a review in The New York Times Book Review (April 23, 1995, p. 13), Michael Specter predicts that Easterbrook's book will be hated by "the liberal ideologues of the environmental movement" and praised by those peddling the Contract with America. The book is poorly documented, Specter points out. "One of the most pernicious documents to claim itself as green in quite some time." - Tom Athanasiou, review in Environmental Action, Fall 1995, p. 27. Reviewed by Calvin B. DeWitt in Christian Century, November 22-29, 1995: Easterbrook is full of errors and misrepresentations. "Easterbrook tells us it's time to reconcile environmentalism with the facts, but he

doesn't practice what he preaches." For a contrasting book, published at the same time, see Dowie, Mark, Losing Ground. Easterbrook has written on environmental issues for Newsweek, The New Republic, and other publications. (v6,#2)

Easton, Thomas A., ed., Taking Sides: Clashing Views on Controversial Environmental Issues, 10th edition. New York: McGraw Hill, Dushkin, 2003. Latest edition of a decade old series of debate-style readers accentuating the controversy in environmental issues. Easton is at Thomas College, Thomasville, GA. (v.13,#4)

Eaton, David, "Incorporating the other: Val Plumwood's integration of ethical frameworks," Ethics and the Environment 7(no. 2, 2002):153-180. Val Plumwood's recent attempt to formulate a "contextual" theory of vegetarianism that integrates concern for animals, ecology, and unprivileged societies involves heavy criticism of Carol J. Adams. Plumwood's theory, although claiming to be "contextual," involves an unnecessary degree of abstraction both in its engagement with Adams's thought and in its attempt to formulate a universal narrative. Plumwood consistently misrepresents Adams's work and demonstrates an alignment with dominant discourses that favor "meat." By representing the rejection of these discourses as alienated and deviant, Plumwood risks muting the radical critique that western vegetarianism represents and absorbing it within the exploitative dominant viewpoint. (E&E)

Eaton, Heather and Lorentzen, Lois Ann, eds. Ecofeminism and Globalization: Exploring Culture, Context, and Religion. Rowman & Littlefield. 2003. Eleven essays in three sections: I. Economic Globalization, the Environment and Gender - two theoretical essays by Mary Mellor and Heather Eaton; II Challenges to Ecofeminism: Concrete Cases - essays from Kenya, Chiapas, Mexico, and India challenge ecofeminist principles (authors Celia Nyamweru, Lois Lorentzen and Aruna Gnanadason; and III. Regional and Transnational Expression of Ecofeminism and Responses to Globalization. Articles by Noel Sturgeon, wan-Li Ho, Mary Judith Ress, Ivone Gebara, Masatsugu Maruyama and Greta Gaard. Lorentzen is in social ethics, University of San Francisco.

Eaton, Heather, "Feminist or Functional Cosmology? Ecofeminist Musings on Thomas Berry's Functional Cosmology," Ecotheology No 5/6 (Jul 98 / Jan 99):73-94.

Eaton, Heather, "At the Intersection of Ecofeminism and Religion: Directions for Consideration," Ecotheology Vol 6 (Jul 01/Jan 02):75-91. heaton@ustpaul.uottawa.ca Ecological feminism has developed from many directions and locations, and with differentiated links between feminism and ecology and between women and nature. Religious discourses are taking ecofeminist analyses into their folds. As a whole, however, religious ecofeminist perspectives are uneven. In this article, I suggest seven hermeneutics that might strengthen religious ecofeminist discourses as well as develop connections among the various viewpoints towards larger horizons, and specifically ones that link theory with concrete and material life-conditions.

Eaton, Heather, and Lorentzen, Lois Ann, Ecofeminism and Globalization: Exploring Culture, Context, and Religion. Lanham, MD: Roman and Littlefield, 2003. Ecofeminism in the context of the social, political and ecological consequences of globalization. (v 14, #3)

Eaton, Heather, "Ecofeminist Ethics: Utopic Conversations," Ecotheology No 8 (Jan 2000):40-57.

Eaton, John, The Circle of Creation: Animals in the Light of the Bible. Valley Forge, PA: SCM Press, 1995. 116 pages. (v8,#2)

Eaton, Randall L., The Sacred Hunt: Hunting as a Sacred Path. Ashland, OR: Sacred Press, 1998. (Sacred Press, P. O. Box 490, Ashland, OR 97520). 206 pages. \$ 25.00. About forty short topical essays,

forcefully written. Our human roots as hunters. The significance of hunting in being human and in understanding one's relation to the world. Samples: "The Human Carnivore," "The Deer I Never Killed," "Trophy Hunting and Planetary Dominion."

On Tom Regan: "Regan doesn't know where in 'the great chain of being' animal rights begin or end. ... Regan is a confused idealist whose animal rights would separate humanity from the animals and nature. There is nothing moral in his animal rights, no sacredness. Just more bombastic intellectualism, more hubris. I doubt that neither Tom Regan nor moral philosophy in general will lead us home. Moral philosophy is anachronistic, save the here-and-now listening to the heart. Let me tell you a secret from one of my students: 'Everybody is someone else's dinner.' ... Here is a simple truth. To live is to kill and to die. To live well is to kill and die well, to make sacred. Our first ethic for nature is to surrender our own hearts" (pp. 148-149). Well, too bad, Tom, but at least nature is still sacred--for these carnivorous hunters. Eaton is an animal behaviorist, long the editor of the journal Carnivore, and has appeared on national television in defense of hunting. There is also a set of two related videos: The Sacred Hunt I and II. (v.9,#4)

Ebenreck, Sara, Review of Carolyn Merchant, Earthcare. Environmental Ethics 19(1997):323-325. (EE)

Ebenreck, Sara, "Opening Pandora's Box: The Role of Imagination in Environmental Ethics," Environmental Ethics 18(1996):3-18. While the activity of imagination is present in much writing about environmental ethics, little direct attention has been given to clarifying its role. Both its significant presence and provocative theoretical work showing the central role of imagination in ethics suggest a need for discussion of its contributions. Environmental ethicists especially should attend to imagination because of the pervasive influence of metaphorical constructs of nature and because imaginative work is required to even partially envision the perspective of a nonhuman being. Without clear awareness of the limits of contemporary Western metaphoric constructs of nature, environmental ethicists may overlook or even contribute to the cultural extinction of ideas of nature present in the imaginative visions of indigenous cultures. In this article, I briefly review the reasons why the dominant Western philosophical tradition ranks imagination below the power of abstract reasoning, survey contemporary ideas about the role of imagination in ethics, and consider the implications of these ideas for environmental ethics. The work of imaginative empathy in constructing what might be the experience of nonhuman beings, the role of diverse metaphors and symbols in understanding nature, and the process of envisioning the possible future are developed as three central contributions of imagination to environmental ethics. Imaginative work is not peripheral, but complementary to the work of reason in shaping an environmental ethic. Ebenreck teaches philosophy at St. Mary's College of Maryland. (EE)

Ebenreck, Sara, "A Partnership Farmland Ethic," Environmental Ethics 5(1983):33-45. By focusing on the agricultural use of land, Ebenreck discusses the problems with a stewardship ethic of natural resources, and instead urges a "partnership" ethic; this involves respecting nature, not destroying it, and returning something to the land as an exchange for the use by humans. (Katz, Bibl # 1)

Ebenreck, Sara. Review of Ecofeminism as Politics: Nature, Marx and the Postmodern. By Ariel Salleh. Environmental Ethics 21(1999):437-440.

Ebenreck, Sara. "A Partnership Farmland Ethic." Environmental Ethics 5(1983):33-45. Current facts about soil erosion, groundwater "mining," and impact of toxic substances suggest a resource crisis in our farming system. Yet traditional checks on the exploitation of farmland, capsulized in the "stewardship ethic," proceed from too limited a viewpoint to adequately address the root of the exploitation and proffer an alternative. After briefly examining the stewardship ethic, I consider the development of a "partnership ethic" to guide the use of land for farming which builds its essential elements out of the reflections of feminist thinkers on the relationship between humankind and nature. Instead of using "rights" language to express the ethic, I develop a theory of appropriate use analogous to the appropriate

use of another person's capabilities--i.e., that such moral use should respect and not destroy the other and that it should return something of value to the other in exchange for the use. Finally, those principles are examined for their practical implications for farmland use and national farm policy. Ebenreck is a food and agricultural policy consultant, Washington, D.C. (EE)

Echenique, Lázaro Miguel, "Zapata Swamp: Cuba's Largest, Wildest Wetland," International Journal of Wilderness 4(no. 2, July 1998):17-20. Echenique is with the National Center for Protected Areas of Cuba. (v.9,#3)

Echeverria, John, and Raymond Booth Eby, eds. Let the People Judge: Wise Use and the Private Property Rights Movement. Washington, DC: Island Press, 1995. 369 pages, hard and soft cover. Wise Use and related organizations are difficult to characterize in terms of either membership or goals, but they share certain tactics. In general Wise Use supporters attack environmental protection and conservation efforts as harmful to the economy and job creation, insensitive to the needs and desires of local communities, and inconsistent with certain traditional American values, including constitutionally protected property rights. There is an alliance between small landowners but the movement is often funded and organized by corporations with an interest in preventing further environmental gains. There is also a serious call to work toward solutions to resource conflicts in cooperation with local communities and citizens. This volume collects a wide range of different and sometimes divergent articles on the Wise Use movement. Samples: Thomas Lewis, "Cloaked in a Wise Disguise"; Philip Brick, "Taking Back the Rural West"; John D. Echeverria, "The Takings Issue"; Mary Ann Glendon, "'Absolute' Rights: Property and Privacy"; Holmes Rolston, III, "Winning and Losing in Environmental Ethics"; Teresa Erikson, "Finding the Ties that Bind: Coalitions with Agriculture Groups"; and many others. Thirty-five articles. Escheverria is chief legal counsel for the National Audubon Society; Eby is a graduate student, St. John's College, Annapolis, MD. (v6,#1)

Echeverria, John, "Does a Regulation that Fails to Advance a Legitimate Governmental Interest Result in a Regulatory Takings of Private Property Far Outweigh the "Rule"," Environmental Law 29 (No. 4, 1999): 853- . (v.11,#2)

Echlin, Edward P., "Jesus and the Earth Community," Ecotheology No 2 (Jan 1997):31-47.

Echlin, Edward, "An African Church sets the Example. (In Environmental Stewardship)," The Ecologist 30 (No. 1, Jan 01 2000): 43- . (v.11,#2)

Echlin, Edward P., *The Cosmic Circle: Jesus and Ecology*. Blackrock, County Dublin: Columba Press, 2004. Stewardship "easily lends itself to a detached and manipulative view of creation" and "has not moved hearts" (p. 16).

Eckberg, D. L. and T. J. Blocker, "Varieties of Religious Involvement and Environmental Concerns: Testing the Lynn White Thesis," Journal for the Scientific Study of Religion vol. 28, no. 4, December 1989. (v2,#1)

Eckberg, Douglas Lee, and Blocker, T., "Varieties of Religious Involvement and Environmental Concern," Journal for the Scientific Study of Religion 28(1989)509-517. (v8,#3)

Eckberg, Douglas Lee, and Blocker, T., "Environmental Issues as Women's Issues," Social Science Quarterly 70(1989):586-593. (v8,#3)

Eckberg, Douglas Lee, T. Jean Blocker, "Varieties of Religious Involvement and Environmental Concerns: Testing the Lynn White Thesis," Journal for the Scientific Study of Religion 28(1989):509-

517. Based on a telephone survey, the authors ask, "Is there a measurable 'disdain' for nature which grows from acceptance of Biblical authority?" They conclude, "Within the limits of our data, White's thesis received firm support from our results." Eckberg is a professor of sociology at Winthrop College, Rock Hill, South Carolina. Blocker is a professor of sociology at the University of Tulsa, Oklahoma. (v3,#4)

Eckerberg, Katarina, Environmental Protection in Swedish Forestry. Aldershot, UK: Avebury, 1990. In English. Sweden has forests, more than before, but these are increasingly managed for silviculture and with reduced biodiversity in result, due to such practices as draining wetlands and to the use of herbicides and pesticides. The threat to biodiversity is surprisingly high: 20 percent of vascular plants, 20 percent of the land-living mollusks, 30 percent of mammals and birds, and 50 percent of the amphibians and reptiles. There is a political consensus in the Swedish Parliament to conserve this diversity, but can this be made effective? Eckerberg is in political science at the University of Umea, Sweden. (v7,#2)

Eckerberg, Katarina. "Environmental Problems and Policy Options in the Baltic States: Learning from the West?" Environmental Politics 3 (no. 3, 1994): 445- . (v6,#1)

Eckersley, Robin. "Ecological Intervention: Prospects and Limits." *Ethics & International Affairs* Vol. 21, no. 3 (2007): 293-316. This essay seeks to extend the already controversial debate about humanitarian intervention by exploring the morality, legality, and legitimacy of ecological intervention and its corollary, ecological defense. If the legacy of the Holocaust was acceptance of a new category of "crimes against humanity" and an emerging norm of humanitarian intervention, then should the willful or reckless perpetration of mass extinctions and massive ecosystem destruction be regarded as "crimes against nature" or "ecocide" such as to ground a new norm of ecological intervention or ecological defense? *Ethics & International Affairs* features an online symposium of replies to Eckersley at: <<http://www.cceia.org/resources/journal/index.html>>.

- "On Not Being Green about Ecological Intervention" by Matthew Humphrey.
- "Ecological Intervention and Anthropocene Ethics" by Simon Dalby.
- "Ecological Intervention in Defense of Species" by Clare Palmer.
- "Some Worries about Ecological-Humanitarian Intervention and Ecological Defense" by Mark Woods.

Eckersley, Robyn, Review of Benton, Ted Natural Relations., "Natural Justice: From Abstract Rights to Contextualised Needs." Environmental Values 3 (1994):161-172. (EV)

Eckersley, Robyn, "Free Market Environmentalism: Friend or Foe?", Environmental Politics 2(1993):1-19. "Free market environmentalism" proposes that environmental problems can be solved by creating and enforcing tradeable property rights in respect of common environmental assets. But while the market can allocate resources efficiently, it cannot by itself perform the task of setting an optimal (in the sense of just) distribution of income nor an optimal (in the sense of sustainable scale) of the economy relative to the ecosystem. There are certain specific environmental problems where "free market environmentalism" may prove to be the most appropriate solution (it can, for example, promote energy efficiency through market mechanisms), but it is inappropriate as a blanket solution to the ecological crisis. This calls for economic policies concerned with three broad goals: economic efficiency, social justice and ecological sustainability. Eckersley is in politics at Monash University, Australia. A useful response by Michael Jacobs (University of Lancaster, UK) is in the Winter 1993 issue, vol. 2, no. 4. (v5,#4)

Eckersley, Robyn, "The Discourse Ethic and the Problem of Representing Nature," Environmental Politics 8(no. 2, Summer 1999):24- . (v10,#4)

Eckersley, Robyn, "Beyond Human Racism," Environmental Values (1998): 165-182. In 'Non-

Anthropocentrism? A Killing Objection', Tony Lynch and David Wells argue that any attempt to develop a non-anthropocentric morality must invariably slide back to either anthropocentrism (either weak or strong) or a highly repugnant misanthropy in cases of direct conflict between the survival needs of humans and nonhuman species. This reply argues that their attempt to expose the flaws in non-anthropocentrism deflects attention away from the crux of the ecocentric critique, which can best be understood if we replace the confusing terms anthropocentrism/non-anthropocentrism with 'human racism'/ecocentrism (understood as a more inclusive moral perspective which encompasses nonracist humanism). Human racism manifests when a reconciliation of human and nonhuman needs is possible but is nonetheless concealed and/or denied. That is, the best test for discerning prejudice against nonhuman nature is not when individual or social choice are severely circumscribed but rather when such choices are relatively unconstrained. Moreover, their concluding argument that human concern for nonhuman nature should be understood in terms of aesthetic values rather than moral values does not provide reliable grounds for the systematic protection of nonhuman nature. KEYWORDS: anthropocentrism, human racism, ecocentrism, hierarchy of needs, deep ecology. Robyn Eckersley is at Monash University, Melbourne, Australia. (EV)

Eckersley, Robyn, "Divining Evolution: The Ecological Ethics of Murray Bookchin," Environmental Ethics 11(1989):99-116. A clear account of the merits and defects of Bookchin's ecological ethics. Although Bookchin is correct in tying his ethics to a comprehensive synthesis of biological and political realities, he makes two crucial mistakes: (1) he claims that his ethics and philosophy of nature is objectively correct, since it is based on the evolutionary potential of all natural entities; (2) this leads to the idea that humanity in its subjectivity is the highest expression of evolution; humanity should direct nature to reach its highest potential for freedom for all beings. Eckersley shows that this optimism is impossible, since human knowledge is inadequate for the control of nature. The best course is to act in harmony and respect with natural processes. Bookchin's criticism of deep ecology is based on an extreme interpretation of biological egalitarianism. (Katz, Bibl # 2)

Eckersley, Robyn, Review of William M. Lafferty and James Meadowcroft, Democracy and the Environment, Environmental Values 7:(1998):482.

Eckersley, Robyn, "Natural Justice: From Abstract Rights to Contextualised Needs." Review of Benton, Ted, Natural Relations: Ecology, Animal Rights and Social Justice, Environmental Values 3(1994):161-172. (EV)

Eckersley, Robyn, The Green State: Rethinking Democracy and Sovereignty. Cambridge, MA: The MIT Press, 2004.

Eckersley, Robyn, "Translating Science and Restoring our Sense of Wonder: The End of Nature as a Landmark," Organization and Environment 18 (no. 2, June 2005).

Eckersley, Robyn, Environmentalism and Political Theory: Toward an Ecocentric Approach. Albany: State University of New York Press, 1992. Paper. 274 pages. Claims to be the most detailed and comprehensive examination to date of the impact of environmentalism upon contemporary political thought. An interdisciplinary study that builds bridges between environmental philosophy, ecological thought, and political inquiry. Eckersley is Australian Research Council Fellow, Centre for Environmental Studies, University of Tasmania. (v3,#3)

Eckersley, Robyn. Environmentalism and Political Theory. Reviewed in Environmental Ethics 15(1993):185-90.

Eckersley, Robyn. "Divining Evolution: The Ecological Ethics of Murray Bookchin." Environmental

Ethics 11(1989):99-116. I provide an exposition and critique of the ecological ethics of Murray Bookchin. First, I show how Bookchin draws on ecology and evolutionary biology to produce a mutually constraining cluster of ethical guidelines to underpin and justify his vision of a nonhierarchical, ecological society. I then critically examine Bookchin's method of justification and the normative consequences that flow from his position. I argue that Bookchin's enticing promise that his ecological ethics offers the widest realm of freedom to all life forms is undermined by the way in which he distinguishes and privileges second nature (the human realm) over first nature (the nonhuman realm). I conclude that Bookchin's promise can only be delivered by a biocentric philosophy (which he rejects) rather than by his own ecological ethics. Eckersley is at the Centre for Environmental Studies, University of Tasmania, Hobart, Tasmania. (EE)

Eckersley, Robyn. "Liberal Democracy and the Rights of Nature: The Struggle for Inclusion." Environmental Politics 4(Winter 1995):169. (v7,#2)

Eckert, H., "Negotiating Environmental Agreements: Regional or Federal Authority?," Journal of Environmental Economics and Management 46(no. 1, 2003): 1-24. (v 14, #3)

Eckley, M and Egan, A, "Harvesting Where the People Are: Aesthetic Preferences for Logging in Progress," Journal of Forestry 103 (no. 8, December 2005): 401-406.

Eckley, N; Selin, H, "the Arctic at risk," Environment 45(no.7, 2003):37-40. (v.14, #4)

Eco Conference 2003. Nature, Science, Technology and Religions. Our Common Bioethical Issues. Book of abstracts in English. Conference held in Muttukadu, India, November 2003. Organized by Church of South India Madras Diocese, Eco Vision Department. Some three dozen abstracts give insight into the thinking of Indians (and some internationals) in these areas. Samples: Mrs. Ilamathi V., "Nature Worship in Hinduism"; S. Mohan, "Sustainable Development: The Religious Dimension"; S. M. John Kennedy, "Pure Water is the Birth Right of All." Contact: Jayapal Azariah, President, All India Bioethics Association, New No. 4, 8th Lane, 5th Cross Street, Indiranagar, Chennai 600 020, India.

Eco-Justice Working Group of the National Council of the Churches of Christ in the U.S.A., Faith-Based Environmental Justice Resources for Youth and Children. An 18-page bibliography with a variety of resources, including audiovisual ones, for children and youth, all currently in print. With ordering information. Compiled and edited by Tina B. Krause. \$ 2.50 from Environmental Justice Resources, National Council of the Churches, P. O. Box 968, Elkhart, IN 46515. 800/762-0968 or 219/264-3102. (v8,#1)

Ecofeminist Newsletter. The has been published since 1990 as a network for ecofeminists, providing news of activities, publications, and related information. Published yearly, except in 1995, future issues will be on the world wide web. Contact Noël Sturgeon, Women Studies, Washington State University, Pullman, WA 99164-4007. Phone 509/335-1794. Fax 509/335-4377. Web site: www.wsu.edu:8080/~ecofem/index.htm (v7, # 3)

Ecofeminist Newsletter. A network newsletter for ecofeminists. Contact: Women Studies, Washington State University, Pullman, WA 99164-4032. 509/335-1794. Fax 335-4171. (v5,#1)

Ecologist. The has a special issue on deep ecology, vol. 18, nos. 4/5, 1988. Articles: Grover Foley, "Deep Ecology and Subjectivity"; Henryk Skolimowski, "Eco-philosophy and Deep Ecology"; Arne Naess, "Deep Ecology and Ultimate Premises"; Brian Tokar, "Social Ecology, Deep Ecology and the Future of Green Political Thought"; Robyn Eckersley, "The Road to Ecotopia? Socialism vs. Environmentalism"; Richard Sylvan and David Bennett, "Taoism and Deep Ecology"; and Edward Goldsmith, "The Way: An

Ecological Worldview."

Ecologist, The, a British and European journal since 1969, based in Cornwall, England, will now also be distributed in the United States and Canada by MIT Press. (v1,#1)

Ecologist, The Vol. 18, nos. 4/5 (1988). "Rethinking Man and Nature: Towards an Ecological Worldview." This is a special issue on "deep ecology" with criticisms by Grover Foley, "Deep Ecology and Subjectivity," and Henryk Skolimowski, "Eco-philosophy and Deep Ecology." There is a reply by Arne Naess, "Deep Ecology and Ultimate Premises." Foley argues that deep ecology is a mystical view that avoids the need to control science, technology, and power. Skolimowski argues that deep ecology is not deep enough, for it lacks a unifying cosmology and sense of human destiny. Naess replies that these critics wish to view deep ecology as a definitive philosophical doctrine, but it is more a platform of generally agreed common principles, without a unitary foundation. Also in the issue: Brian Tokar, "Social Ecology, Deep Ecology, and the Future of Green Political Thought," provides an objective look at the debate between the followers of Bookchin and the deep ecologists. Robyn Eckersley, "The Road to Ecotopia? Socialism Vs. Environmentalism," argues for the incompatibility of socialism and the green movement. Richard Sylvan and David Bennett, "Taoism and Deep Ecology," suggest that Taoism's emphasis on natural living---following "the way"---can help to articulate practical principles for deep ecology. The editor of The Ecologist, Edward Goldsmith, provides a list of 67 principles as the basis for a new world-view to preserve the biosphere. (Katz, Bibl # 2)

Ecology of Industrial Regions is an international journal, founded in 1994 by the V. Vinnichenko International Foundation. Articles are invited covering ecological problems of industrial regions in the broadest sense, including zoological, botanical, medical, geographic, economical, ethical, philosophical and other aspects. Contact: Vladimir Dvornik, Editor, 10 ul. Komsomolskaya, Gorlovka 338001, Ukraine. E-mail root@wave.donetsk.ua. Baird Callicott is a contributor the first issue with a paper, "Whaling in Sand County: A Dialectical Hunt for Land-Ethical Answers to Questions about the Morality of Norwegian Mink-whale Catching."

Economy, Elizabeth C., *The River Runs Black: The Environmental Challenge to China's Future*, Reviewed by Paul G. Harris, *Environmental Values* 16(2007):135-138.

Ecopolitics: Thought & Action aims to construct a two-way bridge between scholarly work on ecopolitical thought and reflective analysis of ecopolitical action. It will provide a forum for analysis and critique of environmental policy formulation and implementation. The journal will be of vital relevance to researchers, students, policy-makers, activists, politicians, academics and the media in Australia, New Zealand and SE Asia. It is published by The Ecopolitics Association of Australiasia and Pluto Press Australia. For subscription rates and further information, please contact Megan Alsop at malsop@socialchange.net.au> (v.12,#4)

Ecosystem Health, a journal, published interdisciplinary studies in the environmental sciences, applied ecology, economics, landscape architecture and planning, natural resource management, public health, and environmental policy, from 1995 to 2001, when it ceased publication. The publisher was Blackwell Science, and the editor was David J. Rapport, then in Environmental Sciences, University of Guelph, Guelph, Canada.

Ecotheology is a refereed academic journal published in the United Kingdom. The editor is Mary Grey, LSU College of Higher Education, The Avenue, Southampton SO17 1BG, UK. There are two issues a year. The publisher is Sheffield Academic Press, Ltd. Sample articles: Bishop Kallistos of Dioklea, "Through the Creation to the Creator"; Edward P. Echlin, "Jesus and the Earth Community"; Denise Ackerman, "Earth-Healing in South Africa: Challenges to the Church"; Elisabeth Gerle, "Justice, Please

and the Integrity of Creation"; Rosemary Radford Ruether, "Ecofeminism: First and Third World Women"; Catherine Keller, "Eschatology, Ecology, and a Green Ecumenacy."--all in the January 1997 issue, Issue No. 2. (v.8,#4)

Ecumene: A Journal of Environment, Culture, Meaning is published by geographers and others in the U.K., now in its third year. Sample articles in the April 1996 issue (vol. 3, no. 2): Sarah Green and Mark Lemon, "Perceptual Landscapes in Agrarian Systems: Degradation Processes in North-western Epirus and the Argolid Valley, Greece" (whether environmental changes are regarded as degradation at all is dependent on the perspectives with which such changes are regarded); Robin Doughty, "Not a Koala in Sight: Promotion and Spread of Eucalyptus" (on the transforming of native forests in India, Spain, Portugal, Chile, and Brazil into giant eucalyptus plantations. Eucalyptus is now grown in about 100 nations, for timber and pulp, one of the world's most successful plant migrants. But often there are substantial environmental losses in result, both to ecosystems and to local people.) Unfortunately, the journal is not cheap: \$ 73 per year for individuals, \$ 209 institutions. Editors are: Denis Cosgrove, Department of Geography, Royal Holloway, University of London, UK, and James S. Duncan, Department of Geography, Syracuse University, USA. (v7, #3)

Edberg, Rolf and Alexei Yablokov, Tomorrow Will Be Too Late: East Meets West on Global Ecology (Tempe: University of Arizona Press, 1991). 210 pages. \$ 14.95. Conversations between a Swedish statesman, delegate to the United Nations, and a Soviet biologist, Deputy Chairman of the Committee of the Supreme Soviet on Ecology, on population growth, pollution, biological extinction, nuclear hazards, and technical proliferation. "We have no respect anymore for oneness, wholeness, the unimpaired state of things. And respect is precisely what we need in order to live on Earth according to its laws. We've created a robot that orders us around ... and now the robot has subjected us to its will." (v2,#1)

Eddins, Katherine M., Flick, Warren A. "The Criminal Aspects of Environmental Law: An Evolving Forest Policy," Journal of Forestry 95(no.7, 1997):4.

Edelman, Marc, "The Green Republic: A Conservation History of Costa Rica," Human Ecology 28(no. 4, Dec. 1, 2000):651- . (v.12,#2)

Edelstein, Michael R., Makofske, Willaim J. Radon's Deadly Daughters: Science, Environmental Policy and Politics of Risk. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1997. 320 pp. \$21.95 paper, \$62.50 paper. The complex mix of social and scientific factors that have led to public and official misunderstanding of the geologic radon issue and how risk factors are surrounded by mythic beliefs that contradict scientific realities. Public perception of risk may fail to be motivated even by serious threats and the political and scientific influences behind environmental policy can seriously undermine an effective response. (v8,#2)

Eden, Michael J. Ecology and Land Management in Amazonia (London: Belhaven Press, 1990). (v1,#2)

Eden, S. Environmental Issues and Business: Implications of a Changing Agenda. Chichester, U.K.: John Wiley and Sons, 1996. 200 pp. £ 25. cloth. Details the dimensions of the business response to environmental issues by taking a critical interdisciplinary social science perspective. Eden catalogues the pressures put upon businesses to take up environmental responsibilities, and then assesses those activities in terms of company culture, communication, and influence on the environmental agenda. The author examines the diversity of business activities and the statutory environmental legislation to which they are subject and evaluates the impact of these activities according to policy developments and the restoration of public confidence. (v8,#2)

Eden, Sally, "Environmental Issues: Sustainable Progress?," Progress in Human Geography 24 (No. 1,

2000): 111- . (v.11,#2)

Eder, Klaus, The Social Construction of Nature: A Sociology of Ecological Enlightenment. London: Sage, 1996. 231 pages. £ 14, paper. Eder is embedded in contemporary German social theory, under the influence of Habermas's neo-Marxism and the neo-functionalism of Niklas Luhmann.. He focuses on the symbolic appropriation of nature in various cultural systems. Western thought has concentrated on "labour" seeing nature from a utilitarian perspective and with an instrumental rationality. This instrumentalism is frequently the focus of radical environmentalist critiques. The products of labour are consumed. Our consumptive patters and preferences are not preordained by human needs, as naturalists might hold, but are culturally constructed and symbolically mediated. We use nature to make social distinctions. "People separate themselves according to culturally determined interactions with nature" (p. 21). Eder wants to make a series of cognitive, normative and symbolic corrections to historical materialism. We now belong to "a society that no longer allows for authoritative statements that found rationality on the idea of objectivity in dealing with nature" (p. 203). Eder holds a two cultures perspective in which he regards radical environmentalism as incommensurable with a dominant cultural codes. (v9,#1)

Eder, Klaus, The Social Construction of Nature: A Sociology of Ecological Enlightenment. London and Thousand Oaks, CA: Sage, 1996. \$ 25.00 paper. \$ 82.00 cloth. "The relationship between nature and society can be conceived of in two mutually exclusive ways: as a natural constitution of society or as a social construction of nature" (p. 7). There is either a "natural history of society" or a "social history of nature" (p. 19). Modern, industrial societies have become increasingly destructive of nature, because they see nature as object. Other cultures socially construct nature using symbolism, taboo, and ritual. Nature is always socially constructed; there is an inevitable pluralism of views about nature, though some can be more socially functional than others. Eder is at Humboldt University, Berlin, and European University, Florence. (v.9,#3)

Edgar, G.J., Moverley, J., Reed, C. "The Conservation-Related Benefits of a Systematic Marine Biological Sampling Programme: The Tasmanian Reef Bioregionalisation as a Case Study," Biological Conservation 79(no.2/3 1997):227-240.

Edgerton, Lynne T., The Rising Tide: Global Warming and World Sea Levels (Corvelo, CA: Island Press, 1991). 200 pages. \$ 29.95 cloth, \$ 17.95 paper. (v2,#2)

Edgerton, Robert, Sick Societies: Challenging the Myth of Primitive Harmony. New York: Free Press, 1992. (v4,#1)

Edmondson, W. T., The Uses of Ecology: Lake Washington and Beyond (Seattle: University of Washington Press, 1991), 312 pages. \$ 19.95. Begins with a case study of Lake Washington, on the eastern edge of the city of Seattle, a success story in conservation, and develops a broad perspective on environmental problems. Shows how basic research is critical for solving and preventing such problems, providing that it is coupled with effective public action. Basic long-term scientific research is the source of knowledge that will allow us to avoid environmental disaster. Edmondson is professor emeritus of zoology at the University of Washington. (v2,#1)

Edmunds, D; Wollenberg, E, "Historical Perspectives on Forest Policy Change in Asia: An Introduction," Environmental History 6(no.2, 2001):190-212. (v.12,#4)

Education for the Earth: A Guide to Top Environmental Studies Programs. Princeton, NJ: Peterson's Guides, Second Edition, 1994. (v6,#2)

Edwards, Amy L. "Restoring Private Property Values in the World of CERCLA's Emerging Alternatives." Journal of Environmental Law & Practice 3(May 1996):17. The benefits of voluntary cleanup programs as a response to CERCLA, and an analysis of four such state-sponsored programs. (v7,#2)

Edwards, David, and Henderson, Caspar, "Can we trust the media on the environment?," The Ecologist 30 (No. 4, 2000 Jun 01): 22-23. Edwards says yes, Caspar no. (v.12,#3)

Edwards, David. "Greenwash - Co-opting Dissent." The Ecologist 29(no. 3, May 1999):172-

Edwards, Denis, Jesus the Wisdom of God: An Ecological Theology. Maryknoll, NY: Orbis, 1995. \$ 16.95. Edwards is eloquent about Jesus the Sophia of God, a more feminine metaphor that crosschecks Jesus' masculinity and the overly patriarchal tradition, allows more openness to other religious traditions, and, above all, enjoins a more ecological theology--less human dominance and more caring for creation. He waxes eloquent over every Biblical opportunity to interpret Jesus as Sophia, personifying this where he can. Also, this improves the doctrine of the Trinity. God is a sort of community-in-unity, allowing autonomy in the creatures, a more ecological account than the patriarchal monarch. Interesting argument, but not always convincing. Edwards is a Roman Catholic priest from Adelaide, Australia. (v7,#2)

Edwards, Denis, "Theological Foundations for Ecological Praxis," Ecotheology No 5/6 (Jul 98 / Jan 99):126-141.

Edwards, Denis, Made from Stardust: Exploring the Place of Human Beings Within Creation. North Blackburn, Australia: Collins Dove, 1992. 81 pages. \$ 9.00. Edwards, a Roman Catholic priest of the Archdiocese of Adelaide Australia, begins with a meditation on an Australian aboriginal story that provides insight into the interconnectedness of the universe as a whole, and develops a Biblical account that moves away from an anthropocentrism that sees the world as given for humanity's use alone. This is related to evolutionary science, as well as to astrophysics. He closes with a plea for social justice and the well-being of the planet based on the integrity of creation. Edwards lectures in systematic theology in the Adelaide College of Divinity. (v5,#4)

Edwards, Denis, "An Ecological Theology of the Trinity," CTNS (Center for Theology and the Natural Sciences, Berkeley) Bulletin 13, no 3. Summer 1993. Ultimate reality is understood as persons in dynamic communion. This means that all of creation, the whole universe, the biosphere on Earth, individual ecosystems, a living tree, a cell, or a proton can be understood as fundamentally relational and part of a network of interrelationships. Edwards is a Roman Catholic priest and theologian from Australia, the author of Jesus the Wisdom of God: An Ecological Theology, Orbis Press, forthcoming. (v5,#1)

Edwards, Denis, ed., Earth Revealing. Earth Healing: Ecology and Christian Theology. Collegeville, Minn: Liturgical Press, 2001. Christian theology as a theology of the Earth. (v.12,#4)

Edwards, Denis. Jesus the Wisdom of God: An Ecological Theology. Maryknoll, NY: Orbis, 1995. 208 pages. \$ 16.95 paper. The Biblical wisdom literature and contemporary creation thought can be used to formulate an integrated ecological theology. What it means to recover the notion that Sophia-Wisdom became incarnate in Jesus of Nazareth and how the universe is altered by this incarnation. The trinitarian theology of Richard of St. Victor and St. Bonaventure find that every creature, including humans, is the free self-expression of the trinitarian God. Humanity is integrally related to all creation. Edwards is a Roman Catholic priest and lectures in theology in the Adelaide, Australia, College of Divinity. (v6,#3)

Edwards, J.L., "Research and Societal Benefits of the Global Biodiversity Information Facility,"

BioScience 54(no.6, 1 June 2004):485-486(2). (v. 15, # 3)

Edwards, James G., "Locating Enlightenment," Philosophy and Geography 5 (No. 1, 2002): 122-124. Book review of David N. Livingstone & Charles W.J. Withers (Eds), "Geography and Enlightenment", Chicago and London: The University of Chicago Press, 1999. (P&G)

Edwards, K, "On the Windy Edge of Nothing: A Historical Human Ecology of the Faroe Islands," Human Ecology 33 (no. 5, October 2005): 585-596.

Edwards, Michael, Future Positive: International Co-operation in the 21st Century. London: Earthscan Publications, 1999. Sub-Saharan Africa is in deep trouble. The cruelties of its warlords and the miseries of the people displaced by war are but the most visible and dramatic results of declining economics and the unraveling social fabric. Much of Africa is drifting to the margins of the world system. "Africa's crisis is really one of governance." Edwards is with the Ford Foundation, and has a long career in non-governmental developmental agencies. (v.11,#1)

Edwards, P. J., R. M. May, and N. R. Webb, eds., Large Scale Ecology and Conservation Biology. Cambridge: Blackwell Scientific Publications, 1994. 416 pages. Paper, \$ 29.95. Claims to be the first book ever published that examines the feasibility of using a large scale ecological approach to solve some of the world's most pressing environmental problems. Some topics: the effects of spatial scale on ecological questions and answers; animal distributions; metapopulations and conservation; definitions and categories for describing the conservation status of species; turning conservation goals into tangible results, the ecological component of economic policy; translating ecological science into practical policy. Edwards is in biology at the University of Southampton, UK; May is in zoology at Oxford, Webb is a researcher in Dorset, England. (v5,#1)

Edwards, Robert, "Bags of rubbish," The Ecologist 30(no.8, NOV 01 2000):52- . Plastic bags, says Robert Edwards, are choking the life out of India. And that's just how the plastics industry likes it. (EE v.12,#1)

Edwards, Steven E., "In Defense of Environmental Economics," Environmental Ethics 9(1987):73-85. A rebuttal to the frequent environmentalist criticisms of economic rationality in the determination of environmental policy. (Katz, Bibl # 1)

Edwards, Steven E. "In Defense of Environmental Economics." Environmental Ethics 9(1987):73-85. The appropriateness of economic valuations of the natural environment is defended on the basis of an objective analysis of individuals' preferences. The egoistic model of "economic man" substantiates economic valuations of instrumental values even when markets do not exist and when consumption and use are not involved. However, "altruistic man's" genuine commitment to the well-being of others, particularly wildlife and future generations, challenges economic valuations at a fundamental level. In this case, self-interest and an indifference between states of the world are secondary and undefined respectively, since preferences are not based on tradeoffs between the welfare of others and self. The appropriateness of economic valuations rests solely with the empirical validity of the assumptions that give rise to economic man. Edwards is at Woods Hole Oceanographic Institute, Woods Hole, MA. (EE)

Edwards, V. M., Dealing in Diversity: America's Market for Nature Conservation. Cambridge: Cambridge University Press, 1995. Can market-based approaches be used successfully to conserve biodiversity? Should environmentalists eschew government regulation of private land-owners and the public purchase of conservation lands and instead strengthen private activities that further conservation. Edwards answers yes to both these questions. Edwards teaches land management at the University of Portsmouth, England.

Edwards, Victoria. Dealing in Diversity: America's Market for Nature Conservation. Cambridge, 1995. 182 pp. This book examines the "market" for conservation of natural areas in the U.S. considering the efforts of both profit and non profit organizations. (v8,#2)

Edwards-Craig, R; Williams, PW; Gunton, TI, "Backcountry Tourism Perspectives On Shared Decision Making In B.C. Land Use Planning", Environments 31 (no.3, 2003): 31-50.

Edwards-Jones, Gareth, Review of Perrings, Charles, Williamson, Mark, and Salmazzone, Silvana, eds., The Economics of Biological Invasions. Cheltenham, UK: Edward Elgar, 2000. Environmental Values 12(2003):138-140. (EV)

Egan, Andrew F., Kathy Waldron, and Bender, John. "Ecosystem Management in the Northeast: A Forestry Paradigm Shift?" Journal of Forestry 97(No. 10, Oct. 1999):24- . A survey was conducted to determine if new forestry terms actually represent new ideas to practicing foresters, and whether these concepts shape their day-to-day forestry activity. (v10,#4)

Egan, Andrew F. "Forest Roads: Where Soil and Water Don't Mix." Journal of Forestry 97(No.8, August 1999):18- . A review of the forest science literature on forest road practices reveals some general concepts that foresters need to consider when planning, building, and maintaining forest access systems so as to avoid water quality problems. (v10,#4)

Egan, Kevin D. "The Neoliberal Wager: Existence and Environment: Existence and Environment Gambled on Economics", Organization and Environment, 16, (No. 2, 2003): 243-47. An extended book review essay on William Easterly The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics and E.O. Wilson's The Future of Life. Egan is a graduate student in political science at Virginia Polytechnic Institute and State University

Egan, Michael., "The Social Significance of the Environmental Crisis: Barry Commoner's 'The Closing Circle'". Organization and Environment, 15, (No. 4, 2002): 443-457. The author argues that Barry Commoner's "The Closing Circle" has retained its immediate relevance better than any comparable environmental volume from the 1960s or 1970s due to Commoner's ability to articulate the social ramifications of environmental decline. This close reading of "The Closing Circle" proposes to situate Commoner's most important book in its social and historical context, paying particular attention to Commoner's four laws of ecology and to his role in changing the fight for the environment from a scientific debate to a public one. Egan is a doctoral student in the Department of History at Washington State University, working on a dissertation about Commoner's career as an environmentalist.

Egan, Michael. *Barry Commoner and the Science of Survival: The Remaking of American Environmentalism*. Cambridge: MA: The MIT Press, 2007. Egan recounts Barry Commoner's career from calling attention to the hazards of nuclear fallout to raising public awareness of the environmental dangers posed by the petrochemical industry. Commoner drew connections between the environmental, civil rights, labor, and peace movements; he connected environmental decline with exploitation, injustice, poverty, and war; and he argued that the root cause of environmental problems was the American economic system and its manifestations. Egan argues that Commoner's commitments to the dissemination of scientific information, the importance of dissent, and the need for citizen empowerment were instrumental in helping remake American environmentalism.

Egg, The : An Eco-Justice Quarterly is now in volume 12. The quarterly explores critical issues of ecology and justice. Short articles, book reviews, news, and a steady update on these issues. Contact: Eco-Justice Project and Network, Anabel Taylor Hall, Cornell University, Ithaca, NY 14853-1011. The

editor is Dieter T. Hessel. (v4,#1)

Eggleston, J. E., S. S. Rixecker, and G. J. Hickling, "The Role of Ethics in the Management of New Zealand's Wild Mammals," New Zealand Journal of Zoology 30(2003):361-376. New Zealand's wild mammals are introduced species. Wildlife researchers and managers in New Zealand find animal welfare guidelines developed for captive and domestic animals unsuitable for this new context. The recommendation that New Zealand adopt an ecocentric ethic is also incomplete for this situation. The authors here propose a more comprehensive framework for considering ethical responsibility to New Zealand's introduced ungulates, and also for pest species. Under this framework some contemporary assumptions must be questioned, such as justifying recreational hunting through the provision of an ecologically therapeutic role. The authors present a comprehensive process of ethical consideration in management decision-making for other introduced wild mammal species. Eggleston is in Philosophy and Religious Studies, University of Canterbury, Christchurch, New Zealand. Rixecker is in Environment, Society and Design Division, Lincoln University, Christchurch, NZ. Hickling is in Fisheries and Wildlife, Michigan State University, East Lansing.

Eghenter, Cristina, "What Is Tana Ulen Good For? Considerations on Indigenous Forest Management, Conservation, and Research in the Interior of Indonesian Borneo," Human Ecology 28(no.3, SEP 01 2000):331- . (EE v.12,#1)

Ehmann, William, "Environmental Virtue Ethics With Martha Stewart," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 51-57. Renewed philosophical discourse about virtue ethics motivates the search for examples to inform and extend our thinking. In the case of environmental virtue ethics, I have decided to consult "America's Lifestyle Expert," Martha Stewart. Oft dismissed as a pop icon or model of domesticity, Martha's business success is arguably a result of her claimed authority on what the good life entails and how we get it. Reviewing over 60 signed "Letters From Martha" from her monthly magazine Martha Stewart Living, I explored her presentations of current environmental topics including biodiversity, obligations to animals, gardening, global warming, and reliance on technology. I find that her work ultimately makes managing a household interesting, and encourages her public to take personal pride in everyday tasks done well. These are trademark Martha Stewart "good things." Moreover, by connecting with a large audience few philosophers or scientists ever court, she is poised to help us manage our larger planetary household and frame a quality of life for future generations. Ehmann is Director, Center for Earth and Environmental Science, Plattsburgh State University-SUNY, Plattsburgh, New York. (v.13,#2)

Ehrenfeld, David, ed., Readings from Conservation Biology in six volumes: 1) To Preserve Biodiversity: An Overview, 2) Wildlife and Forests, 3) Plant Conservation, 4) The Landscape Perspective, 5) Genes, Populations and Species, 6) The Social Dimension: Ethics, Policy, Law, Management, Development, Economics, Education. Cambridge, MA: Blackwell Science, 1995. Between 30 and 40 articles in each volume. Each is \$24.95. 800-215-1000. Fax 617-492-5263. (v6,#2)

Ehrenfeld, David and Joan G. Ehrenfeld. "Some Thoughts on Nature and Judaism." Environmental Ethics 7(1985):93-95. (EE)

Ehrenfeld, David, "Earth Stories" Wild Earth 9(no. 3, Fall 1999):15- . (v10,#4)

Ehrenfeld, David, Beginning Again: People and Nature in the New Millennium. New York: Oxford University Press, 1993. 216 pages. Hardcover. \$ 22.00. A collection of essays. "Human population, powered by an unforgiving, ill-adapted, and poorly functioning technology, is rapidly growing past the inevitable crash point." Gary Nabhan says, "Not since Sand County Almanac has an ecologist given us so many enduring insights and principles to inspire and guide our lives on this planet." Ehrenfeld is in natural resources at Rutgers University. (v4,#2)

Ehrenfeld, David, "Environmental Protection: The Expert's Dilemma," Report from the Institute for Philosophy and Public Policy, Vol. 11, no. 2, Spring 1991, pp. 8-12. "We believe implicitly in our models. The more specific the predictions are, the more we believe in them, no matter how scientifically preposterous and absurd that specificity is." "Every project with an environmental component should make provision for public education about that work. Why should the public value what we do if it does not know what it is for?" An address given to the Oregon Chapter of the American Fisheries Society at a conference on science and advocacy. Ehrenfeld is professor of biology in the Department of Environmental Resources at Cook College, Rutgers University, and the editor of Conservation Biology. (v2,#2)

Ehrenfeld, David, "War and Peace and Conservation Biology," Conservation Biology 14 (2000): 105-112. Conservation biology is, like medicine, a mission-oriented field. But most of the papers published in Conservation Biology since its origins thirteen years ago, though scientifically rigorous and often with useful recommendations, do not make much difference in practice. The deeper problem may be that the forces jeopardizing biodiversity have little to do with biology, and no amount of good biology will solve the problem. Tolstoy made this point in War and Peace: expertise and reason do not control the major events of the times. But a more moderate position is possible. Conservation biologists can make important and relevant scientific discoveries, but must give up the belief that science itself is a solution. Conservation science must go into critical feedback loops, as does medicine, and monitor its actual effectiveness in the whole human community. Ehrenfeld is in the Department of Ecology, Evolution, and Natural Resources, Cook College, Rutgers University.

Ehrenfeld, David, The Arrogance of Humanism. Oxford University Press, 1978.

Ehrenfeld, David. The Arrogance of Humanism. Reviewed in Environmental Ethics 3(1981):173-76.

Ehrlich, Gretel, "Sprites, Jets, and Elves," Audubon 100(no. 5, 1998):28-30. Ehrlich, who was injured by lightning, describes the force of ephemeral beauty, which strikes the Earth 100 times every second. Dazzling displays of lightning occur in the upper atmosphere, and there may be other kinds that scientists don't know about. "Having survived and healed, I now think of the world and its atmosphere as a layer cake, a dacquoise of cream and electricity reaching high and higher, reminding me once again that we humans are not being sought out by anything or anyone--neither lightning nor UFOs. We are geography's ants, stupidly terrestrial. The real show is going on beyond our capacity to see."

Ehrlich, P. R., "Human Natures, Nature Conservation, and Environmental Ethics," Bioscience 52(no.1, 2002): 31-43. (v.13,#2)

Ehrlich, Paul R., and Ehrlich, Anne H. "The Population Explosion: Why We Should Care and What We Should Do About It," Environmental Law 27(no.4, 1997):1187- . (v9,#2)

Ehrlich, Paul R., Ehrlich, Anne H. Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future. Washington, D.C.: Island Press, 1998. \$27.50 cloth, \$16.95 paper. 320 pp. (v9,#2)

Ehrlich, Paul H., "Human Natures, Nature Conservation, and Environmental Ethics," BioScience 52(January 2002):31-43. Human behavior, though requiring a genetic basis, is largely culturally determined. "Our complex and flexible behavior is largely determined by our environments, and especially by the extragenetic information embodied in our cultures" (p. 32). "Cultures already have been evolving in the direction of broader environmental ethics, and that process needs to be accelerated. ... "It behooves us to try to understand how cultural evolution operates on the ethics of environmental preservation." (p. 32) "There is abundant evidence that different behaviors toward the environment are not

in any significant way programmed into the human genome" (p. 36). (So much for Wilson's biophilia.)

"More social scientists must join the quest for sustainability and help to construct an interdisciplinary theory of cultural microevolution that will provide background for efforts to consciously and democratically influence its trajectory" (p. 32). "I and others believe not only that, like any other citizens, environmental scientists can be advocates but also that they ethically must be advocates, at least to the extent of informing the general public about their work and conclusions." "The needed changes in ethics are underway, and with focused effort we may learn how to accelerate them while maintaining open democratic debate" (p. 40) Ehrlich is in biology at Stanford University. (v.13,#2)

Ehrlich, Paul, "Human Natures, Nature Conservation, and Environmental Ethics," BioScience 52(no. 1, 2002):31-43. "There is general agreement among scientists that the accelerating loss of biodiversity should be a matter of great concern. They have concluded that nature must be conserved not just for its own sake but also for the sake of Homo sapiens, to which it supplies an indispensable array of ecosystem services. And for most of these scientists, and large numbers of environmentalists, conservation is a major ethical issue. ... But the seriousness of the human predicament is still unknown to the vast majority of the general public and decisionmakers worldwide. ... As a result the cutting edge of the environmental sciences is now moving from the ecological and physical sciences toward the behavioral sciences, which seem to have the potential to develop ways to improve that response." Ehrlich is in biology, Stanford University.

Ehrlich, Paul R., Anne H. Ehrlich, and Gretchen C. Daily, The Stork and the Plow: The Equity Answer to the Human Dilemma. New York: Grosset/Putnam, 1995. The population-consumption problem and its connection with the environment. The authors are at Stanford University. (v7,#1)

Ehrlich, Paul, Gaily, Gretchen, Daily, Scott, Myers, Norman, and Salzman, James, "No Middle Way on the Environment," The Atlantic Monthly, December 1997. (v9,#2)

Ehrlich, Paul R. Human Natures: Genes, Cultures, and the Human Prospect. Covelo, CA: Island Press, 2000. 542 pages. Cloth \$29.95. Using personal anecdote, vivid example, and narrative, Ehrlich searches his way through the thicket of controversies over what science can and cannot say about the influence of our evolutionary past on everything from race to religion, from sexual orientation to economic development. Ehrlich attempts a fresh view of human natures and evolution, applying this to questions such as who and where we are as a species, and where we may be headed. (v.11,#4)

Ehrlich, Paul R., and Anne H. Ehrlich, Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future. Washington: Island Press, 1996. 352 pages. \$ 24.95 hardcover. The anti-environmental backlash or "brownlash" is evidence of the success of the environmental movement, but it needs particular attention. Environmentalists must find the flaws in the brownlash movement and expose them. With much personal experience of the issues at points at hand. The Ehrlichs are at Stanford University. (v7,#4)

Ehrlich, Paul, and Kremen, Claire, "Human Effects on Ecosystems, Overview," Encyclopedia of Biodiversity 3: 383-394. Two central issues concerning biodiversity today are the roles that plants, animals, fungi, and microorganisms play in the functioning of ecosystems, and the primarily negative impacts of human beings on those ecosystems. Here we focus on the latter, starting with the rise of humanity as a geophysical force and then examining in some detail current anthropogenic alteration of ecosystems and the prospects of further damage by human beings to the delivery of ecosystem goods and services. Finally, we look at ways in which human damage to ecosystems could be limited in the future. (v.11,#4)

Ehrlich, Paul R. and Edward O. Wilson, "Biodiversity Studies: Science and Policy," Science, August 16, 1991, "The loss of biodiversity should be of concern to everyone for three basic reasons. The first is

ethical and esthetic. ... The second reason is that humanity has already obtained enormous direct economic benefits from biodiversity. ... The third reason, perhaps the most poorly evaluated to date, is the array of essential services provided by natural ecosystems." (v2,#3)

Ehrlich, Paul R., and Anne H. Ehrlich, One with Nineveh: Politics, Consumption and the Human Future. Washington, DC: Island Press, 2004. The combination of population growth, rampant consumption, and environmental degradation seriously threatens the livelihoods of the have-nots today and will increasingly threaten the haves in the none-too-distant future. Insecurity, hunger, and the recognition that one is entitled to a better world can breed a certain rage that will eventually find a voice. We humans today are one with Nineveh in our predilection for weakening the natural resource base that shores up the whole of human activity. However, we diverge from Nineveh in our technological capacity, our global reach, and the rapidity with which we can inflict change. Our fate will be worse than Nineveh's. Local collapses can no longer be contained. And global rescue will require a new evolutionary step--a "conscious cultural evolution" that allows us to overcome the limitations of individual perception and formulate a more responsive societal whole. Humanity's capacity to shape the planet has become more profound than our ability to recognize the consequences of our collective activity. Paul Ehrlich is in biology, Stanford University. (v. 15, # 3)

Ehrlich, Paul R., "Bioethics: Are Our Priorities Right?" BioScience 53(no. 12, 2003):1207-1216. Neither biologists nor nonbiologists are paying adequate attention to the escalating ethical issues raised by the human predicament, and the expertise of biologists seems to demand they make additional contributions to environmental ethics, broadly defined. Massive environmental destruction and the development of biological and nuclear weapons have changed the world; cultural evolution of ethics has not kept pace. "Bioethics" must be expanded from its focus on medical issues to consider such things as the ethics of preserving natural capital for future generations and those of dealing with overconsumption. Bioethics should examine issues as diverse as the ethics of invading Iraq to increase the role of the rich in generating climate change and the ethics of the Lomborg affair. Achieving a sustainable global society will require developing an agreed-upon ethical basis for the necessary political discourse, and the time to start is now. Ehrlich is in biology, Stanford University.

Ehrlich, Paul R., and Lawrence H. Goulder. "Is Current Consumption Excessive? A General Framework for Some Indications for the United States." Conservation Biology Vol. 21, no. 5 (2007): 1145-54. Many prior studies have explored the implications of human population growth and environmentally problematic technologies for biodiversity loss and other forms of environmental degradation. Relatively few, however, have examined the impacts of the level and composition of consumption. The authors offer a framework that shows how the level and composition of a society's total consumption relate to the uses of various forms of capital and to the sustainability of natural resources and human well-being.

Eichler, Margrit, "Introduction," Environments 28(no.2, 2000): 1-. In/equity and Un/sustainability: Exploring Intersections. (v.12,#3)

Eilperin, Juliet, "GOP Group Forms to Promote Free-Market Environmentalism," Washington Post (6/15/98): A6.Green GOP group forms. The Coalition of Republican Environmental Advocates has formed to promote free-market solutions to environmental problems. The group aims to show that the GOP is not opposed to environmental protection, but prefers approaches to achieving conservation other than traditional, governmental command and control. The group hopes to counter the barrage of negative publicity Republicans have encountered on environmental issues and to prevent surrendering the issue to Al Gore in 2000. House speaker Newt Gingrich hopes the group can redefine what it means to be an environmentalist: "The Al Gore, left-wing environmental model is a centralized, bureaucratized, litigious, adversarial, anti-technology model. . . Let's create a conservationist, common-sense, practical, high tech environmental model." Members of the group included vocal property rights advocate and

Colorado Attorney General Gale Norton (a protégé of Reagan Interior Secretary James Watt), Endangered Species Act foe Rep. Richard Pombo of California, and Rep. Helen Chenoweth of Idaho, who once joked she wasn't concerned about salmon being endangered because "you can buy a can in Albertson's," a local supermarket. Two-thirds of the Senators who have joined the group have ratings of zero from the League of Conservation Voters, including Majority Leader Trent Lott of Mississippi. Republicans known to be pro-environment, such as Rep. Sherwood Bohmert of New York, have decided not to join. (v9,#2)

Eisenbud, Merrill. Environment, Technology and Health: Human Ecology in Historic Perspective. Reviewed in Environmental Ethics 3(1981):85-94.

EJAP, The Electronic Journal of Analytic Philosophy, Issue on Justifying Value in Nature, 3 (Spring 1995). ISSN: 1071- 5800. Articles: Martin Schönfeld (guest editor), "Introduction to Justifying Value in Nature"; Robin Attfield, "Preferences, Health, Interests and Value"; Kent Baldner, "Transcendental Idealism and the Fact/Value Dichotomy"; J. Baird Callicott, "Intrinsic Value in Nature: A Metaethical Analysis"; Stephen R. L. Clark, "Objective Values, Final Causes: Stoics, Epicureans, and Platonists"; S. F. Sapontzis, "The Nature of the Value of Nature"; Donald VanDeVeer, "Interspecific Justice and Intrinsic Value." With EJAP, there are two issues a year, put on the network, or "published" all at once. The journal is not meant to be printed, it will never be "bound", there are no "volume" numbers. Each issue is referenced in the order of release. There are no page numbers but each paragraph is numbered and referenced instead. To subscribe: It's free! Send a message to: <listserv@iubvm.ucs.indiana.edu> with "subscribe ejap [Firstname] [Lastname]" in the body. Subscribers receive instructions for retrieving EJAP files from the listserver. Anonymous FTP: phil.indiana.edu/ejap/ Gopher: phil.indiana.edu World Wide Web: <http://www.phil.indiana.edu/ejap/> EJAP is produced at the Department of Philosophy, Indiana University: ejap@phil.indiana.edu

Ekeli, Kristian Skagen, "Giving a Voice to Posterity -- Deliberative Democracy and Representation of Future People," Journal of Agricultural and Environmental Ethics 18(2005):429-450. Ought some seats in a democratically elected legislative assembly be reserved for representatives of future generations. I propose a new democratic model for representing posterity. This model has several advantages compared with a model for the democratic representation of future people previously suggested by Andrew Dobson. Nevertheless, the democratic model that I propose confronts at least two difficult problems. First, it faces insoluble problems of representative legitimacy. Second, one might question whether this model provides a reasonably effective way to represent future interest. Despite such problems, political representation of posterity can be defended.

Key words Andrew Dobson - deliberative democracy - futuregenerations - political representation. The author is in philosophy, Norwegian University of Science and Technology, Trondheim, Norway. (JAEE)

Ekins, Paul, "Criticism Beyond Measure: Reply to David Fleming's Review of Wealth Beyond Measure by Paul Ekins, Mayer Hillman & Robert Hutchison in Environmental Values, Vol.1 No.3. Autumn 1992." Environmental Values Vol.2 No.1(1993):73-75. ABSTRACT: Fleming's critique of Wealth Beyond Measure (WBM) is wide-ranging. It alleges, inter alia, that the authors prefer "to come out of the corner with fists flying" rather than "to be accurate or to work out careful, rigorous arguments" and that they regard anyone who disagrees with them as "not just wrong but villainous with it." They are also characterized as the purveyors of "pure dream-world stuff." Fleming's assertions on which he bases these statements are that: There are "failures to set out clear explanations" of important topics. It gives "a parody" rather than "a coherent critique of the treatment of environmental issues by mainstream economics." The book "is full of inconsistencies" and "continually contradicts itself." Radical proposals for economic change are frequently unjustified. Unfortunately, as we shall now show, the examples that Fleming gives of these shortcomings are either inaccurate or wholly unconvincing. Department of Economics, Birkbeck College, Gresse Street, London W1P 1 PA, UK.

Ekins, Paul, Review of: Clive Spash, Greenhouse Economics: Values and Ethics, Environmental Values 15(2006):119-121.

ElBala (El Bala), Rodrigue, and Michel Marie," Animal Welfare Considerations in Small Ruminant Breeding Specifications," Journal of Agricultural and Environmental Ethics 19(2006):91-102. After satisfying their quantitative and qualitative needs as regards nutrition, consumers in developed countries are becoming more involved in the ethical aspects of food production, especially when it relates to animal products. Social demands for respecting animal welfare in housing systems are increasing rapidly, as is social awareness of human responsibility towards farm animals. Many studies have been conducted on animal welfare measurement in different production systems, but the available information for small ruminants remains insufficient. In this study, a 75 criteria-evaluation tool has been set up on the basis of the five freedoms concept. Animal welfare considerations have been analyzed in 25 documents, including labeling schemes, regulations, and recommendations from different European countries. The results show many differences between regular and organic small ruminant farming standards. Emergency measures are generally lacking. A weak representation of psychological aspects of animal welfare, especially by the current European legislation, is highlighted. Keywords: animal welfare - small ruminants - indicators - regulations - specifications. The authors are with Sciences Animales, Vandoeuvre lès Nancy, France. (JAEE)

Elbers, Joan S., Changing Wilderness Values 1930-1990: An Annotated Bibliography. Westport, CT: Greenwood Press, 1991. 160 pages. \$ 45.00!! 324 well-annotated entries on the literature and research that shifted American attitudes toward wilderness so dramatically in the course of this century. Elbers finds that this quest, far from being peripheral, has become "the central problem of modern civilization: How to live with restraint and respect for other life and natural ecosystems in a time when human numbers and technological power have made our species a geological force" (preface). (v.9,#3)

Elder, John, ed., American Nature Writers, 2 vols. New York: Charles Scribner's Sons, 1996. Essays about (not by) famous American nature writers. Includes Fritzell, Peter A., "Aldo Leopold." Also some general essays, including Robertson, David, "Bioregionalism in Nature Writing."

Elder, John, Imagining the Earth: Poetry and the Vision of Nature, 2nd ed. Athens: University of Georgia Press, 1996. 256 pages. \$ 19.95. Poetry as a window into our environmental consciousness. Elder teaches English and environmental studies at Middlebury College. (v7,#2)

Elders, Fons (ed.), Visions of Nature: Studies on the Theory of Gaia and Culture in Ancient and Modern Times, Reviewed by Mary Midgley, Environmental Values 15(2006):253-255.

Eldredge, Niles, Life in the Balance: Humanity and the Biodiversity Crisis. Princeton, NJ: Princeton University Press, 1998. Our failure to recognize our connection with the global ecosystem lies behind the biodiversity crisis facing our planet today. We must act now to avert an Earth-wide extinction crisis. A summary is "Life in the Balance, Natural History 107(no. 5, June 1998)42-55. Eldredge is in the Department of Invertebrates, American Museum of Natural History, New York, and a well-known paleontologist. (v9,#2)

Eldredge, Niles, ed., Systematics, Ecology, and the Biodiversity Crisis. New York: Columbia University Press, 1992. 220 pages. Thirteen essays on what systematists have to say about, and how they can contribute to, biological conservation. Eldredge is in the Department of Invertebrates, American Museum of Natural History. (v4,#1)

Eldredge, Niles, ed., Life on Earth: An Encyclopedia of Biodiversity, Ecology, and Evolution. 2 vols.

Santa Barbara, CA: ABC-CLIO, 2002. Earth's extraordinary diversity of life and the unprecedented threats it faces. 200 A-Z articles, four major overview essays. Eldredge, at the American Museum of Natural History, is the author of numerous works on biodiversity and evolution. (v.13,#1)

Eldredge, Niles. Dominion. New York: Henry Holt, 1995. \$ 25.00. A clearer understanding of our long evolutionary history can help us understand better who we humans are. Agriculture was a critical turning point, about 10,000 years ago, leading humans to believe that they could "step out of" local ecosystems and manage or dominate nature in human interests. Humans came to believe that they could escape the ecological laws of the planet established through many millennia of evolution. This view has gone unchallenged for 10,000 years and has now led us to the brink of ecological disaster. "Now we can see the beginnings of serious, lasting threats--to the global system, to ourselves--if the same course is pursued for much longer." "We have, at best, a few decades to a century to change our course." Eldredge is an invertebrate paleontologist at the New York Museum of Natural History. (v7, #3)

Elgmork, K. "The Brown Bear Ursus arctos L. in Norway: Assessment of Status Around 1990," Biological Conservation 78(no.3, 1996):233.

Elias, David and Goodman, Robert C., "When Nothing is Something: Understanding Detection Limits," Journal of Environmental Law & Practice 7 (No. 3, 2000 Winter): 52-. (v.11,#4)

Elkington, John, Julia Hailes and Joel Makower. The Green Consumer, Penguin Books, New York, 1990. \$ 8.95. American version of a British best-seller. Also a Canadian version, and there is a like-minded Australian one. (v1,#2)

Ellefson, Paul V., "The Safety of Our Forests and the Prosperity of Our People--Has Gifford Pinchot's Regulatory Vision Been Realized," Journal of Forestry 98 (No. 5, 2000 May 01): 14- . Forestry on private land should be regulated, Gifford Pinchot argued, and so it came to pass...though not quite in the way he imagined. Recognizing their cost and administrative burden, regulatory programs of the future will further accommodate public and private interests in forests. (v.11,#4)

Ellen, Roy, and Fukui, Katsuyoshi, eds., Redefining Nature: Ecology, Culture and Domestication. Oxford, UK: Berg, 1996. Part I. Nature as a Cultural Construction. Part II. The Cultural Management of the Environment. Part III. Nature, Co-evolution and the Problem of Cultural Adaptation. Relations between plants, animals, and humans. Ellen is in anthropology and human ecology, University of Canterbury, Kent. Fukui is in anthropology, Kyoto University, Japan. (v.13,#1)

Elling, Bo. *Rationality and the Environment: Decision Making in Environmental Politics and Assessment*. London: Earthscan Publications, 2008. Political decision-making frameworks for environmental assessment have important ethical and aesthetic dimensions but usually lack the tools to provide guidance based on these dimensions. Drawing from a Habermasian trisection of rationality as cognitive-instrumental, moral-practical, and aesthetic-expressive, Elling argues that ethical and aesthetic dimensions can only be brought into environmental politics, assessment, and policies by public participation. Citizen involvement can counteract the dictatorship of technical and economic instrumentality in environmental policy.

Ellingsen, Guro M. Havrevold, Gull eller grønne skoger (Gold or Green Forests). M.A. thesis in the Department of the History of Ideas, University of Oslo. The question of a naturalized environmental ethics versus an economically oriented ethic. She is particularly concerned with the use of evolutionary and ecology theory in contrast to economic theory in formulating an ethic. (Norway)

Elliot, Norbert. Review of Literature, Nature, and Other: Ecofeminist Critiques. By Patrick D. Murphy.

Environmental Ethics 21(1999):217-219.

Elliot, R., "Environmental Ethics." Pages 284-293 in P. Singer, ed., A Companion to Ethics. Cambridge, MA: Basil Blackwell, 1991.

Elliot, Robert, ed., Environmental Ethics. Oxford: Oxford University Press, 1995. There are papers by John Passmore, Mary B. Williams, Richard Sylvan, Val Plumwood, Mary Midgley, Holmes Rolston, Robert Elliot, J. Baird Callicott, Freya Mathews, Andrew Brennan, Colleen D. Clements, Elliot Sober and Mark Sagoff. (v5,#2)

Elliot, Robert, ed. Environmental Ethics. New York: Oxford University Press, 1995. 272 pages. paper, \$16.95. Contains: Mary B. Williams, "Discounting Versus Maximum Sustainable Yield"; J. Baird Callicott, "Animal Liberation: A Triangular Affair"; Holmes Rolston, III, "Duties to Endangered Species"; Robert Elliot, "Faking Nature"; Mary Midgley, "Duties concerning Islands"; Richard Routley (Sylvan) and Val Routley (Plumwood), "Against the Inevitability of Human Chauvinism"; John Passmore, "Attitudes to Nature"; Freya Mathews, "Value in Nature and Meaning in Life"; Val Plumwood, "Nature, Self and Gender: Feminism, Environmental Philosophy and the Critique of Rationalism"; Mark Sagoff, "Can Environmentalists be Liberals?"; Andrew A. Brennan, "Ecological Theory and Value in Nature"; Colleen D. Clements, "Stasis: The Unnatural Value"; Elliott Sober, "Philosophical Problems for Environmentalism." Inexpensive, as these anthologies go, and focuses on philosophically seminal articles, rather than seeking more comprehensive coverage by extracts from several dozen articles. Oxford's other offering is Gruen and Jamieson, eds., Reflecting on Nature: Readings in Environmental Philosophy. Elliot is in philosophy at the University of New England, Armidale, N.S.W., Australia. (v6,#1)

Elliot, Robert, "Review of R.G. Frey, Interests and Rights: the Case Against Animals", Australasian Journal of Philosophy, 61: (1983): 219-21.

Elliot, Robert, "Review of Freya Mathews The Ecological Self", Australasian Journal of Philosophy, 70 (1992): 369-70.

Elliot, Robert, "Rawlsian Justice and Nonhuman Animals", Journal of Applied Philosophy, 1 (1984): 94-105. (Abstract based on abstract in Philosopher's Index) In his book "A theory of Justice", John Rawls argues against the inclusion of non-human animals within the scope of the principles of justice developed therein. However, the reasons Rawls and certain commentators, have advanced in support of this view do not adequately support it. Against Rawls' view that "we are not required to give strict justice" to creatures lacking the capacity for a sense of justice, it is initially argued that (1) "De facto" inclusion should be accorded non-human animals since their exclusion strains just institutions, and (2) Rawls' account of the sense of justice has implicit and undefended human chauvinist elements. Two further counter-arguments are then developed in more detail. It is then claimed that there are no good reasons for disallowing the possibility that non-human animals in the real world would be participants in the original position. If this claim is sound, animals are brought directly within the scope of Rawlsian principles of justice.

Elliot, Robert and Arran Gare, eds., Environmental Philosophy: A Collection of Readings. University Park, Pa.: University of Pennsylvania, 1983. Pp. xiv, 303. The best collection of original essays in environmental ethics. The essays are placed in three groups: the environment and human interests, the development of a new environmental ethic, and the historical traditions regarding the environment. Although the essays in the middle group are more foundational, the essays in Part I are more provocative because they cover ground often ignored by "eco-philosophers." In "Ethical Principles for Environmental Protection," (pp. 3-20), Robert Goodin offers a set of principles that can limit the traditional maximization of net-utility in cost-benefit analysis: Actions should be biased against irreversibility; the

most vulnerable parties and interests should receive particular attention; sustainable policies should be promoted; actions should avoid harm. In "On Deep Versus Shallow Theories of Environmental Pollution," (pp. 58-84), C. A. Hooker extends the criticism of cost-benefit analysis by arguing that it is an "incremental" approach to holistic problems. Without a "vision of life," a collective ideal of the good for society as a whole, environmental problems will be "systematically misposed." Janna L. Thompson, "Preservation of Wilderness and the Good Life," (pp. 85-105), attempts a compromise between preservation arguments based on human interests and those based on the intrinsic value of natural objects. Utilizing the social critique of Marcuse, she proposes a society in which "human self-realization and happiness" arises out of a harmonious working with natural processes as they exist in themselves. Wilderness is not an instrument for humans, but a self-regulating system analogous to a human subject. Part II contains articles by Holmes Rolston, III, "Are Values in Nature Subjective or Objective," (pp. 135-165), criticizing the fact/value distinction in environmental ethics; Mary Midgely, "Duties Concerning Islands," (pp. 166-181), a critique of contractarian "rights" terminology and a broadening of our sense of duty; and Stephen R. L. Clark, "Gaia and the Forms of Life," (pp. 182-197), a call for an extreme "holistic" vision of the self and the obligations to the planetary ecosystem. There are also articles by Gregory S. Kavka and Virginia Warren, Jan Narveson, Mary Anne Warren, Robin Attfield, J. Baird Callicott, and Richard Routley. Extensive bibliography. (Katz, Bibl # 1)

Elliot, Robert, "Environmental Degradation, Vandalism and the Aesthetic Object Argument," Australian Journal of Philosophy 67(1989):191-204. Environmental degradation is wrong, among other reasons, because "the natural environment possesses aesthetic value and its despoliation, or even modification, destroys or diminishes that value." This involves "the claim that what has aesthetic value has intrinsic moral value." Elliot defends this position against John Passmore's argument that environmental degradation is wrong because it involves vandalism and Thomas Hill, Jr., suggestion that the degradation is wrong because it violates ideals of human excellence. "A plausible account of intrinsic moral value, which does not construe it as objective and marks it off from merely valuing something for its own sake, permits explanations of the wrongness of environmental degradation in addition to ones couched solely in terms of ideals of human excellence. Accounts of the latter kind offer a distorted perspective on such cases." Elliot is professor of philosophy at the University of New England, Armidale, Australia and contact person for ISEE in Australia and New Zealand. (v1,#4)

Elliot, Robert, "Intrinsic Value, Naturalness and Environmental Obligation", The Monist, 75 (1992): 138-60. It is argued that wild nature has intrinsic value, which gives rise to obligations both to preserve it and to restore it. An account of intrinsic value, which permits core environmentalist claims, is outlined and defended. A thing has intrinsic value when its value-adding properties outweigh its value-subtracting properties. Value-adding properties may include complex properties and need not be intrinsic - they may be relational. Connections between intrinsic value and obligation are discussed. It is argued that wild nature has intrinsic value, in part, in virtue of its naturalness. Naturalness, it is claimed, is a significant value-adding property, thus supporting the claim that there are obligations to preserve and restore wild nature.

Elliot, Robert, "Ecology and the Ethics of Environmental Restoration", Philosophy, Supplement 36 (1994): 31-43. Some people think that nature has intrinsic value, some people think that nature's intrinsic value grounds an obligation to preserve it and to minimise human interference with it. This is the view the author defends. A distinction is made between non-anthropocentric meta-ethics, which the author suggests is not possible, and non-anthropocentric normative ethics, which is. Williams questions how the normative shift away from the narrowly anthropocentric might be achieved in those who are initially disinclined to perceive intrinsic value in nature. The author suggests that the otherness of projective nature is in concert with its positive aesthetic worth is the significant basis of its intrinsic value. This view is defended against some apparently contrary claims of some restoration ecologists.

Elliot, Robert, "The Rights of Future People." Journal of Applied Philosophy 6 (1989): 159-169. Attempt to unravel some of the puzzles involving the attribution of rights to future non-existent people. Elliot separates the existence of the rights from the existence of the people. We do "not have to claim that the future person is the present bearer of the right...[T]here is no present bearer of the right but...the right exists now" (p. 161). The existence of the right in the present constrains our actions regarding future people, regardless of who these people are. Any cogent view of moral obligation to future generations must address Derek Parfit's problems with future identity; Elliot here fails to mention Parfit, but he raises many of the same issues. (Katz, Bibl # 2)

Elliot, Robert, "Critical Notice of H. McCloskey Environmental Ethics and Politics and R. Attfield The Ethics of Environmental Concern", Australasian Journal of Philosophy, 63 (1985), 499-508.

Elliot, Robert, "Libertarian Justice, Locke's Proviso and Future Generations", Journal of Applied Philosophy, 3, (1986): 217-27. Libertarian justice might plausibly be thought to generate only minimal obligations on the part of present people toward future generations. This is not so, at least on Nozick's version of libertarian justice. Nozickian justice generates extensive obligations to future people. This provides an indirect argument for environmentalist policies such as resource conservation and wilderness preservation. The basis for these obligations is Nozick's use of Locke's proviso, which is spelled out using the notion of the baseline. This paper explains how the extensive obligations are implied by the core ideas of Nozickian justice. There is also a discussion of some of the difficulties involved in understanding the notion of the baseline. However, these difficulties do not destroy the theoretical basis for obligations to future generations contained within Nozickian justice. Provided that libertarian justice involves some such device as Locke's proviso the enforcement of substantial environmentalist policies comes within the ambit of the libertarian minimal state.

Elliot, Robert, "Regan on the Sorts of Beings that Can Have Rights", Southern Journal of Philosophy, 16 (1978): 701-5. According to Joel Feinberg neither plants nor "mere things" can have rights. This seems plausible but Tom Regan has criticised the arguments Feinberg offers in support of his view. Feinberg appeals to two principles to distinguish between those beings that can, and cannot, have rights - the interest principle (only beings who have interests can have rights) and the goodness principle (a right-holder must have a good of its own). The author draws on a distinction between a thing being good and its having a good of its own to defend Feinberg's view against Regan's criticism. Mere things are not included by the goodness principle among the sorts of beings that can have rights. Something that lacks sentience cannot have a good of its own, therefore it cannot have rights.

Elliot, Robert, "Review of "S.R.L. Clark, The Nature of the Beast, and Bernard Rollin, Animal Rights and Human Morality", Australasian Journal of Philosophy, 61 (1983): 454-56.

Elliot, Robert, "Introduction", R. Elliot and A. Gare, eds., Environmental Philosophy: A Collection of Readings, St. Lucia, University of Queensland Press, 1983, ix-xiv. Concern for present and future human beings should be sufficient motivation for calling into question our relationship with the natural environment and modifying our attitudes to it. There are other reasons as well. Our policies threaten nonhuman animal populations. Certain policies may be condemned not just because they harm human beings or nonhuman animals but because they threaten parts of the natural environment. An environmental ethic may be thought of as a systematic ethic which allows moral concern for future generations, nonhuman animals and nonsentient nature. What is significant is that an environmental ethic represents a decided shift from traditional ethics which place human beings at the centre of the moral universe to an ethic of much wider scope. This collection of papers represents the efforts of philosophers to comprehend and respond to the environmental crisis. The papers are divided into three parts: Environmental policy and human welfare, A new environmental ethic? and Attitudes to the natural environment.

Elliot, Robert, "Future Generations, Locke's Proviso and Libertarian Justice." Journal of Applied Philosophy 3, no. 2 (1986): 217-227. A defense of Robert Nozick's version of libertarian justice applied to obligations to future generations. If Locke's proviso regarding just acquisitions (that "enough and as good be left for others") is taken seriously, then environmental obligations to future generations can be maintained. (Katz, Bibl # 1)

Elliot, Robert, "Review of C.C.W. Taylor Ethics and the Environment, Australasian Journal of Philosophy, 72 (1994): 262-63.

Elliot Robert, "Faking Nature", Inquiry, 25 (1982): 81-93. Environmentalists express concern at the destruction/exploitation of areas of the natural environment because they believe that those areas are of intrinsic value. An emerging response is to argue that natural areas may have their value restored by means of the techniques of environmental engineering. It is then claimed that the concern of environmentalists is irrational, merely emotional or even straightforwardly selfish. This essay argues that there is a dimension of value attaching to the natural environment which cannot be restored no matter how technologically proficient environmental engineers become. The argument involves highlighting and discussing analogies between faking art and faking nature. The pivot of the argument is that claim that genesis is a significant determinant of an area's value.

Elliot, Robert, "Environmental Ethics", in P. Singer, ed., A Companion to Ethics, Oxford, Blackwell, 1991, 284-93. This article describes a variety of environmental ethics from the anthropocentric to the holistic. It highlights relationships between them and reviews the arguments which might be used to justify them.

Elliot, Robert, "Extinction, Restoration, Naturalness", Environmental Ethics, 16, (1994): 135-144. Alastair S. Gunn has argued that it is in principle possible to restore degraded natural environments and to restore their full value, provided that species distinctive to them are extant. It is argued, first, that the proviso is unnecessary. More importantly, it is claimed that full value cannot be restored because restored environments lack the relational property of being naturally evolved. Elliot delineates and explains the structure and detail of the theoretical bases for this claim and shows that Gunn's reflections do not rule out the view that full value cannot be restored.

Elliot, Robert, "In Defence of the Vegetarian Argument", Applied Animal Ethology, (1981): 190-96. Lehman and Hurnik have attempted to undermine the moral basis for vegetarianism. The author claims that their arguments to this end are defective. When the vegetarian argument used by Regan and Rachels is correctly understood, Lehman and Hurnik's objections have no weight.

Elliot, Robert, "Moral Autonomy, Self-Determination and Animal Rights", The Monist, 70 (1987): 83-97. It has been argued that nonhuman animals do not, because they cannot, possess moral rights because they lack rational autonomy and a capacity for moral self-determination. Elliot refutes these arguments in two of their recent forms and suggests that nonhuman animals possess that degree of autonomy which is necessary for the coherent ascription of moral rights to them.

Elliot, Robert, Review of Sylvan, Richard, Bennett, David, The Greening of Ethics. Environmental Values 5(1996):273-274. (EV)

Elliot, Robert, "Review of Holmes Rolston III Philosophy Gone Wild", Canadian Philosophical Reviews, 7 (1987), 319-22.

Elliot, Robert, "Extinction, Restoration, Naturalness." Environmental Ethics 16(1994):135-144. Alastair S. Gunn has argued that it is in principle possible to restore degraded natural environments and to restore

their full value, provided that species distinctive to them are extant. I argue, first, that the proviso is unnecessary. More importantly, I claim that full value cannot be restored because restored environments lack the relational property of being naturally evolved. I delineate and explain the structure and detail of the theoretical bases for this claim and show that Gunn's reflections do not rule out the view that full value cannot be restored. Elliot is in philosophy at the University of New England, Armidale, Australia. (EE)

Elliot, Robert, "Introduction", in R. Elliot, ed., Environmental Ethics, Oxford, Oxford University Press, 1995, 1-20. Prudence and a concern for other humans, including future humans is sufficient to motivate unease about human modifications to the natural environment. Self-interest and morality, evidenced in beliefs about the rights of, and duties and obligations towards, other humans, combine to persuade many people that modifications of the natural environment should at the very least be scaled down. The author goes on to describe different human-centred ethics. But not all who advocate environmentalist policies are moved by human-centred reasons alone and some might regard these reasons as comparatively insignificant. This view, they claim, it to exhibit an unjustified human chauvinism. The extent to which moral concern is extended to include beings other than humans is discussed. Next, the nature of competing environmental ethics is examined (by drawing on the distinction between the terms "moral considerability" and "moral significance"), and the meta-ethical and metaphysical aspects of environmental ethics are identified.

Elliot, Robert Faking Nature: the Ethics of Environmental Restoration, Routledge, London and New York, xii, 177. This book is a development of the view first outlined in Elliot's 1982 Inquiry article, "Faking Nature". Although the present account revises certain aspects of the earlier account it maintains the earlier claims that natural value cannot be restored and that naturalness is a basis for intrinsic moral value. These claims are developed in the context of a theory of value which is both subjectivist and nonanthropocentric. The book takes into account criticisms of the earlier article, particularly those of Richard Sylvan and various restoration ecologists. The chapter titles, indicative of the content are, "The nature of natural value", "Environmental obligation, aesthetic value, and the basis of natural value", "Faking nature", and "Naturalness, intrinsic value and restoration ecology." Elliot is at Sunshine Coast University College, Maroochydore South, Queensland, Australia. (v9,#1)

Elliot, Robert, "The Rights of Future People", Journal of Applied Philosophy, 6 (1989): 159-69. It has been argued by some that the present non-existence of future persons entails that whatever obligations we have towards them are not based on rights which they have or might come to have. This view is refuted. It is argued that the present non-existence of future persons is no impediment to the attribution of rights to them. It is also argued that, even if the present non-existence of future persons were an impediment to the attribution of rights to them, the rights they will have when they come into existence constitute a constraint on present actions. Next three arguments are considered which, while they do not highlight the non-existence issue, are related to it. The view that the causal dependence, of (some) future people on present policies, erodes or weakens the claim that rights considerations should constrain our present actions concerning them; the view that future people can only have rights to what is available at the time at which these people come into existence; and the view that the attribution of rights to future people involves, in virtue of resource scarcity, an unacceptable arbitrariness. All three are rejected.

Elliot, Robert, "Review of Holmes Rolston III Environmental Ethics", Australasian Journal of Philosophy, 67 (1989): 493-94.

Elliot, Robert, "The Value of Wild Nature", Inquiry, 26 (1983):359-61. Don Mannison levels three criticisms at the claims Elliot makes in "Faking Nature". First, he claims that Elliot argues from (1) "x is valued" to (2) "x has value". Elliot denies this. Second, Mannison criticises an argument of Nelson Goodman's to which Elliot alludes. While the criticism has point, Elliot claims that Mannison

misrepresents the role he (Elliot) assigns to Goodman's argument. Third, Mannison suggests that there is no need for Elliot to count environmental evaluations as evaluations of the moral kind. However, he offers no account of why he should not and ignores an important consideration that requires that he should.

Elliot, Robert, "Facts About Natural Values," Environmental Values 5(1996)221-234. Some environmental philosophers believe that the rejection of anthropocentric ethics requires the development and defence of an objectivist meta-ethical theory according to which values are, in the most literal sense, discovered not conferred. It is argued that nothing of normative or motivational import, however, turns on the meta-ethical issue. It is also argued that a rejection of normative anthropocentrism is completely consistent with meta-ethical subjectivism. Moreover the dynamics and outcomes of rational debate about normative environmental ethics are not determined by any particular choice between meta-ethical subjectivism and objectivism. These different meta-ethical views sustain analogous moves in normative debate, although they offer rather different accounts of what underlies these moves. They also provide for analogous links between moral belief and motivation, although again they offer rather different accounts of what underlies these links. In the course of defending these conclusions a subjectivist account of intrinsic value is developed and defended. KEYWORDS: Anthropocentrism, environmental ethics, meta-ethics, value-theory

Elliot, Robert, "Meta-Ethics and Environmental Ethics", Metaphilosophy, 16 (1985): 103-17. It has been argued by some that an environmental ethic is possible only if meta-ethical objectivism is true. However, there are good reasons for thinking that it is not true. It turns out that an environmental ethic is compatible with a non-objectivist meta-ethic. A subjectivist meta-ethic is outlined and is shown to provide conceptual space for the claims of an environmental ethic.

Elliot, Robert, "Reply to William Godfrey-Smith", in D. Mannison, M. McRobbie and R. Routley, eds., Environmental Philosophy, Canberra: Research School of Social Sciences, Australian National University, 1980, 48-51. William Godfrey-Smith is now William Grey. It is agreed that the moral community can be justifiably extended to include sentient non-humans, however, it is claimed that it is possible to give up human chauvinism without adopting the ethic Godfrey-Smith advocates. Feinberg's interest principle is taken by Godfrey-Smith to be the most promising for demarcating the class of individuals to whom rights can be properly attributed. It is claimed that this principle does not force an extension of the class of rights-holders beyond the class of sentient individuals, as claimed by Godfrey-Smith, to include individual trees, rainforests, soils and whole species. The crucial difference, it is claimed, is that sentient individuals but not plants are the subjects of experience. It is claimed that Godfrey-Smith has not provided sufficient argument to force an extension of the class of right-bearers in the way he advocates. Godfrey-Smith opposes the view that all values are grounded in human interest and concern, however, it is not necessary to accept his conclusion in order to argue against this position. Finally, it is not clear that he has produced an argument that shows there is no dependence between value and valuers analogous to the dependence between, say, lies and liars.

Elliot, Robert, "Environmental Degradation, Vandalism and the Aesthetic Object Argument", Australasian Journal of Philosophy, 67 (1989): 191-204. It is argued that the natural environment has intrinsic moral value because it has aesthetic value. It is argued that its having intrinsic moral value generates a prima facie obligation to preserve and protect it. Two aesthetic object arguments are examined: The first argument against environmental degradation makes a direct connection between aesthetic value and intrinsic moral value - what has aesthetic value has intrinsic moral value. The second is not so conjoined, and requires supplementing in order to demonstrate that there is a moral reason for not degrading the natural environment. It is argued that the second argument does not provide an independently strong argument against environmental despoliation. The problem lies in identifying a basis for a condemnation of despoliation which does not appeal either to instrumental reasons nor the

intrinsic value of nature. The first aesthetic object argument, on the other hand, is plausible, coherent and compelling. Elliot claims it can be defended against the normative, metaphysical and meta-ethical arguments brought against it.

Elliot, Robert, "Why Preserve Species?" in D. Mannison, M. McRobbie and R. Routley, eds., Environmental Philosophy, Canberra: Research School of Social Sciences, Australian National University, 1980, 8-29. Environmentalists frequently urge restraints on human activity because that activity threatens the existence of some species or other. The author aims to find out how much strength there is in the argument that it is wrong, or at least prima facie wrong, to destroy species. The question is whether there is any value in species preservation over and above the consequences species preservation has for individual members of species. That species preservation is instrumentally valuable, the aesthetic object argument, and the intrinsic value of species preservation, as well as the claimed need for a new environmental ethic are considered.

Elliot, Robert. "Instrumental Value in Nature as a Basis for the Intrinsic Value of Nature as a Whole." Environmental Ethics 27 (2005):43-56. Some environmental ethicists believe that nature as whole has intrinsic value. One reason they do is because they are struck by the extent to which nature and natural processes give rise to so much that has intrinsic value. The underlying thought is that the value-producing work that nature performs, its instrumentality, imbues nature with a value that is more than merely instrumental. This inference, from instrumental value to a noninstrumental value (such as intrinsic value or systemic value), has been criticized. After all, it seems to rely on the bizarre idea that a thing's instrumental value could be a basis for its intrinsic value. This idea, however, is not as easy to dismiss as many might think. Review of the obvious arguments that might be deployed to defeat it shows that they have to be rejected, suggesting that a thing's instrumental value could be, and arguably is, a basis for its intrinsic value. Defending this apparently bizarre idea provides a way of justifying the claim that nature as a whole has intrinsic value. (EE)

Elliot, Robert. Faking Nature: The Ethics of Environmental Restoration. Reviewed in Environmental Ethics 21(1999):329-332.

Elliot, Robert. Faking Nature: The Ethics of Environmental Restoration. Review by Eric Katz, Ethics and the Environment 3(1998):201-205.

Elliot, Wayne. "Wilderness in the New South Africa." International Journal of Wilderness 2, no. 2 (August 1996): 9-13. South Africa is redefining itself in the post-apartheid era. Currently eleven wilderness areas are protected by law. The principal challenges lie in developing uniform wilderness management standards, legislating a wilderness act, and enabling local communities such as those that exist in KwaZulu/Natal to manage and receive direct benefit from their adjacent wildlands. Elliot heads conservation in the Department of Nature Conservation, KawZulu/Natal, South Africa, and has been influential in incorporating blacks into wildlife conservation there. (v7, #3)

Elliott, Craig, "New Frontiers: Thermal Pools May Hold Many Secrets," Wilderness Profile (Newsletter of the Yellowstone Association), 13 (no. 1, Spring 1998):1-4. Bioprospecting in Yellowstone National Park. Park authorities have now set a policy that scientific research without expectation of commercial results is free, but that research in expectation of commercial results must enter into a "shared benefits contract," by which the park will receive a set amount of cash and a percentage of royalties from any future successful applications resulting from the research. There is great interest the thermophiles, especially since Thermus aquaticus, or "tac" was used to develop the polymerase chain reaction, a process worth many millions of dollars. (v9,#1)

Elliott, Herschel, *Ethics for a Finite World: An Essay Concerning a Sustainable Future*. Fulcrum

Publishing, Golden, CO, 2005. Humans need a finite ethics, "a steady-state ethics" (p. xxvi). Since we humans evolved on the planet, we have been pushing back limits. For millennia humans have lived with a deep-seated belief that life will get better, that one should hope for abundance, and work toward obtaining it. We have in the West built that into our concept of human rights: a right to self-development, to self-realization. The egalitarian ethic is wrong, because it scales everybody up and drives an unsustainable world. The ethic of "human rights," of a right to food, to development, to education, to employment, a right to reproduction is, in this sense, pushing in the wrong direction. Asserting such rights is contributing to life-system breakdown (Chapter 2; cf. pp. 74-75). Elliott is a retired professional philosopher, now a vegetarian farmer in remote Vermont, living without utilities and indoor plumbing, eating mostly what he grows and stores.

Elliott, Kevin. "Norton's Conception of Sustainability: Political, Not Metaphysical." *Environmental Ethics* 29(2007):3-22. In his new book, *Sustainability: A Philosophy of Adaptive Ecosystem Management*, Bryan G. Norton proposes an account of sustainability grounded in the deliberation of local communities as part of an adaptive management process. One can distinguish two different ways of justifying his account - resulting in "political" and "metaphysical" conceptions of sustainability - in much the same way that John Rawls famously distinguishes between political and metaphysical conceptions of justice. Whereas the metaphysical conception of sustainability depends on principles that are specific to American pragmatist philosophical theory, the political conception draws on relatively uncontroversial elements of democratic political culture. Although Norton seems to lean toward a metaphysical conception of sustainability in his book, a political conception would actually be more compatible with the overarching aims of his project. Finally, the distinction between political and metaphysical conceptions could prove valuable as a model for thinking about how many of the current projects in environmental pragmatism relate to other strands of environmental philosophy. Thus, a potentially fruitful alteration to Norton's recent work provides some conciliatory lessons for relating different projects in the field of environmental philosophy. (EE)

Elliott, Lorraine M., "Environmental Conflict: Reviewing the Arguments," *Journal of Environment and Development* 5 (no. 2, June, 1996):149-167. (v.10,#3)

Elliott, Lorraine, "Imaginative Adaptations: A Possible Environmental Role for the UN Security Council," *Contemporary Security Policy* 24(no. 2, 2003):47-68. Possible roles of the UN Security Council in environmental protection; a review of the literature.

Elliott, Lorraine, *The Global Politics of the Environment*. Washington Square, NY: New York University Press, 1998. What kinds of international institutions are best suited to dealing with global environmental problems? Mainstream strategies, which seek to build support for reforms through existing institutions, and the tensions with radical critiques, which argue that environmental degradation is a symptom of a dysfunction world that must itself be transformed. Stockholm to Rio. Transboundary agendas, protecting wildlife, pollution across borders. Global commons of atmosphere, climate, biodiversity, forests. The state and global institutions. Non-state actors. Voices from the margins: women and indigenous peoples. North and South. Strategies for sustainable development. Environmental security, the military. Elliott is in political science, Australian National University, Canberra. (v.10,#3)

Elliott, Lorraine, *International Environmental Politics: Protecting the Antarctic*. New York: St. Martins, 1994. London: Macmillan, 1994. 336 pages. (v.10,#3)

Elliott, Robert and Arran Gare, eds. *Environmental Philosophy*. Reviewed in *Environmental Ethics* 6(1984):367-71.

Elliott, Robert. *Faking Nature: The Ethics of Environmental Restoration*. Reviewed by Jenny Heap.

Environmental Values 8(1999):122. (EV)

Elliott, Valerie, "400,000 March in London," The Times, September 23, 2002, p. 1, pp. 4-5. 400,000 protesting for fox hunting!?! The biggest peaceful street protest in British history took place September 22 in London, with an estimated 400,000 protestors on behalf of numerous rural concerns, with fox hunting an icon of these concerns. The Liberty and Livelihood March was organized by the Countryside Alliance, hunting horns blaring, but many conceded they were more concerned about making a living from the land regardless of the fate of the foxes.

Ellis, Gerry and Karen Kane, Wilderness Remembered. Minocqua, WI: NorthWord Press, 1995. Excerpts from earlier explorers of the wilderness, their diaries, journals, and other works, often offsetting the belief that such explorers found a howling wilderness that they feared or disliked. Accompanied by contemporary photographs. (v7,#1)

Ellis, Joy. "Drafting from an Overdrawn Account: Continuing Water Diversions from the Mainstem Columbia and Snake Rivers." Environmental Law 26, no.1 (1996): 299. Ellis analyzes restrictions on diversions of mainstream Columbia River flows in Washington, Oregon, and Idaho. She concludes that, while the moratoria recently imposed by the three states will contribute to the recovery of threatened and endangered salmon species, state agencies must do more to protect instream flow from further water appropriation activity. (v7, #3)

Ellis, Richard J. and Lewis Ricci. "On Limits of Altruism." Environmental Ethics 1(1979):380. (EE)

Ellis, William B. "Crying a River and Other Approaches to Water Resource Development", Natural Resources & Environment 11(no.2, 1996):21.

Ellison, Peter, On Fertile Ground: A Natural History of Human Reproduction. Cambridge, MA: Harvard University Press, 2001. Mounting evidence that the physiological regulation of ovulation, fertilization, implantation, and the maintenance of a pregnancy among humans is particularly specialized to protect high-quality, large-brained offspring. Implantation and nurturance of the human fetus with a haemochorial placenta, which endures a large and consistent supply of nutrients, differ from those in most mammals. Fetal growth is more rapid in humans than in gorillas and chimpanzees. Birth in humans is a treacherous affair, because the pelvis is barely large enough to allow the baby's enormous head to pass through. Natural selection has compromised conflicting demands of female locomotion, brain growth, and birth complications to produce a delicate fitness-maximizing balance.

Human mothers store exceptional amounts of fat, during and after pregnancy, to support an equally exceptional rate of brain growth in the fetus and nursing newborn. These offspring then require a long period of nurture and education into culture. Raising humans requires a massive investment, typically about eighteen years. Ellison is an anthropologist at Harvard University. (v.12,#3)

Elmendorf, Christopher S., "Ideas, Incentives, Gifts, and Governance: Toward Conservation Stewardship of Private Land, in Cultural and Psychological Perspective," University of Illinois Law Review 2003, no. 2, 423-505. Conserving ecological resources on private lands requires both supportive landowners and regulatory coercion, notwithstanding that rural landowners comprise the most consistently anti-environmental demographic group in America. Neither policymakers nor legal scholars have come up with satisfying responses to this predicament. One needs incentives, gifts, governance, and, above all, more ideas. Long law article with many citations. Elmendorf is Law Clerk, U.S. Court of Appeals for the Second Circuit, and University of California, Davis, School of Law.

Elmore, Roger W. "Our Relationship with the Ecosystem and Its Impact on Sustainable Agriculture," Journal of Production Agriculture 9 (no.1, 1996):42-45. A brief survey of geocentric, anthropocentric and

theocentric approaches to environmental ethics. (v7,#4)

Elmusa, Sharif S. "Dividing Common Water Resources According to International Water Law: The Case of the Palestinian-Israeli Waters," Natural Resources Journal 35(no.2, Sprg. 1995):223- . (v6,#4)

Elmwood Quarterly, The, 8, no. 4 (Winter 1992-93) contains papers by George Sessions, Arne Naess, Max Oelschlaeger, Gary Snyder, and many others. (v4,#4)

Els, H., and J. Du P. Bothma, "Developing partnerships in a paradigm shift to achieve conservation reality in South Africa," Koedoe (Research Journal, South African Parks) 41 (no. 1, 2000):19-26. Community development as an integral part of, not an add-on to, conservation. Programmes which really achieve conservation-based community development, enhancing survival for both the communities and their inherent natural resources. Both authors are at the Centre for Wildlife Management, University of Pretoria, South Africa. (v.11,#4)

Eldson, Ron. Bent World: A Christian Response to the Environmental Crisis. Reviewed in Environmental Ethics 4(1982):359-62.

Elvey, Anne, "Beyond Culture? Nature/Culture Dualism and the Christian Otherworldly," Ethics and the Environment 11(2006):63-84. As Val Plumwood argues, the Christian otherworldly is ecologically problematic. In relation to time, space, being and agency, this article considers the tendency to dualism in Christian appeals to the otherworldly. In the context of Plumwood's critique of nature-skepticism, I ask whether we should also critique an otherworldly skepticism. I then set out five possibilities for understanding the Christian otherworldly in relation to nature and culture. I argue that the otherworldly can be understood not only as a problematic cultural notion that participates in the devaluation of nature, but as a way of understanding the otherness of nature, as having purposes and agencies beyond the cultural construction of earth as world. An understanding of nature as other-worldly presents challenges for both Christian theologies and environmental ethics. Elvey is director of research administration, Melbourne College of Divinity, Australia. (Eth&Env)

Elvin, Mark, The Retreat of the Elephants: An Environmental History of China. New Haven: Yale University Press, 2004.

Emanuel, Kerry. *What We Know About Climate Change*. Cambridge, MA: The MIT Press, 2007. Emanuel, an atmospheric scientist at the Massachusetts Institute of Technology, discusses the basic science of global climate change and how the current scientific consensus about global warming has emerged.

Emblidge, David, The Appalachian Trail Reader. New York: Oxford University Press, 1996. 382 pages. \$ 27.50. An anthology of writings by those who have hiked the famous trail. Emblidge has also written a series of Companions to various sections of the AT, published by Stackpole Books. (v7,#4)

Emerson, H. arriet J. and Gillmor, Desmond A., "Rural Environment Protection Scheme of the Republic of Ireland," Land use policy 16(no. 4, Oct 01 1999):235- . (v10,#4)

Emery, N. J., and N. S. Clayton, "Effects of Experience and Social Context on Prospective Caching by Scrub Jays," Nature 414 (22 November 2001): 443-446. Scrub-jays only take steps to prevent future thefts from food caches that they have made after having been thieves themselves, the birds seemingly projecting their own experience of thievery onto competitors. Various studies have shown that jays are remarkably adept at remembering where they have hidden food caches.

Emmenegger, Susan and Axel Tschentscher, "Taking Nature's Rights Seriously: The Long Way to Biocentrism in Environmental Law," Georgetown International Environmental Law Review 6(1994):545-. (v7,#2)

Encyclopedia of Animal Rights and Animal Welfare, The. will be available from Greenwood Press within a few months. Edited by Marc Bekoff, a biologist at the University of Colorado, this one-volume reference work provides essays by recognized authorities in the field, addressing the many issues of animal rights and animal welfare. The Foreword is by Jane Goodall. For more information, contact Marc at EPO Biology, University of Colorado, Boulder, Colorado 80309-0334 USA; marc.bekoff@colorado.edu (v.8,#4)

Encyclopedia of Bioethics. The following articles are in the second edition of the Encyclopedia of Bioethics. Holmes Rolston, III, Colorado State University, is the area editor for environmental ethics and animal welfare issues. Coverage of these issues is expanded ten times over the first edition. Warren T. Reich, Georgetown University, is the editor-in-chief. Also of interest is an extensive appendix (the last half of volume 5), "Codes, Oaths, and Directives Related to Bioethics," including Section V, Ethical Directives Pertaining to the Welfare and Use of Animals, with codes and policies on veterinary medicine and on research involving animals; and Section VI, Ethical Directives Pertaining to the Environment. The latter section contains: World Charter for Nature, General Assembly of the United Nations (1982); Rio Declaration on Environment and Development (1992); Conservation Policies of the Wildlife Society (1988); Code of Ethics for Members of the Society of American Foresters, Society of American Foresters (1976, amended 1986, 1992), the last amendment with the land ethic canon; Code of Ethics and Standards of Practice for Environmental Professionals (1979, revised 1994); and Code of Ethics, National Environmental Health Association (revised 1992).

Callicott, J. Baird, "Environmental Ethics: Overview"
Naess, Arne, "Deep Ecology" (Environmental Ethics)
Callicott, J. Baird, "Land Ethic" (Environmental Ethics)
Warren, Karen J., "Ecofeminism" (Environmental Ethics)
Wenz, Peter, "Environmental Health"
Sagoff, Mark, "Environmental Policy and Law"
Engel, J. Ronald, "Environment and Religion"
Engel, J. Ronald, "Sustainable Development"
Shrader-Frechette, Kristin, "Hazardous Wastes and Toxic Substances"
Regan, Tom, "Ethical Perspectives on the Treatment and Status of Animals" (Animal Welfare and Rights)
Linzey, Andrew, "Vegetarianism" (Animal Welfare and Rights)
Rolston, Holmes, III, "Wildlife Conservation and Management" (Animal Welfare and Rights)
Rolston, Holmes, III, "Endangered Species and Biodiversity"
Linzey, Andrew, "Pet and Companion Animals" (Animal Welfare and Rights)
Dunlap, Julie and Kellert, Stephen R., "Zoos and Zoological Parks" (Animal Welfare and Rights)
Loftin, Robert and Klein, Ellen, "Hunting" (Animal Welfare and Rights)
Rollin, Bernard E., "Animals in Agriculture and Factory Farming" (Animal Welfare and Rights)
Jamieson, Dale, "Climatic Change"
Engel, J. Ronald, "Sustainable Development"
Kesel, M. Lynne, "Veterinary Ethics"

Endangered Peoples: Indigenous Rights and the Environment, from the editors of the Colorado Journal of Environmental Law and Policy. Niwot, CO: University Press of Colorado, 1994. 225 pages. \$ 17.50 paper. Nine authors provide an overview of the issues and proposals for the protection of indigenous peoples and their environment. (v5,#1)

Endangered Wildlife is the journal of the Endangered Wildlife Trust, South Africa, c/o The Johannesburg Zoological Gardens, Jan Smuts Avenue, Parkview, 2193. (v1,#4)

Endangered Wildlife is the official publication of the Endangered Wildlife Trust. (v6,#3)

Ends and Means is a journal of philosophy and technology published twice yearly by the Centre for Philosophy, Technology and Society at the University of Aberdeen. The journal is devoted to rigorous philosophical exploration of social, moral and conceptual questions arising in relation to technology. Although not committed to any one school or style of philosophy, its editorial policy is to publish only material of high philosophical quality written in a style accessible to a wide readership. Contributions should not exceed 7500 words, though shorter articles and discussions are especially welcome. Two copies of a typescript should be submitted to: Dr. Jonathan Friday, Centre for Philosophy Technology and Society, University of Aberdeen, Aberdeen, SCOTLAND, AB24 3UB. Alternatively texts may be submitted by email to Friday@abdn.ac.uk. For more information visit the Centre's web-page at www.abdn.ac.ukat. (v.12,#2)

Endter-Wada, Joanna, Levine, Douglas W. "Comparison of Subsistence Activities Among Natives and Non-Natives in Bristol Bay, Alaska", Society & Natural Resources 9(no.6, 1996):595. (v7,#4)

Engel, C, "Heal Thyself," Ecologist 32(no.3, 2002):34-39. It's a little known fact, animals have numerous ingenious ways of looking after their own health. (v.13, #3)

Engel, Cindy, Wild Health: How Animals Keep Themselves Well and What We Can Learn from Them. Boston: Houghton Mifflin, 2002. What bears, wolves, tigers, snow geese, and especially chimps do to medicate themselves. Examples: eating pharmaceutical plants, or eating rough grass to get rid of intestinal worms, or clay to stop diarrhea. But Engel insists that such behaviors do not reflect innate animal wisdom, but are the result of millions of years of natural selection. Engel is a lecturer in environmental sciences at the Open University in the United Kingdom. (v.13,#2)

Engel, J. Ronald and Joan Gibb Engel, eds. Ethics of Environment and Development: Global Challenge and International Response (London: Belhaven Press, Pinter Publishers, 1990). Published in association with the International Union for the Conservation of Nature and Natural Resources. Twenty one articles with an international focus. (v1,#1)

Engel, J. Ronald, "Sustainable Development," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 2456-62. (v6,#2)

Engel, J. Ronald, and Julie Denny-Hughes, eds., Advancing Ethics for Living Sustainably. Report of the IUCN Ethics Workshop, April 1993, Indiana Dunes National Lakeshore, USA. Published for the IUCN Ethics Working Group by the International Center for the Environment and Public Policy, P. O. Box 189040, Sacramento, CA 95818. \$ 15.00. 56 pages. Sections include: Martin Holdgate, "The Moral Challenge to Care for the Earth"; Steven Rockefeller, "A World Ethic for Living Sustainably: Sources and Principles"; M. A. Partha Sarathy, "The Contribution of Yesterday to the Ethics of Tomorrow."

Engel, J. Ronald and Joan Gibb Engel, eds., Ethics of Environment and Development: Global Challenge, International Response is now available from the University of Arizona Press, 1230 N. Park Ave., Tucson, AZ 85719. Twenty three ethicists from fifteen nations. \$ 29.95 plus \$1.25 postage. Phone 800/426-3797. The British publisher is Belhaven Press, 25 Floral Street, London, WC2E 9DS. (v1,#2)

Engel, J. Ronald and Joan Gibb Engel, eds., Ethics of Environment and Development: Global Challenges and International Response. Tucson: University of Arizona Press, 1990. Pp. xv, 264. Collection of

articles on environmental ethics and international development, inspired by a citation in the Brundtland report on sustainable development calling for a new "global ethic." The strength of the collection is its international and interdisciplinary character, with authors from every continent represented, as well as major figures in the field of environmental ethics: Arne Naess, Holmes Rolston, Henryk Skolimowski, Denis Goulet, and Ariel Salleh. (Katz, Bibl # 2)

Engel, J. Ronald. Review of Religion and Environmental Crisis. Edited by Eugene C. Hargrove. Environmental Ethics 9(1987):181-83.

Engel, J. Ronald, "Environment and Religion," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 707-14. (v6,#2)

Engel, Kirsten H. "The Dormant Commerce Clause Threat To Market-Based Environmental Regulation: The Case of Electricity Deregulation." Ecology Law Quarterly 26(no. 2, 1999):243- . (v10,#4)

Engelbrecht, BJ 1986. Teologie en ekologie. Skrif en kerk 77:1, 24-38. (Africa)

Engelbrecht, BJ 1988. Teologie en ekologie. Hervormde Teologiese Studies. 44:1, 23-38. (Africa)

Engelbrecht, W. G., and P. T. van der Walt, "Notes on the Economic Use of the Kruger National Park," Koedoe: Research Journal for National Parks in the Republic of South Africa 36, no. 2, 1993: 113-120. In an economic analysis, the present use of Kruger National Park creates substantially more net social benefits than would its conversion to agricultural use, but the question remains whether these benefits are equitably distributed at various levels of the South African society. Engelbrecht is with the Development Bank of Southern Africa; van der Welt is with the National Parks Board, Republic of South Africa. (v5,#1)

England. Some notes on environmental philosophy in the United Kingdom are in the ISEE newsletter, vol. 4, no. 3, Fall 1993.

English, Donald B.K., Marcouiller, David W. and Cordell, H. Ken, "Tourism Dependence in Rural America: Estimates and Effects," Society & Natural Resources 13 (No. 3, Apr 01 2000): 185- . (v.11,#2)

English, Mary R., Siting Low-Level Radioactive Waste Disposal Facilities. New York: Quorum Books, 1992. 279 pages. With chapters on Trust, Risk, and Justice, and an examination of how various ethical theories fit what has happened in policy decisions. Lots of case studies. Documents how the poor catch most of the radioactive pollution. English is an Associate Director of the University of Tennessee's Energy, Environment, and Resources Center and a Senior Fellow of the University's Waste Management Research and Education Institute. (v4,#1)

Enoch, M., "Review of: Daniel Miller (Ed.), Car Cultures," Environmental Politics 12(no. 1, 2003): 263-264. (v 14, #3)

Enserink, Martin, "Tiptoeing Around Pandora's Box," Science 305(30 July, 2004):594-595. Avian flu in Asia is one of the worst animal-health outbreaks in history. [See Altman, Lawrence K., "Avian Flu Kills 1,500 Ostriches on 2 South Africa Farms," New York Times, August 10, 2004, p. D4]. Two hundred million birds have been culled in Asia this year. The virus is very similar to human influenza and researchers fear a crossover that would create a highly lethal human epidemic. They could do this in the labs and test the likelihood of an epidemic, promoted by the World Health Organization. But how likely is it that the hybrid might escape the labs--recalling that the SARS virus escaped from three Asian labs in the past year? Researchers think that present drugs would kill the new virus, but they do not know how

likely an epidemic would be, probably in areas with few drugs to control it. (v. 15, # 3)

Enserink, Martin and Vogel, Gretchen, "The Carnivore Comeback," Science 314(3 November 2006):746-749. Bears, wolves, lynx, and wolverines, once nearly exterminated from Western Europe, have been making a comeback--both by reintroducing themselves from Eastern Europe, now that the fences are down, and by restoration biology. And there are plenty of protests, especially from farmers whose sheep are killed. Wolves and bears are in almost every country in Europe.

Entree, a periodical of Campus Ministry Communications, Evangelical Lutheran Church in America, devotes the November 1990 issue to "Caring for the Creation: The Church and the Environmental Crisis." Some articles: David H. Petering, "Roots for a Bioethic," Frances F. Saunders, "Environmental Health and Ecological Justice," Jeff Merkel, "Wilderness Spirituality," "Peter Bakken, "God and Garbage: A Theology of Trash." Copies available for \$ 2.00 from ELCA Distribution Service, 426 South Fifth Street, Box 1209, Minneapolis, MN 55440. Phone 800/328-4648. (v1,#4)

Entrikin, J. Nicholas, The Betweenness of Place: Towards a Geography of Modernity. Baltimore, MD: Johns Hopkins University Press, 1991. "To understand place requires that we have access to both an objective and a subjective reality. From the decentered vantage point of the theoretical scientist, place becomes either location or a set of generic relations and thereby loses much of its significance for human action. From the centered viewpoint of the subject, place has meaning only in relation to an individual's or a group's goals and concerns. Place is best viewed from points in between" (p. 5). Entrikin is a geographer at UCLA. (v7,#1)

Entrikin, J., "Review of: Gleeson, B. and Low, N., Governing for the Environment: Global Problems, Ethics and Democracy," Progress in Human Geography 27(no. 3, 2003): 387-388. (v 14, #3)

Entwhistle, Abigail, and Dunstone, Nigel, eds., Priorities for the Conservation of Mammalian Diversity: Has the Panda Had its Day? Cambridge: Cambridge University Press, 2000. Is charismatic megafauna the best conservation policy, versus, for example, biodiversity hotspots or attention to hunting, or tourism, or political and social needs? Entwhistle is with Fauna and Flora International, UK; Dunstone at the University of Durham, UK. (v.13, #3)

environment Yale: The Journal of the School of Forestry & Environmental Studies Vol. 7, no. 1 (Spring 2008). Contents include: (1) "Dean's Message: Time for Civic Unreasonableness" by James Gustave Speth (pp. 2-3), (2) "Forest Destruction's Prime Suspect" by Steve Kemper (pp. 4-11, 31) (3) "Growing Concerns About the Environment Raise Hope of a New Public Consciousness" (pp. 12-15), (4) "Stewards of Public Resources *or* Private Profits? National Parks Enshrine Policy to Commercialize Research" by Jon Luoma (pp. 16-19), (5) "United States Slips in Latest Environmental Performance Index" by Alan Bisbort (p. 20), (6) "Money Can't Buy You Love, Or Happiness" by James Gustave Speth (pp. 23-28), and (7) "Satellites: Snooping That's Saving the World's Resources" by Steve Kemper (pp. 32-37, 57). This journal is available online at:
<<http://environment.yale.edu/documents/downloads/0-9/2008-Spring-Master.pdf>>.

Environment 91/92, 10th edition (Sluice Dock, Guilford, CT 06437: Duskin Publishing Group, Inc.) 256 pages, softcover. \$ 10.95. 35 articles, 27 of them new, drawn from magazines and popular academic sources Sections on the global environment, world population, energy, pollution, land, water, and air resources, endangered species. Articles are facsimile reproduced from their original sources. An instructor's resource guide is available. (v2,#1)

Environment and History, specializing in environmental history, is based in the U.K. Contact Richard H. Grove, Global Environmental History Unit, Department of History and Philosophy of Science, University

of Cambridge, Free School Lane, Cambridge CB2 3RH, UK. Fax 44 1223-332333. (v6,#1)

Environment Views is published quarterly by Alberta Environmental Protection, and is available free on request. A sample issue, Winter 1993, was on the theme, "Sacred Ground." Articles include: J. Stan Rowe, "In Search of the Holy Grass: How to Bond with the Wilderness in Nature and Ourselves"; John Marsh, "Back to the Garden: Can Christianity Take Root in the Earth?"; Connie Bryson, "Earth Mothers: Do Women Have a Special Connection to the Earth?" Clayton Blood, "Blood Ties: On the Blood Reserve, an Irrigation Project Puts People Back in Touch with the Spirit of the Land" (Blackfoot Indians), and others. Contact: Environment Views, Alberta Environmental Protection, 9915 - 108 Street, Edmonton, Alberta T5K 2C9, CANADA. (Thanks to Phil Pister, Desert Fishes Council.)

Environment Yale. The Journal of the School of Forestry and Environmental Studies Vol. 6, no. 2 (Fall 2007). This book contains discussions of bioenergy, cap and trade control of CO₂, the emerging alliance of religion and ecology, and conservation economy in indigenous culture in Australia.

Environmental and Architectural Phenomenology. The winter 1992 issue marks the start of this multidisciplinary newsletter's third year. This issue focuses on "place and place experience" and includes book reviews and poetry as well as essays by composer R. Murray Schafer, philosopher Antony Weston, and geographers Edward Relph and J. Douglas Porteous. The theme of the spring 1992 issue is "phenomenology and environmental ethics." Contributors include naturalist Paul Krapfel and philosophers Ralph R. Acampora, Joseph Grange, and Jeffrey Wattles. Annual subscription \$ 6 (\$ 8 foreign). Contact: Dr. David Seamon: Architecture Department, Seaton 211, Kansas State University, Manhattan, KS 66506. (v2,#4)

Environmental and Architectural Phenomenology Newsletter, Winter 97, focuses on Goethean science, which can be described as an implicit phenomenology of nature and the natural world. Though best known as one of the world's great poets and playwrights, Johann Wolfgang von Goethe (1749-1832) also developed a qualitative style of science that drew on firsthand experience of particular phenomena. Goethe's own scientific work focused on plants and the nature of light and color. Recent work by others has examined such topics as the nature of water, animal form, and the built environment. This issue of the EAP Newsletter includes an essay by ecologist Mark Riegner on the relationship between Goethe and deep ecology, and reviews of two recent books on Goethean science. The EAP Newsletter is published three times annually and a subscription is \$10. For a free sample copy or to subscribe, contact the Editor: David Seamon, Architecture Department, 211 Seaton Hall, Kansas State University, Manhattan, KS 66506-2901; Tel: 785-532-1211. (v.8,#4)

Environmental and Architectural Phenomenology Newsletter, The. has recently been launched as a forum and clearing house for research and design that incorporates a qualitative approach to environmental and architectural experience. A key concern is design, education, and policy supporting and enhancing natural and built environments that are beautiful, alive, and humane. The newsletter is interested in the sense of place, of home, of environmental encounter and its relation to environmental ethics, responsibility, and action. There will be three issues each year. Contact David Seamon, Department of Architecture, College of Architecture and Design, Kansas State University, Manhattan, KS 66506. (v1,#2)

Environmental Careers Organization. The Complete Guide to Environmental Careers in the 21st Century. Covelo, CA: Island Press, 1999. 280 pp. \$39.95 cloth. \$17.95 paper. The entire spectrum of environmental career fields. Individual chapters provide an "at a glance" summary of a field; discuss its history and background along with current issues and trends. Specific career opportunities and their educational requirements; salary ranges by type of employer, level of experience, and responsibility. (v.10,#1)

Environmental Challenges to Modern Society. Theme issues of Socijalna Ekologija: Casopis za ekolosku misao i sociologijska istrazivanja okoline (Social Ecology: Journal for Environmental Thought and Sociological Research) vol. 5, no. 3 (1996). Published in Zagreb, Croatia, in Croatian. Articles on sustainability, environmental education, waste, ontological and ethical perspectives on environmental protection and ecology, the Croatian strategy of environmental education in the church and at school. (v8,#3)

Environmental Conservation is an international journal devoted to maintaining global viability through exposing and countering environmental deterioration resulting from human population pressure and unwise technology. Now in its eighteenth year, it is published quarterly for the Foundation for Environmental Conservation, in Lausanne, Switzerland, with the collaboration of the United Nations Environment Programme (UNEP), the International Union for the Conservation of Nature and Natural Resources (IUCN), the International Association for Ecology (INTECOL), the International Society of Naturalists (INSONA), the International Conferences on Environmental Future (IECFs), the World Council for the Biosphere-International Society for Environmental Education (WCB-ISEE) and the World Wide Fund for Nature (WWF). (v2,#1)

Environmental Crimes at the Rocky Flats Nuclear Weapons Facility. Hearings Vol. I. U. S. Subcommittee on Investigation and Oversight, Committee on Science, Space, and Technology. 1,700 pages (!) of testimony before this House Committee concerning Rockwell Corporations management of Rocky Flats, a nuclear weapons facility in Colorado. Government documents, call no: Y4.SCI 2:no. 102/163DOC. (v4,#2)

Environmental Education Research is a new academic journal, issued three times a year, devoted to advancing environmental education through a focus on papers reporting research activities. The journal expects to publish papers on policy issues, comparative environmental education, and critical reviews of environmental education. Sample papers from vol. 1, no. 1, 1995: John Fein, "Teaching for a Sustainable World: The Environmental and Development Education Project for Teacher Education"; Barcia Marentic Pozarnik, "Probing into Pupil's Moral Judgement in Environmental Dilemmas: A Basis for 'Teaching' Values"; Elena Camino and Carla Calcagno, "An Interactive Methodology for 'Empowering' Students to Deal with Controversial Environmental Problems." Address inquiries to Chris Oulton, Environmental Education Research, School of Education, University of Bath, Bath BA2 7AY, U.K. (v6,#3)

Environmental Enhancement Through Agriculture. Agriculture can serve the environment rather than conflict with it. 36 papers offering numerous examples of agricultural systems that benefit the environment: increasing wildlife habitat and biodiversity; protecting water quality in streams and estuaries; producing substitutes for nonrenewable energy sources; turning urban waste into a resource; offering aesthetically appealing landscapes; and bringing urban residents into closer contact with food production and the land. Special attention to areawide collaborations in which farmers, citizens, and technical experts establish common goals and develop innovative arrangements. From a conference held in Boston, sponsored by the Tufts University School of Nutrition Science and Policy and others. \$20, postpaid, to "Trustees of Tufts College." Center for Agriculture, Food and Environment, School of Nutrition Science and Policy, Tufts University, Medford, MA 02155.

Environmental Grantmaking Foundations, 1993 Directory. Rochester, NY: Environmental Data Research Institute (1655 Elmwood Ave, Suite 225, Rochester, NY 14620-3426. \$ 55. 400 foundations. Indexes by location, activity, emphases, and so forth. (v4,#4)

Environmental Grantmaking Foundations, 5th edition. Rochester, NY: Resources for Global Sustainability, 1997. 1,000 pages. \$ 89.00. 750 foundations, U.S. and Canadian sources of world-wide funding. The most comprehensive source. The first four editions were published by Environmental Data

Research Institute, a related group. There is a CD-Rom version at \$ 104.00 800/724-1857. Fax 716/473-0968. E-mail rgs@eznet.net. Web site: <http://home.eznet.net/~rgs> (v.8,#4)

Environmental Grantmaking Foundations, 1992 Directory. Rochester, NY: Environmental Data Research Institute, 1992. (797 Elmwood Avenue, Rochester, NY 14620) 490 pages, \$ 40. 250 foundations that give environmental grants. (v3,#4)

Environmental Grantmaking Foundations 1993. Rochester, NY: Environmental Data Research Institute (1655 Elmwood Ave., Suite 225, Rochester, NY 14620-3426), 1993. \$ 55.00. 400 foundations, the most significant independent, community, and company-sponsored foundations. These foundations together gave over \$ 350 million for environmental purposes last year. Why foundations make the awards they do. Sample grants. Key personnel. (v4,#3)

Environmental Grantmaking Foundations 1996. Rochester, N.Y.: Environmental Data Research Institute, 1996. 900pp. \$84 softcover. A comprehensive guide to 700 of the most significant independent, community, and company-sponsored foundations that give environmental grants. Each profile gives data to target the most likely sources of support; multiple indexes help to narrow the search. (v8,#1)

Environmental Grantmaking Foundations. 3rd edition, 1995. 600 foundations. Environmental Data Research Institute, 1655 Elmwood Ave., Suite 225, Rochester, NY 14620-3426. \$70. (v6,#1)

Environmental History Review (formerly, Environmental Review). Center for Technology Studies, New Jersey Institute of Technology, Newark, New Jersey 07102. This is the journal of the American Society for Environmental History. As such, it specializes in environmental history and policy studies. Many articles concern the intellectual history of environmentalism. One forthcoming issue (summer 1991) with a focus on "The Moral Sense of Nature," will be devoted to environmental philosophy. (Katz, Bibl # 2)

Environmental Investments: The Costs of a Clean Environment. Report of the Administrator, Environmental Protection Agency. Covelo, CA: Island Press, 1991. \$ 40.00 cloth. 520 pages. What industry should expect in direct costs for implementing pollution control measures and undertaking compliance with environmental laws. The costs of forthcoming and projected environmental programs. An account of the \$ 115 billion per year that the public and private sectors spend on pollution prevention and control. (v2,#3)

Environmental Justice: A Negotiation Training Program. Developed by graduate students at MIT, here are negotiation exercises designed to help groups teach and learn as they negotiate. Case studies: (1) Siting an asphalt plant in the city of Madrona. Six keyholder states must meet to consider how to address equity and fairness claims. (2) The Beaumont Incinerator. What are valid grounds for claims of environmental justice? Impacts and risks concentrated in poor communities, environmental racism. \$ 10 each. Order from: Program on Negotiation Clearinghouse, Harvard Law School, 518 Pound Hall, Cambridge, MA 02138. Phone 617/495-1684. Fax 617/495-7818. (v7,#1)

Environmental Media Association, The. has been founded in Hollywood by producer-director Norman Lear and a cast of major television and movie industry players. Andy Spahn is director and the association tries to use the industry's communication skills to make people more aware of environmental issues. For information contact: Environmental Media Association, 10536 Culver Boulevard, Culver City, CA 90232. Phone 213/559-9334. (v1,#1)

Environmental Philosophy: A Bibliography. The Centre for Philosophy and Public Affairs, University of St. Andrews, Scotland, has published a series of booklets on environmental philosophy commissioned by the U.K. Nature Conservancy Council. One of general interest is this bibliography, 75 pages in length. It

contains a small section of key books and articles, a comprehensive and thematic listing of recent work in environmental ethics, philosophy, and policy, and a description of research centers, societies, and education programs concerned with environmental philosophy. Copies are available at £3.00 within the U.K and the equivalent of £4.00 elsewhere. Orders to Dr. John Haldane, Centre for Philosophy and Public Affairs, University of St. Andrews, St. Andrews, Fife KY16 9AL, Scotland, UK. (v3,#4)

Environmental Planning Professions Interdisciplinary Committee, Poverty and the Environment. Proceedings of the EPPIC '92 Conference (28-29 September 1992, Midrand). 376 pages. EPPIC address: P.O. Box 62041, Marshalltown, 2107, South Africa. Telephone: (27) 11 836 8618. Fax: (27) 11 836 8657). Contains a keynote address, "The Nature of Poverty in South Africa," by Roy Siegfried, Percy Fitzpatrick Institute of Ornithology, University of Cape Town. These proceedings, resulting from the conference, are devoted to the following themes: 1. The Nature of Poverty in South Africa. 2. Economic Realities of Poverty in South Africa. 3. The Impact of Poverty on the Environment. 4. Energy Needs, Poverty and the Environment. 5. Strategies for Environmental Management in South Africa. 6. Environmental Education. 7. What Can The Planning Professions do to Alleviate Poverty and Reduce its Impact on the Environment. 8. Development of Viable Strategies for the Future. (v6,#3)

Environmental Politics, which began publication in the spring of 1992, is proving a lively forum for exchange of ideas, more often than not with implications for environmental ethics. The price (£ 35.00, or \$ 50.00 individuals) may discourage individual subscriptions, but encourage your library to get it (£ 80.00, or \$ 120.00). Also you can get automatic E-mail notice of each issue's contents through the UnCover Reveal service (see above). Editors are Michael Waller and Stephen C. Young, Department of Government, University of Manchester, UK. Published by Frank Cass and Company, Ltd., Gainsborough House, 11 Gainsborough Road, London E11 1RS, UK. The winter 1993 (vol. 2, no. 4) issue is: "Rio: Unravelling the Consequences." (v5,#4)

Environmental Professional, The. The official journal of the National Association of Environmental Professionals, published in cooperation with the Civil Engineering Department at UCLA. Volumes 9:4 (1987) and 10:1 (1988) were dedicated to "Focus on Environmental Ethics." These two issues brought together papers by environmental philosophers, environmental historians, engineers, and policymakers. Eighteen articles are included in the special issues, including essays by Eugene Hargrove, J. Baird Callicott, Holmes Rolston, Paul B. Thompson, Alastair Gunn, John Opie, and Gene Spitzer. These special issues are important because they introduce the work of environmental philosophers to environmental engineers and scientists; for environmental philosophers, standard issues of The Environmental Professional are of central importance for the understanding of policy problems. (Katz, Bibl # 2)

Environmental Values, issue no. 2, is in print. Articles: Bryan Norton, "Sustainability, Human Welfare and Ecosystem Health"; Mary Midgley, "Beasts Versus the Biosphere?"; David Rothenberg, "Individual or Community? Two Approaches to Ecophilosophy in Practice"; Richard B. Howarth, "Intergenerational Justice and the Chain of Obligation"; Brian Furze, "Ecologically Sustainable Rural Development and the Difficulty of Social Change"; Anthony M. Friend, "Economics, Ecology and Sustainable Development: Are They Compatible?" This is the most recently launched journal in environmental ethics and policy. Contact Alan Holland, Lancaster University, Lancaster LA1 4YT, United Kingdom. (v3,#2)

Epstein, Gerald, Julie Graham, and Jessica Nembhardt, eds., Creating a New World Economy. Philadelphia: Temple University Press, 1993. 496 pages. \$ 22.95 paper. \$ 49.94 cloth. Twenty-five economists set out the challenges posed by a global economy. With much reference to environmental conservation. Epstein is an economist at the University of Massachusetts-Amherst, Graham is a geographer there, and Nembhardt specializes in international finances there. (v4,#3)

Epstein, Jack. "Rio Summit Finds It's Not Easy Being Green." The Christian Science Monitor 89.79 (20

March 1997): 1.

Epstein, Jack. "Brazil Asks: Is Mine Sale a Sell Off-Or Sell Out." The Christian Science Monitor, vol. 89, 31 Dec. 1996, p. 7.

Epstein, Jack. "Downside of Brazil's Auto Boom: Air Pollution, 90-Mile Road Jams." The Christian Science Monitor, vol. 89, 23 Jan. 1997, p. 8.

Erhard, Nancie. *Moral Habitat: Ethos and Agency for the Sake of Earth*. Albany: State University of New York Press, 2007. Erhard explores how moral imaginations and moral norms have been shaped and co-created with Earth in diverse biotic communities. She weaves religion and science with indigenous peoples and womanist traditions and uses examples from sources such as the Old Testament, post-Cartesian science, and the Mi'kmaq tribe of Eastern Canada to develop pluralist accounts of the moral agency of the natural world.

Erhard, Nancie. *Moral Habitat: Ethos and Agency for the Sake of Earth*. Albany: State University of New York Press, 2007. Environmental ethics, featuring "otherkind" and humankind, contributes to our moral imagination. Our moral imaginations and moral norms have been shaped by Earth in diverse biotic communities. Weaving together science and religion with indigenous and womanist traditions, Erhard uses examples from a variety of sources, including post-Cartesian science, the Old Testament, and the Mi'kmaq tribe of Eastern Canada. Each portrays the agency including the moral agency of the natural world. This radically undermines anthropocentrism. Erhard is in comparative religious ethics at Saint Mary's University in Halifax, Nova Scotia.

Erickson, Jon. Review of A. Tylecote and van der Straaten, J. Environment, Technology and Economic Growth: The Challenge to Sustainable Development, Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 1997, Erickson, Environmental Values 10(2001):137. (EV)

Erickson, Kai, A New Species of Trouble: Explorations in Disaster, Trauma, and Community. Reviewed by Maurie Cohen. Environmental Values 5(1996):276-278. (EV)

Erickson, Ron, "On Environmental Virtue Ethics." Environmental Ethics 16(1994):334-336.

Erickson, Ron. Review of Beauty. By Sherri S. Tepper. Environmental Ethics 15(1993):283-85.

Ericsson, G; Heberlein, TA, "Attitudes of hunters, locals, and the general public in Sweden now that the wolves are back", Biological Conservation 111(no.2, 2003):149-159.

Eriksson, Lena. "Graduate Conservation Education." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):955- . (v10,#4)

Ernault, A., Bureau, F. and Poudevigne, I., "Patterns of Organisation in Changing Landscapes: Implications for the Management of Biodiversity," Landscape Ecology 18(no. 2, 2003): 239-251.

Ervin, J, "Rapid Assessment of Protected Area Management Effectiveness in Four Countries," Bioscience 53(no.9, 2003):833-842. (v.14, #4)

Ervin, J, "Protected Area Assessments in Perspective," Bioscience 53(no.9, 2003):819-822. (v.14, #4)

Ervin, Keith. Fragile Majesty: The Battle for North America's Last Great Forest (Seattle: The Mountaineers, 1989). (v1,#2)

Erwin, Douglas H., *Extinction: How Life on Earth Nearly Ended 250 Million Years Ago*. Princeton, NJ: Princeton University Press, 2005. At the end of the Permian Period, 251 million years ago, about 90% of marine species perished in the deadliest mass extinction of all time. Terrestrial ecosystems suffered as well. The extinctions took place over a couple hundred thousand years. What was the cause? Nobody knows. "None of the extinction models fits all the evidence and some hypotheses require data that despite every effort have not been found." This sharply contrasts with the less severe end of Cretaceous extinction, where an extraterrestrial impact is widely accepted as the cause.)

Erwin, Edward, Sidney Gendin, and Lowell Kleiman, eds. Ethical Issues in Scientific Research. Hamden, CT: Garland Publishing Co., 1994. 430 pages. \$18.95, paper. \$60, cloth. Five articles on the ethics of animal research, including Peter Singer, Dale Jamieson, and Tom Regan. (v6,#1)

Erwin, T. L., "An Evolutionary Basis for Conservation Strategies," Science, August 16, 1991, Conservation strategies have been too anthropocentric--saving those species that are useful or interesting to humans. A more objective, nonanthropocentric conservation strategy would be to locate and save the evolutionary dynamic lineages, those ecosystem regions and species groups in which evolution and speciation is still actively taking place. Many of the species saved under current strategies are living fossils, dead-ends in the evolutionary process. (v2,#3)

Esbjornson, Carl D. "On Rethinking Resistance." Environmental Ethics 15(1993):287-88. (EE)

Escapa, Marta, Gutierrez, Maria Jose. "Distribution of Potential Gains from International Environmental Agreements: The Case of the Greenhouse Effect," Journal of Environmental Economics and Management 33(no.1, 1997):1. (v8,#2)

Eschenhagen, María Luisa, "Aproximaciones Al Pensamiento Ambiental De Enrique Leff: Un Desafío y Una Aventura Que Enriquece El Sentido De La Vida," *International Society for Environmental Ethics Newsletter* 19, no. 3, Fall 2008, pp. 6-12. English translation: "Approaches to Enrique Leff's Environmental Thought: A Challenge and a Venture that Enriches the Meaning of Life," pp. 12-18. Enrique Leff, since 1986, has been coordinator of the "Red de Formación Ambiental" (UNEP's Network of Environmental Education and Thought for Latin America and the Caribbean). He has been senior researcher of Instituto de Investigaciones Sociales (the Institute of Social Research) at UNAM (Universidad Autónoma de Mexico) since 1986. Eschenhagen is a Ph.D. in Latin American Studies UNAM, Associate Researcher at Universidad Central de Colombia in Bogota. Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

Escobar, Arturo, "Constructing Nature: Elements for a Poststructural Political Ecology." Pages 46-68 in Peet, Richard, and Watts, Michael, eds. Liberation Ecologies: Environment, Development, Social Movements. London: Routledge, 1996. The discourse of "biodiversity" is a modern, recently invented discourse, and is used by Westerners to bring aboriginal peoples into the arena of modernism. Nature becomes "biodiversity reserves," local communities may lay claim to be the "owners" of their biodiversity; they learn to treat it as "natural capital" and their local knowledge as "intellectual property"--things of worth in global markets. All this bypasses the ways in which plants and animals once figured in the aboriginal cultures (p. 57). Escobar is in anthropology, University of California, Berkeley. (v.13,#1)

Eser, SG; Luloff, AE, "Community Controversy Over a Proposed Limestone Quarry," Society and Natural Resources 16(no.9, 2003):793-806. (v.14, #4)

Eser, Uta. "Assessment of Plant Invasions: Theoretical and Philosophical Fundamentals." Pages 95-107 in U. Starfinger, K. Edwards, I. Kowarik and M. Williamson, eds., Ecological Mechanisms and Human

Responses (Leiden, The Netherlands, Backhuys Publishers, 1998). There is a tendency among ecologists to regard biological invasions as obviously negative. To question value-judgments based on "ecological evidence," I present an analysis of the impact of non-scientific values and norms on the scientific writing about introduced plants. Special concern is given to the suspicion of a xenophobic bias. Scientific terms like "alien" or "invasion" bear negative connotations that might influence perception and evaluation. Furthermore, the terminology often reflects a conservation bias. Like the term "weed" the terms "invasive" or "neophyte" denote interference with conservation or management goals. The concept of the plant community also influences assessments. In an organism-like community, intruders necessarily are seen as afflicting the health or integrity of the whole. The concept of disturbance or the hypothesis of natural stability refer to an ideal of nature as a harmonic cosmos. From this perspective, human interventions necessarily are conceived as destructive. Conservationists tend to idealize pristine nature as intrinsically good, harmonic and stable. The opposite image of nature "red in teeth and claws" suggests that nature must be controlled and subjected by humans. As spreading introduced plants are neither nor controllable, they are conceived as negative from the perspective of conservation. I claim that the replacement of original vegetation by a new species may not per se be assessed negatively, but needs further reasons. The conservation of biodiversity or endangered species is a reasonable argument, the preference for natives is not. Eser is at the University of Tübingen, Center for Ethics in Science. She recently completed a Ph.D. dissertation on exotic species. (v.11,#3)

Eser, Uta. "Ecological and Normative Fundamentals of Value Judgments in Nature Conservation: The Case of Nonindigenous Plants," Advances in Human Ecology 7 (JAI Press, 1998):293-312. There is a tendency among environmentalists to mistake the role of ecology. To question value judgments based on ecology, I present an analysis of values involved in the assessment of introduced plants. Special concern is given to the relation of ecology and values. I show that the common use of the terms "neophyte" or "invader" reveals a conservation bias. I describe how organismic concepts of the community, the concept of disturbance, or the hypothesis of natural stability, refer to an idealized nature as an harmonic cosmos. Conservationists also tend to idealize pristine nature as intrinsically good, harmonic and stable. They neglect the opposite image of a "wild" nature, that must be controlled and subjected by humans. Eser is at the University of Tübingen, Center for Ethics in Science. (v.11,#3)

Essoka, J. D., "Review of Novotny, Patrick, Where We Live, Work and Play: The Environmental Justice Movement and the Struggle for a New Environmentalism," Society and Natural Resources 15(no.3, 2002): 281. (v.13,#2)

Estabrook, Barry, "Some Sport," Audubon 107(no. 6, Sept./Oct. 2005):11-12. Internet hunting. Dale Hagberg, a quadriplegic in bed in Indiana, aimed a remote-controlled high-powered rifle at a fallow deer in Texas, and missed. Next day he shot and killed a mouflon sheep. The owner of Live Shot thought it a great success, but the Texas Parks and Wildlife Department hurriedly enacted regulations to prohibit hunting wild game this way. Later the state legislature also prohibited such hunting on game farms.

Estes, Carol, "Trading Park Futures," National Parks, September/October 1996. Reprinted in PERC Reports 14, no. 4, December 1996, with replies by PERC spokesman. A thoughtful critique of free market environmentalism, as advocated by PERC, the Political Economy Research Center, a conservation think tank that works out the economic theory behind the property rights movement and free market environmentalism. Essentially, free market environmentalism holds that markets are, in almost all cases, the best avenue through which to protect natural resources. Estes has many doubts, essentially that the profit motive is not sufficient to protect many environmental goods, which are commons. The whole exchange, as found in PERC Reports, is suitable for use in a single class discussion on this topic. But people who read PERC ought also read Freyfogle, Eric T., "Ethics, Community, and Private Land," Ecology Law Quarterly 23(1996):631-661; see that entry. Copies of the Estes article from PERC, 502 S. 19th Avenue, Suite 211, Bozeman, MT 59715. Phone 406/587-9591. Fax 406/586-7555. Estes is a free

lance journalist who lives in Minnesota.

Estés, Clarissa Pinkola, Women Who Run With the Wolves: Myths and Stories of the Wild Woman Archetype. New York: Ballentine Books, 1992. 521 pages. \$ 20.00 "Within every woman there is a wild and natural creature, a powerful force, filled with good instincts, passionate creativity, and ageless knowing. Her name is Wild Woman, but she is an endangered species. Though the gifts of wildish nature come to us at birth, society's attempt to "civilize" us into rigid roles has plundered this treasure, and muffled the deep, life-giving messages of our own souls. Without Wild Woman, we become overdomesticated, fearful, uncreative, trapped." Estés is a Jungian analyst who lives in Colorado and Wyoming. Her book has been number one on the New York Times non-fiction best-seller list. (v4,#1)

Estrada, Reinaldo Estrada and Puga, Antonio Perera, "Determining Significance of Protected Areas in Cuba. Sistema Nacional De Areas Protegidas." International Journal of Wilderness 4(no. 2, July 1998):13-16. The authors are Cubans in planning and management of protected areas. (v.9,#3)

Esty, Daniel C., "Toward Optimal Environmental Governance," New York University Law Review 74(December 1999):1495-1574. Better environmental results depend less on fine tuning theories of environmental federalism than on improving regulatory performance. Simply put, how we regulate is more important than where we regulate. Current environmental policy efforts fall short for a number of reasons: technical information shortcomings, "structural" or jurisdictional mismatches, and public choice distortions. A theory of optimal environmental governance must seek to address each of these sources of regulatory failure. A long article. Esty is Associate Dean, Yale School of Forestry and Environmental Studies, also in Law, Yale Law School. He was earlier Deputy Chief of Staff for Policy, U.S. Environmental Protection Agency.

Esty, Daniel C., and Andrew S. Winston. *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage*. New Haven: Yale University Press, 2006. Esty and Winston discuss firms that adopted green strategies and used these strategies to gain competitive advantage over competitors. Both authors are at Yale University.

Esty, Daniel C., and Andrew S. Winston. *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage*. New Haven: Yale University Press, 2006. Esty and Winston discuss the advantages a company can reap by adopting environmental strategies.

Etheridge, David; MacLean, David; Wagner, Robert; Wilson, Jeremy, "Effects of Intensive Forest Management on Stand and Landscape Characteristics in Northern New Brunswick, Canada," Landscape Ecology 21 (no.4, May 2006): 509-524 (16).

Ethical and Philosophical Issues in Environmental Epidemiology. The report of a World Health Organization / International Society for Environmental Epidemiology Workshop held last fall, at Research Triangle Park, North Carolina, USA, is now available in English, French, German, and Russian. Contact: Roberto Bertollini, World Health Organization, Regional Office for Europe, European Centre for Environment and Health, Via Vincenzo Bona, 67, I-00156 Rome, Italy. Phone 39-6-4116640. Fax 39-6-4116649. (v6,#2)

Ethical Institute of Chiva University, Study of Bioethics and Environmental Ethics (in Japanese). Chiva, Japan: Ethical Institute of Chiva University, 1990. The chapters are: Masua, Introduction to Callicott's Ideas; Nagakura, Introduction to Callicott's Ideas; Osawa, Introduction to Chiras' Ideas; Nitta, Introduction to Rolston's Ideas; Unoki, Introduction to Shrader-Frechette's and Feinberg's Ideas; Tanimoto, Introduction to Shrader-Frechette's Ideas; Ishikawa, Introduction to Glover's Ideas;

Matsukawa, Introduction to McIntyre's Ideas; and Maruyama, Introduction to Shrader-Frechette and Others. (v4,#2)

Ethical Perspectives, Vol. 14, no. 4 (2007). The topic of this special issue is "Environmental Philosophy after the De(con)struction of Nature." Contents include: (1) "Introduction: Environmental Philosophy after the De(con)struction of Nature" by Ullrich Melle (pp. 361-70), (2) "New Wilderness Landscapes as Moral Criticism: A Nietzschean Perspective on our Contemporary Fascination with Wildness" by Martin Drenthen (pp. 371-403), (3) "Pining for the Wild" by Glenn Delière (pp. 405-29), (4) "The Beastly Familiarity of Wild Alterity: Debating the 'Nature' of our Fascination with Wilderness" by T.R. Kover (pp. 431-53), (5) "Wilderness, Wasteland, and Homeland: Comments on Drenthen" by Nathan Kowalsky (pp. 455-76), (6) "Alienation and the Siren Song of Nature" by Wim Bollen (pp. 477-98), (7) "Postmodernism, Deep Ecology and the Idea of Wildness: Some Problems with Drenthen's Formulations" by Kingsley Goodwin (pp. 499-510), and (8) "Reflections on the Meaning of Nature" by Ullrich Melle (pp. 511-27). *Ethical Perspectives* is the Journal of the European Ethics Network.

Ethics and the Environment 2, no 2 (Fall 1997). "Environmental Values and Environmental Law in New Zealand" by Alastair S. Gunn and Carolyn McCallig. "Affluence, Poverty, and Ecology: Obligation, International Relations, and Sustainable Development" by Paul G. Harris. "Gleaning Lessons from Deep Ecology" by David Keller. "Prospecting for Ecological Gold amongst the Platonic Forms: A Response to Timothy Mahoney" by Val Plumwood. "Marxism and Animal Rights" by David Sztybel. "A Vegetarian Critique of Deep and Social Ecology" by David Waller. Norman S. Care, review of Environmental Pragmatism, ed. Andrew Light and Eric Katz. Raymond A. Younis, review of Reinventing Nature, ed. Michael E. Soulé and Gary Lease. (v8,#3)

Ethics Education: A Greater Teacher. Reflections: Newsletter of the Program for Ethics, Science, and the Environment, Department of Philosophy, Oregon State University, vol. 8, no. 2, November, 2001, is a theme issue on alternative contexts and methods of education in ethics and philosophy, many of which involve the experience of nature, and some undertaken at OSU, approaches "that look to the environment as a greater teacher." Copies from Department of Philosophy, Oregon State University, Corvallis, OR 97331-3902. (v.13,#1)

Ethics, Place, and Environment, is a new journal to be launched in 1998 by Carfax Publishing, Ltd. Edited by Tim Unwin (Royal Holloway, University of London), James Proctor (University of California, Santa Barbara) and Iain Hay (The Flinders University of South Australia), the journal will provide a forum for the publication of research and scholarship on all aspects of geographical and environmental ethics. Included will be research on ethical issues, animal rights, questions of justice in urban society, development ethics, cartography, and the construction of cultural values. Volume 1, 1998, 2 issues, ISSN 1366-879X. For an inspection copy of the first issue, contact Carfax Publishing, Ltd., 875-81 Massachusetts Ave., Cambridge, MA 02139 USA. Tel: 800-354-1420. Fax: 617-354-6875. Email: sales@carfax.co.uk. Website: <http://www.carfax.co.uk/epe-ad.htm>

Ethics, Place and Environment: A Journal of Geographical Ethics is a peer-reviewed forum for scholarly research on all aspects of geographical and environmental ethics. Each issue includes mainline papers (research articles), short contributions (e.g., commentaries, reports, etc.), and reviews. A U. S. contact is William S. Lynn, Review Editor, Department of Geography, University of Minnesota, 414 Social Science, Minneapolis, MN 55455. 612/625-6080 (office); 624-1044 (fax); Email: lynn0003@tc.umn.edu; <http://www.geog.umn.edu/geo-ethics>. The editor is Tim Unwin, Geography, Royal Holloway, University of London, Egham, Surrey, England TW20 0EX, +44(0)1784 44364, +44(0)1784 477260 (fax), t.unwin@vms.rhbc.ac.uk. Another contact is Jim Proctor, Geography, University of California, Santa Barbara, California, 93106, USA, 805/893-8741, 805/893-3146 (fax), Email: jproctor@geog.ucsb.edu. (v8,#2)

Etica & Animali. 1996. Special issue devoted to The Great Ape Project.

European Environmental Yearbook 1991. From the DocTer Institute for Environmental Studies. Covelo, CA: Island Press, 1991. 1,100 pages. \$ 165.00. A comprehensive guide to the environmental policies, laws, and regulations of the European Economic Community. Air and water pollution, nuclear safety, toxic and hazardous wastes, land reclamation. (v2,#3)

Evanoff, Richard J., "Reconciling Realism and Constructivism in Environmental Ethics," Environmental Values 14(2005):61-81. This paper outlines a constructivist approach to environmental ethics which attempts to reconcile realism in the ontological sense, i.e., the view that there is an objective material world existing outside of human consciousness, with the view that how nature is understood and acted in are epistemologically and morally constructed. It is argued that while knowledge and ethics are indeed culturally variable, social constructions of nature are nonetheless constrained by how things actually stand in the world. The 'realist' version of constructivism proposed here can be linked to dialectical forms of reasoning which see knowledge and ethics as arising out of human interactions with an objectively real environment, and contrasted with strong constructivist views which see nature as 'nothing more than' a social construct. While both the physical environment and human attitudes towards it are in part socially constructed, nature also retains a measure of autonomy, or 'wildness', apart from human constructions. Evanoff is in the School of International Politics and Economics, Aoyama Gakuin University, Tokyo, Japan. (EV)

Evanoff, Richard, "A Constructivist Approach to Intercultural Dialogue on Environmental Ethics" Ph.D. thesis, Institute for Environment, Philosophy, and Public Policy at Lancaster University, U.K. Current trends towards globalization are creating entirely new social and environmental problems which require the development of a new global ethic. How cross-cultural dialogue on a global ethic can be effectively conducted among cultures with differing epistemological, value, and ethical orientations. An adequate framework for intercultural dialogue is provided by neither foundationalist nor relativist theories of ethics and an alternative constructivist theory which acknowledges the historically contingent and socially situated nature of cultural discourses but contends that the current global situation creates an entirely new *situs* in which intercultural dialogue on environmental ethics becomes not only possible but also necessary. A global ethic which adopts human flourishing, social justice, and environmental integrity as its guiding objectives. Since current forms of development are unable to meet these objectives, an alternative bioregional paradigm is developed which calls for the creation of economically self-sufficient and politically decentralized communities delinked from the global market but confederated at appropriate levels to address problems that transcend cultural borders. Alan Holland and John O'Neill were advisors; Vernon Pratt was the internal examiner; Philip Sarre of the Open University was the external examiner. Evanoff is a professor in the School of International Politics and Economics at Aoyama Gakuin University in Tokyo, Japan and can be contacted at <evanoff@sipeb.aoyama.ac.jp>. (v.13,#2)

Evanoff, Richard J. "Communicative Ethics and Moral Considerability." *Environmental Ethics* 29(2007):247-266.

Evans, Bernard F., and Gregory D. Cusack, eds. Theology of the Land. Collegeville, Minn.: The Liturgical Press, 1987.

Evans, Brock, "The Wilderness Idea as a Moving Force in American Cultural and Political History," Idaho Law Review 16(1980):389-406.

Evans, J. Claude, With Respect for Nature: Living as Part of the Natural World, Reviewed by Ronald

Sandler and Emily Volkert, Environmental Values 15(2006):536-538.

Evans, J. Claude, With Respect for Nature: Living as Part of the Natural World. Albany, NY: State University of New York Press, 2005. The challenge of animal rights and animal liberation. Schweitzer's respect for life. Paul Taylor's biocentrism. Biocentric anthropocentrism. Toward a philosophy of the hunt. The ethics of catch and release fishing. A distinctive niche of this book is working out an environmental ethic, respect for nature, enlarged from an ethic of hunting and fishing. Evans is in philosophy and environmental studies, Washington University, St. Louis.

Evans, Jason M., Ann C. Wilkie and Jeffrey Burkhardt, "Adaptive Management of Nonnative Species: Moving Beyond the "Either-Or" Through Experimental Pluralism," *Journal of Agricultural and Environmental Ethics* 21(2008):521-539. This paper develops the outlines of a pragmatic, adaptive management-based approach toward the control of invasive nonnative species (INS) through a case study of Kings Bay/Crystal River, a large artesian springs ecosystem that is one of Florida's most important habitats for endangered West Indian manatees (*Trichechus manatus*). Building upon recent critiques of invasion biology, principles of adaptive management, and our own interview and participant-observer research, we argue that this case study represents an example in which rigid application of invasion biology's a-priori imperative to minimize INS has produced counterproductive results from both an ecological and social standpoint. As such, we recommend that INS control in Kings Bay should be relaxed in conjunction with an overall program of adaptive ecosystem management that includes meaningful participation and input from non-institutional stakeholders. However, we also note that adaptive management and INS control are by no means mutually exclusive, in Kings Bay or elsewhere. Instead, we suggest that adaptive management offers a means by which INS control efforts can emerge from—and be evaluated through—ongoing scientific research and participatory dialogue about the condition of specific places, rather than non-contextual assumptions about the harmfulness of INS as a general class. The authors are in several departments at the University of Florida, Gainesville.

Evans, Julian. A Wood of Our Own. New York: Oxford University Press, 1995. 176pp. \$25. A forester's development, management, and enjoyment of his own patch of woodland. (v8,#2)

Evans, M. I., Important Bird Areas in the Middle East. Washington, DC: Smithsonian Institution Press, 1994. 335 pages, with 398 maps. \$ 32. Over 300 sites for bird conservation in the region. (v6,#4)

Evans, Marc and Dana Harmon. "Need More Cheap Lumber? Learn to Conserve." The Christian Science Monitor, vol. 89, 27 Dec. 1996, p. 23.

Evans, Mike. "The Coming Changes in Forest Industry Statistics: Comparisons Among NAFTA Nations Sought," Journal of Forestry 95(no.7, 1997):33. (v8,#3)

Evans, Paul, A Sketch of an Environmental Ethic for the Conservation of Plants, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Evans, Paul, Review of Spellerberg, Ian F., Evaluation and Assessment for Conservation. Environmental Values Vol.2 No.3(1993):274.

Evans, Paul, Review of de Groot, Rudolf S., Functions of Nature: Evaluation of Nature in Environmental Planning, Management and Decision Making. Environmental Values Vol.2 No.3(1993):274.

Evans, Paul, A Sketch of an Environmental Ethic for the Conservation of Plants, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.

Evans, Peter, "The Eclipse of the State? Reflections on Stateness in an Era of Globalization," World Politics 50 (no. 1, October 1997):62- . (v.8,#4)

Evenson, R. E., and Gollin, E., "Assessing the Impact of the Green Revolution, 1960-2000," Science 300 (2 May 2003):758-762. Genetic crop improvement in developing countries (but not transgenics). Modern varieties of traditional crops, especially rice, have dramatically increased production in some areas, but unevenly across crops and regions. Consumers have generally benefited, but farmers benefit only if their costs saved are greater than the lower prices they now receive for the additional food. Prospects for a continued green revolution are quite mixed. The authors are in economics, Yale University. (v 14, #3)

Everett, Jennifer, "Environmental Ethics, Animal Welfarism, and the Problem of Predation: A Bambi Lover's Respect for Nature," Ethics and the Environment 6(no. 1, 2001):42-67. Many environmentalists criticize as unecological the emphasis that animal liberationists and animal rights theorists place on preventing animal suffering. The strong form of their objection holds that both theories absurdly entail a duty to intervene in wild predation. The weak form holds that animal welfarists must at least regard predation as bad, and that this stance reflects an arrogance toward nature that true environmentalists should reject. This paper disputes both versions of the predation critique. Animal welfarists are not committed to protecting the rabbit from the fox, nor do their principles implicitly deprecate nature. Everett is in philosophy, University of Anchorage, Alaska. (E&E)

Everett, Jennifer, "Review of Wise, Steven M., Rattling the Cage: Legal Rights for Animals," Ethics and the Environment 7(no. 1, 2002):147-153. (E&E)

Everett, Michael D. and Robert Peplies, "The Political Economy of Environmental Movements: U.S. Experience and Global Movements." Environmental Values Vol.1 No.4(1992):297-310. ABSTRACT: In 1972 a public choice model predicted that the incipient environmental movement in the United States would grow but encounter overwhelming industrial opposition. Twenty years later we find the model overstated this opposition. Environmental pressure groups were able to pass substantial legislation, resist counter forces, and reduce most targeted pollutants. A revised public choice model predicts that the success of the present global environmental movement depends on (1) information flows between scientists and the public on the potential costs of deterioration, and (2) means for reducing the costs of regulation such as relying more on market incentives. KEYWORDS: Environment (political aspects), environmental movements, environmental policy, environmental protection, politics (environmental aspects), public choice models. Everett: Department of Economics and Finance, Peplies: Department of Geography, East Tennessee State University, Johnson City, Tennessee 37614-0002, USA.

Everett, Sue. "Ecology and Environmental Management on the European Scene." Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Everett, William J., "Land Ethics: Toward a Covenantal Model," in Max L. Stackhouse, ed., American Society of Christian Ethics, 1979: Selected Papers from the Twentieth Annual Meeting. Waterloo: Council on the Study of Religion, 1979.

Evernden, Neil, The Natural Alien: Humankind and Environment. Toronto: University of Toronto Press, 1985. Second edition, 1993. Homo sapiens is the one species on Earth that is "naturally alien," by which Evernden means that human nature is genetically disposed to break away from our evolutionary history and to form cultures built by technology. So we repeatedly and naturally "alienate" ourselves from wild nature. We are natural aliens because we are essentially technological beings, living by "the encountering of the world as a field for the use of tools" (p. 67). Ecologically, humans are "exotics" (p. 109). We have no niche; we rebuild nature. Born with this "congenital deformity" (p. 137) which

emerged with our species, we are unable to encounter the world as anything other than our resource, unable to relate to anything in nature as having intrinsic value. So "there is no possibility of an environmental ethic ... in a society dominated by the technological vision of the world" (p. 69). Evernden hopes this is not "an entirely pessimistic conclusion" (p. 123) because humans, despite this congenital deformity also have an unfinished "essential openness" (p. 122), and maybe we can break away from this innate tendency to be natural aliens and find more harmony with nature.

Evernden, Neil, The Social Creation of Nature. Baltimore: Johns Hopkins University Press, 1992. (v3,#4)

Evernden, Neil, The Natural Alien: Humankind and Environment. Toronto: University of Toronto, 1985. A unique blending of several disciplines--art, literature, philosophy, ecology, biology, photography--designed to show that the environmental crisis is a crisis of "world-view" or experience. An attempt must be made to understand the subjective experience of nature, for the environmental crisis is a crisis of meaning, caused by the false objectification of the nonhuman world. A phenomenological position that is intelligible even to a layman. (Katz, Bibl # 1) Reviewed in Environmental Ethics 12(1990):283-87.

Evernden, Neil. Review of The Beauty of the Environment. By Yrjo Sepänmaa. Environmental Ethics 10(1988):183-86.

Ewald, J., S. Callegari, N. Kingdon, and N. Graham. "Fox-hunting in England and Wales: its contribution to the management of woodland and other habitats." *Biodiversity and Conservation* Vol. 15, no. 13 (2006): 4309-34.

Ewbank, Roger, "Farm Animal Welfare: A Historical Overview", Journal of Agricultural and Environmental Ethics 6(1993). One result of Ruth Harrison's 1964 book *Animal Machines* was the UK Brambell Committee report on the welfare of animals kept under intensive livestock husbandry systems. The Council of Europe took on, from the Brambell Committee evidence, the idea that animals have ethological needs. The concept of rights is somewhat foreign to the UK, but the government's Farm Animal Welfare Council has suggested that farm stock should be kept so that they enjoy the so-called New Five Freedoms - including freedom from suppression of "normal" behaviour. Currently two conflicting forces act in the animal welfare area: the seemingly high need of consumers for cheap high-quality animal protein foods and the demand, by the animal rightists, that humans should not use animals at all. Ewbank is with the Universities Federation for Animal Welfare, 8 Hamilton Close, South Mimms, Potters Bar, Herts EN6 3QD, United Kingdom.

Ewel, John J., Dennis J. O'Dowd, and Daehler, Curtis C. "Deliberate Introductions of Species: Research Needs." Bioscience 49(No.8, August 1999):619- . Benefits can be reaped, but risks are high. (v10,#4)

Ewers, R; Didham, R; Wratten, SD; Tylianakis, J, "Remotely sensed landscape heterogeneity as a rapid tool for assessing local biodiversity value in a highly modified New Zealand landscape," Biodiversity and Conservation 14 (no. 6, June 2005): 1469-1485.

Ewert, A; Baker, D, "Standing for Where You Sit: An Exploratory Analysis of the Relationship Between Academic Major and Environmental Beliefs," Environment and Behavior 33(no. 5, 2001): 687-707. (v.13,#1)

Ewert, Alan W. The Human/Environment Interaction: Human Dimensions Research and Natural Resource Management. Boulder, CO: Westview Press, 1994. 320 pages. \$38.95. (v5,#2)

Ewing, Rodney C., and Macfarlane, Allison, "Yucca Mountain," Science 296(26 April 2002):659-660. U.S. President Bush has recommended Yucca Mountain in Nevada as the U.S. site for the disposal of 400 metric tons of high-level nuclear waste, mainly the used fuel from commercial nuclear power plants. The Secretary of Energy claims "sound science," but these scientists have many doubts. "In our view, the disposal of high-level nuclear waste at Yucca Mountain is based on an unsound engineering strategy and poor use of present understanding of the properties of spent nuclear fuel." A main problem is that there isn't any serious alternative, and politics is driving the need for a storage facility, which is resulting in twisting the estimates of probabilities. A bigger problem is that estimates have to be made across many disciplines from atomic physics to geology, to materials science (reliability of containers, barriers), to likelihood of systems failure, across tens of thousands of years, with serious and involuntary risks. Nothing like this has ever been done before. Ewing is in nuclear engineering at the University of Michigan, Ann Arbor. Macfarlane is in security studies at MIT, Cambridge, MA. (v.13,#2)

Ewing, Susan, and Grossman, Elizabeth, eds., Shadow Cat: Encountering the American Mountain Lion. Seattle, WA: Sasquatch Books, 1999. \$ 16. (v.10,#1)

Fa, JE; Peres, CA; Meeuwig, J, "Bushmeat Exploitation in Tropical Forests: an Intercontinental Comparison," Conservation Biology 16(no.1, 2002):232-237. (v.13, #3)

Fabel, Arthur J., "Environmental Ethics and the Question of Cosmic Purpose." Environmental Ethics 16(1994):303-314. In the context of the earlier views of John Haught, I discuss the paradox that while environmental philosophers seek a viable ethics, advocates of the majority view, scientific materialism, deny an intrinsic value to nature. I argue that a new science, just now arising, may set aside this pessimistic view, replacing it with a conception of the cosmos as a self-organizing genesis. Its method is holistic and integrative rather than analytical and divisive. After a survey of its overall outlines, I introduce some salient features of the central trend, a key property, and a universal complementarity and explore their relevance for a scientifically based natural ethics that takes into account an ecological self, animal awareness, and cooperative communities. Fabel is at 620 Bay Road, Amherst, MA. (EE)

Faber, Daniel, Environment Under Fire: Imperialism and the Ecological Crisis in Central America. Monthly Review Press, 1993. 301 pages. \$ 16. How the subjugation of indigenous peoples has been incorporated into Central American export economies, to supply North Americans with coffee, sugar, bananas, and other pleasures of life at a severe and ever-rising cost to the environment and to the Central American poor. Faber is former research director of the Environmental Project on Central America. (v4,#4)

Faber, Daniel. The Struggle for Ecological Democracy: Environmental Justice Movements in the United States. Reviewed by Shari Collins-Chobanian. Environmental Ethics 22(2000):319-322.

Faber, Daniel. *Capitalizing on Environmental Justice: The Polluter-Industrial Complex in the Age of Globalization*. Lanham, MD: Rowman & Littlefield, 2008. Some of the major challenges facing today's environmental justice movement (EJM) are the global exportation of ecological hazards, capital restructuring, and the weakening of consumer, environmental, and occupational laws, all of which disproportionately hit poor people of color and the working class the hardest. Faber analyzes these challenges and shows how the EJM resists the polluter-industrial complex to bring about meaningful social transformation.

Faber, Malte, Reiner Manstetten and John L. R. Proops, "Humankind and the Environment: An Anatomy of Surprise and Ignorance." Environmental Values Vol.1 No.3(1992):217-242. ABSTRACT: This paper addresses the problem of 'ignorance' in philosophy and science, particularly with respect to the

conceptualization, study and solution of environmental problems. We begin by distinguishing between 'risk', 'uncertainty' and 'ignorance.' We then offer a categorization of ignorance, and use these categories to assess the role of science as a means of reducing ignorance. We note that to proceed with science, several 'acts of faith' are necessary. We conclude with a discussion of the importance of an attitude of openness in science and philosophy, especially regarding environmental problems. Throughout, we illustrate our discussion of ignorance, and the problems involved in its reduction, by reference to environmental issues. KEYWORDS: Environment, ignorance, openness, surprise. Faber and Manstetten: Alfred Weber-Institut, Department of Economics, Universitat Heidelberg, Grabengasse, 6900 Heidelberg, Germany. Proops: Department of Economics, University of Keele, Staffordshire ST5 5BG, UK.

Fagan, A, "Challenging the Bioethical Application of the Autonomy Principle within Multicultural Societies", Journal of Applied Philosophy 21 (no.1, 2004): 15-31(17).

Fagan, A. and Jehlicka, P., "Contours of the Czech Environmental Movement: a Comparative Analysis of Hnutí Duha (Rainbow Movement) and Jihočeské Matky (South Bohemian Mothers)," Environmental Politics 12(no. 2, 2003): 49-70.

Fagin, Adam and Jehlicka, Petr. "Sustainable Development in the Czech Republic: A Doomed Process?" Environmental Politics 7(no.1, Spring 1998):113- . (v10,#4)

Fagin, Adam. "Environment and Transition in the Czech Republic." Environmental Politics 3 (no. 3, 1994):479- . (v6,#1)

Fahsbender, John H. "An Analytical Approach to Defining the Affected Neighborhood in the Environmental Justice Context." New York University Environmental Law Journal 5, no.1 (1996): 120. (v7, #3)

Fair, Jeff, and Lynn Rogers, The Great American Bear. Minocqua, WI: NorthWord Press, 1994. (P. O. Box 1360, Minocqua, WI 54548) 192 pages, paper. A study of the black bear, nicely illustrated, biologically accurate and philosophically insightful. (v7,#1)

Fairfax, S. K., "When an Agency Outlasts Its Time: A Reflection," Journal of Forestry 103(no. 5, July/August 2005): 264-267.

Fairfax, S., and A. Issod, "Trust Principles as a Tool for Grazing Reform: Learning from Four State Cases," Environmental Law 33(no. 2, 2002): 341-398. (v 14, #3)

Fairfax, Sally K., and Darla Guenzler, Conservation Trusts. Lawrence, KS: University Press of Kansas, 2001. (v. 15, # 3)

Fairfax, Sally K., "The Federal Forests Are Not What They Seem: Formal and Informal Claims to Federal Lands," Ecology Law Quarterly 25(No.4, 1999):630. (v.10,#2)

Fairfax, Sally K., Lauren Gwin, Mary Ann King, Leigh Raymond, and Laura A. Watt, Buying Nature: The Limits of Land Acquisition as a Conservation Strategy, 1780-2004. Cambridge, MA: The MIT Press, 2005.

Fairfax, Sally K., "The Gentle Use of Working Landscapes, " Different Drummer, vol. 3, no. 3, Summer 1996 (published by the Thoreau Institute, Randal O'Toole, senior economist). Websites: <http://www.teleport.com/~rot/ddrummer.html>>

<http://www.ti.org/envirotofc.html>> Reprinted in It's Not Easy Being Green, spring 2001, pp. 7-10 (Newsletter of the Christian Environment Project, P.O Box 80092, Portland OR 97280).

"Preoccupation with parks, wilderness, and the preservation of wild spaces for recreation is destructive.... because it miseducates us and our children about the relationship between humans and the natural world, and because it focuses attention on the wrong lands and the wrong activities Environmentalists, in my experience, have expended far too much effort lobbying the federal government for the preservation of untrammelled wilderness ... in the pursuit of the utterly nutso (sic) belief that if we can simply bar humans from those areas, they will be preserved, preferably forever.... The preservation of the world, I would argue, is not in 'wildness', but in the working landscape. And defining that is more appropriately a regional, local and community undertaking than a role for the federal government....

The garden rather than the wilderness is the appropriate metaphor for the touchstone of land management. [But for environmentalists] The ideal landscape is not an agrarian setting as in Jefferson, where decent hardworking folk toil to make a living from the earth, but one which is totally removed from human use, except for the privileged to retreat for leisure and refreshment. No room is left in this vision for people to live and work in the natural world....The preoccupation with wilderness leaves no opportunity to learn about gentle use of the land.... " Fairfax is professor of forestry at UC-Berkeley, and the author of the second edition of Samuel Trask Dana's Forest and Range Policy: Its Development in the United States, 1956, 2nd ed., 1980, McGraw-Hill, a well-known text. (Thanks to Bill Willers, Biology, University of Wisconsin-Oshkosh.) (v.12,#3)

Fairhead, James, and Leach, Melissa. Misreading the African Landscape: Society and Ecology in the Forest-Savanna Mosaic. New York: Cambridge University Press, 1996. 285 pages. \$55 cloth, \$19.95 paper. How the view that West African landscapes are degraded can be wrong. The inhabitants of landscapes may have enriched the land when scientists mistakenly believe that they have degraded it. A new framework of ecological anthropology and a challenge to old assumptions about the African landscape. (v7, #3)

Fairlie, Simon, Hagler, Mike, O'Riordan, Brian. "The Politics of Overfishing," The Ecologist 25(no.2/3, Mar. 1995):46- . Industrialized overfishing has brought world fisheries to the point of collapse; historical processes; The success of community-managed fisheries; The enclosure of commons regimes; the dynamics of overfishing; the "ratchet effect" of increased fishing effort; a critique of the mainstream response to overfishing; property right or people's rights? The case for limiting technology; the resurgent commons; tools of negotiation. (v6,#4)

Fairlie, Simon. "Britain's Fishing Industry and the EU Common Fisheries Policy," The Ecologist 25(no.2/3, Mar. 1995):105- . Increasing numbers of British fishermen are calling for a withdrawal from the European Union's Common Fisheries Policy (CFP); the inadequacies of the CFP; the consequences of quotas; decommissioning; a divided industry. (v6,#4)

Fairweather, P. G., "Links between Ecology and Ecophilosophy, Ethics and the Requirements of Environmental Management," Australian Journal of Ecology 18 (1993): 3-19. A two-way interaction between ecology and ethics will continue to bear fruit for both disciplines. We need to address fundamental issues of definition and meaning before useful debate can occur in environmental decision-making. Legal requirements of environmental legislation should be met, but we should act more in line with the spirit of the legislation. Science is not paramount in decision-making; psycho-social factors are. Philosophy and ethics offer a wide range of perspectives that can benefit ecology, though, in general, philosophers have listened to ecologists better than ecologists have listened to philosophers. Ecology needs to guide ecophilosophers as to how nature works, why we expect variability in ecosystems, what is natural, and other issues where a scientific understanding of nature has progressed further than many are aware. Fairweather is in the Graduate School of the Environment, Macquarie University, NSW, Australia. (v5,#4)

Faith, D. P. "How Do Indicator Groups Provide Information About the Relative Biodiversity of Different Sets of Areas?: On Hotspots, Complementarity and Pattern-Based Approaches", Biodiversity Letters 3(no.1, 1996):18.

Faith, Daniel P. "Conservation Priorities and Phylogenetic Pattern." Conservation Biology 10, no.4 (1996): 1286. (v7, #3)

Falk, Donald A. and Kent E. Holsinger, Genetics and Conservation of Rare Plants. New York: Oxford University Press, 1991. The result of a conference held by the Center for Plant Conservation at the Missouri Botanical Garden in 1989. (v3,#2)

Falk, Donald, Millar, Constance, Olwell, Margaret, eds. Restoring Diversity. Covelo, CA: Island Press, 1996. 400 pp. \$39.95 cloth, \$27.50 paper. Seeks both to unify concepts in the field of restoration biology, and also to fill significant technical and policy gaps, with the goal of providing operational tools for successful restorations. (v.7,#4)

Falk, Richard A., Samuel S. Kim, and Saul H. Mendlovitz, eds., The United Nations and a Just World Order. Boulder, CO: Westview Press, 1991. 40 contributors.

Falkowski, P. et al (16 others), "The Global Carbon Cycle: A Test of Our Knowledge of the Earth as a System," Science 290(2000):291-296. "Our knowledge of the carbon cycle within the oceans, terrestrial ecosystems, and the atmosphere is sufficiently extensive to permit us to conclude that although natural processes can potentially slow the rate of increase in atmospheric CO₂, there is no natural 'savior' waiting to assimilate all of the anthropogenically produced CO₂ in the coming century." Authors are from the International Geosphere-Biosphere Program (IGBP) Working Group on climate change. (v.12,#2)

Fall, Juliet J., "Transboundary Biosphere Reserves: A New Framework For Cooperation," Environmental Conservation 26 (No. 4, Dec 01 1999): 252- . (v.11,#2)

Fan Dongping, "The Value Goals of Sustainable Development", Ziran Bianzhengfa Tongxun (Journal of Dialectics of Nature) 6(2000): 18-24. In Chinese. (EE v.12,#1)

Fan Xiaoxian. "The Ontology of Zhangzai's Ecological Ethics." *Journal of Xi'an University of Arts and Sciences* No. 3 (2007).

Fankhauser, Samuel, Valuing Climate Change. (London: Earthscan, 1995). Reviewed by Colin Price. Environmental Values 6(1997):368-369. (EV)

Farber, Daniel A., "From Here to Eternity: Environmental Law and Future Generations," University of Illinois Law Review 2003, no. 2, pages 289-335. An analysis of exponential discounting, placing a present day value on future harms, which may often have the effect of minimizing catastrophic events far in the future. Some form of discounting is appropriate, given that society cannot allocate finite resources equally over an infinite number of time periods. Farber is in law, University of California at Berkeley, also in law, University of Minnesota.

Farber, Daniel A. Eco-pragmatism: Making Sensible Environmental Decisions in an Uncertain World. Chicago: University of Chicago Press, 1999. 210pp. \$23. Environmental policy, steering a middle course between those who advocate strict cost-benefit analysis and those who would protect the environment at any cost. Defends an emerging social consensus favoring environmental values, but at the same time, demonstrates how those values are consistent with a balanced weighing of costs and benefits, and shows how environmental policies can respond dynamically to changing needs and new information. (v10,#4)

Farber, Daniel A., and Jim Chen. *Disasters and the Law: Katrina and Beyond*. Cambridge, MA: Aspen Publishers, 2006. Emergency response, social vulnerability, compensation, risk-spreading, prevention, mitigation, litigation, rebuilding, flood risks, pandemics.

Farber, Paul Lawrence, Finding Order in Nature: The Naturalist Tradition from Linnaeus to E. O. Wilson. Baltimore: Johns Hopkins University Press, 2000. (v.13,#1)

Farber, Paul L., The Temptations of Evolutionary Ethics. Berkeley: University of California Press, 1994. A negative assessment of the last one hundred years of attempts to develop an evolutionary ethics. Always, some version of the naturalistic fallacy is one of the central sources of the failures of evolutionary ethics. Though it has attractions, evolutionary ethics is a temptation to be resisted. Reviewed by William A. Rottschaefter in Biology and Philosophy 12(1997):369-384. (v8,#3)

Farber, S, et al., "Linking Ecology and Economics for Ecosystem Management," BioScience 56 (no. 2, February 2006): 121-133. Outlines an approach, based on ecosystem services, for assessing trade offs inherent in managing humans embedded in ecological systems. Evaluating these trade offs requires an understanding of the biophysical magnitudes of the changes in ecosystem services resulting from human actions, and of the impact of these changes on human welfare. We summarize the state of the art of ecosystem services based management and the information needs for applying it. Three case studies of Long Term Ecological Research (LTER) sites coastal, urban, and agricultural illustrate the usefulness, information needs, quantification possibilities, and methods for this approach.

Farina, Almo, "The Cultural Landscape as a Model for the Integration of Ecology and Economics," Bioscience 50 (No. 4, 2000 Apr 01): 313- . (v.11,#4)

Farina, Almo; Belgrano, Andrea, "The Eco-field Hypothesis: Toward a Cognitive Landscape," Landscape Ecology 21 (no.1, January 2006): 5-17 (13).

Farney, Dennis, "Chaos Theory Seeps Into Ecology Debate, Stirring Up a Tempest," Wall Street Journal, 11 July 1994, pp. A1, A8. Since the Renaissance, nature has been viewed as rational and orderly; but it is inherently disorderly, says environmental historian Donald Worster (University of Kansas). All is flux and flow, change without end. Ours is a post-modernist, post-structuralist age. (v5,#3)

Farnham, Timothy J. *Saving Nature's Legacy: Origins of the Idea of Biological Diversity*. New Haven: Yale University Press, 2007. Farnham discusses the historical roots of biological diversity, the evolution of the term, and the earlier conservation tradition that contributed to its rapid acceptance.

Farnsworth, E. J., "Oikos and Ethos: Setting our House in Order," Trends in Ecology and Evolution 10(1995):56-57. (v7,#2)

Farnsworth, E. J. and Rosovsky, J., "The Ethics of Ecological Field Experimentation," Conservation Biology 7 (1993): 463-72. (v7,#2)

Farnsworth, Elizabeth J. and Judy Rosovsky, "The Ethics of Ecological Field Experimentation," Conservation Biology 7(1993):463-472. Ecological research, though it generates information supporting conservation efforts, raises ethical issues when we propose to modify or endanger the individual organism, population, species, or ecosystem. Yet the scientific literature contains little explicit consideration of such study. This is due to (1) trepidation about controversy that could endanger research efforts, (2) assumptions that the benefits outweigh the cost, (3) difficulties in perceiving the negative impacts of such study, and (4) tacit assumptions about certain experiments that are simply "wrong" to do.

Such ethical issues are increasingly arising. The literature on environmental ethics and experimentation affords diverse and occasionally conflicting value systems on which to build an ethical of ecological experimentation. Ethical considerations are compatible with sound scientific protocols. The authors encourage a dialogue between scientists and philosophers. Both authors are in biology at the University of Vermont. (v4,#4)

Farooquee, Nehal A., and Saxena, Krishna G. "Conservation and Utilization of Medicinal Plants in High Hills of the Central Himalayas." Environmental Conservation 23, no.1 (1996): 75. (v7, #3)

Farr, Douglas. *Sustainable Urbanism: Urban Design With Nature*. Hoboken, NJ: Wiley, 2007. Farr provides a comprehensive introduction to the design reform movement that combines the creation and enhancement of walkable and diverse places with the need to build high-performance infrastructure and buildings. He seeks to break down barriers between human-focused urbanists and nature-focused environmentalists by championing radical change in how we live in urban environments. Farr argues that we should make sustainable urbanism the primary pattern of human settlement by 2030.

Farrell, Katherine. Review of: Forsyth, Tim, Critical Political Ecology: The Politics of Environmental Science. Environmental Values 13(2004):403-406. (EV)

Farrelly, Elizabeth. *Blubberland: The Dangers of Happiness*. Cambridge, MA: The MIT Press, 2008. Farrelly critiques "Blubberland" a world of cosmetic surgery, gated communities, home entertainment systems, pension funds, posh resorts, quadruple-garaged mansions, stretch limos, SUVs, trophy homes, and vast malls and a state of mind in which we expect to be happy but in reality are increasingly bloated, bored, and miserable. She argues that our "superfluous superfluity" and goal of happiness lead to destructive habits and huge ecological footprints that jeopardize our survival.

Farthing, Stuart M., ed. Evaluating Local Environment Policy. Brookfield, Vt.: Ashgate, 1997. 208 pp. \$ 46.95. Lessons from environmental auditing for and appraisal of the development of local environmental policy, environmental planning, bus-based park and ride towards sustainability, coordinating facility provision and new housing development, and case studies, among others. (v8,#2)

Faucheux, S. and M. O'Connor, eds. Valuation for Sustainable Development: Methods and Policy Indicators. Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 1998, 326. Reviewed by John Lemons. Environmental Values 9(2000):118.

Fausch, KD; Torgersen, CE; Baxter, CV; Li, HW, "Landscapes to Riverscapes: Bridging the Gap between Research and Conservation of Stream Fishes," Bioscience 52(no.6, 2002):483-498. (v.13, #3)

Fausold, Charles J., and Lilieholm, Robert J., "The Economic Value of Open Space: A Review and Synthesis," Environmental Management 23(no. 3, 1999):307-320. Different concepts of the value of open space and methods for quantifying these values. Market values, enhancement values, production values, natural systems value, use and nonuse values, and various intangible values. Fausold is at Cornell University Cooperative Extension, Montour Falls, NY. Lilieholm is in Forest Resources, Utah State University, Logan.

Favre, David S. and Murray Loring, Animal Law. Westport, CT: Quorum Books, 1983. (v3,#1)

Fawcett, Eric., "Working Group on Ethical Considerations in Science and Scholarship," Accountability in Research (Gordon and Breach Science Publishers) 3(1993):69-72. A Toronto group analyze and propose particular ethical codes by professional societies to suggest that they all address common elements, with the result that scientists and scholars agree to a common moral framework in the conduct of their

investigations. "Living in a world in which all forms of life are interdependent, we recognize that human activity since the scientific revolution now threatens the future of life on the planet. This threat stems in part from reckless exploitation of the earth's resources and massive pollution of the biosphere by humankind, exacerbated by rampant militarism. To help solve these problems, scientists and scholars, and all those concerned with the welfare of life on earth, need to unite in a world-wide moral community." Fawcett is in physics at the University of Toronto. (v5,#1)

Fay, James A., and Golomb, Dan S., Energy and the Environment. New York: Oxford University Press, 2002. The worldwide growth of energy use and the destructive relationship between this energy use and environmental degradation. Fay is at Massachusetts Institute of Technology; Golomb is at the University of Massachusetts Lowell.

Fazey, I.; Fischer, J.; Lindenmayer, D.B., "Who does all the research in conservation biology?," Biodiversity and Conservation 14(no.4, April 2005):917-934(18).

Fazio, PM, Book Review: "Ralph H. Lutts, The Nature Fakers: Wildlife, Science and Sentiment," Environmental History 7(no.2, 2002):326- . (v.13, #3)

Feagan, Robert and Ripmeester, Michael, "Reading private green space: competing geographic identities at the level of the lawn," Philosophy and Geography 4 (No. 1, 2001): 79-95. This paper focuses on private residential green space as a site of contested meanings. Recent research points to the emergence of an activism centered on ecological restoration and a shift away from the lawn as the only accepted landscape practice for private green space. However, it is clear that the lawn, a particularly powerful cultural landscape form in residential neighborhoods, still largely dominates this space across North America. This investigation examines the voices of two groups: traditional lawn owners and ecological activists. We observe two sets of discourses centered on private green space. Both groups construct residential green space as a site of identity politics -- a site wherein the self is defined as pure and the other excluded as different and necessarily inferior. And both perceive their discourse as 'natural'. The critical finding is that they are almost entirely oppositional discourses. The contest over what constitutes appropriate landscaping practices for this space provides a locus for bringing to a discursive level, the kinds of socio-cultural perspectives and practices that create and dominate our places in late capitalist society. We suggest that at present the lawn remains a barrier to alternative green space practices. Feagan is Assistant Professor of Geography at the University of Guelph. Ripmeester is Associate Professor of Geography at Brock University. (P&G)

Fearnside, Philip M., "Biodiversity As An Environmental Service In Brazil's Amazonian Forest: Risks, Value And Conservation," Environmental Conservation 26 (No. 4, Dec 01 1999): 305- . (v.11,#2)

Fearnside, Philip M. "Conservation Priorities in Latin America," Conservation Biology 11(no.4, 1997):1040. (v8,#3)

Featherstone, Alan Watson, "Regenerating the Caledonian Forest: Restoring Ecological Wilderness in Scotland," International Journal of Wilderness 2 (no. 3, December, 1996):36-41, 47. (v8,#1)

Federal Lead Poisoning Prevention Program: Inadequate Guidance for an Expedient Solution. Boston College Environmental Affairs Law Review 23, no.3 (1996): 645. (v7, #3)

Federoff, Nina and Nancy Marie Brown, Mendel in the Kitchen: a Scientist's View of Genetically Modified Foods. Washington, DC: Joseph Henry Press, 2004. Changing genes to feed the world. Crop yields doubled and quadrupled during the Green Revolution. Of increased crop yields, traditional breeding accounts for about 40% of the increase, the remaining 60% stems from greater inputs in fossil-

fuels energy, fertilizers, pesticides. Genetic engineering now provides rich possibilities, especially for pesticide resistance and freezing tolerance, perhaps for perennial grains. Reviewed by David Pimentel in Science 306 (29 October 2004):815, who thinks the authors deal inadequately with the possibilities for organic agriculture rather than GMO agriculture. Federoff is in plant molecular biology at Penn State; Nancy Brown is a science writer. (v.14, #4)

Fedkiw, John. "The Forest Service's Pathway toward Ecosystem Management," Journal of Forestry 95(no.4, 1997):30. (v8,#2)

Feeley, Kenneth J., S. Joseph Wright, M.N. Nur Supardi, Abd Rahman Kassim, and Stuart J. Davies. "Decelerating Growth in Tropical Forest Trees." Ecology Letters Vol. 10, no. 6 (2007): 461-69. The topic is climate change and tropical forests. One prediction has been that more CO₂ in the atmosphere might act as fertilizer, speeding up photosynthesis, causing trees to grow faster and larger, sequestering more CO₂ in woody tree tissues. To that extent, the problem might be self-fixing: more human-introduced CO₂ leads to more sequestering in tree body mass. But in an extensive study of data from tropical forests just the opposite was found; growth rates have been declining. Scientists are unsure why the counterintuitive result. Some speculation is that local increases in rainfall lead to less sunlight for photosynthesis. In any case, contrary to the problem being self-fixing, it seems to be self-aggravating. This article is also summarized in "The Impact of Climate Change on Tropical Forests" by Robert E. Cook, Public Garden Vol. 22, no. 2 (2007): 10-11.

Feeny, D., Berles. F., McKay, B.J., Acheson, J.M. "The Tragedy of the Commons: Twenty-two Years Later," Human Ecology, 1990. 18:1-19. (v8,#3)

Feiler, Bruce, Abraham: A Journey to the Heart of Three Faiths. Reviewed by Batabyal, Amitrajeet A. Journal of Agricultural and Environmental Ethics 16(2003):516-518. (JAEE)

Feinberg, Joel, "Environmental Pollution and the Threshold of Harm." Hastings Center Report vol. 14, no. 3 (June 1984): 27-31. Feinberg discusses the moral and political problems for legislators dealing with a problem like pollution, where no individual act--below a certain threshold--is actually harmful. Individual acts of pollution are thus only "wrong" when they violate a predetermined set of principles for allocating the incremental harms below the threshold. (Katz, Bibl # 1)

Feldman, David L., Wilt, Catherine A. "Evaluating the Implementation of State-Level Global Climate Change Programs," The Journal of Environment and Development 5(no.1, 1996):46. (v8,#2)

Feldman, Linda. "Cruelty to Pets--and People--as One Battle." Christian Science Monitor 89 (10 September 1997): 1, 5. Cruelty to animals often indicates or predicts abuse to people as well. The "boys-will-be-boys" attitude is opposed by the Humane Society. (v8,#3)

Fellenz, Marc R. *The Moral Menagerie: Philosophy and Animal Rights*. Champaign: University of Illinois Press, 2007. Fellenz draws from critical perspectives in environmentalism, feminism, and postmodernism and argues that moral extensionist routes to animal rights are ultimately inadequate because taking animals seriously requires a more radical reassessment of morality than the concept of animal rights implies.

Feller, Joseph M. "'Til the Cows Come Home': The Fatal Flaw in the Clinton Administration's Public Lands Grazing Policy," Environmental Law 25(no.3, 1995):703- . Feller evaluates the Clinton Administration's efforts to reform environmentally destructive livestock grazing on public lands in the western United States. He concludes that although the Administration has issued a number of regulatory proposals exhibiting varying degrees to commitment to genuine change, the proposals still perpetuate

fundamental flaws in the grazing system causing environmental destruction. (v6,#4)

Feller, Robert H. "Environmental Disclosure and the Securities Laws." Boston College Environmental Affairs Law Review 22 (no. 2, 1995): 225- . (v6,#1)

Feminism and Ecology. Special issue of Heresies: A Feminist Journal of Art and Politics. Reviewed in Environmental Ethics 5(1983):173-79.

Fenchel, T. and Finlay, B. J., "The Ubiquity of Small Species: Patterns of Local and Global Diversity," BioScience 54(no. 8, 2004): 777-784(8). Small organisms (less than 1 millimeter in length) tend to have a cosmopolitan distribution. This is a consequence of huge absolute population sizes rather than any inherent properties of particular taxonomic groups. At the local scale, the diversity of small species exceeds that of larger organisms, but at the global scale this relation is reversed, because endemism is largely responsible for the species richness of large organisms. For small organisms, the relationship between species and area is flat, and a latitudinal diversity gradient is absent or weak. These patterns are explained by some of the assumptions underlying the unified neutral community model. (v.14, #4)

Fenchel, Tom; Finlay, Bland J, "The Ubiquity of Small Species: Patterns of Local and Global Diversity", BioScience 54 (no. 8, 1 August 2004):777-784(8). Small organisms (less than 1 millimeter in length) tend to have a cosmopolitan distribution. This is a consequence of huge absolute population sizes rather than any inherent properties of particular taxonomic groups. At the local scale, the diversity of small species exceeds that of larger organisms, but at the global scale this relation is reversed, because endemism is largely responsible for the species richness of large organisms. For small organisms, the relationship between species and area is flat, and a latitudinal diversity gradient is absent or weak. These patterns are explained by some of the assumptions underlying the unified neutral community model.

Feng Xianghong & Yang Guoshu, "Notes at the 'Conference on Ecological Ethics'" (sponsored by Heilongjiang Association of Ethics). Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 3 (September 30, 2000). In Chinese. (EE v.12,#1)

Fennell, D. A., and Dowling, R. K., eds., Ecotourism Policy. New York: Oxford University Press, 2003. Fennell is at Brock University, Ontario, Canada; Dowling is at Edith Cowan University, Joondalup, Australia.

Fenner, David E. W., "Environmental Aesthetics and the Dynamic Object," Ethics and the Environment 11(2006):1-19. I lay out a case for why those objects of aesthetic attention which are principally characterized as natural objects should be understood not statically, as existing in merely a three-dimensional fixed state, but as dynamic, as existing in a space-time context, complete with change, movement, and flux. After this, I explain why this is important, how the dynamic nature of natural objects raises a concern for aesthetically evaluating natural objects, and how that concern may be addressed. Fenner is in philosophy, University of North Florida. (Eth&Env)

Fenner, David E.W., "Aesthetic Appreciation in the Artworld and in the Natural World," Environmental Values 12(2003): 3-28. I explore some parallels and dissimilarities between aesthetic appreciation that takes as its focus art objects and that which focuses on natural objects. I cover three areas. The first deals with general approach, whether a paradigm of engagement is more appropriate to environmental aesthetics than one of detachment and disinterest. The second theme is about preservation and whether the appropriate model is static or dynamic. The final theme is about environmental criticism and the application of aesthetic theory to arguments for preservation. (EV)

Fenton, Elizabeth, Wild Animal Welfare and Common Sense Ethics, M. A. thesis, Colorado State

University, Spring 2002. Environmental ethics includes an ethics of respect for wild animals. There are two dimensions here, one is respect for the integrity of animal life, which includes caring for animals welfare; the other is respect for wildness. In much environmental ethics, for example in that of Holmes Rolston, valuing the wildness takes precedence over concern for animal suffering. This is similarly true when exotic (feral) animals are removed by killing in order to protect endangered species of plants, or ecosystems, also argued by William Throop. But a common sense ethic moves us to care about animal suffering; and such an ethic is, on reflection, well founded. The desire to extend humane treatment to wild animals expresses human moral compassion, and recognizes the fact that the capacity to suffer is a morally relevant characteristic shared by all sentient beings, regardless of whether they are wild. On occasions when we do encounter wild animals in distress, the moral and compassionate action is to reduce their suffering, not to let wild nature take its course. Fenton is from New Zealand. (v.13,#2)

Feoli, E; Vuerich, LG; Woldu, Z, "Processes of environmental degradation and opportunities for rehabilitation in Adwa, Northern Ethiopia," Landscape Ecology 17(no.4, 2002): 315-325.

Ferber, Dan, "Sperm Whales Bear Testimony to Worldwide Pollution," Science 309(19 August, 2005):1166. Results from the first global survey of toxic contaminants in marine mammals find DDT, PCB's, and other toxics even in midocean areas thought to be pristine.

Ferber, Dan, "Human Diseases Threaten Great Apes," Science 289(25 August, 2000):1277-1278. Disturbing evidence that scientists and tourists are infecting wild primates with human pathogens.

Ferber, Dan, "WHO Advises Kicking the Livestock Antibiotic Habit," Science 301(22 August 2003):1027. Livestock have routinely been given small doses of antibiotics to make farm animals grow slightly faster on less feed (the biology of which is not too clear, but it works). But there are worries about increasingly resistant bacterial disease microbes, about the transfer of the antibiotic residues to human consumers, and about the use of such antibiotics when needed to treat human diseases against now more resistant microbes. Denmark has phased out the practice and a World Health Organization study of the results have led to the recommendation that farmers worldwide kick the antibiotic habit. The European Union plans a phase out by 2006, but the U.S. is mostly continuing to use the antibiotic. (v 14, #3)

Feremenga, D. T., "Book Review: Geography and Development, by Arthur Morris," Environment and Behavior 34(no.4, 2002): 550-53. (v.13,#4)

Ferguson, Frances, Solitude and the Sublime: The Romantic Aesthetics of Individuation. New York: Routledge, Chapman and Hall, 1992. 256 pages. Cloth, \$ 45; paper, \$ 15.95. Especially examines Burke and Kant in terms of the philosophical issues they raise. Ferguson is professor of English at Johns Hopkins University. (v4,#1)

Fern, Richard L., Nature, God and Humanity: Envisioning an Ethics of Nature. Cambridge: Cambridge University Press, 2002. Why non-human animals and nature in general are proper objects of moral concern, and how human well-being depends on harmony with nature-as-created. Fern frames a philosophical ethics of nature, in dialogue with the principal figures in the field, assesses this ethics scientifically, finds support for it in traditional theism, and then situates it culturally. There is tension between a widespread respect for what science tells us about nature, simultaneously with a genuine conviction that there is more to nature than science reveals.

The analyses of philosophers in environmental ethics are important and insightful here. Discovering value in nature, which ought to be morally considered, is plausible and consistent with classical monotheism. In fact, the roots of the contemporary redirecting of ethics toward nature have deeper roots in the Biblical sources of Western values than is usually recognized. The insights of

monotheism are important and needed to formulate positive visions of the future, visions of a just and good world, of humans in harmony with nature. Fern defends both human uniqueness and the radical otherness of God; these make possible (rather than preventing) an appropriate relation to the wild creatures with whom we share the planet and to the supporting biosphere. Fern call this a "humane holism" (p. 7, p. 65ff). "My hope is to have cleared the way for a more fully developed theistic ethic of nature" (p. 215). This book grows out of a course in environmental ethics taught for over a decade at Yale University Divinity School, from which Fern is now retired. It rivals Michael Northcott's The Environment and Christian Ethics (Cambridge, 1996) as the most philosophically sophisticated work on a theistically-oriented environmental ethics. (v.13,#2) Later: Cambridge lists this in their top five best sellers in religion. (v.13,#4)

Fern, Richard L., Nature, God and Humanity: Envisioning an Ethics of Nature. Cambridge: Cambridge University Press, 2002. Cambridge now lists this in their top five best sellers in religion. Longer description in Newsletter, vol. 13, no. 2. (v.13,#4)

Fernandes, Edesio, ed. Environmental Strategies for Sustainable Development in Urban Areas: Lessons from Africa and Latin America. Brookfield, VT: Ashgate, 1998. 200 pp. \$63.95. Introduces some of the significant experiences of environmental administration in urban areas in several African and Latin American countries. Fernandes is at the University of London. (v9,#2)

Fernando, P., Wikramanayake, E., Weerakoon, D., Jayasinghe, L. K. A., Gunawardene, M. and Janaka, H. K., "Perceptions and Patterns of Human elephant Conflict in Old and New Settlements in Sri Lanka: Insights for Mitigation and Management," Biodiversity and Conservation 14(no. 10, October 2005): 2465-2481.

Ferraro, PJ, "Global Habitat Protection: Limitations of Development Interventions and a Role for Conservation Performance Payments," Conservation Biology 15(no. 4, 2001):990-1000. (v.13,#1)

Ferraz, Gonçalo, James D. Nichols, James E. Hines, Philip C. Stouffer, Richard O. Bierregaard, Jr., and Thomas E. Lovejoy. "A Large-Scale Deforestation Experiment: Effects of Patch Area and Isolation on Amazon Birds." *Science* Vol. 315, no. 5809 (12 January 2007): 238-41. As patches of Amazon forest get smaller, they support many fewer species of birds. As they get more isolated, bird species are differentially lost.

Ferre (Ferré), Frederick. Being and Value: Toward a Constructive Postmodern Metaphysics. Reviewed in Environmental Ethics 21(1999):425-428.

Ferre {Ferré), Frederick, Review of Higgs, Eric, Light, Andrew, and Strong, David, eds., Technology and the Good Life? Ethics and the Environment 6(no. 2, 2001):106-113. (E&E)

Ferre, Frederick. Shaping the Future: Resources for the Post-Modern World. New York: Harper and Row, 1976.

Ferré, Frederick and Peter Hartel, eds., Ethics and Environmental Policy: Theory Meets Practice. Athens: University of Georgia Press, 1944. Paper, 283 pages. \$ 20.00, paper. Contributors: Victoria Davion (Philosophy, University of Georgia), "Introduction: Where Are We Headed"; Frank B. Golley (Ecology, University of Georgia), "Grounding Environmental Ethics in Environmental Science"; Elizabeth Dodson Gray (Bolton Institute and Harvard Divinity School), "Come Inside the Circle of Creation: The Ethic of Attunement"; Yu-shi Mao (Chinese Academy of Social Sciences, Beijing), "Evolution of Environmental Ethics: A Chinese Perspective"; J. Baird Callicott (Philosophy, University of Wisconsin, Stevens Point), "The Role of Technology in the Evolving Concept of Nature"; Ignazio Musu (Economics, University of

Venice), "Efficiency and Equity in International Environmental Cooperation"; Udo E. Simonis (Environmental Policy, Wissenschaftszentrum, Berlin), "Toward a 'Houston Protocol': How to Allocate CO₂ Emission Reductions Between North and South"; Corrado Poli (Fondazione Lanza, Padua, Italy), "The Political Consequences of an Environmental Question"; Gary E. Varner (Philosophy, Texas A&M), "Environmental Law and the Eclipse of Land as Private Property"; Erazim Kohák (Philosophy, Charles University, Prague), "Red War, Green Peace"; Kristin Shrader-Frechette (Philosophy, University of South Florida, Tampa), "An Apologia for Activism: Global Responsibility, Ethical Advocacy, and Environmental Problems"; Alastair S. Gunn (Philosophy, University of Waikato, New Zealand), "Can Environmental Ethics Save the World?"; Holmes Rolston, III (Philosophy, Colorado State University), "Winning and Losing in Environmental Ethics"; Bryan Norton (Philosophy, Georgia Institute of Technology) and Eugene Hargrove (Philosophy, University of North Texas), "Where Do We Go from Here?"; Frederick Ferré, "Epilogue." Ferré is in philosophy, Hartel in crop and soil sciences at the University of Georgia. This anthology results from a conference there in April 1992. (v5,#3)

Ferré, Frederick, ed., Research in Philosophy & Technology, Reviewed by Jesse Seaton Tatum in Environmental Ethics 16(1994):107-109.

Ferré, Frederick, "Cosmic Context, Earthling Ethics," Journal of the American Academy of Religion 67(1999):435-446. Review essay of Rasmussen, Larry J., Earth Ethics (Orbis, 1996); Grange, Joseph, Nature: An Environmental Cosmology (SUNY, 1997); and Murphy, Nancey and Ellis, George F. R., On the Moral Nature of the Universe: Theology, Cosmology, and Ethics (Fortress, 1996). "If the above three books are any portent, there may yet be grounds for hope. All are written out of the unsustainable precariousness of modernity, as a way of life and a way of thought. All are integrative. All are informed by science but wary of scientism. All recognize the power of faulty cosmological vision to distort human relations, both with other humans and with the earth on which we dwell." Ferré is philosophy emeritus, University of Georgia. (v.10,#2)

Ferré, Frederick, "Obstacles on the Path to Organismic Ethics: Some Second Thoughts," Environmental Ethics 11(1989):231-241. Organic and holistic theories of environmental ethics face the problem of individual value; here Ferré attempts to sketch a "personalistic organicism"---but as he admits, this re-introduces the problem of species chauvinism or anthropocentrism. (Katz, Bibl # 2)

Ferré, Frederick, Hellfire and Lightning Rods: Liberating Science, Technology and Religion. Maryknoll, NY: Orbis Books, 1993. Cloth, \$ 24.95. Prevailing models of nature are inadequate because they are too narrow in their portrayal of a single but polyvalent organic world. The world must be envisioned organically or be destroyed by stunted and sterile approaches. Ferré is Research Professor of Philosophy at the University of Georgia, and instrumental in the environmental studies faculty there. (v4,#2)

Ferré, Frederick, "Finding the Balance: A Response to Potter and Zucker," Ethics and the Environment 1(no.2, 1996):191-199. (E&E)

Ferré, Frederick, "Persons in Nature: Toward an Applicable and Unified Environmental Ethics," Ethics and the Environment 1(no.1, 1996):15-25. There is a dilemma facing mainstream environmental ethicists. One of our leading spokesmen, Holmes Rolston, III, offers a rich ethical position, but one that lacks internal connections between principles relevant to the environment and principles relevant to human society. These principles are just different; thus no higher-order guidance is available to cope with cases of conflict between them. A second major spokesman, Baird Callicott, recommends a "land ethics" that is internally coherent but sadly inadequate for addressing many distinctly human ethical concerns. To escape this dilemma I advocate an alternative worldview, "Personalistic Organicism." On this view, inspired by Alfred North Whitehead, a continuum of values, pervading the universe, can undergird a unified ethics in which human persons are recognized as especially valuable without rupturing the

continuities that bind humanity to the rest of the living (and nonliving) environment. Ferré teaches philosophy at the University of Georgia. (E&E)

Ferré, Frederick, Being and Value: Toward a Constructive Postmodern Metaphysics. Albany, NY: State University of New York Press, 1996. 424 pages. \$ 24.95 paper. Metaphysics with courage and conviction, persuasive and comprehensive, at a time when many are cultured despisers of it. Premodern philosophy intimately bound being and value. Modern philosophy divorced being and value. Postmodern philosophy is in transition from the modern mechanical worldview to an alternative inspired by ecology. The beauty of nature, along with other values, is a more potent ingredient in the structure of things than modern reductionism allows. One chapter is entitled: Toward an Ecological World Model. Another is: Toward a Kalogenic (Beauty-generating) Universe. Two more volumes: Knowing and Value, and Living and Value, are projected. Ferré is professor of philosophy at the University of Georgia. (v7,#1)

Ferré, Frederick, "Persons in Nature: Toward an Applicable and Unified Environmental Ethics," Zygon 28(1993):441-453. Two major contenders for the role of robust environmental ethics claim our allegiance. One is Baird Callicott's, based on the land ethical formulated by Aldo Leopold; the other is that of Holmes Rolston, III, sharply distinguishing environmental from social (human) ethics. Despite their many strengths, neither gives us the vision we need. Callicott's ethic leaves too much out of his picture; Rolston's leaves too much disconnected between nature and humankind. A really usable environmental ethic needs to be both comprehensive and integrated. For that, we need a world view that includes the human in nature but also affirms the unique values of personhood. Ferré is Research Professor of Philosophy at the University of Georgia. (v4,#4)

Ferré, Frederick, "Theodicy and the Status of Animals." American Philosophical Quarterly 23 (1986): 23-34. The starting point of this argument is the "Free-Will Defense" of God's goodness, given the existence of suffering in the world. Ferré finds this defense inadequate, because it permits the suffering of animals: since they lack freedom and moral responsibility, their suffering cannot be accounted for in God's plan. Ferré thus argues for an expanded sense of community between God, humanity, and the animal kingdom. (Katz, Bibl # 1)

Ferré, Frederick. Review of Sustainability: Economics, Ecology, and Justice. By John B. Cobb, Jr. Environmental Ethics 15(1993):359-62.

Ferré, Frederick. Review of Ecology and the Politics of Scarcity. By William Ophuls. Environmental Ethics 4(1982):85-87.

Ferré, Frederick. Review of The Embers and the Stars. By Erazim Kohák. Environmental Ethics 7(1985):87-89.

Ferré, Frederick. "Value, Time, and Nature." Environmental Ethics 17(1995):417-431. Notoriously, beauty is subject to time's "tooth"; but--somehow--we sense also the imperviousness of achieved value to mere duration. This paradox is illustrated using a recent art event, and three principles analyzed from the case in point: (1) the exclusive intrinsic importance of subjective immediacy, (2) the necessity of intersubjective connections, and (3) the crucial place of instrumental value. Moving from art to metaphysics to nature, I conclude with discussions of habitat and of evolution. Only if a habitat's instrumental value (for many centers of subjective immediacy besides human ones) is adequately respected can anthropocentric values be prevented from always "trumping" all others. I reconsider evolution in terms of many interconnected value-realizing subjects, presenting the proffered "Kalogenic" perspective as a manifestation of the most fundamental process of the universe—one in which the pursuit, actualization, and defense of concrete beauty actually generates what we abstractly call "time." Ferré is in

the philosophy department, University of Georgia. (EE)

Ferré, Frederick. Being and Value: Toward a Constructive Postmodern Metaphysics. Albany, NY: State University of New York Press, 1996. Works Cited; Name Index; Subject Index. 406 pp. \$24.95 paper. Ferré is Research Professor of Philosophy at the University of Georgia and a pioneering scholar in environmental philosophy. He has published several books and numerous articles. Ferré was for many years the editor of the journal Research in Philosophy and Technology, and he was co-founder of the Faculty in Environmental Ethics at the University of Georgia.

Being and Value is Volume One of a trilogy with the overall title Philosophy and Value. Volume Two is currently in press and is entitled Knowing and Value: Toward Constructive Postmodern Epistemology. It should be available in early 1998. Volume Three is currently being written and is titled Living and Value: Toward Postmodern Ethics, Religion, and Social Ecology. All three volumes will be published SUNY Press in the series "Constructive Postmodern Thought," edited by David Ray Griffin, a process theologian and philosopher at Claremont Graduate School (California).

Ferré's trilogy is arguably the first sustained attempt to create a truly comprehensive environmental philosophy--epistemology, metaphysics, ethics, aesthetics, philosophy of religion, and all. Ferré's main philosophical mentor in the project is Alfred North Whitehead. Although many philosophers and environmentalists have agreed that Whitehead's process philosophy is conducive to a strong, constructive environmental ethic (and environmental philosophy generally), Ferré in these volumes is the first philosopher to develop the process position in its ecological fullness. The project is no easy task, and philosophers and environmentalists alike owe a debt of gratitude to Ferré. Guided by the concept of ecological relatedness, Ferré develops what he calls an "ecological worldview." His metaphysic and epistemology have been shaped almost as much by the environmental scientists Eugene Odum and Frank Golley as by Whitehead. The trilogy draws out the implications of an environmental (ecological) philosophical worldview. Starting with the ancient Greek sense of kosmos (a value-laden concept) and working through the modern metaphysical problematic (the loss of mind, purpose, and value in nature), Volume One offers an ecological answer to the problematic. Then, Volume Two works through the modern epistemological problematic (the epistemological gap caused by the alienation of mind from nature), and, again, offers an ecological answer. Finally, Volume Three will be a direct examination of value--of ethics, religion, environment, and what Ferré calls "social ecology." Volume Three will include analyses of the kinds of technology and other institutions needed for an ecologically benign (postmodern) world.

Parts One and Two of Being and Value (Volume One of the trilogy) are re-examinations of classical Greek philosophy ("Premodern Metaphysics") and modern philosophy ("Modern Metaphysics") in light of contemporary postmodern ecological consciousness. (What is missing in the volume is the Medieval era, which Ferré may be saving for Volume Three since the Medieval era was dominated by philosophy of religion. Although the Medieval era has been widely rejected by Enlightened Modern and contemporary analytic and continental philosophers, the postmodern viewpoint may allow the era to be seen anew without these biases.) Part Three ("Postmodern Metaphysics") will be of special interest to environmentalists and philosophers alike. It is here that Ferré is at his best in constructing a postmodern, Whiteheadian ecological view of reality. Reality is deeply, pervasively ecological: namely, it is interconnected, organic, personalistic, and kalogenic (Ferré's term for the universe's tendency to generate value). The deepest and highest intrinsic value, Ferré argues, is experiential--the relatedness of actual entities to one another. Reality is "panexperiential," that is, personalistic and intersubjective all the way down, and all the way up. Value is not fabricated inside subjective minds that are evolutes from inert matter; rather, all of reality--the very fabric of being itself--is by its very nature laden with values. The volume is courageously comprehensive and epistemically persuasive, at a time when few philosophers or environmentalists have the knowledge or critical ability to construct such a position. (v8,#1)

Ferré, Frederick. "Obstacles on the Path to Organismic Ethics: Some Second Thoughts." Environmental Ethics 11(1989):231-241. An organismic viewpoint is a welcome alternative to modern mechanistic

consciousness, with the latter's excessive epistemic reliance on analysis, its ontological presumption of atomism, and its value commitments to competition, quantification, reduction, and predictability. These ideas have had negative social and environmental consequences and require replacement. Organismic ethics, grounded in the "wisdom of life"--especially the dialectical triad of creativity, homeostasis, and holism--is far healthier. But organicism alone has serious defects sometimes overlooked by environmental enthusiasts (earlier including this author): life's creativity wastes individual organisms, and life's holism neglects the unique value of parts in favor of larger unities. Is it possible to work out a genuinely personalistic organicism? Traditional personalistic idealism will not do, but insights into essential personal qualities may enrich the concepts of creativity, homeostasis, and holism enough to offer a start toward a more adequate ethic. Ferré is in the department of philosophy, University of Georgia, Athens, GA. (EE)

Ferré, Frederick. Review of Technology, Environment, and Human Values. By Ian G. Barbour. Environmental Ethics 5(1983):367-70.

Ferrell, John S., Fruits of Creation: A Look at Global Sustainability as Seen Through the Eyes of George Washington Carver. Shakopee, MN: Macalester Park, 1995. (v7,#1)

Ferrey, Stephen P. "Allocation and Uncertainty in the Age of Superfund: A Critique of the Redistribution of CERCLA Liability." New York University Environmental Law Journal 3 (no. 1, 1994): 36- . (v6,#1)

Ferrier, S., Pressey, R.L., and Barrett, T.W., "A new predictor of the irreplaceability of areas for achieving a conservation goal, its application to real-world planning, and a research agenda for further refinement," Biological conservation 93 (No. 3, 2000): 303 -- . (v.11,#4)

Ferry, Luc, The New Ecological Order. Reviewed by Robert Kirkman in Environmental Ethics 20(1998):101-04.

Ferry, Luc, Nowy ład ekologiczny (The New Ecological Order). Centrum Uniwersalizmu przy Uniwersytecie Warszawskim, 1995. In Polish. Originally in French: Le nouvel order écologique. (v9,#2)

Ferry, Luc, The New Ecological Order. Trans. Carol Volk. Chicago: University of Chicago Press, 1995. Cloth, \$34.95; Paper, \$14.95. A philosophy professor at the Sorbonne analyzes deep ecology. He finds it irrational and antidemocratic. (v6,#2)

Ferry, M., "The Polish Green Movement Ten Years after the Fall of Communism," Environmental Politics 11(no.1, 2002): 172-77. (v.13,#2)

Feshbach, Murray and Alfred Friendly Jr., Ecocide in the USSR: Health and Nature under Siege. New York: Basic Books, 1992. 376 pages. \$ 24. A sad tour of the human and environmental wreckage of 74 years of Communist misrule. But lest any think such fate can befall only Communists, see the next entry. (v3,#2)

Festa-Bianchet, M. and M. Appollonio, eds., Animal Behavior and Wildlife Conservation. Washington, DC: Island Press, 2003. (v. 15, # 3)

Fideler, David, "Ecologic: How Modern Cosmology Forces Us to Revision Our Relationship to the Living Universe," Kosmos: The Newsletter of Cosmology, Philosophy, Myth, and Culture, Issue 1, Autumn 1996. (v.7,#4)

Fiechtl, R., "Know When to Hold `Em: Minimizing Disclosure of Corporate Environmental Information,"

Environmental Law 31(no.4, 2001): 951-80. (v.13,#2)

Fiedler, Peggy L. and Subodh K. Jain, eds., Conservation Biology: The Theory and Practice of Nature Conservation, Preservation, and Management. London and New York: Chapman and Hall, 1992. 18 essays. A sample: G. Ledyard Stebbins, "Why Should We Conserve Species and Wildlands?" Fiedler is in biology at San Francisco State University. Jain is at the University of California, Davis. (v4,#2)

Fiedler, Peggy L., Kareiva, Peter M., eds. Conservation Biology for the Coming Decade. Washington, D.C.: Smithsonian Institution Press, 1997. 528 pp. \$44.95. This revised edition incorporates a number of new authors and additional chapters. Ten new chapters highlighting such topics as ecosystem management and the economics of conservation. (v8,#3)

Fiedler, Peggy L., and Jain, Subodh K., eds., Conservation Biology: The Theory and Practice of Nature Conservation and Management. New York: Chapman and Hall, 1992. Includes:

--Pickett, Steward T. A., Parker, V. Thomas, and Fiedler, Peggy L., "The New Paradigm in Ecology: Implications for Conservation Above the Species Level," pages 65-88. Conservation biology traditionally focused on individuals and species, but there are practical and theoretical needs to widen the focus to more comprehensive levels. But these levels have been rethought, generally shifting from equilibrium to non-equilibrium paradigms. The new paradigm licenses new approaches, includes humans in basic ecology, and focuses on maintaining integrity of processes rather than species.

--Stebbins, G. Ledyard, "Why Should We Conserve Species and Wildlands?", pages 453-470.

Fiege, Mark, Irrigated Eden: The Making of an Agricultural Landscape in the American West. Seattle: University of Washington Press, 1999. Irrigation in the Pacific Northwest and the real and imagined landscapes that resulted. Agriculture on a radically transformed landscape, such as potato farms, yet with much nature also often surviving, indeed often winning. Dichotomized images and a nature/feminine and male/conquest dualism. Fiege is in environmental history, Colorado State University. (v.13,#4)

Field, Terri. "Caring Relationships with Natural and Artificial Environments." Environmental Ethics 17(1995):307-320. A relational-self theory claims that one's self is constituted by one's relationships. The type of ethics that is said to arise from this concept of self is often called an ethics of care, whereby the focus of ethical deliberation is on preserving and nurturing those relationships. Some environmental philosophers advocating a relational-self theory tend to assume that the particular relationships that constitute the self will prioritize the natural world. I question this assumption by introducing the problem of artifact relationships. It is unclear whether a relational self theory recognizes relationships with the artificial world as being meaningful in any moral sense, and whether such relationships, if they can exist, should be accorded equal value to relationships with the natural world. The problem of artifact relationships becomes particularly apparent when the relational-self theory is linked to place-based ethics. If our ethics are to develop from our relations to place, and our place is largely an artificial world, is there not a danger that our ethical deliberations will tend to neglect the natural world? I adapt Holmes Rolston's concept of "storied residence" to show how the inclusion of the artificial world will lead to different questions regarding one's resident environment, and perhaps a different emphasis on what is valued. My aim in raising these questions is to challenge the optimism that writers such as Karen Warren and Jim Cheney have shown in supporting relational-self theories and place-based ethics. I conclude that the challenge to develop a relational-self/place-based ethic does not appear to have been met within Western environmental philosophy, which has perpetuated a silence on the matter of our embedment in the artificial world. Field is in the department of philosophy, University of Queensland, Australia. (EE)

Fieser, James, Metaethics, Normative Ethics, and Applied Ethics. Belmont, Ca: Wadsworth, 1999. 512 pages. Includes sections on animal ethics: Augustine, Descartes, Kant, Regan, Machan; environmental ethics: Augustine, "Against the View that God Dwells in Plant Life"; Thoreau, "Primeval Nature"; Leopold, "The Land Ethic"; Fieser, "An Argument Against Normative Ecocentrism." Fieser is at the

University of Tennessee at Martin, TN. (v10,#4)

Fieser, James, Metaethics, Normative Ethics, and Applied Ethics. Belmont, Ca: Wadsworth, 1999. 512 pages. Includes sections on animal ethics: Augustine, Descartes, Kant, Regan, Machan; environmental ethics: Augustine, "Against the View that God Dwells in Plant Life"; Thoreau, "Primeval Nature"; Leopold, "The Land Ethic"; Fieser, "An Argument Against Normative Ecocentrism." Fieser is at the University of Tennessee at Martin, TN. (v.11,#1)

Fieser, James, ed., Metaethics, Normative Ethics, and Applied Ethics: Contemporary and Historical Readings. Belmont, CA: Wadsworth, 1999. 512 pages. Historically oriented. Includes section on Animal Ethics: Augustine: "Killing Plants and Animals." Aquinas, "Whether It is Unlawful to Kill Any Living Thing." Descartes: "The Automatism of Animals." Kant: "Duties Toward Animals." Regan: "The Case for Animal Rights." Machan: "Do Animals Have Rights?" Includes section on Environmental Ethics: Augustine: "Against the View that God Dwells in Plant Life." Thoreau: "Primeval Nature." Leopold: "The Land Ethic." Fieser: "An Argument Against Normative Ecocentrism." Fieser is at the University of Tennessee at Martin. (v.10,#3)

Fieser, James, "An Argument against Normative Eco-Centrism." Pages 496-504, p. 516, p. 530, in Fieser, James ed., Metaethics, Normative Ethics, and Applied Ethics: Historical and Contemporary Readings. Belmont, CA:Wadsworth/Thomson Learning, 2000. Critiques Aldo Leopold, J. Baird Callicott, James Heffernan. Eco-centrism begins with a bold claim that traditional morality is not complete and that we need to acknowledge a new set of direct obligations to ecosystems. But eco-centrism fails as an act-consequentialist theory because we cannot derive traditional moral duties from a primary principle of eco-centrism. As a rule-consequentialist theory, eco-centrism fails because it is inconsistent with traditional moral rules, such as prohibitions against stealing. Although consequentialist eco-centrism does provide us with normative guidelines for preserving environmental well-being, it does not advocate traditional human morals, and therefore we must reject it as a normative theory. Fieser is in philosophy, University of Tennessee, Martin, TN. (v.11,#3)

Fieser, James. "Callicott and the Metaphysical Basis of Ecocentric Morality." Environmental Ethics 15(1993):171-80. According to the theory of ecocentric morality, the environment and its many ecosystems are entitled to a direct moral standing, and not simply a standing derivative from human interests. J. Baird Callicott has offered two possible metaphysical foundations for ecocentrism that attempt to show that inherent goodness can apply to environmental collections and not just to individual agents. I argue that Callicott's first theory fails because it relies on a problematic theory of moral sentiments and that his second theory fails because it rests on an unsupported parallel between the breakdown of the subject-object dichotomy suggested by quantum theory and an alleged actualization of morality upon the interaction of environmental collections with consciousness. Finally, I argue that Callicott overrates the need for a metaphysical grounding of inherent value, and that the metaphysical question has little bearing on the normative issue of ecocentrism. Fieser is in the department of philosophy, Christopher Newport University, Newport News, Virginia. (EE)

Figge, Frank, "Capital Substitutability and Weak Sustainability Revisited: The Conditions for Capital Substitution in the Presence of Risk," Environmental Values 14(2005): 185-201. The capital approach is frequently used to model sustainability. A development is deemed to be sustainable when capital is not reduced. There are different definitions of sustainability, based on whether or not they allow that different forms of capital may be substituted for each other. A development that allows for the substitution of different forms of capital is called weakly sustainable. This article shows that in a risky world and a risk-averse society even under the assumptions of weak sustainability the circumstances under which different forms of capital may be substituted are limited. This is due to the risk-reducing effect of diversification. Using Modern Portfolio Theory this article shows under which conditions substitution of

different forms of capital increases risk for future generations. Figge is in the School of Earth and Environment, University of Leeds, UK. (EV)

Figueiredo, Gisela M., Leitao-Filho, Hermogenes F., Begossi, Alpina. "Ethnobotany of Atlantic Forest Coastal Communities: II. Diversity of Plant Uses at Sepetiba Bay (SE Brazil)," Human Ecology 25(no.2 1997):353. (v8,#3)

Figuerola, Robert Melchior, Debating the Paradigms of Justice: The Bivalence of Environmental Justice. Ph.D. dissertation in philosophy, University of Colorado, Boulder, 2000. Environmental justice addresses social justice related to human activities that affect both human and natural environments, including human health and values, living and working conditions, natural resources upon which humans depend, and cultural values intimately tied with the natural environment. The social problem may be the cause of the environmental problem or vice versa.

The thesis analyzes how environmental justice affects the debate between distributive justice and justice in the politics of recognition. Distributive justice theories focus on the fair distribution and redistribution of material goods in a society. Justice in the politics of recognition emerges from principles of self-determination, cultural identity, and political recognition. Cultural institutions and habits determine the conditions for social status which then guide the distribution of material goods. Contemporary justice theory seems gridlocked into this dichotomy. Using the work of Nancy Fraser, this thesis uses a bivalent conception of participatory parity as the bridging criterion. The main advisor was Claudia Mills. Figuerola is from Puerto Rico. Figuerola is currently at Colgate University. (v.11,#2)

Fiksei, Joseph, "Sustainability and Resilience: Toward a Systems Approach," Sustainability: Science, Practice, and Policy 2(no. 2, 2006):1-8. Global consumption continues to grow. There is urgent need for better understanding of the dynamic, adaptive behavior of complex systems and their resilience in the face of disruptions. But assessing the broad impacts of policy and technology choices is a formidable challenge. Recommendations for progress in continued research. Fiksei is at the Center for Resilience, The Ohio State University.

Filho, Souza, Hildo M. de. The Adoption of Sustainable Agricultural Technologies. A review by I. Howard, Journal of Agricultural and Environmental Ethics 11(1999):155-158. (JAEE)

Filippi, David E. "Unleashing the Rule of Lenity: Environmental Enforcers Beware!", Environmental Law 26(no. 3):951. Filippi discusses the tension between the rule of lenity and the public welfare status of environmental laws in the Second Circuit's decision in *United States v. Plaza Health Laboratories*. In the light of recent Supreme Court decisions, he argues, the interest in protecting public health and the environment should take precedence over the rule of lenity where a reasonable person should know that certain conduct is subject to regulation and may threaten the community's health or safety.

Filippi, E. and Luiselli, L., "Status Of The Italian Snake Fauna And Assessment Of Conservation Threats," Biological Conservation 93 (No. 2, 2000): 219- . (v.11,#2)

Filson, Glen C. "Demographic and Farm Characteristic Differences in Ontario Farmers' Views about Sustainability Policies," Journal of Agricultural and Environmental Ethics 9(1996):165-180. This study was undertaken to assess farmers' attitudes toward sustainable agriculture and the environment. The majority of Ontario farmers in this 1991 survey supported the need for government policies which promote sustainable agriculture but there were major differences in the government policies which farmers thought would be sustainable or desirable. Most farmers felt the Government should promote diversified rural economic development, sponsor appropriate research and provide conservation grants to farmers willing to change to more sensitive environmental methods. Those least interested in forms of government intervention designed to enhance agricultural sustainability operated the largest farms.

Conversely, those most likely to be receptive to government regulations and interventions designed to enhance rural equity, stability, productivity and sustainability were the smaller operation farmers who most often had off-farm employment. Keywords: sustainability, government agricultural policies, environmental regulations, family farm support. Filson is with the Rural Extension Studies, University of Guelph, Ontario. (JAEE)

Filson, Glen C., "Comparative Differences in Ontario Farmers' Environmental Attitudes", Journal of Agricultural and Environmental Ethics 6(1993):165-184. This paper provides an analysis of a 1991 survey of the views of a stratified random sample of 1,105 Ontario farmers. Factor analysis, Kruskal-Wallis one way ANOVA, chi-square and correlations were used to identify differences in farmers' attitudes toward rural environmental issues as a function of their demographic and farm characteristics. Younger, well educated, and especially female, farmers were most concerned about the rural environmental degradation, in contrast to the largest operators' being the least environmentally oriented. Filson is in rural extension studies at the University of Guelph, Ontario.

Finch, Robert and John Elder, The Norton Book of Nature Writing. New York: W. W. Norton, \$ 29.95. A 921-page tome with the best of such English and American writing over the last two centuries, 125 substantial selections by 94 writers. "Nature writing asserts both the humane value of literature and the importance to a mature individual's relationship with the world of understanding fundamental physical and biological processes" (Introduction). (v1,#4)

Findlay, C. Scott, Houlahan, Jeff. "Anthropogenic Correlates of Species Richness in Southeastern Ontario Wetlands," Conservation Biology 11(no.4, 1997):1000. (v8,#3)

Findlay, Chris, Review of Graham, K.M., Irradiation: A Canadian Folly. Journal of Agricultural and Environmental Ethics 9(1996):83-85. (JAEE)

Finkel, Adam M. and Dominic Golding, eds. Worst Things First? The Debate over Risk-Based National Environmental Priorities. Washington, DC: Resources for the Future, 1994. 348 pages. \$ 45.00 cloth. The controversy over EPA's risk-based approach for setting the U. S. environmental priorities. Agreeing that alternative ways exist to plan for the protection of the nation's environmental resources, the contributors differ sharply as to whether these varied approaches complement each other or would disrupt environmental policymaking. (v6,#3)

Finkel, Elizabeth, "Engineered Mouse Virus Spurs Bioweapon Fears," Science 291(26 January 2001):585. Super-deadly virus, genetically engineered. Australian scientists inserted a virus into a pest mouse to sterilize the mouse. Then, in further attempts to increase its effectiveness sterilizing the mice, scientists found they had made a virus with deadly virulence, wiping out all the animals. They reported these results, with a warning that the results might or might not be transferrable to humans, cautioning that it might be dangerously easy to engineer such a human virus. The media release triggered sensational warnings in the Australian press, and elsewhere. (EE v.12,#1)

Finland. A bibliography of environmental ethics and conservation in Finland is in the ISEE newsletter, vol. 5, no. 2, Summer 1994.

Finn, Daniel Rush, Just Trading: On the Ethics and Economics of International Trade. Nashville: Abingdon, 1996. (v.13,#2)

Finn, Daniel. "International Trade and Sustainable Community: Religious Values and Economic Arguments in Moral Debates." Journal of Religious Ethics 22 (Fall 1994): 213-273.

Finnegan, Eleanor. Review of Islam and Ecology: A Bestowed Trust. Edited by Richard Foltz, Frederick M. Denny, and Azizan Baharuddin. Environmental Ethics 27 (2005):101-104.

Finnigan, D; Gunton, TI; Williams, P, "Planning in the Public Interest: An Evaluation of Civil Society Participation in Collaborative Land Use Planning in British Columbia", Environments 31 (no.3, 2003): 13-30.

Finsen, L., and Finsen, A., The animal rights movement in American: From compassion to respect. New York: Twayne Publishers. 1994.

Finsen, Susan. "Making Ends Meet: Reconciling Ecophilism and Animal Rights Individualism." Between the Species 4 (1988): 11-20. Individualism and holism are complementary theories of value, if we interpret holism on the model of "community" and not "organism." For a comment on this paper see Eric Katz, "Methodology in Applied Environmental Ethics," same issue, pp. 20-23. (Katz, Bibl # 2)

Fiorelli, Paul E. and Rooney, Cynthia J., "The Environmental Sentencing Guidelines for Business Organizations: Are There Murky Waters in Their Future?" Boston College Environmental Affairs Law Review 22 no. 3 (Spring 1995): 481- . (v6,#2)

Fiorino, Daniel J. "Toward a New System of Environmental Regulation: The Case for an Industry Sector Approach." Ecology Law Quarterly 23(1996):457. Fiorino is the Director of the Industry Strategies Division of the U.S. Environmental Protection Agency Office of Policy Development. He examines the current federal regulatory scheme for controlling industrial pollution and identifies structural flaws that are impeding further progress. Fiorino advances alternative approaches based on performance across industry sectors or facilities. Recent EPA initiatives and other models illustrate how a more flexible and integrated system of environmental regulation may be developed. (v7,#2)

Firbank, Les. "Environmental Change and UK Land Use." Land Use Policy 13(Apr.1996):153. (v7,#2)

Firmament: The Journal of Christian Ecology is published by the North American Conference on Christianity and Ecology. The Winter 1992 issue features Christian Ecological Economics. Also articles on Christian Ecology in Russia. North American Conference on Christianity and Ecology, P. O. Box 14305, San Francisco, CA 94114. (v3,#1)

Firmament: The Journal of Christian Ecology, vol. 3, no. 3, Summer 1992 is an issue on ideas that created the global environmental crisis. Among other articles: HRM Prince Charles, "Architecture and Spiritual Principle: Building My Dream of Future Harmony." "The modern tendency to forget sacred principles in building design fosters a sterile, mechanistic worldview in which the spiritual dimension is extinguished. The solution lies in a form of architecture which honors the sacred and maintains a continuity with tradition." Architecture tends to dislocate us from a sense of belonging in our environment. Prince Charles is forming a new architecture school. (v3,#3)

Firm, RD, "Bioprospecting - why is it so unrewarding?," Biodiversity and Conservation 12(no.2, 2003): 207-216.

Firor, John, The Changing Climate: A Global Challenge. New Haven: Yale University Press, 1990. Acid rain. Ozone layer depletion. Global warming. Air pollution.

Firth, Dan, "The Role of Aesthetic Considerations in a Narrative Based Approach to Nature Conservation," Ethics and the Environment 13(no. 2, 2008):77-100. The claim presented here is that aesthetic considerations are an essential part of place narrative, and are thus essential to ethical

environmental decision-making. Holland's narrative-based approach to nature conservation is taken as a starting point from which an argument is developed to show how his approach can be extended to include the aesthetic. Aesthetic experience of place is important because it gives us knowledge by acquaintance of the place, because it gives meaning to our relationship to the place, and because it reveals and gives insight to meaningful relationships within the place. The narrative approach allows these experiences and meanings, which are problematic to other approaches, to be captured and included in environmental decision-making. Dan Firth is studying in the Centre for Professional Ethics at the University of Central Lancashire.

Firth, Dan, "Do Meaningful Relationships with Nature Contribute to a Worthwhile Life?," *Environmental Values* 17(2008): 145-164. This paper argues that a worthwhile life is one in which the meaningful relationships existing in nature are recognised and respected. A meaningful relationship occurs when the interactions between two entities have significance in their past history and its anticipated continuation. The form in which the history of both the human and the non-human is related is narrative. A life is enriched or impoverished by the subject's relationships to other people and nature, and as such is more or less worthwhile. The argument presented here shows how Alan Holland's approach to conservation decision making can be extended to have relevance to individual lives, and that a strong ethical position can be developed from this insight.

Fischedick, Manfred, and Supersberger, Niko, "Erneuerbaren Energien gehört die Zukunft (The future belongs to renewable energies)" In German. *Natur und Kultur* 2(no. 1, 2001):76-96. Abstract: Rising temperatures, severe storms, eroded coast lines ? will this be our future? All the evidence seems to indicate that this will happen if we don't change our behaviour. Indeed we have an alternative to burning fossil fuels like coal, oil and natural gas, we don't have to accept the greenhouse effect as a natural event (which it really isn't). One possible way out of the imminent dilemma is increasing the use of renewable energies and an efficient use of energy. A practical solution how this can be achieved is presented. (v.12,#2)

Fischer, Frank, Citizens, Experts and the Environment: The Politics of Local Knowledge. Durham, NC: Duke University Press, 2000. Reviewed by Kenyon, Wendy, Environmental Values 12(2003):263-265. (EV)

Fischer, Kenneth S., Barton, John, Khush, Gurdev S., Leung, Hei, and Cantrell, Ronald, "Collaborations in Rice," *Science* 290(2000):279-280. Rice is the largest food source for the poor, the staple of Asia, and also provides employment and income for vast numbers of rural people. Genetic and genomic research in rice has formerly been mostly public, government sponsored research, but the trend is toward private, industry sponsored research. There is growing concern that the poor will not benefit from such research, since the results are often proprietary. These authors, from the International Rice Research Institute, Philippines, propose a model by which patents are available on research discoveries, but rights to these must be made available at reasonably royalty in commercial markets in the developing world, and at zero royalty for subsistence farming. (EE v.12,#1)

Fischer, Megan, "Should We Save Nature While People Go Hungry?: An Analysis of Nature Preservation and Poverty." M.A. thesis, Philosophy, Colorado State University. 2000. Sometimes, the most ethical decision is to preserve nature even if some people have basic needs unmet. This issue is important and often faced in nature preservation internationally. Some case studies. Priority should be given to win-win situations, where needy people can remain on lands without degrading them or harming wildlife. Attention needs to be given to the deeper social problems that underlie and cause such poverty. Also one must consider whether policies are likely to succeed or be counter-productive. Sustainable development, though desirable, is not always an answer. Analysis must take all values into account, including the holistic values, and optimizing such value will require saving nature even though human needs go unmet.

This ought to prove an interim ethic, and on longer time scales future generations of humans are likely to be better off in result. (v.11,#4)

Fischer, WC, "Review of: Stephen J. Pyne, Fire: A Brief History; and Stephen J. Pyne, Year of the Fires: The Story of the Great Fires of 1910", Environmental History 8(no.1, 2003):144.

Fischman, RL, "The National Wildlife Refuge System and the Hallmarks of Modern Organic Legislation", Ecology Law Quarterly 29(no.3, 2002):457-622.

Fischhoff, Baruch et al. Acceptable Risk. Reviewed in Environmental Ethics 8(1986):277-85.

Fish, Stanley, The Trouble with Principle. Cambridge, MA: Harvard University Press, 2000. Nobody's neutral. It is dangerous to believe you have principles and still more dangerous to speak and act as if you do. "Principles" are abstract, neutral, and general standards for judging and resolving particular substantive differences. Things like fairness, impartiality, and justice are supposed to be so neutral that they work for all parties to the debate. A radical ecofeminist and a conservative Southern Baptist ought to be able to agree on what is a fair way to divide the pie. Fish thinks this is liberal mythology. There are no neutral principles, no standards not already infected with substantive commitments about the way the world is. To pretend there is has been the error of liberalism for recent decades, and this foists a particular world view on others. (Liberals especially dupe religious people with their worldview.)

Politics (and ethical claims within it) is a struggle whose goal is victory, which means getting the kind of policies you want in place. This is the only kind of politics or law that there is. We should abandon the search for rationally demonstrable foundations that would show a particular action to be right. Our concern should be to find ways to put the policy, whatever it is, into place (and this can include some theoretical claims, if these succeed). In the end, there is nothing but rhetoric; rhetoric, like politics, goes all the way down. Environmentalists, pragmatists, postmodernists, take note. (v.11,#3)

Fisher, Andy, Radical Ecopsychology: Psychology in the Service of Life. Albany, NY: State University of New York Press, 2002. (v.13, #3)

Fisher, Andy, Nature and Experience: A Radical Approach to Ecopsychology, 1999, York University (Canada), Ph.D. thesis in Environmental Studies. 343 pages. I propose an approach to ecopsychology which is (1) naturalistic, in that it aims to link human nature to the larger natural world; (2) experiential, in that it uses bodily felt meaning as its touchstone; (3) and radical, in that it locates itself within critical currents within both psychology and ecology. Its method is interpretive and rhetorical, understanding the human-nature relationship in a way that normal science cannot and arguing for concerns counter to those of the dominant social order.

My own version of ecopsychology, "naturalistic psychology," asserts that to be claimed by the natural order means to belong to it, to be limited by it, and to feel its demands within our bodily experience. Naturalistic psychology advocates fidelity to nature, being in service of nature, and cultivating our inherent relations with a more-than-human world. This calls for a countering of the dominant pattern of our technologized and economized society. The general advance of technology leads not to the fulfilment of our nature but to a natural rebellion that the ruling powers of our society must constantly turn to advantage, administer, or out-manuever. The radical task is to recognize the suffering intrinsic to the modern enterprise and to create loving contexts for the bearing of this suffering. Thus may we both discover what our suffering means and work toward a society more congruent with and respectful of our nature and our experience. The advisor was Mora Campbell. This thesis has been published as Radical Ecopsychology: Psychology in the Service of Life (Albany, State University of New York Press, 2002); see that entry. (v.13,#4)

Fisher, Andy, Radical Ecopsychology: Psychology in the Service of Life. Albany: State University of

New York Press, 2002. Fisher is a psychotherapist in private practice. (v.13,#1)

Fisher, Andy. "Toward a More Radical Ecopsychology: Therapy for a Dysfunctional Society." Alternatives 22(Jul. 1996):20. If ecopsychology is to help reconcile humanity with nature, it must become more critically-oriented. (v7,#2)

Fisher, Andy. Radical Ecopsychology: Psychology in the Service of Life. Albany, State University of New York Press, 2002. An introduction to ecopsychology--an emerging field that ties the human mind to the natural world. Ecopsychology must become a more comprehensive and critical undertaking if psychology is to be relevant to a world desperately seeking sustainability--and sanity. With emphasis throughout on the experiential--our bodily felt, lived-through experience--bringing to light what Fisher argues is a neglected dimension in the ecology/environmental discourses and debates. Forward by David Abram. (v.13,#4)

Fisher, Andy. "Ecopsychology Resources." Alternatives 22(Jul. 1996):25. (v7,#2)

Fisher, Andy. "What is Ecopsychology?" Alternatives 22(Jul. 1996):20. (v7,#2)

Fisher, Anthony, C., Environmental and Resource Economics. Reviewed by Thomas D. Crocker. Environmental Values 6(1997):108-110. (EV)

Fisher, C, "Review of: Jacoby, Karl, Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation," Journal of Environment and Development 12(no.1, 2003):138.

Fisher, Christopher L., "Animals, Humans and X-Men: Human Uniqueness and the Meaning of Personhood," Theology and Science 3 (no., 3, 2005): 291-314. Several critical boundary areas between humans and animals are examined for scientific evidence about human distinctiveness. These include communication and language capacity, cultural creativity, spirituality, and ethical capacity. Aspects of human uniqueness are apparent, can be fruitfully encompassed in the idea of personhood, and are coherent with Trinitarian theology's anthropological focus. Fisher is at Asbury Theological Seminary, Wilmore, KY.

Fisher, Duncan and Clare Davis, Alexander Juras and Vukasin Pavlovic, eds. Civil Society and the Environment in Central and Eastern Europe. 300 pages. About US\$ 20.00. Available from Institut für Europäische Umweltpolitik e.V., Aloys Schulte Str. 6, 5300 Bonn 1, Germany. Or: Ecological Studies Institute, 49 Wellington Street, London WC2E 7BN, U.K. These same sources also have available an NGO Directory for Central and Eastern Europe. (v4,#1)

Fisher, Erik. Review of Geo-Logic: Breaking Ground between Philosophy and the Earth Sciences. By Robert Frodeman. Environmental Ethics 27 (2005):97-100.

Fisher, Frank. Review of Richard Dawkins, Climbing Mount Improbable. Environmental Values 8(1999):114.

Fisher, Hank, Wolf Wars: The Remarkable Inside Story of the Restoration of Wolves to Yellowstone. Helena: MT: Falcon Press, 1995. (v7,#1)

Fisher, John A. "Taking Sympathy Seriously." Environmental Ethics 9(1987):197-215. Sympathy for animals is regarded by many thinkers as theoretically disreputable. Against this I argue that sympathy appropriately underlies moral concern for animals. I offer an account of sympathy that distinguishes

sympathy with from sympathy for fellow creatures, and I argue that both can be placed on an objective basis, if we differentiate enlightened from folk sympathy. Moreover, I suggest that sympathy for animals is not, as some have claimed, incompatible with environmentalism; on the contrary, it can ground environmental concern. Finally, I show that the traditional concept of anthropomorphism has no coherent basis, and I argue that the attempt to prove that animals lack thoughts is both unsuccessful and irrelevant to sympathy for languageless creatures. Fisher is in the department of philosophy, University of Colorado, Boulder, CO. (EE)

Fisher, Jonathan, "To Ban or Not to Ban?" (Ivory) International Wildlife 27(no. 3, May/June 1997):36-37. Nations are meeting in June to consider whether to continue the international ban on the sale of ivory, enacted in 1989. The ban has been quite effective. In the 1980's poachers slaughtered more than 70,000 elephants annually, a mortality 20 times what the continent-wide elephant population could sustain. The ban cut poaching by 90%. African elephants live in 35 countries. Some nations want to trade legal ivory, especially Zimbabwe, Botswana, Namibia, and Malawi. Ivory trade, they say, will generate income for conservation and it is cultural imperialism for developing nations to impose their standards on developing nations. Ban advocates reply that it is impossible to tell legal from illegal ivory, that legal sale will return the illegal sale, that conservation funds in often corrupt governments will fail to be so used, and that the impetus for banning ivory originally came from the African nations, is supported by the majority of them, and that the pro-trade nations themselves are just as guilty of forcing their views on others. (v8,#2)

Fisher, Mark, Review of Ben Mepham, ed., Food Ethics, Environmental Values 7:(1998):375.

Fisher, Mark, "New Zealand farmer narratives of the benefits of reduced human intervention during lambing in extensive farming systems," Journal of Agricultural and Environmental Ethics 16(2003):77-90. Easy-care or natural lambing pertains to those sheep able to successfully lamb and rear at least one lamb without human assistance in a difficult environment. Such sheep may have a higher survival rate, lower lamb mortality, and require less shepherding at lambing than other sheep breeds or strains. The farmer or shepherd account of easy-care lambing reveals several themes. Firstly, stock were bred to survive or suit local environments or conditions, particularly steep hill country in New Zealand. This involved extensive culling of undesirable dams, regardless of how well they might perform in traits other than the ability to survive and to produce live lambs at weaning. Sheep that did have problems were often assisted, recorded or marked and then culled at an appropriate time; thus both artificial (culling) and natural selection were used. Secondly, natural selection enabled the important traits to be identified and they were subsequently incorporated into artificial selection programs. Thirdly, the practice was necessitated by the impracticality of supervising lambing in difficult terrain and the cost of skilled farm labor. Finally, it was acknowledged that disturbance at lambing created problems and most importantly, the easy-care approach reduced some of the problems traditionally associated with lambing. Easy-care lambing systems thus aim to minimize some of the detrimental effects associated with carefully supervised lambing in some environments, by selecting sheep to suit both that environment and modern farm management. They overcame pervasive influences our cultural legacy was exerting on the way we interact with animals, and may have produced a system more in keeping with the biology of the animal in an extensive environment.

KEY WORDS: easy-care, farmer, farm magazines, lambing, shepherd. (JAEE)

Fisher, Mark W., Book Review: Gary L. Comstock (ed.). Life Science Ethics (Iowa State Press, Ames, 2002). Journal of Agricultural and Environmental Ethics 19(2006):199-201.

Fisher is with Kotare Bioethics, Hastings, New Zealand. (JAEE)

Fisher, Michael, "Environmental Racism Claims Brought Under Title VI of the Civil Rights Act," Environmental Law 25 no. 2 (1995): 285- . Fisher evaluates the usefulness of Title VI's prohibition on discrimination in U.S. federal funding to the environmental justice movement, focusing on the evidentiary

demands that a title VI case presents and concluding that a Title VI approach to litigation would overcome the doctrinal barriers that have frustrated past attempts to apply civil rights laws to the problem of discrimination. (v6,#2)

Fisher, N., "PETA's Anti-Fishing Campaign Misses the Point. Anglers Do More Than Anyone Else to Look after Fish and the Rivers They Swim In," Ecologist 31(no.8, 2001): 45. (v.13,#2)

Fisher, Philip, Wonder, the Rainbow, and the Aesthetics of Rare Experiences. Cambridge, MA: Harvard University Press, 1998. The sciences have not reduced the sense of wonder that many people find in nature, for example, rainbows. Rainbows have always evoked wonder, from ancient times onward, and science does not stop such wonder. Religious approaches do impoverish the sense of wonder, however, largely because they suppress further investigation.

Fisher, Richard F., "Broader and Deeper: The Challenge of Forestry Education in the Late 20th Century", Journal of Forestry, 94(No.3, 1996):4- . (v7,#1)

Fisher, Robert N., Shaffer, H. Bradley. "The Decline of Amphibians in California's Great Central Valley", Conservation Biology 10(no.5,1996):1387.

Fisher, William F., ed. Toward Sustainable Development: Struggling over India's Narmada River. Armonk, NY: M. E. Sharpe, 1995. 500 pages. \$24.95 paper. \$70.00 hardcover. Diverse opinions of proponents and opponents of the project and the complex issues involved, including economics, sociology, law, and governance. Studies on human rights issues that arise when large numbers of people, particularly marginal, disadvantaged groups, and women, are displaced from their homes and villages. See note in the Issues section, below on the wildlife and endangered species issues here. Fisher is at Harvard University. (v6,#1)

Fisheries (American Fisheries Society), vol. 17, no. 3, May-June 1992, is a special issue devoted to biodiversity and conservation of endangered fishes. A sample article: Robert M Hughes and Reed F. Noss, "Biological Diversity and Biological Integrity: Current Concerns for Lakes and Streams." (v3,#2)

Fitter, Chris, Poetry, Space, Landscape: Toward a New Theory. Cambridge: Cambridge University Press, 1995. Chapters: 1. Toward a theory of 'landscape' and landscape perception. 2. The values of landscape: an historical outline in the ancient world. 3. Landscape and the Bible. 4. Late antiquity and the Church Fathers. 5. Medieval into Renaissance. 6. Seventeenth-century English poetry. Fitter teaches English, Rutgers University.

Fitzgerald, Edward A., "The Waste War: Oregon Waste Systems, Inc. v. Department of Environmental Quality", Boston College Environmental Affairs Law Review, 23(No.1, 1995):43- .

Fitzgerald, Kathleen. "A Homecoming for Wolves in the Northern Forest," Wild Earth 7(no.1, 1997):61. (v8,#2)

Fitzgerald, Randy, "The Right Balance: Students Blaze a Trail in Two Environments," (University of Richmond Alumni Magazine, Summer 2003, pp. 22-23. "Not content with being pioneers in the classroom, the first six students to graduate from Richmond with an environmental degree also made history in the halls of the Virginia General Assembly. Mixing academic prowess with political acumen, the Class of 2003 environmental science majors drafted, proposed and successfully lobbied for a bill that could save the state billions of dollars." The students proposed invasive species legislation, pushed it through twenty-one steps in the legislative process, and had it approved by a 100-0 vote in the House, and a 40-0 vote in the Senate. (v 14, #3)

Fitzhugh, T. W. and Richter, B. D., "Quenching Urban Thirst: Growing Cities and Their Impacts on Freshwater Ecosystems," BioScience 54(no. 8, 2004): 741-754(14). The development of water resources to satisfy urban water needs has had serious impacts on freshwater ecosystem integrity and on valuable ecosystem services, but positive trends are emerging that point the way toward a solution. We demonstrate this through case studies of water resource development in and around five large urban areas: Los Angeles, Phoenix, New York, San Antonio, and Atlanta. Providing freshwater ecosystems with the water flows necessary to sustain their health, while meeting the other challenges of urban water management, will require greatly increased water productivity in conjunction with improvements in the degree to which planning and management take ecosystem needs into account. There is great potential for improvement in both these areas, but ultimately water planners will also need to set limits on human alterations to river flows in many basins in order to spur greater water productivity and protect ecosystem water allocations before water supplies become overtaxed. (v.14, #4)

Fitzhugh, Thomas W; Richter, Brian D, "Quenching Urban Thirst: Growing Cities and Their Impacts on Freshwater", BioScience 54 (no. 8, 1 August 2004):741-7154(14). The development of water resources to satisfy urban water needs has had serious impacts on freshwater ecosystem integrity and on valuable ecosystem services, but positive trends are emerging that point the way toward a solution. We demonstrate this through case studies of water resource development in and around five large urban areas: Los Angeles, Phoenix, New York, San Antonio, and Atlanta. Providing freshwater ecosystems with the water flows necessary to sustain their health, while meeting the other challenges of urban water management, will require greatly increased water productivity in conjunction with improvements in the degree to which planning and management take ecosystem needs into account. There is great potential for improvement in both these areas, but ultimately water planners will also need to set limits on human alterations to river flows in many basins in order to spur greater water productivity and protect ecosystem water allocations before water supplies become overtaxed.

Fitzpatrick, John W. et al (two dozen others), "Ivory-billed Woodpecker (Campephilus principalis) Persists in Continental North America," Science 308(3 June 2005):1460-1462, and other commentary articles. Suspected to be extinct for forty years, now there are reliable sightings, video tapes, and recordings documenting the ivory-billed woodpecker in the Big Woods region of eastern Arkansas, including the Cache River National Wildlife Refuge. But the bird is hard to find; there seem to be thinly distributed individuals in a vast region (over 220,000 hectares).

Fitzpatrick, Kevin, and LaGory, Mark, Unhealthy Places: The Ecology of Risk in the Urban Landscape. New York: Routledge, 2000. City life may be thrilling, exotic, anonymous, and more, but it is bad for your health. (v.13,#4)

Fitzpatrick, William J., "Valuing Nature Non-Instrumentally," Journal of Value Inquiry 38(2004):315-332. In addition to valuing nature instrumentally, humans can also value nature because such valuing is constitutive of flourishing human life. "We ought to value at least some natural things and places non-instrumentally because they in fact have non-instrumental value, due to their irreplaceable, constitutive role in fully flourishing human life." A "closely analogous" relationship is human friendship. We do not value friends instrumentally but because

"friends are fundamental non-instrumental goods in human lives, due to their irreplaceable role in fully flourishing human life" (p. 329). This relationship is not pragmatic, nor does it need to posit intrinsic value in nature. Fitzpatrick is in philosophy, Virginia Polytechnic Institute, Blacksburg, VA.

FitzPatrick, William J. "Climate Change and the Rights of Future Generations: Social Justice Beyond Mutual Advantage." Environmental Ethics 29(2007):369-388. Despite widespread agreement that we have moral responsibilities to future generations, many are reluctant to frame the issues in terms of justice

and rights. There are indeed philosophical challenges here, particularly concerning non-overlapping generations. They can, however, be met. For example, talk of justice and rights for future generations in connection with climate change is both appropriate and important, although it requires revising some common theoretical assumptions about the nature of justice and rights. We can, in fact, be bound by the rights of future people, despite the "non-identity problem," and the force of these rights cannot be diluted by "discounting" future costs. Moreover, a rights-based approach provides an effective answer to political arguments against taking mandatory measures to curb greenhouse gas emissions when these are unpopular with a democratic populace. (EE)

Fitzsimmons, Allan K., Defending Illusions: Federal Protection of Illusions. Lanham, MD: Rowman and Littlefield, 1999. A synopsis is "The Illusion of Ecosystem Management," PERC Reports 17 (no. 5, December 1999):3-5. The main problem is that ecosystems are not real. "Ecosystems are only mental constructs, not real, discrete, or living things on the landscape. They do not breathe, emerge from wombs, or spring from seeds. They are not real, organized entities consciously seeking to perpetuate themselves against internal or external threats to their existence" (p. 4). The second problem is that, even if they were real, we have no idea of what their "health" or "integrity" might mean. There are some further problems, such as the "wooliness" of the ideas of "ecologist Bryan Norton" about ecosystem health and creativity. Fitzsimmons is a geographer and environmental analyst, president of Balanced Resource Solutions, a consulting firm in Woodbridge, Virginia (and no doubt also unreal, since consulting firms are mental constructs and do not breathe, emerge from wombs, or spring from seeds). (v10,#4)

Fiut, I. S., Ekoetyki. Kierunki rozwoju aksjologii współczesnej przyjaznej Źrodowisku (Ecoethics. The Directions of Development of Contemporary Environment-friendly Axiology), Oficyna Wydawnicza ABRYS (ABRYS Press), Kraków, 1999. (v.13,#1)

Fiut, I. S., Ekoetyki. Kierunki rozwoju aksjologii współczesnej przyjaznej Źrodowisku (Ecoethics. The Directions of Development of Contemporary Environment-friendly Axiology), Oficyna Wydawnicza ABRYS (ABRYS Press), Kraków, 1999.

Fiut, Ignacy S., Filozofia ewolucyjna Konrada Zachariasza Lorenza. Studium problemowe i historyczne (Evolutionary Philosophy of Konrad Z. Lorenz. Systematic and Historical Analysis), Krakow, 1994. (v9,#2)

Fixdal, Jon. "Consensus Conferences in Denmark and Norway - A Comparison." Pages 29-38 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Fjelland, Ragnar, "Facing the Problem of Uncertainty," Journal of Agricultural and Environmental Ethics 15(no. 2, 2002):155-169. (JAEE)

Fjellstrom, Roger, "Is Singer's Ethics Speciesist?" Environmental Values 12(2003): 71-90. To show favouritism toward humans has been considered a prejudice, otherwise known as 'human chauvinism', 'anthropocentrism' or 'speciesism'. Peter Singer is one philosopher in particular who holds this view. In this paper I argue that there is a lack of coherence between his ethical ideology and his actual ethical theory. Singer's ethics in crucial respects exhibits favouritism toward humans, which is something he fails to justify non-partially and plausibly. It would thus be an instance of speciesism, in a sense of this term that he probably would accept. This, however, does not mean that his ethics should be rejected or is impossible to defend.

Zwart, Hub, "Aquaphobia, Tulipmania, Biophilia: A Moral Geography of the Dutch Landscape," Environmental Values 12(2003): 107-128. In Genesis (1:9-10) we are told that God gathered the waters into one place, in order to let the dry land appear, which He called earth, while the waters were called

seas. In the Netherlands, this process took more than a single day, and it was the work of man. Gradually, a cultivated landscape emerged out of diffuse nature. In the course of centuries, the Dutch determined the conditions that allowed different aspects of nature to present themselves. This process is described as a moral geography in the sense that different types of landscape are read as a manifestations (or materialisations) of different moral attitudes towards nature, whereas concrete landscape interventions are interpreted as instances of moral criticism directed towards the activities and values of previous generations. At present, this process (the genesis of the Dutch landscape) is being reversed, as diffuse, wetland nature is experiencing a come-back. (EV)

Fjellstrom, Roger, "Specifying Speciesism," Environmental Values 11(2002):63-74. Many philosophers consider favouritism toward humans in the context of moral choice to be a prejudice. Several terms are used for it - "speciesism", "human chauvinism", "human racism", and "anthropocentrism" - with somewhat varying and often blurred meanings, which brings confusion to the issue. This essay suggests that only one term, "speciesism", be used, and it attempts a conceptual clarification. To this end it proposes a set of conditions of adequacy for a concept that would be acceptable to the parties of the controversy. Through an examination of various forms of alleged speciesism it eventually proposes a rather precise concept. On this definition some positions believed not to be speciesist perhaps should be so called, and some positions believed to be speciesist perhaps should not be so called. The latter would better be referred to as "humanistic ethics" or "non-speciesist humanism". (EV)

Fjellstrom, Roger. "Equality Does Not Entail Equality across Species." I critique Peter Singer's view that equality across species is a natural extension of equality. Singer presents one minor and two major arguments. The first major argument is that equality across species is implied by the traditional principle of equality. The second is that it follows from a conception that is behind the principle of equality, namely the moral "point of view of the universe." The minor argument is a theory of the altruistic character and expanding circles of ethics. Environmental Ethics 24(2002):339-352. (EE)

Fjetland, Conrad A., "Possibilities for Expansion of the Migratory Bird Treaty Act for the Protection of Migratory Birds," Natural Resources Journal 40 (No. 1, 2000 Winter): 47- . (v.11,#4)

Fjetland, Conrad A., "The Endangered Species Act and Indian Treaty Rights: A Fresh Look," Tulane Environmental Law Journal 13 (No. 1, 1999 Winter): 45- . (v.11,#4)

Flader, Susan L. "Leopold's Some Fundamentals of Conservation: A Commentary." Environmental Ethics 1(1979):143-48. A commentary on the context of the previously unpublished essay by Leopold, published for the first time in this same issue of Environmental Ethics. This is "perhaps the most significant of Leopold's unpublished manuscripts," though there is evidence that he did not publish it because he was unsatisfied with it. (EE)

Flader is in the department of History, University of Missouri, Columbia, MO. (EE)

Flagstad, O; Hedmark, E; Landa, A; Broseth, H; Persson, J; Andersen, R; Segerstrom, P; Ellegren, H, "Colonization History and Noninvasive Monitoring of a Reestablished Wolverine Population," Conservation Biology 18(no.3, 2004):676-688. (v. 15, # 3)

Flanagan, Maureen A., "Environmental Justice in the City: A Theme for Urban Environmental History," Environmental History 5 (No. 2, 2000 Apr 01): 159- . (v.11,#4)

Flanders, Nicholas E., "Native American Sovereignty and Natural Resource Management." Human Ecology 26(no.3, 1998), p.425. (v.9,#4)

Flannery, Maura C. "Education: The Conservation Aesthetic and the Microscopic Aesthetic. Bioscience

49(No.10, Oct. 1999):801- . (v10,#4)

Flannery, Tim, *The Weather Makers: How Man is Changing the Climate and What It Means for Life on Earth*. New York: Atlantic Monthly Press, 2006. A passionate explanation of human influence on climate change and a call to action. Flannery recalls first being a skeptic about climate change but subsequently realizing that the delicate web of life is being torn apart by human interference in the climate. Examples from all over the globe. Flannery, director of the South Australian Museum, also advocates the "blitzkrieg" theory of mass extinction, arguing that the mass extinction of Australia's large terrestrial vertebrates 50,000 years ago was caused by humans.

Flannery, Tim. *The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth*. New York: Atlantic Monthly Press, 2006. There is evidence that a runaway greenhouse effect has begun. Negative feedback mechanisms are being replaced by positive, feed forward ones. Earth is transitioning to a new equilibrium and humans may be powerless to halt this process. Before the end of this century, it is likely that 60 percent of all species on Earth will be extinct. Flannery is an Australian scientist, recently named "Australian of the Year."

Flaspohler, David J.; Meine, Curt, "Planning for Wildness: Aldo Leopolds Report on Huron Mountain Club," Journal of Forestry 104 (no.1, January/February 2006): 32-42.

Flattau, Edward, Tracking the Charlatans: An Environmental Columnist's Refutational Handbook for the Propaganda Wars. Washington, DC: Global Horizons Press, 1998. Flattau, a U. S. national syndicated columnist since 1972 (the first journalist to specialize in environmental coverage), unmasks the purveyors of false "good news" about the environment. Renewable energy, wetlands, radon, secondhand smoke, recycling, ozone depletion, and land use planning. The environmental movement became mainstream twenty years ago, and most Americans support environmental protection, but now there is a backlash of anti-conservation voices and they are getting away with murder. (v9,#2)

Fleecing of Sheep, The Animals' Agenda 16(Mar.1996):30. To think that wool is a painlessly derived product is to pull the wool over your eyes. The truth is that the production of wool involves suffering and death for sheep, and is intimately linked with the meat industry and lethal "predator control" programs. (v7,#2)

Fleischner, T. L., "Diversity Deep and Wild," Conservation Biology 17(no. 4, 2003): 952-953.

Fleischner, T. L., "Ecological Costs of Livestock Grazing in Western North America," Conservation Biology 8(1994):629-644. About 70% of the eleven U.S. Western states are currently grazed, all types of ecosystems, the most widespread land use practice. There are a host of negative repercussions: reduced densities and biomass of many plant and animal species, reduced biodiversity, spread of exotic species, spread of introduced wildlife diseases, interrupted ecological succession, impeded cycling of the most important nutrient, nitrogen, changed habitat structure, disturbed community organization, especially of riparian areas. Fleischner is in environmental studies at Prescott College, Arizona. This research paper grounds the Society for Conservation Biology, Position Statement on Livestock Grazing," Society for Conservation Biology Newsletter 1 (no. 4, November, 1994):2-3. "The ecological evidence is clear that livestock grazing must be drastically reduced in the American West." (v5,#4)

Fleischner, Thomas. "Revitalizing Natural History." Wild Earth 9(No. 2, Summer 1999):81- . (v10,#4)

Fleishman, E, "The Error of Judgment: Struggling for Neutrality in Science and Journalism," Conservation Biology 16(no.6, 2002): 1451-1453.

Fleming, David, Review of Ekins, Paul and Mayer Hillman and Robert Hutchinson, Wealth Beyond Measure. Environmental Values Vol.1 No.3(1992):274.

Fleming, Deborah., "John Chapman, 1774-1845", Organization and Environment, 15, (No. 4, 2002): 475-481. Prompted by the ongoing creation of an outdoor theme park by the Johnny Appleseed Heritage Center Inc. of Ashland County, Ohio, the author tries to counterbalance the theme park tendency to reduce complex characters to cartoon simplicity by presenting a sketch of the life of Johnny Appleseed, whose real name was John Chapman, stressing his love of nature, his links with the Shawnee and the naturalistic elements in Chapman's broadly Swedenborgian spirituality. Fleming is associate professor of English at Ashland University, Ashland, Ohio.

Fleming, W; Rivera, J; Ageton, C; Jandacek, A; Marmon, J; Messenger, R; Moeller, S; MyersTaylor, D; Santelli, M; Vitela, L, "Transfer of Development Rights as an Option for Land Preservation in a Historic New Mexico Community: La Cienega Valley, Santa Fe County, New Mexico," Natural Resources Journal 41(no. 2, 2001):427-444. (v.13,#1)

Flesher, Gail A., Bryk, Dale S. "How to Incur Liability Without Really Trying: The Perils of Parenthood Under CERCLA." Journal of Environmental Law & Practice 3(Mar.1996):4. Developing case law describes the responsibility of parent companies for environmental liabilities of subsidiaries. (v7,#2)

Flick, Warren A.; Tufts, Robert A.; and Zhang, Daowei. "Sweet Home as Forest Policy." Journal of Forestry 94, no.4 (1996): 4. The U. S. Supreme Court Sweet Home Court Decision and its impact on forest policy. (v7, #3)

Flink, Charles A. and Robert M. Searns, with editing by Loring LaB. Schwarz. Greenways: A Guide to Planning, Design, and Development. Washington, DC: Island Press, 1993. 320 pages. \$ 45.00, hardbound. Greenways are proving to be the most innovative way of preserving a wide variety of economic, ecological, wildlife, and social values. (v4,#2)

Flint, R. Warren, and Houser, W. L., Living a Sustainable Lifestyle for our Children's Children. Lincoln, NE: Authors Choice Press, 2001 ISBN: 0-595-20013-3 (v.12,#4)

Flood, Ann Margaret. Eco-morality: The Extension of Moral Development Theory to an Environmental/Ecological Context and the Development of the Flood Relative Presence Scoring Method to Assess Gender-biased Differences in Moral Orientation. Ph.D. dissertation in psychology at the Fielding Institute, 1992. Eugene Kerfoot was the chief advisor. Investigates the theoretical extension of Kohlberg's moral development theory from the anthropocentric context to an environmental context in terms of care and justice orientations of moral development theory. A new scoring method, the "Flood Relative Presence Scoring Method" is developed to assess more accurately the relative presence of moral orientations. Gender differences found in responses to human moral dilemmas were also found in environmental dilemmas. There is strong evidence that present moral development theory is incomplete, as well as unnecessarily limited to the human domain. With substantial reviews of the field of environmental ethics. (v6,#3)

Flores, Dan, "Bison Ecology and Bison Diplomacy: The Southern Plains from 1800-1850," Journal of American History 78(1991):465-485. Flores claims that the southern plains native Americans, after they got horses from the Spanish, and even before they got guns, within a century were exploiting the bison so effectively that the herds were seriously declining. Soon many Indians were starving; and, even without the Europeans, the bison would well have been driven to extinction before 1900. So much for the myth of the Indian as a good ecologist. In fact, the native American religion contributed to the crisis, since plains Indians believed that buffalo were produced supernaturally every spring in countless numbers in a country

under the ground and swarmed like bees out of a hive from cave openings in unknown locations. Flores teaches environmental history at Texas Tech University. (v9,#2)

Flores, Dan, Horizontal Yellow: Nature and History in the Near Southwest. Albuquerque: University of New Mexico Press, 1999. The complex relationships of humans with the natural environment in the U.S. Southwest. (v10,#4)

Flores, Nicholas E., Carson, Richard T. "The Relationship between the Income Elasticities of Demand and Willingness to Pay," Journal of Environmental Economics and Management 33(no.3, 1997):287. (v8,#3)

Flournoy, Alyson C., "Section 404 at Thirty-Something: A Program in Search of a Policy," Alabama Law Review 55(No. 3, Spring 2004):607-649. In 2002, as the Clean Water Act turned thirty, the program that regulates the discharge of dredged and fill material into water and wetlands was beset by a familiar turbulence, involving fights over the significance of the ordinary high water mark, the meaning and proof required to demonstrate a "hydrologic connection," mitigation requirements, and others. Over the years, both governmental and non-governmental reports have highlighted the persistent gaps in knowledge, enforcement, monitoring, funding, and interagency coordination under section 404, and the attendant disappointing results. Flournoy is in law, University of Florida.

Flournoy, Alyson C., "In Search of an Environmental Ethic," Columbia Journal of Environmental Law 28(no. 1, 2003):63-118. There is a massive corpus of environmental law, but "it is not clear that environmental laws do reflect any clearly articulated ethic that should be called environmental. As a nation we lack an adequate understanding of the values that undergird these laws. ... It is time we ask ourselves those obvious, but frequently overlooked questions. Are our environmental laws simply extensions of the ethical structure of our tort, property and criminal law, designed to protect person and property from certain insults not adequately addressed under the pre-existing common law? Or are they 'environmental laws' in another sense, in that they embody a special valuing of the environment?"

Long article, includes summaries of environmental ethics as a philosophical discipline and whether and how far there is a connection with environmental law. Benefits to be realized from a more adequate study of the ethics embedded in environmental law. Flournoy is in law, University of Florida. (v 14, #3)

Flournoy, Alyson C., "Building an Environmental Ethic from the Ground Up," U.C. Davis Law Review 37(No. 1, Nov. 2003):53-80. Unearthing the ethics embodied in environmental law. To what extent have theories in environmental philosophy had a practical impact on environmental law and policy. Environmental law cannot and will not succeed unless there is strong public commitment to conserving nonhuman nature. Environmental law will not endure or have lasting effect unless environmental philosophy does come down to earth. Such work is vitally important for the future of environmental law as well as for the success of environmental philosophy itself. The American public lacks a coherent account of the values we now pursue under our current environmental laws. Philosophers and legal scholars can help to bring philosophy down to earth by developing "stepping stones" to invoke concepts that represent marginal or gradual change from the dominant human-centered utilitarian ethical framework, as opposed to radically divergent theories of environmental ethics, such as biocentric intrinsic value theory. Sustainability is such a stepping stone. Excellent and thoughtful article linking environmental philosophy and environmental law. Flournoy is in law, University of Florida.

Flournoy, Alyson C., "Beyond the 'Spotted Owl Problem': Learning from the Old-Growth Controversy," Harvard Environmental Law Review 17(no. 2, 1993):261-332. The author considers at extensive length the claim that there is a "spotted owl problem," (that environmental laws, including those protecting endangered species, are too strong and need to be revised to accommodate human welfare and economic

interests), and rejects efforts to weaken or bypass existing laws. Current statutes may, however, be inefficient and risky where legislation intended for the protection of a single species is used to try to protect ecosystems as a whole, such as old-growth forests. The Endangered Species Act is not the problem its detractors claim it to be. On the contrary, the promotion of economic activities inconsistent with widespread ecological values in the absence of effective laws addressing conservation of land and natural resources is the real problem. The challenge is to adapt the law and economic policy to the reality of important ecological constraints. More and better laws alone cannot resolve the problem, however, since gaps in the laws "partly reflect a struggle to find an agreeable environmental ethic on which to build policy. Only with a clearer ethical vision of appropriate preservation goals can better laws be shaped." Thorough and insightful article. Philosophers who think that lawyers do not do their philosophical homework should read this article. Flournoy teaches law at the University of Florida. (v5,#4)

Flowers, R. Wills. "Ethics and the Hypermodern Species." Environmental Ethics 8(1986):185-88. (EE)

Floyd, Donald W., Germain, Rene H., ter Horst, Kate. "A Model for Assessing Negotiations and Mediation in Forest Resource Conflicts." Journal of Forestry 94(May 1996):26. (v7,#2)

Flugel, Peter. Review of Jainism and Ecology: Non-Violence in the Web of Life. Edited by Christopher Key Chapple. Environmental Ethics 27 (2005):201-206.

Flynn, B., "Much Talk But Little Action? 'New' Environmental Policy Instruments in Ireland," Environmental Politics 12(no. 1, 2003): 137-156.

Flynn, Sarah, Gunton, Thomas, "Resolving Natural Resource Conflicts Through Alternative Dispute Resolution: A Case Study of the Timber Fish Wildlife Agreement in Washington State", Environments 23(No.2, 1996):101- . (v7,#1)

Flyvbjerg, Bengt. Rationality and Power: Democracy in Practice. Chicago: University of Chicago Press, 1998, 290. Reviewed by Eeva Berglund. Environmental Values 9(2000):250.

Folke Carl, and Colding, Johan, "Traditional Conservation Practices," Encyclopedia of Biodiversity 5: 681-694. People have inhabited terrestrial ecosystems for thousands of years. Both resource management systems and cosmological belief systems have evolved and continue to develop. In fact, most, if not all, ecosystems and biodiversity have been altered by humans to various degrees. The human imprint has in many cases wiped out species and caused substantial land use change. However, some traditional and contemporary practices do contribute to biodiversity conservation. (v.11,#4)

Folse, Henry J., Jr. "The Environment and the Epistemological Lesson of Complementarity." Environmental Ethics 15(1993):345-53. Following discussions by Callicott and Zimmerman, I argue that much of deep ecology's critique of science is based on an outdated image of natural science. The significance of the quantum revolution for environmental issues does not lie in its alleged intrusion of the subjective consciousness into the physicists' description of nature. Arguing from the viewpoint of Niels Bohr's framework of complementarity, I conclude that Bohr's epistemological lesson teaches that the object of description in physical science must be interaction and that it is now mistaken to imagine that physical science aims to represent nature in terms of properties it possesses apart from interaction. Folse is in the department of philosophy, University of Loyola, New Orleans, LA. (EE)

Foltz, Bruce V. "On Heidegger and the Interpretation of Environmental Crisis." Environmental Ethics 6(1984):323-38. Through an examination of the thought of Martin Heidegger, I argue that the relation between human beings and the natural environment can be more radically comprehended by critically

examining the character of the relation itself with regard to how it has been shaped and articulated by the tradition of Western metaphysics, particularly in light of the manner in which this tradition contains the central presuppositions of both modern natural science as well as contemporary technology. I conclude with an examination of a "deconstructive analysis" of the concept of nature that has dominated Western philosophy; with a delineation of an alternative understanding of the environment, that is nevertheless deeply rooted in the Western tradition, and with a proposal that the present "environmental crisis" ultimately derives not from certain Judeo-Christian "values," as it is commonly claimed, but from the initial metaphysical orientation of early Greek philosophy. Foltz is in the department of philosophy, University of Dallas, Irving, TX. (EE)

Foltz, Bruce V., "On Heidegger and the Interpretation of Environmental Crisis," Environmental Ethics 6(1984):323-338. An examination of Heidegger that shows that the environmental crisis has its roots in Western metaphysics. The central conceptions of natural science and technology objectified nature, thus preventing its own "self-emergence."

Foltz, Bruce V. Inhabiting the Earth: Heidegger, Environmental Ethics, and the Metaphysics of Nature. Atlantic Highlands, NJ: Humanities Press, 1995. Through a comprehensive study of the status of "nature" and related concepts such as "earth" in the thought of Heidegger, Foltz attempts to show how Heidegger's understanding of the natural environment and our relationship to it offers a more promising basis for environmental philosophy than others that have been put forward. Foltz is at Eckerd College, St. Petersburg, Florida. (v7,#1)

Foltz, Bruce V., Inhabiting the Earth: Heidegger, Environmental Ethics, and the Metaphysics of Nature. Reviewed by Robert Frodeman. Environmental Ethics 19(1997):217-219. (EE)

Foltz, Bruce V., and Robert Frodeman, eds., *Rethinking Nature: Essays in Environmental Philosophy*. Bloomington, IN: Indiana University Press, 2004. Twenty essays, with an emphasis on continental philosophy. Samples: James Hatley, "Uncanny Goodness of Being Edible to Bears"; Irene J. Klaver, "Boundary Projects versus Border Patrol"; Robert Kirkman, "Beyond Doubt: Environmental Philosophy and the Human Predicament"; Stephen David Ross, "Biodiversity, Exuberance, and Abundance: Cherishing the Body of the Earth"; Diane Michelfelder, "Contemporary Continental Philosophy and Environmental Ethics: A Difficult Relationship?".

Foltz, Bruce V., and Robert Frodeman, eds., *Rethinking Nature: Essays in Environmental Philosophy*. South Bend, IN: University of Indiana Press, 2004. The voices of leading Continental philosophers brought into discussion about the environmental crisis. Environmental ethics, environmental aesthetics, ontology, theology, gender and the environment, and the role of science and technology in forming knowledge about our world. Contributors are David Abram, Edward S. Casey, Daniel Cerezuelle, Ron Cooper, Bruce V. Foltz, Robert Frodeman, Trish Glazebrook, James Hatley, Robert Kirkman, Irene J. Klaver, Alphonso Lingis, Kenneth Maly, Diane Michelfelder, Elaine P. Miller, Robert Mugerauer, Stephen David Ross, John Sallis, Ingrid Leman Stefanovic, Bruce Wilshire, David Wood, and Michael E. Zimmerman. Foltz is in philosophy, Eckerd College in St. Petersburg, Florida. Frodeman is in philosophy at the University of North Texas.

Foltz, R. C., "Alon Tal. Pollution in a Promised Land: An Environmental History of Israel," Environmental History 8(no. 3, 2003): 484.

Foltz, Richard C., "Iran's Water Crisis: Cultural, Political, and Ethical Dimensions," Journal of Agricultural and Environmental Ethics 15(no. 4, 2002):357-380. By the summer of 2001, most of Iran had been suffering a three-year drought, the worst in recent history. Water rationing was in place in Tehran and other cities, and large proportions of the country's crops and livestock were perishing. Yet

many academics and other experts in Iran insist that the water crisis is only partly drought-related, and claim that mismanagement of water resources is the more significant cause. Underlying this discussion is a complex of overlapping yet often conflicting ethical systems--Iranian, Islamic, and modernist/industrialist--which are available to inform water policy in Iran. A review of the various arguments about the nature of the crisis and the range of solutions that have been proposed, including precedents from traditional Iranian water management and the ethics of water use in Islamic law, suggests that Iran's own cultural heritage provides alternatives to wholesale adoption of Western models. KEY WORDS: Iran. Islamic law. qanat, sustainable development, water management, Zoroastrianism. Foltz is in the Department of Religion, University of Florida, Gainesville, FL. (JAEE)

Foltz, Richard C., ed., Worldviews, Religion, and the Environment: A Global Anthology. Belmont, CA: Wadsworth/Thomson Learning, 2003. The sections are: The Seeds of a Green Theology; Humans, Nature, and Modernity; First Peoples; South Asian Traditions; Buddhism; Chinese Traditions; Japanese Traditions; Judaism; New Cosmologies and Visions; Globalization, Community, and Ecojustice. Over sixty contributors. Foltz teaches religious studies at the University of Florida. (v.13, #3)

Foltz, Richard C., "Environmental Initiatives in Contemporary Iran," Central Asian Survey 20(no. 2, 2001):155-165. "The land of Iran possesses the greatest degree of biodiversity on south-western Asia. The country claims many of the world's ecosystem types, from high mountains and deserts to semi-tropical forests and marine environments. Yet ... with rapid overpopulation, desertification and the endangerment of virtually all species in the country ... Iran's environmental problem is among the most critical in the world. ... Tehran has been classified as one of the ten most polluted cities in the world. ... [Yet] in Iran today the government stand on the environment, formally enshrined in the nation's constitution, as well as the energy and motivation of environmental NGOs and the rate at which public awareness of environmental issues is increasing, are all impressive." Iran is probably the only country that claims Islam as the basis of its national environmental ethic. Foltz is in religion at the University of Florida. (v.12,#4)

Foltz, Richard C., "Mormon Values and the Utah Environment," Worldviews 4(2000):1-19. Although there has been little if any discussion of Mormon environmentalism outside the tradition, it is increasingly apparent that such an ethic does exist--though whether this ethic is with or against the current of formal LDS teaching is less clear. This article probes an overview of contemporary Mormon ecological thought and its roots within the LDS tradition, and highlights some of the tensions connected with environmental issues within the Mormon community today in Utah and elsewhere. Foltz teaches religious studies at the University of Florida, Gainesville. (v.11,#3)

Foltz, Richard C., *Animals in Islamic Tradition and Muslim Cultures* (Oxford, UK: Oneworld Publications, 2006). Reviewed by Nadeem Haque, *Journal of Agricultural and Environmental Ethics* 20(2007):545-553.

Foltz, Richard C., Review of Kemmerer, Lisa, *In Search of Consistency: Ethics and Animals* (Leiden: Brill, 2006). *Journal of Agricultural and Environmental Ethics* 20(2007):543-544.

Foltz, Richard. "Is There An Islamic Environmentalism?" Environmental Ethics 22(2000):63-72. Contemporary Muslim writers have demonstrated that an environmental ethic can be derived from the scriptural sources of Islam. However, at present, the impact of this type of interpretation within the Muslim world appears to be minimal. The most promising prospects for disseminating an environmental awareness based on Islamic principles have come from governments, such as those of Iran, Pakistan, and Saudi Arabia, which claim Islam as a basis for legislation. (EE)

Food Animal Well-Being: 1993 Conference Proceedings and Deliberations. West Lafayette, IN: Purdue University Office of Agricultural Research Programs, 1993.

Foot, Philippa, Natural Goodness. Oxford: Clarendon Press, 2001. "'Natural' goodness, as I define it, which is attributable only to living things themselves and to their parts, characteristics, and operations, is intrinsic or 'autonomous' goodness in that it depends directly on the relation of an individual to the 'life form' of its species. On barren Mars there is no natural goodness" (p. 27). "The central feature of my own account is that it will set the evaluation of human action in the wider contexts not only of the evaluation of other features of human life but also of evaluative judgements of the characteristics and operations of other living things" (p. 25).

"I am therefore, quite seriously, likening the basis of moral evaluation to that of the evaluation of behavior in animals. I should stress, however, that it is important not to underestimate the degree to which human communication and reasoning change the scene. The goods that hang on human cooperation, and hang too on such things as respect for truth, art, and scholarship, are much more diverse and much harder to delineate than are animal goods. Animals are different also from us in that to do what they should do--what is needed and is within their capacity--they do not have to understand what is going on; whereas a human being can and should understand that, and why, there is a reason for, say, keeping a promise or behaving fairly" (p. 16). Foot is in philosophy, Oxford University.

Foot, A. Lee; Pandey, Sanjeeva; and Krogman, Naomi T. "Processes of Wetland Loss in India." Environmental Conservation 23, no.1 (1996): 45. (v7, #3)

Forbes, Graham J., and Theberge, John B. "Cross-Boundary Management of Algonquin Park Wolves." Conservation Biology 10, no.4 (1996): 1091. (v7, #3)

Forbes, LC, "Book Review: Our National Parks and the Search for Sustainability. By Bob R. O'Brien. University of Texas Press, Austin, 1999, 246 pp," Human Ecology 30(no.4, 2002): 555-558.

Forbes, Linda C. & Jermier, John M. "The Institutionalization of Bird Protection: Mabel Osgood Wright and the Early Audubon Movement", Organization and Environment, 15, (No. 4, 2002): 458-474. The authors focus on a relatively unknown segment of the early American conservation movement, examining the period around 1900, a time in which birds were being slaughtered at an alarming rate, in part to supply milliners who used plumes and other bird parts to decorate women's hats. These practices led to a groundswell of opposition that eventually turned the tide in favor of bird protection and appreciation, forming a foundation for today's activism on behalf of beleaguered birds. One of the key leaders of this movement was Mabel Osgood Wright, who like many significant conservationist women of that era is only now beginning to receive the recognition that she deserves. The authors highlight three major projects to which Wright devoted her energy, namely the early Audubon Society, children's nature writing and education, and the Birdcraft Sanctuary, and discuss them as institutional manifestations of the early conservationists' bird-loving philosophy. Extracts from three of Wright's most important publications are also reprinted, in order to provide relevant insights for contemporary environmental protection and organizing. Forbes is an assistant professor in Franklin & Marshall College, Lancaster, Pennsylvania, with interests in cultural studies, environmental philosophy and history, and a feature editor of Organization and Environment. Jermier is professor of organizational behavior in the College of Business at the University of South Florida, and editor of Organization and Environment.

Forbes, Malcolm, S., Jr., "People Are an Asset, not a Liability," Forbes, September 12, 1994. An editorial. At the Cairo conference, "the real issue is that curbing population growth is critical for economic development. That premise is preposterous. A growing population is not a drag on economic development. When combined with freedom, it is a stimulant." The richest countries in the world are the most densely populated, and people are poor only where governments dominate and suffocate economic

activity. "A growing population helps improve the quality of life." "Free people don't 'exhaust' resources; they create them."

Forbes, Nancy, Imitation of Life: How Biology is Inspiring Computing. Cambridge, MA: MIT Press, 2004. Generations of engineers have recognized that often biology does it better. Similarly computer scientists are impressed with the computing powers in DNA and other biological processes. Neural nets, genetic algorithms, cellular automata, hierarchy, modularity, layers of control, system architecture, organizing for large-scale complexity, and more. (v.14, #4)

Forbes, William and Lindquist, Christopher, "Philosophical, Professional, and Environmental Ethics: An Overview for Foresters," Journal of Forestry 98 (No. 7, 2000 July 01): 4- . Discussions of contemporary environmental ethics should emphasize the importance of case-specific flexibility, workplace settings, and experiential learning in ethical decision making. (v.11,#4)

Force, Jo Ellen. "The Human Ecosystem, Part II: Social Indicators in Ecosystem Management," Society & Natural Resources 10(no.4, 1997):369. (v8,#3)

Ford, Andrew. Modeling the Environment: An Introduction to System Dynamics Modeling of Environmental Systems. Covelo, CA: Island Press, 1999. 480 pp. \$70 cloth, \$40 paper. Basic concepts of modeling using system dynamics; the design and application patterns of dynamic behavior; exercises for students. (v.10,#1)

Ford, Gary D., "Love of the Lowcountry," Southern Living October 2005, pp. 128-133. The Ashepoo, Combahee, and Edisto basin (ACE) in lowcountry South Carolina between Beaufort and Charleston, and the work of the ACE Task Force, preserving and managing a blend of deep forests, spartina grasses, tidal rivers, and fields, old rice dikes, old homes and homesites, and rural countryside, resulting in a treasured mix of nature and culture. A much loved and lightly used landscape. The ACE lovers/managers delight in pointing out that their landscape is not pristine but abundantly natural.

Ford, H. A., Barrett, G. W., and Recher, H. F., "Why have birds in the woodlands of Southern Australia declined?" Biological Conservation 97(no. 1, 2001):71- . (v.12,#2)

Ford, Peter, "Howl over Wolves' Return," Christian Science Monitor, November 1, 1999, pp. 12-13. While there are thousands of wolves in Italy and Spain, wolves have been extinct in France for over half a century--until 1992 when a pair was sighted in the French Alps, presumably having come from the Italian population. Many people have welcomed the idea of wolves in the French Alps, but to shepherds it is a catastrophe. Today there are about 50 wolves in the Alps and they have killed about 1,000 sheep. The best hope seems to lie in a guard dog, the pastou, the Great Pyrenean Mountain Dog. (v.11,#1)

Ford, Peter, "Howl over Wolves' Return," Christian Science Monitor, November 1, 1999, pp. 12-13. While there are thousands of wolves in Italy and Spain, wolves have been extinct in France for over half a century--until 1992 when a pair was sighted in the French Alps, presumably having come from the Italian population. Many people have welcomed the idea of wolves in the French Alps, but to shepherds it is a catastrophe. Today there are about 50 wolves in the Alps and they have killed about 1,000 sheep. The best hope seems to lie in a guard dog, the pastou, the Great Pyrenean Mountain Dog. (v10,#4)

Forell, Parker, "A Fox in the Forest," Call to Earth. vol. 2, no. 1, 2001, pp. 13-14. An account of an encounter with a fox. (v.12,#2)

Foreman, Dave, "Am I a Free Market Environmentalist?" PERC Reports 14 (no. 1, March 1966):1, 4-5. PERC is published by the Political Economy Research Center, 502 S. 19th Ave., Suite 211, Bozeman,

MT 59719. The Wildlands Project has a goal of protecting and restoring the ecological richness of North America. Private property and voluntary agreements play a big role in that. Landowners who host endangered species should be honored as good members of the community and as good stewards of their land. Am I a free-market environmentalist? Naw, I'm an agnostic. But I'm a friendly agnostic. Dave Foreman, co-founder of Earth First!, now heads the Wildlands Project. (v7,#1)

Foreman, Dave, Rewilding North America: A Vision for Conservation in the 21st Century. Island Press, 2004. This work lays out an audacious vision for landscape conservation and restoration in North America. The first part reviews the "bad news" of anthropogenic changes to land and its associated effects, such as pollution, habitat loss and extinctions. The second part reviews the "good news" represented by the science of conservation biology and visions for continent-wide "metalinkages" among remaining sections of habitat. The third part provides a plan of action for rewilding the continent.

Foreman, Dave, Books of the Big Outside lists over 400 books, with annotated descriptions, also maps, cassette's and CD's, is issued quarterly, and is a valuable resource bibliography. Ned Ludd Books, P. O. Box 85190, Tucson, AZ 85754-5190. (v4,#2)

Foreman, Dave, The Lobo Outback Funeral Home. Boulder, CO: University Press of Colorado, 2000. A novel about a burned-out Sierra Club lobbyist who leaves Washington, convinced that nothing can stop the human war on nature, and retreats to a cabin in southwestern New Mexico's Diablo National Forest. But he falls in love with a biologist, as pretty as she is tough, who tries to draw him into the defense of the Diablo Wilderness and a pack of lobos, Mexican wolves. He first refuses, then is soon caught up the bloody consequences of his cynicism, not taking a stand for what he loves. Foreman was a founder of Earth First! in 1980 and is the author of Confessions of an Eco-warrior. (EE v.12,#1)

Foreman, Dave, Confessions of an Eco-Warrior (New York: Harmony Books, 1991. \$20.00. 229 pages. By the controversial founder of Earth First! (v2,#1)

Foreman, Dave, interviewed by Jeremy Lloyd, "Redneck for Wilderness," The Sun, December 2005, pp. 4-12. "I hate the word environment. You can love a forest. You can love a mountain. You can love a plant. But how can you love an abstract concept like the environment?" Foreman does not disavow his monkeywrenching, but now prefers to tap what he sees as a social consensus favoring conservation.

Foreman, Dave. "Wilderness: From Scenery to Nature," Wild Earth 5, no. 4 (Winter 1995):8-16. Wilderness and National Parks have been set aside largely as scenic areas, useful for recreation, and not useful for agricultural or other development. This results in poor protection of overall biodiversity on a continental scale. (v6,#4)

Foreman, Dave. "Martin, Watson, and Eco-sabotage. Environmental Ethics 13(1991):287. (EE)

Foreman, Dave. "More on Earth First! and The Monkey Wrench Gang." Environmental Ethics 5(1983):95-96. (EE)

Foreman, Dave. "Wilderness Areas and National Parks," Wild Earth 5, no. 4 (Winter 1995): 60- . (v6,#4)

Foreman, Dave; Daly, Kathy, "An Ecological Approach to Wilderness Area Design," Wild Earth 10(no.4, Wint 2000):66-. (v.12,#4)

Forest Ecosystem Management Assessment Team, US Forest Service (FEMAT), Forest Ecosystem Management: An Ecological, Economic, and Social Assessment. Washington: U. S. Government Printing Office, 1993. (v.9,#4)

Forest, Marguerite S. E., Ought and Can in Environmental Ethics: Ethical Extensionism and Moral Development, Summer 1992. Extending the range of moral concern from humans to animals to plants to ecosystems, compared with stages in moral development. The position of J. Baird Callicott fails because the full sequence of stages has not been developed. Lawrence Kohlberg's concept of justice is inadequate because it is anthropocentric and not holistic and ecosystemic. Carol Gilligan's caring orientation integrates the needed holistic environmental ethics and the more advanced moral stages. (v3,#4)

Forester, Deborah J., and Machlis, Gary E. "Modeling Human Factors That Affect the Loss of Biodiversity." Conservation Biology 10, no.4 (1996): 1253. (v7, #3)

Forje, John W., Review of Christodoulou, D., The Unpromised Land. Environmental Values Vol.1 No.2(1992):183.

Forman, R. T. T. Land Mosaics: The Ecology of Landscapes and Regions. New York: Cambridge University Press, 1995. 632 pages. (v7, #3)

Forman, RTT, "Road Ecology's Promise: What's Around the Bend?," Environment 46(no.4, 2004):8-21. (v. 15, # 3)

Forrester, Mary Gore. Persons, Animals, and Fetuses: An Essay in Practical Ethics. Hingham, MA: Kluwer Academic Publishers, 1996. 312pp. \$138 cloth. Forrester, both nurse practitioner and philosopher, discusses animal rights, obligations concerning future generations, abortion, limiting medical treatment, and euthanasia. (v7,#4)

Forsberg, Ellen-Marie, "Pluralism, The Ethical Matrix, and Coming to Conclusions," *Journal of Agricultural and Environmental Ethics* 20(2007):455-468. The ethical matrix approach was developed by Prof Ben Mepham and his colleagues at the University of Nottingham in the early 1990s. Since then the approach has received increasing attention and has been used by several researchers in different projects related to assessing ethical impacts of different food production technologies and other policy options of societal concern. The ethical matrix is sometimes understood simply as a checklist of ethical concerns, but might also be seen as a guide to coming to conclusions on moral questions. The problem I discuss in this paper relates to how using the ethical matrix method as a decision guide can be combined with respecting pluralism. The aim of the paper is to suggest a framework making it possible to - at the same time - enhance public justification of judgments and respect pluralism. I argue that pluralism is fundamental to the ethical matrix approach; I distinguish between intuitionist *principled pluralism* and societal *value pluralism*; and I show how both kinds of pluralism imply restrictions on how conclusions can be made. No substantive moral decision principles can be allowed. Still, I argue, decision principles of a more epistemological or procedural character can be acceptable even within pluralism. The pragmatist principle of inquiry is defended as an account of moral problem solving compatible with both principled pluralism and value pluralism. When an ethical matrix is used within such a participatory inquiry process substantive conclusions can be drawn.

Forsberg, Ellen-Marie, "Value Pluralism And Coherentist Justification of Ethical Advice," *Journal of Agricultural and Environmental Ethics* 20(2007):81-97. Liberal societies are characterized by respect for a fundamental value pluralism; i.e., respect for individuals' rights to live by their own conception of the good. Still, the state must make decisions that privilege some values at the cost of others. When public ethics committees give substantial ethical advice on policy related issues, it is therefore important that this advice is well justified. The use of explicit tools for ethical assessment can contribute to justifying advice. In this article, I will discuss one approach to ethical assessment, the ethical matrix method. This method is a variant of intuitionist balancing. Intuitionism is characterized by stressing the existence of several (at least two) fundamental *prima facie* moral principles, between which there is no given rank order. For

some intuitionist approaches, coherentism has been proposed as a model of justification. This article will discuss justification of ethical advice and evaluate the appropriateness of coherentism as a justificatory approach to intuitionist tools. Keywords: coherentism - ethical matrix - ethical tools - intuitionist balancing - justification - prima facie principles - value pluralism. Forsberg is with the The National Committees for Research Ethics, Sentrum, Oslo, Norway.

Forsyth, DM; Duncan, RP; Bomford, M; Moore, G, "Climatic Suitability, Life-History Traits, Introduction Effort, and the Establishment and Spread of Introduced Mammals in Australia", Conservation Biology 18 (no.2, 2004): 557-569.

Forsyth, Tim, Critical Political Ecology: The Politics of Environmental Science. London: Routledge, 2003. Reviewed by Katherine Farrell. Environmental Values 13(2004):403-406. (EV)

Fort, Denise D. "State and Tribal Water Quality Standards Under the Clean Water Act: A Case Study." Natural Resources Journal 35, no.4 (1995): 771. (v7, #3)

Fortey, Richard, Life: A Natural History of the First Four Billion Years. New York: Alfred A. Knopf, 1998. 346 pages. A celebration of biodiversity over the millennia by the senior paleontologist at the Natural History Museum in London and a Fellow of the Royal Society. On Stephen Jay Gould and his sheerly continent wonderful life, with disparate dead ends in the Burgess Shale: "If palaeontology has a priesthood, then Steve Gould is the pontiff. The Burgess Shale, however, was one case where he has, I think, been fallible. The excitement of the ideas being promulgated was so seductive that he simply passed over the real evidence presented by the Burgess fossils. ... One may still marvel at the fecundity of nature without making wild assertions about every fossil belonging to a different world. ... Any history of life is torn between portraying the narrative of successive species as orderly, almost a logical progression, and as something trawled from mighty disorder and upheaval from which chance alone picks survivors. ... Many Cambrian animals actually do make more sense in the light both of what came after them and of what is still alive today. ... Despite the claims of the 'new phylum' enthusiasts ... there are relatively Cambrian designs which are wholly unfamiliar to us. ... [They are] rather like improvisations upon an underlying musical theme that we can only recognize if we listen very carefully" (pp. 97-99). (v.10,#1)

Fortin, Ernest L., "The Bible Made Me Do It: Christianity, Science, and the Environment," The Review of Politics 57 (no. 2, 1995).

Fortmann, Louise. "Voices from Communities Managing Wildlife in Southern Africa," Society & Natural Resources 10(no.4, 1997):403. (v8,#3)

Fortmann, Louise. "Bonanza! The Unasked Questions: Domestic Land Tenure Through International Lenses," Society & Natural Resources 9(no.5, 1996):537. (v7,#4)

Foster, Catherine, "War in the Pacific: Legacy of a Copper Mine," The Christian Science Monitor 86 (20 July 1994):10-11. Residents of the small island of Bougainville have fought for six years to save their environment and gain independence from Papua New Guinea. (v5,#3)

Foster, Charles H.W., "Nonprofits in Forestry: Lessons from Three New England States," Journal of Forestry 99(no.1, 2001 Jan 01): 27-. Leaders of New England conservation organizations are enthusiastic about their individual roles and convinced that working together--with each other, with industry, and with government--has genuine potential for promoting good forestry. (v.12,#3)

Foster, Cheryl, Aesthetics and the Natural Environment. Ph.D. dissertation at the University of Edinburgh, Department of Philosophy. 1993. Advisor: Ronald Hepburn. Foster claims that most

contemporary aesthetics of nature relies on either of two models, one based on art history and criticism, the other based on scientific categories and interpretation. Most accounts cling magnetically to one pole or the other. Either the aesthetic power of nature emerges by analogy or in association with art and its concomitant history and criticism; or, nature's beauty is seen to be properly understood only in deference to scientific knowledge or hypothesis. Neither approach can fully articulate the relationship between natural beauty and ourselves, the beings who encounter it.

Foster holds that Kant and Schopenhauer have been particularly misrepresented with regard to natural beauty and finds them productive for a theory of environmental aesthetics. She continues to develop a theory that is bound by neither art nor science. She examines the role of non-perceptual factors and of ethical and other constraints on aesthetic appreciation (with attention to Allen Carlson). The difference between aesthetic qualities (Sibley) and aesthetic properties (Mothersill) is analyzed in order to defend the idea that aesthetic judgements are singular and not governed by rules or principles. Nature's multi-sensuousness is involved in discerning relevant aesthetic properties. Andrew Brennan's ecological humanism is a useful model. Both the art-based and the science-based models of natural beauty are interesting and relevant, but neither is comprehensive enough to represent the range of concerns in environmental aesthetics. Foster is in the department of philosophy at the University of Rhode Island. (v4, #3)

Foster, Cheryl. Review of Allen Carlson, Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture, London: Routledge, 2000, Environmental Values 10(2001):548. (EV)

Foster, Cheryl. "Aesthetic Disillusionment: Environment, Ethics, Art." Environmental Values Vol.1 No.3(1992):205-216. ABSTRACT: What happens when an object you take to be beautiful or aesthetically pleasing, no longer appears beautiful or pleasing when you learn something new about it? I am assuming a situation in which there is no direct change in the perceptual features of the object, and that what you learn is not the location of some new surface property but rather a bit of non-perceptual information. I classify episodes of dampened appreciation under the heading 'aesthetic disillusionment,' and in this paper I explore the relationship between such episodes and the broader issue of ethical constraints on aesthetic activity and appreciation. Does it make sense to say that one should not, or ought not, take pleasure in certain objects or events? I think it does--but in a very particular, almost ecological way. The subsequent discussion focuses on ethical constraints as they operate on the aesthetic appreciation of objects and events within the natural environment. KEYWORDS: Environmental aesthetics, life-denying processes, life values, nature and art. Philosophy Department, University of Rhode Island, Adams Hall, Kingston, RI 02881-0813, USA.

Foster, Cheryl. Review of Salim Kemal and Ivan Gaskell, eds. Landscape, Natural Beauty and the Arts: (Cambridge University Press, 1993). Environmental Values 4(1995):88-89. (EV)

Foster, D; Swanson, F; Aber, J; Burke, I; Brokaw, N; Tilman, D; Knapp, A, "The Importance of Land-Use Legacies to Ecology and Conservation", Bioscience 53(no.1, 2003):77-88.

Foster, David R., Aber, John D., Bazazz, Fakhri A. "Forest Response to Disturbance and Anthropogenic Stress," Bioscience 47(no.7 1997):437. Rethinking the 1938 Hurricane and the impact of physical disturbance vs. chemical and climate stress on forest ecosystems. (v8,#3)

Foster, David R., Thoreau's Country: Journey through a Transformed Landscape. Cambridge: Harvard University Press, 1999. Thoreau had to hunt for some wildness on a largely transformed, agrarian landscape. But already New England farmers were being outcompeted by Mid-West farmers and many fields were being abandoned, and Thoreau's journals are full of observations of returning wildness. One observation is that farmers let cattle continue to graze on disused fields, and this may have accelerated the growth of pines over hardwoods, although pines do naturally return first to open fields. The returned

forest in New England may be a peculiarly New England product. Foster is director of the Harvard Forest. (v.10,#1)

Foster, David R., and John D. Alber., eds., Forests in Time: The Environmental Consequences of 1,000 Years of Change in New England. New Haven: Yale University Press, 2004. Mostly the story of the Harvard Forest, though with wider implications. Climatic and vegetation changes, natural disturbances (such as hurricanes, pests, and pathogens), the impacts of Native Americans and fire, the history of land use and landscape transformation, present-day changes, and introduced pests and species. The return of forests in the last century, from about 40 percent to 60 to 90 percent of the landscape. One conclusion is that the present forest results from much human impact, but another conclusion, in some tension with this, is that the forest returns quite quickly and vigorously. (v.14, #4)

Foster, J. B., Buttel, F. H. and Trojnar, K., "Review of: Hungry for Profit: The Agribusiness Threat to Farmers, Food, and the Environment, edited by Fred Magdoff," Journal of Environment and Development 10(no.4, 2001): 405-08. (v.13,#2)

Foster, John Bellamy, "Ecology against Capitalism," Monthly Review 53 (no. 5, October 2001): 1-15. "A large part of the answer as to why contemporary society refuses to recognize the full human dependence on nature undoubtedly has to do with the expansionist logic of a capitalist system that makes the accumulation of wealth in the form of capital the supreme end of society" (p. 1). "We are faced with a stark choice: either reject "the gods of profit" as holding out the solution to our ecological problems, and look instead to a more harmonious coevolution of nature and human society, as an essential element in building a more just and egalitarian social order--or face the natural consequences, an ecological and social crisis that will rapidly spin out of control, with irreversible and devastating consequences for human beings and for those numerous other species with which we are linked" (p. 15). Forthcoming in book form. (v.13,#1)

Foster, John Bellamy, "Marx's Ecology: Materialism and Nature," Philosophy and Geography 5 (No. 1, 2002): 117-119. Book reviewed by Scribner, F. Scott. (P&G)

Foster, John Bellamy, "Capitalism and the Ancient Forest," Monthly Review 43(no. 5, October 1991):1-17. Summary of events in the Pacific Northwest over recent years, with a focus on capital's destruction of the forest, "a story of how capital has sought to weather a growing political crisis associated with the destruction of the ancient forest by turning its two main enemies--the workers and the environmentalists--against each other." Foster teaches sociology at the University of Oregon. (v2,#4)

Foster, John, ed. Valuing Nature? Ethics, Economics and the Environment. London: Routledge, 1997. Reviewed by Wilfred Beckerman. Environmental Values 9(2000):122.

Foster, John Bellamy, Marx's Ecology: Materialism and Nature. New York: Monthly Review Press, 2000. Contests conventional accounts of Marx and nature. Marx, it is often assumed, cared only about industrial growth and the development of economic forces. But this neglects Marx's writings on capitalist agriculture and soil ecology, philosophical naturalism, and evolutionary theory. Marx, a powerful critic of capitalist society, was also deeply concerned with the changing human relationship to nature. Foster is in sociology at the University of Oregon. (v.11,#2)

Foster, John, Review of Jonathan Bate, The Song of the Earth, London: Picador, 2000, Environmental Values 10(2001):541. (EV)

Foster, John Bellamy. Marx's Ecology: Materialism and Nature. Reviewed in Environmental Ethics 25(2003):313-315. (EE)

Foster, John, Review of Piers H. G. Stephens, John Barry, and Andrew Dobson, eds., *Contemporary Environmental Politics*, *Environmental Values* 16(2007):542-544.

Foster, John. Review of Richard Kerridge and Neil Sammells, eds., Writing the Environment: Ecocriticism and Literature, London: Zed Books, 1998, *Environmental Values* 10(2001):541. (EV)

Foster, Leeann, "Wildlands and System Values: Our Legal Accountability to Wilderness," Vermont Law Review 22 (no. 4, summer 1998):917-951. "The paradox that is the modern American has given rise to the conflicting values that are embodied in wilderness law. Having outgrown, to a certain extent, notions that wild nature exists solely as something to be conquered, we encouraged our leaders to preserve what we once freely enjoyed, because after having enjoyed so much of it, we were loath to watch it disappear. The Wilderness Act manifests this reluctance. ... What the Wilderness Act did not do, however, was to consider the systems-character of the wild lands it set aside. ... An ecosystems or transboundary approach to wilderness preservation through which systems accountability to wild lands is achieved will likely not pass quietly into law" (pp. 950-951). Foster is now practicing environmental law in New Jersey. She finished Vermont Law School in 1998 and in 1994 a M.A. in environmental philosophy at Colorado State University. (v.9,#4)

Foster, Leeann, The Self in Environmental Philosophy: Identification, Intrinsic Value and an Ecology of Self and Nature, M. A. thesis at Colorado State University, spring 1994. Foster examines the deep ecological concept of self in comparison and contrast with the environmental ethical concept of self. Deep ecologists, such as Warwick Fox and Freya Mathews, expand the self into an identification with the whole, while environmental ethicists, such as Holmes Rolston, maintain a sense of others, centers of intrinsic value in the nonhuman natural world, who are morally considerable as others, differentiated from one's own self, and to whom one has duties of respect. Nevertheless the deep ecologists can find a place for pluralism and Rolston's ethic is based as much on love as it is on duty. Both ways of thinking are contrasted with the traditional concept of the autonomous self, represented by Kant. (v5,#1)

Foster, Susanne E. "Aristotle and the Environment." There are three potential problems with using virtue theory to develop an environmental ethic. First, Aristotelian virtue theory is ratiocentric. Later philosophers have objected that Aristotle's preference for reason creates a distorted picture of the human good. Overvaluing reason might well bias virtue theory against the value of non-rational beings. Second, virtue theory is egocentric. Hence, it is suited to developing a conception of the good life, but it is not suited to considering obligations to others. Third, virtue theory is notoriously bad at providing rules and procedures for resolving ethical questions about particular circumstances. But environmentalists need procedures for determining which of several conflicting values is most important. Virtue theory is not action guiding. I respond to each of these problems. I show that virtue theory is uniquely suited to answering ethical questions about nonhuman animals and the environment. Environmental Ethics 24(2002):409-428. (EE)

Fothergill, Alastair. *Planet Earth As You've Never Seen It Before*. Berkeley: University of California Press, 2007. This is the companion book to the Discovery Channel/BBC series. The series was one of the most ambitious natural history projects ever undertaken, with the latest in state-of-the-art cameras and high-definition technology.

Foulon, J., Lanoie, P., and Laplante, B., "Incentives for Pollution Control: Regulation or Information?," Journal of Environmental Economics and Management 44(no.1, 2002): 169-87. (v.13,#4)

Foundations of Science, Vol. 2, No. 2 (1997). Kluwer Academic Publishers. A special issue, edited by Matthais Kaiser, on "The Precautionary Principle and Its Implications for Science." Articles by J.

Lemons, K. Shrader-Frechette, Matthias Kaiser, L. Westra, and many others. (v9,#1)

Fountain, Henry, "Return to the Wild," New York Times (4/4/00). Captured Condor Set Free. One of the original 27 California condors captured in the 1980s for a captive breeding program to prevent extinction of the species was released into the wild. "Adult Condor No. 8," a female from 28 to 40 years old, had produced 12 offspring in captivity and is now beyond breeding age. The hope is that she will be a mentor for two captive bred 10-month-old condors released with her, showing them places to forage and roost. There are now 155 condors, including 56 that have been released into the wild. (v.11,#1)

Fountain, Henry, "Defending the Park," New York Times (1/9/01): D5. National parks in developing world successful in protecting biodiversity. A study of 93 parks in tropical countries found that despite being under intense land-use pressure from local people, the parks were effective in protecting the ecosystems and species within them. Almost of the parks were in better shape than the land immediately surrounding them; they had less logging, burning, and grazing and more wild animals. 85% were successful against encroaching agriculture. The presence of guards and penalties were effective deterrents (though less so against hunting). The study is represented as a response to critics who claim that such parks will fail if they are aimed solely at protecting nature without accommodating the needs of local people. (EE v.12,#1)

Fouts, Roger, with Mills, Stephen Tukel, Next of Kin: What Chimpanzees Have Taught Me About Who We Are. New York: William Morrow and Co., 1997. 420 pages. Fouts is a well-known psychologist with over thirty years of experience studying and caring for captive chimpanzees, including Washoe. He generally argues that chimpanzees have been treated badly by researchers. Introduction by Jane Goodall. (v.8,#4)

Fowler, Alan. Striking A Balance. Covelo, CA: Island Press, 1997. 320 pp. \$24.50. This is a guide to how non-governmental organizations involved in international development can simultaneously increase the scale of their impact, diversify their activities, respond to long-term humanitarian crises, and improve their performance. (v8,#2)

Fowler, Robert Booth, The Greening of Protestant Thought. Chapel Hill: University of North Carolina Press, 1965. 260 pages. \$ 14.95 paper. Explores the theological, political, and policy debates within U. S. Protestant thought from 1970-1990 concerning the environment and the environmental crisis. (v6,#2)

Fowler, Robert. "International Environmental Standards for Transnational Corporations." Environmental Law 25 (no. 1, 1995): 1- . The challenges inherent in applying environmental standards to transnational corporations, the various methods that could be used to regulate transnationals, and a concluding argument for extraterritorial application of disclosure statutes as a means of imposing stricter self-regulation. (v6,#1)

Fox, Camilla H, "Raining Bullets: The Aerial War on Coyotes," The Animals' Agenda 21(no.1, JAN 01 2001):18-. Killing coyotes costs many taxpayer dollars as well as the lives of some government agents. (v.12,#4)

Fox, Jefferson, Truong, Dao Minh, and Leisz, Stephen, "Shifting Cultivation: A New Old Paradigm for Managing Tropical Forests," Bioscience 50 (No. 6, 2000 Jun 01): 521- (v.11,#4)

Fox, M. A., The case for animal experimentation. An evolutionary and ethical perspective. Berkeley: University of California Press, 1986.

Fox, Matthew, Sheer Joy: Conversations with Thomas Aquinas on Creation Spirituality. San Francisco:

Harper and Row, 1992. 532 pages. \$ 18.00. Fox is a Dominican priest and Director of the Institute in Culture and Creation Spirituality, Oakland, CA. (v3,#4)

Fox, Michael W., Bringing Life to Ethics. Albany, NY: SUNY Press, 2000. We ought to use the compass of global bioethics--humility, responsibility, interdisciplinary and intercultural competence--to counter technological, ecological, and value threats, moving toward a human and sustainable society. Fox, a veterinarian, writes the nationally syndicated column, "Ask the Animal Doctor." (v.11,#4)

Fox, Michael Allen. "Vegetarianism and Planetary Health." Ethics and the Environment 5(2000):163-174. I begin by asserting that a vegetarian, even a vegan diet, from a nutritional standpoint, is at least as healthy as, and in all probability healthier than, one which centers on or includes meat. Scientific evidence supporting this claim is beginning to accumulate, and abundant material is available for those who wish to pursue the issue (Anonymous 1988a; Anonymous 1988b; Barnard 1993; Chen 1990; Melina, Davis, and Harrison 1994; White and Frank 1994). In addition, every good bookshop today has several vegetarian and/or vegan cookbooks, and many titles currently on the market contain excellent chapters on the fundamentals of vegetarian nutrition as well as references to contemporary nutritional research. For these reasons I shall not attempt to summarize here the evidence in favor of a vegetarian diet. My second preliminary claim is that meat-eating in general is, and in particular certain kinds of meat-eating are, unhealthy. The statistical correlation between high meat consumption and increased probability of colon, breast, and other cancers. heart disease, and atherosclerosis--far and away the leading causes of death in North America--has been well established by many independent researchers (Barnard 1990; Fiddles 1991; Mitra 1991; National Research Council 1989; Robbins 1987). This realization prompted Health and Welfare Canada (a federal government department) to issue a new version of Canada's Food Guide to Healthy Eating, which appeared in 1992. Alternatives to meats (such as tofu and legumes) are accentuated, as are 5-10 servings per day of vegetables and fruits and 5-12 servings per day of grain products. Critics maintain that an even greater shift toward a vegetarian diet might have been endorsed in the Guide had it not been for the extraordinary (and entirely predictable) behind-the-scenes lobbying efforts of the livestock industry ("Industry Forced Changes" 1993). (E&E)

Fox, Michael W. "Toward Kinship," The Animals' Agenda 17(no.4, 1997):44. In "Why We Care About Animals," Michael W. Fox, V.M.D., explores the evolution of compassion. (v8,#3)

Fox, Michael W., Animals Have Rights, Too. Crossroad/Continuum, 1991. 176 pages, \$ 12.95 paper. An internationally recognized veterinarian and defender of animal rights urges children and parents to consider all the relevant issues and take positive steps at home, in school, and in the community. (v2,#3)

Fox, Michael Allen, Review of Warwick Fox, *A General Theory of Ethics, Environmental Values* 16(2007):529-532.

Fox, Michael W., The Boundless Circle: Caring for Creatures and Creation. Wheaton, IL: Quest Books (Theosophical Publishing House), 1996. \$ 20.00. ISBN 0-8356-0725-9. Fox argues for a panentheism; God is both transcendent to and imminent in the world. "Fundamentally, there is but one crisis--and it is a spiritual one" (p. 87). Even though respect for animals and the natural environment is evident throughout history and in all the world's major religions, it has been lost over time. The world has been desacralized, the ugly effect of "the materialism of both state and private capitalism, along with its industrialism, scientific imperialism, and shallow priesthood of instrumented rationalists" (p. 150). Fox is the vice-president of the Humane Society of the United States. (v7,#4)

Fox, Michael Allen, Deep Vegetarianism. Philadelphia: Temple University Press, 1999. A vegetarian diet is related to our larger worldview and to our comprehensive code of ethics. Good health, suffering, environmental impacts of meat production, the meaning of food, world hunger, religion and spirituality,

ideologies, including feminism, human nature, humans as carnivores--the vegetarian issue is linked with many other issues that figure in our view of life. Fox is in philosophy, Queen's University, Kingston, Ontario, and was once an outspoken advocate for animal experimentation. (v.10,#1)

Fox, Michael Allen. "Nuclear Weapons and the Ultimate Environmental Crisis." Environmental Ethics 9(1987):159-179. Current philosophical debate on the arms race and on the use of nuclear weapons tends to focus on the rationality and morality of deterrence. I argue, however, that in view of recent scientific findings concerning the possibility of nuclear winter following upon nuclear war, or of some lesser but still massive consequences for nature, the perspective of environmental ethics is one from which nuclear war and preparations for it ought to be examined and condemned. Adopting a "weak anthropocentric" position of the sort advocated by Bryan Norton and others, I argue that it is the extinction or decimation of the human species that should be our central concern, but that even without ascribing intrinsic value to nature, natural objects and nonhuman organisms, the destruction or decimation of the environment provides additional grounds for judging nuclear war to be immoral and unthinkable. Fox is in the department of philosophy, Queen's University, Kingston, Ontario, Canada. (EE)

Fox, Michael W. Agricide: The Hidden Farm and Food Crisis That Affects Us All. Malabar, FL: Krieger Publishing Company, 1996. pp. 252. Reviewed by Mora Campbell, Journal of Agricultural and Environmental Ethics 10(1997/1998):200-203.

Fox, Michael W., Animals Have Rights Too: A Primer for Parents, Teachers, and Young People. New York: Crossroad/Continuum, 1990. 144 pages. \$ 9.95 paper. Fox is the vice president of the Humane Society of the United States. (v1,#4)

Fox, Michael Allen. Review of Dunayer. Joan, Animal Equality: Language and Liberation. Environmental Values 12(2003):400-402. (EV)

Fox, Michael W. Returning to Eden: Animal Rights and Human Responsibility (New York: Viking Press, 1980). Reviewed in Environmental Ethics 5(1983):83-89.

Fox, Michael Allen, Review of: David E. Cooper and Simon P. James, Buddhism, Virtue and Environment, Environmental Values 15(2006):138-140.

Fox, Michael Allen, Review of: Steve F. Sapontzis (ed.), Food for Thought: The Debate over Eating Meat, Environmental Values 15(2006):264-267.

Fox, Michael W., Inhumane Society: The American Way of Exploiting Animals (New York: St. Martins's Press, 1990). \$18.95. 269 pages. By the vice-president of the Humane Society of the United States. (v2,#1)

Fox, Michael Allen, Review of Michael Pollan, *The Omnivore's Dilemma: The Search for a Perfect Meal in a Fast-Food World* (London: Bloomsbury, 2006), Environmental Values 17(2008):113-116.

Fox, Stephen. John Muir and His Legacy: The American Conservation Movement. Reviewed in Environmental Ethics 5(1983):277-81.

Fox, Warwick, "New Philosophical Directions in Environmental Decision Making." In Ecopolitical Theory: Essays from Australia, pp. 1-20. Edited by Peter Hay and Robyn Eckersley. Hobart, Tasmania: Centre for Environmental Studies, University of Tasmania, 1992.

Fox, Warwick, Articles on "Anthropocentrism," "Deep Ecology: Emergence," "Deep Ecology:

Meanings," "Ecophilosophy and Ecopsychology," and "Naess, Arne." In Conservation and Environmentalism: An Encyclopedia, pp. 35-36, 164-65, 165-67, 201-202, and 446 respectively. Edited by Robert Paehlke. New York: Garland Publishing, 1995.

Fox, Warwick, "The Varieties of Transpersonal Identification." In The Deep Ecology Movement: An Introductory Anthology, pp. 136-54. Edited by Alan Drengson and Yuichi Inoue. Berkeley: North Atlantic Books, 1995. (Also in Japanese translation.)

Fox, Warwick, "The Distinctiveness of the Transpersonal Ecology Approach to Ecophilosophy." Holistic Science and Human Values 1 (1992): 21-29.

Fox, Warwick, Review of "Deep Ecology: Living as if Nature Mattered," by Bill Devall and George Sessions. Resurgence, January-February 1986, pp. 41-42.

Fox, Warwick, "Ecophilosophy and Science." The Environmentalist 14 (1994): 207-13.

Fox, Warwick, "An Overview of my Response to Richard Sylvan's Critique of Deep Ecology." The Trumpeter: Journal of Ecosophy 2(4) (1985): 17-20.

Fox, Warwick, "On the Interpretation of Naess's Central Term 'Self Realization!'" The Trumpeter: Journal of Ecosophy 7 (1990): 98-101.

Fox, Warwick, "Towards a Deeper Ecology." Habitat Australia, August 1985, pp. 26-28.

Fox, Warwick, "Deep Ecology: A New Philosophy of our Time?" The Ecologist 14 (1984): 194-200.

Fox, Warwick, "Fondamenti Antropocentrici e Non Antropocentrici Nelle Decisioni Sull'Ambiente." In L'Etica Nelle Politiche Ambientali, pp. 115-37. Edited by Corrado Poli and Peter Timmerman. Padova, Italy: Fondazione Lanza and Gregoriana Libreria Editrice, 1991.

Fox, Warwick, "A Critical Overview of Environmental Ethics." World Futures 46 (1996): 1-21.

Fox, Warwick, "Transpersonal Ecology: 'Psychologizing' Ecophilosophy." The Journal of Transpersonal Psychology 22 (1990): 59-96.

Fox, Warwick, "On Guiding Stars to Deep Ecology." The Ecologist 14 (1984): 203-4.

Fox, Warwick, "Transpersonal Ecology and the Varieties of Identification." The Trumpeter: Journal of Ecosophy 8 (1991): 3-5.

Fox, Warwick, Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism. Boston: Shambhala Publications, 1990. 380 pages. Also Albany, NY: SUNT Press, 1995. Transpersonal ecology represents a creative meeting ground between environmental philosophy and transpersonal psychology. It brings together the psychologist's understanding of the self beyond personal ego with the ecologist's belief in the inherent value of all living things. An in-depth analysis of the deep ecology movement. Fox is a National Research Fellow at the Center for Environmental Studies at the University of Tasmania. (v1,#3)

A major discussion of the philosophy of deep ecology by one of its leading advocates. For the last ten years, Fox has been a prolific commentator and defender of the philosophy of Arne Naess, and this book (an expansion of his doctoral dissertation) is the first complete expression of his views. Fox sees a connection between the deep ecology emphasis on "identification" and recent work in "transpersonal psychology"---thus he changes the name of "deep ecology" to "transpersonal ecology."

For Fox, "Naess's philosophical sense of deep ecology...refers to a psychologically based approach to the question of our relationship with the rest of nature" (p. 197). Fox's view of Naess is in contrast to the standard interpretation of deep ecology as an ethical or axiological theory. Fox provides an in-depth analysis of Naess's three senses of deep ecology: (1) formal derivation of principles; (2) philosophical sense of self-realization; and (3) popular sense of eco-centrism. More importantly, he discusses the place of deep ecological thought in environmental philosophy generally, and evaluates the criticisms of opponents. Although Fox is correct in moving beyond the axiological side of deep ecology, he places too much emphasis on psychological "identification" with the natural world; the most justifiable sense of deep ecology is as an ontological and phenomenological description of the world. See Naess, below. The book contains an excellent bibliography and exhaustive footnotes. (Katz, Bibl # 2) Reviewed in Environmental Ethics 15(1993):181-83.

Fox, Warwick, "Leaves on a Tree." Elmwood Quarterly 8(3) 1992: 20.

Fox, Warwick, "Why Care About the World Around Us?" Resurgence, November-December 1993, pp. 10-12.

Fox, Warwick, "From Anthropocentrism to Deep Ecology." ReVision 16 (1993): 75-76.

Fox, Warwick, "Post-Skolimowski Reflections on Deep Ecology." The Trumpeter: Journal of Ecosophy 3(4) (1986): 16-18.

Fox, Warwick, "The Emergence of the Environmental Movement." In The Borzoi College Reader, 7th ed., pp. 735-40. Edited by Charles Muscatine and Marlene Griffith. New York: McGraw-Hill, 1992.

Fox, Warwick, "The Deep Ecology-Ecofeminism Debate and its Parallels." Environmental Ethics 11 (1989): 5-25.

Fox, Warwick, "The Deep Ecology-Ecofeminism Debate and its Parallels." In Deep Ecology For the Twenty-First Century, pp. 269-89. Edited by George Sessions. Boston and London: Shambhala Publications, 1994.

Fox, Warwick, "Transpersonal Ecology and the Varieties of Identification." In This Sacred Earth: A Reader on Religion, Nature, and the Environment, pp. 436-44. Edited by Roger Gottlieb. New York: Routledge, 1996.

Fox, Warwick, "The Deep Ecology-Ecofeminism Debate and Its Parallels," Environmental Ethics 11(1989):5-25. A defense of deep ecology against the attack by ecofeminism---here defined as the charge that deep ecology is too concerned with anthropocentrism and not the real villain, androcentrism. Fox argues that the ecofeminist criticism is too simplistic, for a whole range of human social classes have been the agents of domination. A concern for androcentrism is another variation of the same old theme that humans have to put their own house in order first. The main point is that deep ecology is not anti-human, but anti-human centeredness. But it is questionable whether an ethic can be against anthropocentrism and not be anti-human. Readers should remember Callicott's assertion in "Animal Liberation: A Triangular Affair" that misanthropy is a mark of biocentrism (Environmental Ethics 2 (1980): 326). (Katz, Bibl # 2)

Fox, Warwick, "On the Interpretation of Naess's Central Term, 'Self-Realization,'" The Trumpeter 7:2, Spring 1990. Fox argues that Naess's "self-realization" can be interpreted either in the axiological direction of objective intrinsic value in natural entities or in the identification direction of a psychological experience of cosmological unity. According to Fox, Naess really prefers the identification direction. On the axiological view, "One ought to protect all living beings ... on account of the fact that they are morally considerable (i.e. intrinsically valuable). In contrast, in Naess's formulation ..., one arrives at the view

that one wants to protect all living beings on account of the fact that one feels deeply identified with them." "What is basic for deep ecologists is the psychological capacity for, and the experience of, wide and deep identification." "At a philosophical or argumentative level, the main writers on deep ecology have adopted an identification based approach in preference to an intrinsic value based approach." Fox is in the Department of Geography and Environmental Studies, University of Tasmania. (v1,#2)

Fox, Warwick, "Ways of Thinking Environmentally (and Some Brief Comments on their Implications for Acting Educationally)." In Thinking Environmentally ... Acting Educationally: Proceedings of the Fourth National Conference of the Australian Association for Environmental Education, pp. 21-29. Edited by J. Wilson, G. Di Chiro, and I. Robottom. Melbourne: Victorian Association for Environmental Education, 1986.

Fox, Warwick, "Introduction: From Anthropocentrism to Deep Ecology." ReVision 13 (1991): 107-8.

Fox, Warwick, "The Meanings of 'Deep Ecology.'" Island Magazine, no. 38, Autumn 1989, pp. 32-35.

Fox, Warwick, "A Critical Overview of Environmental Ethics." In Global Change in the Marine Environment: Scope, Significance and Implications. Edited by Malcolm MacGarvin and Bruce McKay. Oxford: Oxford University Press, 1997.

Fox, Warwick, "Deep Ecology: A New Philosophy of our Time?" and "On Guiding Stars to Deep Ecology" (reprinted 1984 papers). In Philosophical Dialogues: Arne Naess and the Progress of EcoPhilosophy. Edited by Nina Witoszek and Andrew Brennan. Limited edition: Oslo: SUM (Centre for Development and the Environment, University of Oslo), 1997.

Fox, Warwick, "Intellectual Origins of the 'Depth' Theme in the Philosophy of Arne Naess." The Trumpeter: Journal of Ecosophy 9 (1992): 68-73.

Fox, Warwick, "Deep Ecology: A New Philosophy of Our Time?" The Ecologist vol. 14, nos. 5-6 (1984):194-200. With a Reply by Arne Naess, "Intuition, Intrinsic Value and Deep Ecology," pp. 201-203, and a further comment by Fox, pp. 203-204. A good summary expression of the Deep Ecology position. Fox cites three distinguishing marks of the philosophy, as opposed to "shallow" environmentalism: Human-environment unity; a critique of the dominant metaphysic--mechanistic materialism--with the realization that ecological ethics must be ontologically grounded; economic sustainability. But the strength of this essay is that Fox squarely faces some of the problems of Deep Ecology: its ultimate ground in intuition about the unity of the self and the natural environment, and its claim of "biospherical egalitarianism." Fox effectively jettisons the latter principle. In his rejoinder to Naess (p. 204) he draws important distinctions between the advocates of Deep Ecology, who are interested in developing an ecological consciousness, and environmental ethicists, who seek to justify an ethical system by means of argument. Deep Ecology is not based on rational argument. (Katz, Bibl # 1)

Fox, Warwick, "Transpersonal Ecology." In Paths Beyond Ego: The Transpersonal Vision, pp. 240-41. Edited by Roger Walsh and Frances Vaughan. Los Angeles, California: Jeremy P. Tarcher, 1993.

Fox, Warwick, Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism. Boston and London: Shambhala Publications, 1990. US reprint edition: New York: The State University of New York Press, 1995. UK and European reprint edition: Totnes, Devon: Green Books, 1995. Japanese language edition: Toransupasonaru Ekoroji'i. Tokyo: Heibon-sha, 1994.

Fox, Warwick, "The Meanings of 'Deep Ecology.'" The Trumpeter: Journal of Ecosophy 7 (1990): 48-50.

Fox, Warwick, "Writing Intrinsic Values into Legislation." In Clearcut: The Tragedy of Industrial Forestry, p. 251. Edited by Bill Devall. San Francisco: Sierra Club Books and Earth Island Press, 1993.

Fox, Warwick, Review essay on "The Liberation of Life: From the Cell to the Community," by Charles Birch and John Cobb. The Ecologist 14 (1984): 178-82.

Fox, Warwick, "Environmental Concern - the Very Idea!," Resurgence, September-October 1997.

Fox, Warwick, "Arne Naess: A Biographical Sketch." The Trumpeter: Journal of Ecosophy 9 (1992): 45-49.

Fox, Warwick, "Education, the Interpretive Agenda of Science, and the Obligation of Scientists to Promote this Agenda." Environmental Values 4 (1995): 109-14.

Fox, Warwick, "What Does the Recognition of Intrinsic Value Entail?" The Trumpeter: Journal of Ecosophy 10 (1993): 101.

Fox, Warwick, "Further Notes in Response to Skolimowski." The Trumpeter: Journal of Ecosophy 4 (1987): 32-34.

Fox, Warwick, ed., Ethics and the Built Environment, London: Routledge, 2000. 15 original papers, divided into three sections entitled: (1) The Green Imperative - and its Vicissitudes; (2) Building with Greater Sensitivity to People(s) and Places; (3) Steps Towards a Theory of the Ethics of the Built Environment. Just as traditional, anthropocentrically focused forms of ethics have exhibited a major blind spot in their theorising with respect to the nonhuman world, so the development of environmental ethics has thus far exhibited a major blind spot of its own. The world around us--what we call "the environment"--consists of both spontaneously occurring and humanly constructed environments. This natural/built environment distinction is perhaps the most obvious division that we can make in the day-to-day world in which we live. Yet, despite the fact that the world around us consists of both natural and built environments (and their various admixtures), environmental ethics, as a formal field of inquiry, has been overwhelmingly focused upon the spontaneously self-organising natural environment as opposed to the humanly created, or intentionally organised, built environment. Environmental ethics has not yet truly earned the name that it presently goes under. On the one hand, this bias towards concerns with the natural environment is completely understandable: environmental ethicists have wanted to escape the almost exclusively anthropocentric focus that has pervaded traditional ethical approaches. On the other hand, this bias is decidedly odd. Whereas humans evolved in natural, or spontaneously self-organising, environments, we now increasingly live in built, or intentionally organised, environments. (v.11,#4)

Fox, Warwick, "The Deep Ecology-Ecofeminism Debate and its Parallels." In Environmental Philosophy: From Animal Rights to Radical Ecology, pp. 213-32. Edited by Michael E. Zimmerman, J. Baird Callicott, George Sessions, Karen J. Warren, and John Clark. Englewood Cliffs, New Jersey: Prentice Hall, 1993.

Fox, Warwick, Approaching Deep Ecology: A Response to Richard Sylvan's Critique of Deep Ecology. Hobart: Centre for Environmental Studies, University of Tasmania, 1986.

Fox, Warwick, "A Postscript on Deep Ecology and Intrinsic Value." The Trumpeter: Journal of Ecosophy 2(4) (1985): 20-23.

Fox, Warwick, Contributing author to chapter on "The Green Philosophy." In The Green Alternative: Guide to Good Living, pp. 277-93. Edited by Peter Bunyard and Fern Morgan Grenville. London:

Methuen, 1987.

Fox, Warwick, "Approaching Deep Ecology: A Response to Richard Sylvan's Critique of Deep Ecology." Environmental Studies Occasional Paper 20 (University of Tasmania, 1986). The best explanation and defense of the Deep Ecology position, supplanting an earlier and shorter article by Fox, "Deep Ecology: A New Philosophy of Our Time?" Fox first attacks Sylvan's criticisms of Deep Ecology as being based on misrepresentations of the Deep Ecology position (see Sylvan). He then explains this position by focusing on the idea of "identification" with the natural environment. This is the new meaning now given by Fox to the Deep Ecologist primary value of "self-realization." Fox wants to delineate this "identification process" quite clearly; it does not imply a naive biocentric egalitarianism, a view in which every natural entity has equal intrinsic worth, for Deep Ecology denies the ontological independence of natural entities; nor does it imply an extreme holism, in which all entities lose their autonomy and individuality. Deep Ecology wants to take a middle path: deny human superiority, show the interrelatedness of all natural beings, and develop "self-realization," a consciousness which somehow identifies with nature (p. 69). Fox does not explicitly state what this identification process is; he concentrates on what it is not. It is not a search for "intrinsic value" in natural individual entities. That method is the "environmental axiological" approach, and it is insufficient for the development of environmental preservation. We have to change the "mode of discourse" in the analysis of environmental problems. "[T]aking the route of developing and applying formal, theoretical environmental axiological positions ... to our relationship with the nonhuman world is at best not helpful or misguided and at worst dangerous in that it can end up doing more harm than good. ... [S]upporters of deep ecology ... have deliberately chosen not to take the environmental axiological route" (p. 41). But is this mode of discourse rational? Does it degenerate into the "armchair mysticism" which Fox wishes to avoid (p. 66)? I cite as an example Fox's current rejection of his earlier criticism of bio-egalitarianism. One can only criticize bioegalitarianism if it is conceived as a specific environmental axiology. But it should not be so conceived. What then, is it? Apparently, a mere attitude, a rejection of anthropocentrism (pp. 39-40). But then the terminology used by Deep Ecologists is intellectual doubletalk. Fox is the clearest of all Deep Ecologists, but the vagueness and the anti-rationality of the central concepts of this position is frightening. (Katz, Bibl # 1)

Fox, Warwick, *A General Theory of Ethics*. Reviewed by Michael Allen Fox, *Environmental Values* 16(2007):529-532.

Fox, Warwick. "Education, the Interpretive Agenda of Science, and the Obligation of Scientists to Promote this Agenda." Environmental Values 4(1995):109-114. This paper presents an argument that emphasises the following points: (1) the importance of public education; (2) the essential difficulty facing all involved in public education that is aimed at sustaining a biologically and culturally rich world; (3) the recognition of science as having both a technical agenda and an interpretive agenda; (4) the scientific interpretation of the universe: an evolutionary and ecological world-view; and (5) the importance of the interpretive agenda of science for public education and the obligation of scientists to promote this agenda. KEYWORDS: Education, science, sustainability, world-view. Fox is at the Centre for Environmental Studies, University of Tasmania. (EV)

Fox, Warwick. *A Theory of General Ethics: Human Relationships, Nature, and the Built Environment*. Cambridge, MA: MIT Press, 2006. Fox develops an ethical "theory of everything" that encompasses interhuman ethics, the natural environment, and the built environment. He argues that examples in any domain of interest exemplify a quality of responsive cohesion, and it is the relational quality of such cohesion that represents the most fundamental value there is. From this "theory of responsible cohesion," Fox develops a "theory of contexts" and a differentiated model of human obligations in respect of all beings. He tests his theory against eighteen central problems in ethics, including challenges raised by abortion, architecture, animal welfare, ecological management, euthanasia, invasive species, personal obligations, planning, and politics.

Fox, Warwick. "A Critical Overview of Environmental Ethics." World Futures (Amsterdam) 46 (1996): 1-21. A general introduction to, and a critical overview of, environmental ethics. There are three main human-centered or anthropocentric or instrumental value approaches: the unrestrained exploitation and expansionism approach, the resource conservation and development approach, and the resource preservation approach. There are three main nonanthropocentric or intrinsic value approaches: the sentience or animal liberation approach, the life approach, and the holistic integrity approach. Each is examined in terms of both rational foundations and practical consequences. Two of the latter approaches, the life approach and the holistic integrity approach, are based on flawed rational foundations. All three approaches suffer from a range of highly objectionable practical consequences and none of these approaches is comprehensive enough in scope to deal directly with the full range of environmental problems with which people are concerned on a day-to-day level. Despite the negative conclusions, understanding these arguments should serve as a positive stimulus to the development of better approaches. Fox is associated with the Centre for Environmental Studies, University of Tasmania, Hobart. (v7, #3)

Fox, Warwick. "The Deep Ecology-Ecofeminism Debate and Its Parallels." Environmental Ethics 11(1989):5-25. There has recently been considerable discussion of the relative merits of deep ecology and ecofeminism, primarily from an ecofeminist perspective. I argue that the essential ecofeminist charge against deep ecology is that deep ecology focuses on the issue of anthropocentrism (i.e., human-centeredness) rather than androcentrism (i.e., malecenteredness). I point out that this charge is not directed at deep ecology's positive or constructive task of encouraging an attitude of ecocentric egalitarianism, but rather at deep ecology's negative or critical task of dismantling anthropocentrism. I outline a number of problems that can attend not only the ecofeminist critique of deep ecology,--but also comparable critiques that proceed from a broad range of social and political perspectives. I then proceed to argue that deep ecology's concern with anthropocentrism is entirely defensible--and defensible in a way that should be seen as complementing and expanding the focus of radical social and political critiques rather than in terms of these approaches versus deep ecology. Fox is at the Centre for Environmental Studies, University of Tasmania, Hobart, Tasmania. (EE)

Fox, Warwick. Toward a Transpersonal Ecology: Developing Foundations for Environmentalism. Albany: State University Press of New York, 1995. Earlier published Boston: Shambhala Publications, 1990. (v6,#3)

Fox, Warwick. *A Theory of General Ethics: Human Relationships, Nature, and the Built Environment*. Cambridge, MA: MIT Press, 2006. Fox develops an ethical "theory of everything" that encompasses interhuman ethics, the natural environment, and the built environment. He argues that examples in any domain of interest exemplify a quality of responsive cohesion, and it is the relational quality of such cohesion that represents the most fundamental value there is. From this "theory of responsible cohesion," Fox develops a "theory of contexts" and a differentiated model of human obligations in respect of all beings. He tests his theory against eighteen central problems in ethics, including challenges raised by abortion, architecture, animal welfare, ecological management, euthanasia, invasive species, personal obligations, planning, and politics.

Fox, Wawrick, Review of "Deep Ecology: Living as if Nature Mattered," by Bill Devall and George Sessions. In Holistic Human Concern for World Welfare, pp. 39-40. Edited by A. Kannan. Adyar, Madras: The Theosophical Society, 1987.

Fox, Wawrick, "Self and World: A Transpersonal, Ecological Approach." ReVision 13 (1991): 116-21.

Fragomeni, Richard N. and John T. Pawlikowski, eds. The Ecological Challenge: Ethical, Liturgical, and

Spiritual Responses. Collegeville, MI: Liturgical Press, 1994. 140 pages, softbound. Thirteen contributors provide insights, coupled with practical suggestions, for an authentically religious response to the ecological crisis. Drawing upon the biblical, ethical, liturgical, and spiritual wisdom of the covenantal traditions of Judaism and Christianity, they emphasize what they think are frequently underemphasized aspects of their religious heritage. They also suggest areas that require new creative reflection that will push beyond traditional understandings. In several chapters they suggest ways in which ecological concerns might be concretely included which retain the integrity of the Church's liturgical and spiritual traditions. A sample: Thomas A. Nairn, "The Roman Catholic Social Tradition and the Question of Ecology." Nairn claims, "A contemporary ethic, using the signs of the times, would challenge Christians to move from a point of view in which nature has little or no value apart from human choices to one which sees humanity itself as part of the larger ecosystem" (p. 37). Fragomeni and Pawlikowski are both professors Catholic Theological Union, Albany, New York. (v6,#1)

Francione, G. L., Rain without thunder: The ideology of the animal rights movement. Philadelphia: Temple University Press, 1996.

Francione, Gary L., Introduction to Animal Rights: Your Child or the Dog? Philadelphia: Temple University Press, 1999. 264 pages. There is a great inconsistency between what people say they believe about animals and how they act toward animals. Laws designed to protect animals regularly fail to do so. Everyone--human and non-human--has the right not to be treated as a means to an end. Francione is in law and philosophy at Rutgers University Law School. (v.10,#1)

Francione, Gary L. "Animals, Property and Legal Welfarism: 'Unnecessary' Suffering and the 'Humane' Treatment of Animals." Rutgers Law Review 46, no. 2 (Winter 1994): 721-70. Concludes that the legal protection of animals is unlikely to exceed their exploitation. The only prohibition upon animal use is conduct that results in gratuitous suffering. As property, animals can have certain rights, just as human slaves had some rights and were, in a limited sense, regarded as persons. Regarding legal welfarism, animals and their "interests" will virtually always lose in any purported "balancing" of human and animal interests. (v5,#3)

Francione, Gary L. Rain Without Thunder: The Ideology of the Animal Rights Movement. Philadelphia: Temple University Press, 1996. 366pp. \$59.95 cloth \$22.95 paper. The modern animal rights movement has become indistinguishable from a century-old concern with the welfare of animals that in no way prevents them from being exploited. Francione is in law at Rutgers University. (v7,#4)

Francione, Gary L., Animals, Property and the Law. Reviewed by Priscilla M. Cohn. Environmental Ethics 19(1997):319-322. (EE)

Francione, Gary L., Animals, Property, and the Law. Philadelphia: Temple University Press, 1995. 349 pages. Paper, \$22.95; cloth \$59.95. Current legal standards of animal welfare do not and cannot establish rights for animals. As long as they are viewed as property, animals will be subject to suffering for the social and economic benefit of human beings. The history of the treatment of animals, anticruelty statutes, vivisection, the Federal Animal Welfare Act, and specific cases such as the controversial injury of unanaesthetized baboons at the University of Pennsylvania (Francione represented some 100 sit-in protestors at the National Institutes of Health, Bethesda, Maryland, over this issue). Francione argues that there is a paradoxical gap between our professed concern with the humane treatment of animals and the overriding practice of abuse permitted by U.S. law. Francione is professor of law at Rutgers University.

Francione, Gary L. Introduction to Animal Rights: Your Child or the Dog? Translators: Zhang Shoudong and Liu Er. (Beijing: Chinese Politics and Law University Press, 2005). (in Chinese)

Francione, Gary. Animals, Property and the Law. Reviewed by Antonia Layard, Environmental Values 7(1998):118.

Francis, David R. "Global Crowd Control Starts to Take Effect." Christian Science Monitor 89 (22 October 1997): 1, 9. World population growth rates have peaked, and population itself may soon peak. So says the United Nations. By 2040, world population will peak at 7.7 billion, which is about 1/3 more people than now. When population finally peaks, several benefits will result, according to economists. Poor nations will be able to shift resources from basic goods like food and shelter to raising the standard of living. Famine will be reduced, especially in Africa and Asia. Immigration into the developed nations will ease. And export markets in the developing nations will burgeon. Environmental pressures will ease. By 2050, the ratio of population between the third world and the developed nations will be 7:1; it's 4:1 now. Pessimists, like Stan Becker of Johns Hopkins, doubt the UN's optimism. Becker expects disasters in poorly managed nations, especially famines, and others doubt whether the "green revolution"--high yields in grains and other foods--can match the population growth. (v8,#3)

Francis, David R., "Global Crowd Control Starts to Take Effect," Christian Science Monitor 89 (22 October 1997): 1, 9. World population rate peaks, UN claims. World population growth rates have peaked, and population itself may soon peak. So says the United Nations. By 2040, world population will peak at 7.7 billion, which is about 1/3 more people than now. When population finally peaks, several benefits will result, according to economists. Poor nations will be able to shift resources from basic goods like food and shelter to raising the standard of living. Famine will be reduced, especially in Africa and Asia. Immigration into the developed nations will ease. And export markets in the developing nations will burgeon. Environmental pressures will ease. By 2050, the ratio of population between the third world and the developed nations will be 7:1; it's 4:1 now. Pessimists, like Stan Becker of Johns Hopkins, doubt the UN's optimism. Becker expects disasters in poorly managed nations, especially famines, and others doubt whether the "green revolution"--high yields in grains and other foods--can match the population growth. (v8,#3)

Francis, George. "Thinking About Heritage in a New and Different Context", Environments 24(no. 1, 1996):22.

Francis, John M., "Nature Conservation and the Voluntary Principle." Environmental Values 3(1994):267-271. Primary legislation in Britain has enshrined the 'voluntary principle' at the centre of the working relationship between nature conservationists and other land-users. This paper examines the dilemma that arises from the application of the legislation to long-term land management strategies in support of nature conservation. In its historical context this approach does not sit easily with wider goals such as the land-use ethic of Aldo Leopold or the search for an ethic of sustainability. KEYWORDS: Nature conservation, legislation, land-use ethics, conservation management. Francis is at 49 Gilmour Road, Edinburgh, U.K. (EV)

Francis, John M., Review of Adams, W.M., Future Nature: A Vision for Conservation. Environmental Values 5(1996):369-371. (EV)

Francis, John M., "Nature Conservation and the Precautionary Principle," Environmental Values 5(1996):257-264. The application of the precautionary principle to an area of environmental protection, such as nature conservation, requires commitment to the idea that full scientific proof of a causal link between a potentially damaging operation and a long term environmental impact is not required. Adoption of the principle in Government statements related to sustainable development should therefore be seen in this context. The paper addresses the particular case of marine fish farming in Scotland where the principle was advocated but not upheld in practice. In the light of this experience there is a need for educators and philosophers, ethicists and concerned scientists to ensure that the principle is more widely

interpreted and understood. KEYWORDS: Nature conservation, sustainable development, international law, technology assessment. (EV)

Francis, Leslie Pickering. Review of Ethics and Problems of the 21st Century. Edited by K. E. Goodpaster and K. M. Sayre. Environmental Ethics 2(1980):373-78.

Francis, Leslie Pickering. "Global Systemic Problems and Interconnected Duties." Environmental Ethics 25(2003):115-128. Many problems in environmental ethics are what have been called "global systemic problems," problems in which what happens in one part of the world affects preservationist efforts elsewhere. Restoration of the Everglades is one such example. If global warming continues, the Everglades may well be flooded within the next quarter to half century and all restoration efforts will be for naught. Yet, the United States government is both pursuing restorationist efforts and withdrawing from the Kyoto Protocol on emissions of greenhouse gases. One aspect of global systemic problems concerns whether there are interconnections between the preservationist obligations of the locals and the duties of others. There are three main lines of arguments for concluding that there are, indeed, interconnected obligations in such cases. First, the consequentialist case for imposing duties on locals assumes that others do not have inconsistent consequentialist obligations. In addition, a related consequentialist case can be made that when problems are systemic, others have positive supportive duties. Second, a weak principle of reciprocity supports the interconnectedness of obligations. Insistence that someone has an obligation that benefits you implies the duty not to act to undermine the efforts of that person to fulfill that obligation. Third, a weak principle of fairness—that it is only fair to expect one person to bear the burdens of producing a collective good if others have obligations to do their cooperative part—supports interconnected obligations with regard to global systemic problems. Because all three arguments point to the same conclusion, there is a very strong case for interconnected obligations as part of the solution to global systemic problems—problems that are all too prevalent in our world today. (EE)

Franck, Irene M. & Brownstone, David, The Green Encyclopedia. New York: Prentice Hall General Reference, 1992. 485 pages.

Frank, Douglas A., McNaughton, Samuel J., Tracy, Benjamin F. "The Ecology of the Earth's Grazing Ecosystems," Bioscience 48(no.7, Jul. 1998):513- . Profound functional similarities exist between the Serengeti and Yellowstone. (v9,#2)

Frank, Joshua, "A Constrained-Utility Alternative to Animal Rights," Environmental Values 11(2002):49-62. Numerous approaches have been taken in an effort to find a non-anthropocentric ethic that will lead to greater consideration of animals. Most of the recent approaches in this area have been rights-based. It is argued here that a rights-based approach alone fails both theoretically and in practical applications. It is shown that in theory these approaches can lead to unsound conclusions and cannot handle uncertainty. In addition, in practice the rules of the rights-based approaches will often be violated. A utility approach with unequal weighting for different species subject to certain rights or obligations is proposed as an alternative. This approach is intended to be operational rather than purely theoretical and therefore would be based on a negotiated consensus rather than a priori theory. (EV)

Frank, Lone, "Charges Don't Stick to The Skeptical Environmentalist," Science 303(2 January 2004):28. Denmark's science ministry repudiated an earlier finding by one of its committees that Bjorn Lomborg's The Skeptical Environmentalist is "scientifically dishonest." They also note that the ruling does not vindicate The Skeptical Environmentalist either.

Frank Schalow, Review of: Julian H. Franklin, Animal Rights and Moral Philosophy, Environmental Values 15(2006):132-134.

Franke, Mary Ann, To Save the Wild Bison: Life on the Edge in Yellowstone. Norman, OK: Oklahoma University Press, 2005. Bison were saved from near-extinction in the nineteenth century but today nearly all herds are fenced and managed like livestock. Yellowstone is a place bison might yet be wild, except for the threat of brucellosis. Federal and state officials walk on an edge and this leaves bison on the edge.

Frankel, Carl, In Earth's Company: Business, Environment, and the Challenge of Sustainability. Gabriola Island, BC: New Society Publishers, 1998 (P. O. Box 189, Gabriola Island, B.C V0R 1X0; phone 250/247-9737). 223 pages. \$ 16.95. In the series Conscientious Commerce. Environmental policy. Sustainable Development. (v.9,#4)

Frankel, Charles, "The Rights of Nature." In Laurence H. Tribe, Corinne S. Schelling and John Voss, eds., When Values Conflict: Essays on Environmental Analysis, Discourse, and Decision. Cambridge, MA: Ballinger Publishing Co., 1976. Contains an analysis of the various meanings of the word "nature."

Frankel, Mark S., and Chapman, Audrey R., "Facing Inheritable Genetic Modifications," Science 292(2001):1303. Inheritable genetic modifications are coming sooner than most realize (at least for the wealthy and in developed countries). "We should begin establishing an oversight process now so that we can make informed and reasoned choices about the future." Both authors are in science and policy programs of the American Association for the Advancement of Science. (v.12,#2)

Frankel, Otto Herzfeld, "Genetic Conservation: Our Evolutionary Responsibility," Genetics 78(September, 1974):53-65. Urgent action is needed to collect and preserve irreplaceable genetic resources. Wild species, increasingly endangered by loss of habitats, will depend on organized protection for their survival. On a long term basis this is feasible only within natural communities in a state of continuing evolution. Even more, the possibility of a virtual end to the evolution of species of no direct use to humans raises questions of responsibility and ethics. "I am raising the question of whether continuing evolution itself has an intrinsic value." Frankel was Australian plant geneticist and breeding scientist, here using the term "evolutionary responsibility," his precursor to the later term "environmental ethics."

Frankel, Otto Herzfeld, "Variation--The Essence of Life," Proceedings of the Linnean Society of New South Wales, vol. 95, part 2, pp. 158-169. "If a sense of responsibility towards the present and the future state of the world is to become a potent force in human affairs as it must if life on earth is to survive, social ethics and what might be called evolutionary ethics must become effective and influential partners in decision making" (p. 159) "We have acquired evolutionary responsibility" (p. 168). Frankel was with the Division of Plant Industry, CSIRO, Canberra, Australia.

Frankel, Otto; Brown, Anthony H. D.; and Burdon, Jeremy J. The Conservation of Plant Biodiversity. New York: Cambridge University Press, 1995. 113 pp. \$27.95 paper. Conservation biology is faced with several controversial issues, such as the dichotomy between the preservation of individual species versus a broader focus on the environment, the relative importance to give to endangered species, the design and management of reserves and the drive for increasing agricultural productivity through plant improvement versus the drive to maintain traditional peasant varieties in cultivation. (v7, #3)

Frankenfeld, Philip J. Bibliography for Technological Citizenship: Public Participation in Environmental Policy and Risk Policy. Organized by subject and includes such headings as: Environmental Justice; Ethics of Uncertainty; Environmental Policy; Consumer Environmentalism; Environmental Law; Whistleblowing, and others. Hardcopy (offprinted) by request, although the author also has it on disks, Microsoft Word. Address: 1671 North Prospect #304, Milwaukee, WI 53202. 414/272-6765. (v6,#1)

Frankham, Richard, Ballou, Jonathan D., and Briscoe, David A., Introduction to Conservation Genetics. New York: Columbia University Press, 2002. Genetic diversity and its conservation, as this complements or contrasts with the conservation of organisms, species, ecosystems. Frankham is at Macquarie University, Sydney, Australia. (v.13,#4)

Frankham, Richard. "Relationship of Genetic Variation to Population Size in Wildlife," Conservation Biology 10(no.6, 1996):1500. (v8,#1)

Franklin, Julian H., Animal Rights and Moral Philosophy, Reviewed by Frank Schalow, Environmental Values 15(2006):132-134.

Franklin, Julian H. "Regan on the Lifeboat Problem: A Defense." Environmental Ethics 23(2001):189-201. Tom Regan has powerfully argued that all sentient beings having some awareness of self are equal in inherent value, and that their interests where relevant must be given equal treatment. Yet Regan also contends that there are some situations in which the value of different lives should be compared and choice made between them. He supposes an overloaded lifeboat with five occupants in which all will die unless one is thrown overboard. Four of the occupants are human, one is a dog; and Regan holds that it is the dog that ought to go since its life is of less value than that of a human. Regan has thus been sharply attacked for inconsistency. Some say that the comparison of lives, even in this sort of case, contradicts the principle of equal inherent value and introduces a utilitarian calculation of benefit. Others object that no ground of choice exists in situations of this sort. But all these criticisms turn out to be unjustified. (EE)

Franklin, Sarah, "Dolly: a New Form of Transgenic Breedwealth," Environmental Values 6(1997):427-437. ABSTRACT: Public debate in Britain surrounding the cloning of Dolly the sheep has primarily focused on the legitimacy of cloning humans, not sheep. This bracketing of the human question relies on a distinction between humans and animals belied by the very constitution of transgenic animals who are made with human DNA, such as Dolly. Moreover, the ways in which human beings think about, manipulate and classify animals have distinct cultural consequences, for example in relation to cultural understandings of life, property, kinship and other forms of social interconnection. This article introduces the term "breedwealth" to examine Dolly as a unique form of property in order to make some of these connections more visible. Department of Sociology, Lancaster University, Lancaster LA1 4YL, UK. (EV)

Franklin, Sarah, *Dolly Mixtures: The Remaking of Genealogy* (Durham, NC: Duke University Press, 2007). Reviewed by Paul B. Thompson in *Journal of Agricultural and Environmental Ethics* 21(2008):385-388.

Franks, Nigel R. and Tom Richardson, "Teaching in Tandem-running Ants," Nature 439(12 January 2006):153. An ant can signal another ant leading from the nest to food, with signals between the two controlling both the speed and course of the run, called a tandem run. The tandem leaders know the location of food but the tandem followers are naive. The tandem leaders only continue the run when frequently tapped on their legs and abdomen by the following ant's antennae. The tandem leader, therefore, modifies its behavior in the presence of the follower.

"An individual is a teacher if it modifies its behaviour in the presence of a naive observer, at some initial cost to itself, in order to set an example so that the other individual can learn more quickly." Despite the "in order to" in this definition, these authors posit only behavior selected for its survival behavior, and no intent to teach, much less any theory of mind, or ideas passing from teacher to disciple. Compare also the recent claims for teaching in meerkats, who differentially maim prey when the young are learning to hunt. Thornton, Alex and Katherine McAuliffe, "Teaching in Wild Meerkats," Science 313(14 July 2006):227-229.

As with some extended definitions of "culture" (imitated behavior), we now find extended definitions of "teaching" (selection for alternative behaviors in the presence of the naive that facilitate their learning). The authors speculate that teaching does not require big brains, only that it be useful for survival. The authors are in biology, University of Bristol, UK.

Franz, EH, "Ecology, Values, and Policy," Bioscience 51(no. 6, 2001):469-474. (v.13,#1)

Fraser, David, Phillips, P.A., and Thompson, B.K., "Environmental Preference Testing to Assess the Well-Being of Animals - An Evolving Paradigm", Journal of Agricultural and Environmental Ethics 6(1993). Supplement. Environmental preference testing (i.e. research in which animals are allowed to choose among two or more alternative environments or environmental features) is a useful but sometimes problematic approach to improving animal well-being. Preference testing paradigms are evolving rapidly, as evidenced by the number of different procedures being proposed and the volume of debate over their usefulness and validity. One significant shift has been the trend toward asking more precise questions about animal preferences, with more attention to the relevant variables. This has required more comprehensive response measures and more elaborate experimental designs. Results which deviate from the average need to be interpreted with care; these may involve genuine individual differences among animals, options that are preferred for specific minority activities, or they may indicate that important variables have been overlooked. Strategies have also emerged for using preference tests to indicate principles underlying the animals' preferences. Preference testing often needs to be followed by complementary experiments to test whether the animals react differently to preferred and unpreferred options when these are presented alone, or to test the animals' motivation for a preferred option. Tests of motivation are potentially of great value, but much more effort is needed to validate suitable methods. In some cases, animals prefer an environment which is not the most beneficial for health, survival and reproductive success in farm environments. In such cases, agriculturalists may well provide an unpreferred environment, but the animals' preferences still need to be understood so that any resulting distress can be minimized. Fraser, Phillips, and Thompson are at the Centre for Food and Animal Research, Agriculture Canada, Ottawa Canada K1A 0C6.

Fraser, I; Hone, P, "Agricultural land retirement: lessons from an Australian case study," Land Use Policy 20(no.1, 2003): 61-72.

Fraser, Vikki. "What's the Moral of the GM Food Story?" Journal of Agricultural and Environmental Ethics 14(2001):147-159. This paper is an attempt to examine issues and problems raised by agricultural biotechnology by drawing on the richness of contemporary ideas in ethical theory and thereby contribute to the project of establishing new approaches to these problems. The fundamental argument is that many of the negative aspects of agricultural biotechnology are generated at the level of the underlying conceptual frameworks that shape the technology's internal modes of organization, rather than the unintended effects of the application of an inherently benevolent set of techniques. If "food ethics" is to address the adverse impacts of agricultural biotechnology, it must ultimately challenge these conceptual frames, which, I argue, emerge from Enlightenment, liberal, political, and economic theory.

The translation of traditional bioethics (focusing on principles such as autonomy and rights, justice, and well being) into food ethics does not produce the critical tools that are able adequately to challenge the harmful legacy of Enlightenment thinking. What is needed are reorientations of ethics that are capable of formulating concepts and approaches that to some extent break with the presuppositions that underpin biotechnology at its foundation. This paper suggests that narrative and feminist critiques of medical bioethics are a good place to start in this project. Keywords: bioethics, biotechnology, food ethics, narrative ethics, principlism. Vikki Fraser is at the Centre for the Study of Ethics, Queensland University of Technology Carseldine Campus, Beams Road, Carseldine, Brisbane, Queensland Australia. (JAEE)

Frasz, Geoffrey, "Review of: Peter List, ed., Environmental Ethics and Forestry: A Reader," Conservation Biology 18(2004):586-587. (v. 15, # 3)

Frasz, Geoffrey, book review of Peter List (ed.), Environmental Ethics and Forestry: a Reader, Conservation Biology 18 (no. 2, 2004): 586-7.

Frasz, Geoffrey B., The Problem of Community. Ph.D. dissertation at the University of Georgia, completed 1994, under the direction of Frederick Ferré. The philosophical problem of community, reflected in the field of environmental ethics. Chapter 1: How to balance the needs, rights, and interests of the community as a whole with the needs, rights, and interests of the individuals who make up that community; how to develop a mixed community that allows for human flourishing, as well as a diverse nonhuman biotic component. This is applied to the holism/pluralism debate. Chapter 2: The human community, attempts to define community, and two major attempts to describe this. Chapter 3: The biotic community: a historical account of the change in ecology from populations to ecosystems, ending with a new version of a biotic community based on insights from the emerging science of complexity; a critique of the positions of Aristotle and Whitehead on community, and the metaphysical concepts of humans and nature that underlie each one. Chapter 4: Aristotle's concept of friendship can be extended through Whitehead to include nonhuman entities. Chapter 5: Whitehead's metaphysics can serve as a foundation for a postmodern concept of community; the general features of a constructive postmodern version of community; Frederick Ferré's "personalistic organicism" provides a solution to the community problem in environmental ethics. Frasz is currently teaching a course in environmental ethics at the Community College of Southern Nevada that attracts environmental science students from the University of Nevada at Las Vegas. Address: Geoffrey Frasz, Philosophical and Regional Studies, Community College of Southern Nevada, North Las Vegas, NV 89030, USA. 702-651-4126. <frasz@nevada.edu>

Frasz, Geoffrey, "What is Environmental Virtue Ethics that We Should Be Mindful of It?" Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 5-14. There has been increased interest in developing environmental virtue ethics (EVE). This paper presents some of the central features of this project. The first part is a general description of EVE, showing why there is a need for it. The second part spells out the central features of EVE including an account of the good life as flourishing in an expanded or mixed biotic community, and provides a tentative list of important environmental virtues. The third part examines one virtue: friendship, showing how an understanding of it provides insight into current issues in environmental ethics. The final section addresses a challenge to the project of EVE. Frasz is in the Philosophical and Regional Studies Department, Community College of Southern Nevada, Las Vegas. (v.13,#2)

Frasz, Geoffrey B. "Environmental Virtue Ethics: A New Direction for Environmental Ethics." Environmental Ethics 15(1993):259-74. In this essay, I first extend the insights of virtue ethics into environmental ethics and examine the possible dangers of this approach. Second, I analyze some qualities of character that an environmentally virtuous person must possess. Third, I evaluate "humility" as an environmental virtue, specifically, the position of Thomas E. Hill, Jr. I conclude that Hill's conception of "proper" humility can be more adequately explicated by associating it with another virtue, environmental "openness." Frasz is in the Department of Philosophic and Regional Studies, Community College of Southern Nevada, North Las Vegas, NV. (EE)

Frasz, Geoffrey. "Benevolence as an Environmental Virtue." In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Frechette (Shrader-Frechette), Kristin. Ethics of Scientific Research, review by Clark Wolf, Ethics and the Environment 4(1999):241-246. (E&E)

Frederick, Kenneth D. and Roger A. Sedjo, eds., America's Renewable Resources: Historical Trends and

Current Challenges. Washington, DC: Resources for the Future, 1991. 296 pages. Chapters on water, forests, rangeland, cropland, wildlife, outdoor recreation. With particular attention to sustainable development. A frequent theme is that private ownership of resources provides the best resource protection and management. Most of the authors are researchers on the staff of Resources for the Future (RFF), a non-profit organization working since 1952 to promote development, conservation, and use of natural resources. (v3,#4)

Frederick, Robert E., and W. Michael Hoffman, "Environmental Risk Problems and the Language of Ethics," Business Ethics Quarterly 5(1995):699-711. Six criteria for assessing proposed solutions to environmental risk problems. But before these criteria can be used business persons must be willing to discuss the problem in ethical terms, and they are often reluctant to do so.

Frederick, William C., "Anchoring Values in Nature: Toward a Theory of Business Value," Business Ethics Quarterly 2(1992):283-303. The dominant values of the business system--economizing and power-aggrandizing--are manifestations of natural evolutionary forces to which sociocultural meaning has been assigned. Economizing tends to slow life-negating entropic processes, while power-aggrandizement enhances them. Both economizing and power-aggrandizing work against a third (non-business) value cluster--ecologizing--which sustains community integrity. The contradictory tensions and conflicts generated among these three value clusters define the central normative issues posed by business operations. While both economizing and ecologizing are anti-entropic and therefore life-supporting, power augmentation, which negates the other two value clusters, is pro-entropic and therefore life-defeating. Business ethicists have tended to overlook the normative significance of nature-based value systems. Reconciling these is the most important theoretical task of business ethicists. A presidential address to the Society for Business Ethics, August 1991.

Frederick, William C., "Anchoring Values in Nature: Toward a Theory of Business Values," Business Ethics Quarterly 2(1992):283-303. The dominant values of the business system--economizing and power-aggrandizing--are manifestations of natural evolutionary forces. Economizing tends to slow the life-negating entropic processes, while power-aggrandizing enhances them. Both economics and power-aggrandizing work against a third (non-business) value cluster--ecologizing--which sustains community integrity. The contradictory tensions generated among these three value clusters define the central normative issues for business operations. Both economizing and ecologizing are negentropic and therefore life-supporting, but power augmentation, which negates the other two value clusters, is entropic and therefore life-defeating. Business ethicists have tended to overlook the normative significance of nature-based value systems. Reconciling economizing and ecologizing values is the most important theoretical task for business ethicists. Frederick is in the graduate school of business at the University of Pittsburgh. (v5,#2)

Frederick, William Crittenden, Values, Nature, and Culture in the American Corporation. New York: Oxford University Press, 1995. Chapter 6 is "Ecologizing Values and the Business Dilemma," with four ecologizing values: linkage, diversity, homeostatic succession, and community. Also "Anthropocentric Interpretations of Ecological Processes," "The Interface of Economizing and Ecologizing," "Varieties of Ecological Process," "Power Aggrandizement and Ecologizing," and "The Central Ecological Value Problem." An earlier version of this chapter is "Anchoring Values in Nature: Toward a Theory of Business Values," Business Ethics Quarterly, July 1992, pp. 283-303. "An economic system does not stand alone in grand isolation from the everyday life of ordinary people but is instead a pulsating human organism thoroughly embedded in societal and cultural [and ecological] life" (p. xiv). Other chapters are a penetrating insight into values (such as profits and desire for power), as these drive business. Frederick teaches ethics at the University of Pittsburgh. (v6,#4)

Frederiksen, Harald D., Review of Petri S. Juuti and Tapio S. Katko, eds., *Water, Time and European*

Cities, Environmental Values 16(2007):277-279.

Free Inquiry, Spring 1993, is a special issue, "Does Humanism Encourage Human Chauvinism?" with fourteen short articles, for example, Eugenie C. Scott, "Us and Them, Nature and Humanism"; James Lawler, "Ecocentric Ethics"; Frank Cullen and Ingrid Newkirk, "Humanism in a Biocentric Universe" Bernard Rollin, "Intrinsic Value for Nature--An Incoherent Basis for Environmental Concern." An example of anthropocentrism at its best, or worse, depending on your point of view, is Jan Narveson, "Humanism Is for Humans." "What the current ecological movement is about is the capacity to enjoy a North American/European lifestyle, and to do so into the indefinite future. What is unique about it is its claim that we can't do this for technological reasons. It isn't so." "There is, to repeat, no resource problem, no resource problem of consequence for the globe." "What's wrong with things being in pretty good shape for our fellow humans, with every prospect of their getting better still if we can keep our wits about us?" Narveson teaches philosophy at the University of Waterloo. The whole issue makes good short pieces for classroom discussion. (v5,#1)

Freeden, Michael, Review of Brian Doherty and Marius de Geus, eds., Democracy and Green Political Thought. Environmental Values 7(1998):251.

Freeden, Michael, Green Ideology: Concepts and Structures. OCEES Research Paper No. 4. Oxford: Oxford Centre for the Environment, Ethics and Society, Mansfield College, 1995. 31 pp. Ideologies are "decontesting" devices that "attempt to confer cultural and conventional legitimacy on particular, narrow understandings of each of the political concepts they employ." The core concepts of green discourse involve the human-nature relation, nature preservation and variants of holism, together with an emphasis on appropriate human lifestyles. The "indeterminacy" of green core concepts allows them to weave in and out of an unusually wide range of political traditions. There are conservative and liberal-individualist components in contemporary green political thought. The equation of protective interventionism with ecofascism should be rejected as trite. "What the scholar of ideologies can do is to delineate, however roughly, the semantic field within which debate takes place."

Freedman, William H., and Fu, Jacqueline C. "Environmental Issues Affecting Business Transactions in Taiwan." Natural Resources and Environment 10, no.4 (1996): 43. (v7, #3)

Freeman, Aaren S., and James E. Byers, "Divergent Induced Responses to an Invasive Predator in Main Mussel Populations," Science 313(11 August 2006):831-833. A native mussel quickly evolves the capacity to defend itself against a recently introduced invasive crab, by growing a thicker shell when the new crab is present. This makes it harder for the crab to open the mussel and eat it, and crabs eat something else. So native species are not as defenseless as previously thought to invasives. Mussels are more flexibly adaptive.

Freeman, David, Self Realisation: Variations on a Deep Ecological Theme, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Freeman, David M., Choice Against Choice: Cross-Cultural Policy Assessment in Social Development. University Press of Colorado, 1991. \$ 39.95 cloth. 344 pages. Largely devoted to natural resource issues where values are in conflict. The University Press of Colorado advertising blurb says, "Should a river be damned (sic!) for hydroelectric power production or be protected for its wild and scenic values? Which is better? Better for whom? Better for how long? Better in terms of what?" Freeman is a sociologist at Colorado State University and claims that sociology can assess and rank alternative public policy proposals. It seems also that sociologists are still liable to Freudian slips. (v2,#3)

Freeman, David, Self Realisation: Variations on a Deep Ecological Theme, Master's Thesis, Department

of Philosophy, Lancaster University, September 1993.

Freeman, R, "The EcoFactory: The United States Forest Service and the Political Construction of Ecosystem Management," Environmental History 7(no.4, 2002): 632-658.

Freemark, KE; Boutin, C; Keddy, CJ, "Importance of Farmland Habitats for Conservation of Plant Species," Conservation Biology 16(no.2, 2002):399-412. (v.13, #3)

Freemuth, John C., Islands Under Siege: National Parks and the Politics of External Threats (Lawrence, KS: University Press of Kansas, 1991). Attacks on the national parks from outside their boundaries (pollution, acid rain, noise, fragmented habitats) and beyond the control of the Park Service. \$25.00. 186 pages. Freemuth is a political scientist at Boise State University. (v2,#1)

Freemuth, John. "The Emergence of Ecosystem Management: Reinterpreting the Gospel?" Society and Natural Resources 9, no.4 (1996): 411. (v7, #3)

Freese, Curtis H. Harvesting Wild Species: Implications for Biodiversity. Baltimore, Maryland: The Johns Hopkins University Press, 1996. 704pp. \$65 cloth, \$29.95 paper. Freese draws together a diverse group of authorities to discuss the conditions under which commercial use may act as a conservation tool. Presenting fifteen case studies from around the world--in areas ranging from fisheries and forestry to non-timber forest products and trophy hunting--the discussion explores the link between sustainable development and biodiversity conservation. Freese's aim is to raise awareness among environmentalists, policy makers, funding agencies, students, and researchers of the use of economic incentives in conservation efforts. (v8,#1)

Freese, Curtis H. Wild Species as Commodities: Managing Markets and Ecosystems. Washington, D.C.: Island Press, 1998. \$59.95 cloth, \$29.95 paper. 256 pp. (v9,#2)

Freilich, J., Emlen, J, Duda J., Freeman, D., and Cafaro, P. "Ecological Effects of Ranching: a Six-Point Critique." BioScience 53: 759-765. Asks land managers and conservation ranchers to consider all the negative effects of ranching, not just grazing pressure. Focusing on the Great Plains of the United States, the authors raise six points of concern that must be addressed before we can hope to restore or maintain native ecosystems on the range. (v 14, #3)

Freilich, J.; Harris, J.S., "Another Threat to Prairie Streams," BioScience 54(no.5, 1 May 2004):380-380(1). (v. 15, # 3)

Freilich, JE; Emlen, JM; Duda, JJ; Freeman, DC; Cafaro, PJ, "Ecological Effects of Ranching: A Six-Point Critique," Bioscience 53(no.8, 2003):759-765. (v.14, #4)

Freilich, LE; Cornett, MW; White, MA, "Controls and Reference Conditions in Forestry: The Role of Old Growth and Retrospective Studies," Journal of Forestry 103 (no. 7, Oct/Nov 2005): 339-344.

Freilich, RH, "Smart Growth in Western Metro Areas", Natural Resources Journal 43 (no.3, 2003): 687-702.

Freiman, Christopher, Review of: Environmental Virtue Ethics, edited by Ronald Sandler and Philip Cafaro (New York and Oxford: Rowman & Littlefield, 2005). Ethics and the Environment 11(2006):133-138. (Eth&Env)

Freinkel, Susan. *American Chestnut: The Life, Death, and Rebirth of a Perfect Tree*. Berkeley: University

of California Press, 2007. Freinkel discusses the loss of a great American tree from an exotic fungus in the early twentieth century, one of the worst ecological upsets since the Ice Age, and determined efforts to save and restore the chestnut, from classical plant breeding to gene technology. Freinkel is a science journalist.

French, Hilary, Vanishing Borders, Chinese translation, translator: Li Dan. Publisher: Shanghai Translation Publishing House, 2002.

French, Howard W., "A Melting Glacier in Tibet Serves as an Example and a Warning," New York Times, November 9, 2004, p. D1. In eastern Tibet, runoff from the Zepu glacier, 27-square miles, melting with rising temperatures, has formed the powerful headwaters of a new river. (v.14, #4)

French, R. D., ed., Antivivisection and medical science in Victorian England. Princeton, NJ: Princeton University Press, 1975.

French, William C. "Against Biospherical Egalitarianism." Environmental Ethics 17(1995):39-57. Arne Naess and Paul Taylor are two of the most forceful proponents of the principle of species equality. Problematically, both, when adjudicating conflict of interest cases, resort to employing explicit or implicit species-ranking arguments. I examine how Lawrence Johnson's critical, species-ranking approach helpfully avoids the normative inconsistencies of "biospherical egalitarianism." Many assume species-ranking schemes are rooted in arrogant, ontological claims about human, primate, or mammalian superiority. Species-ranking, I believe, is best viewed as a justified articulation of moral priorities in response to individuals' or entities' relative ranges of vulnerability and need, rooted in their relative ranges of capacities and interests. French is in the theology department, Loyola University. (EE)

French, William C., "Ecological Degradation and the Judgment of God," Christian Century, January 6-13, 1993. Critical reviews of Al Gore, Earth in the Balance, and Bill McKibben, The Age of Missing Information, see below. French teaches ethics at Loyola University, Chicago. (v3,#4)

French, William. "Catholicism and the Common Good of the Biosphere." In An Ecology of the Spirit: Religious Reflections and Environmental Consciousness, ed. Michael Barnes, 11-26. Lanham, MD: University Press of America, Inc. and College Theology Society, 1994.

Fretheim, Terence E. "The Plagues as Ecological Signs of Historical Disaster." Journal of Biblical Literature 110 (1991): 385-96.

Freud, Sigmund, The Future of an Illusion. New York: W. W. Norton, 1961. p. Freud on nature and culture. "Nature ... destroys us--coldly, cruelly, relentlessly. ... It was precisely because of these dangers with which nature threatens us that we came together and created civilization. ... For the principal task of civilization, its actual raison d'être, is to defend us against nature.

We all know that in many ways civilization does this fairly well already, and clearly as time goes on it will do it much better. But no one is under the illusion that nature has already been vanquished; and few dare hope that she will ever be entirely subjected to man. There are the elements, which seem to mock at all human control: the earth, which quakes and is torn apart and buries all human life and its works; water, which deluges and draws everything in a turmoil; storms, which blow everything before them; there are diseases, which we have only recently recognised as attacks by other organisms; and finally there is the painful riddle of death, against which no medicine has yet been found, nor probably will be. With these forces nature rises up against us, majestic, cruel and inexorable, she brings to our mind once more our weakness and helplessness, which we thought to escape through the work of civilization" (p. 19). (v.10,#1)

Freudenberger, C. Dean, "Bridging the Gap: Sustainable Development More Fully Considered," CTNS (Center for Theology and the Natural Sciences) Bulletin 16 (no. 4, Fall 1996):14-21. In sustainable development, at global scales, we are addressing questions only recently entertained in the human imagination. We have no historical precedents to help us fathom the implications of our present crisis. We have to learn that we are interdependently related to the land and share with it a marvelous, mutually enhancing relationship. Injustice in any form ultimately erodes human communities and the ecosystems in which they are founded. Freudenberger teaches at Luther Seminary, St. Paul, MN. (v8,#1)

Freudenberger, C. Dean, Global Dust Bowl: Can We Stop the Destruction of the Land Before It's Too Late? (Minneapolis: Augsburg, 1990). Freudenberger claims that "agriculture is the responsibility of the entire society." He advocates more education regarding Earth ethics and regenerative "agroecology that preserves and enhances natural resources." Forests and grasslands, much more than being natural resources, are awesome relational environments that teach us creaturehood. Freudenberger is professor of international development, missions, and rural church at the Claremont School of Theology. He has written about agriculture in national and religious life for two decades. (v2,#1)

Freudenberger, Schoonmaker, Mark, Carney, Judith A., Lebbie, Aiah R. "Resiliency and Change in Common Property Regimes in West Africa: The Case of the Tongo in The Gambia, Guinea, and Sierra Leone," Society & Natural Resources 10(no.4, 1997):383. (v8,#3)

Freund, Judith Ann, Landscapes of Promise: An Examination of Students' Journals Written During a Cross-cultural Wilderness Experience (High School Students), 1997, University of St. Thomas, Saint Paul, Ed.D. thesis. 188 pages. An examination of nature journals written by ten American and ten Russian high school students during a cross-cultural exchange that provided experiences in selected national wilderness areas designated by the respective countries. The students participated in a backpacking excursion in the Lee Metcalf Wilderness Area of Montana in the summer of 1994, and a camping experience in the wilderness areas in the provincial region of Penza, Russia in the summer of 1995. Aesthetic 'peak' experiences; spiritual inspiration derived from experiences in nature; attitudes toward the preservation of wildlife; and environmental ethics. (v.10,#1)

Frewer, L. J., A. Kole, S. M. A. Van de Kroon and C. de Lauwere, "Consumer Attitudes Towards the Development of Animal-Friendly Husbandry Systems," Journal of Agricultural and Environmental Ethics 18(2005):345-367. Recent policy developments in livestock husbandry have suggested that, from the perspective of optimizing animal welfare, new animal husbandry systems should be developed that provide opportunities for animals to be raised in environments where they are permitted to engage in natural behavior. This research focuses on understanding consumer attitudes and preferences regarding such systems, to ensure that they are acceptable to consumers as well as producers, regulators, and scientists. Consumer perceptions of animal welfare and animal husbandry practices were evaluated using a quantitative consumer survey, which focused on two animal husbandry issues - farmed pigs and farmed fish. A transparent, enforceable, and traceable monitoring system for animal welfare friendly products is likely to be important for consumers. Keywords Animal welfare - fish farming - pig farming - consumer attitudes. The authors are in the Marketing and Consumer Behaviour Group, Social Sciences Department, University of Wageningen, Wageningen, The Netherlands. (JAEE)

Frewer, Lynn J., Howard, Chaya, Shepherd, Richard. "Public Concerns in the United Kingdom about General and Specific Applications of Genetic Engineering: Risk, Benefit and Ethics," Science, Technology, & Human Values 22(1997):98. (v8,#1)

Frey, R. G., "Speciesism," in Donald M. Borchert, ed., The Encyclopedia of Philosophy Supplement. New York: Macmillan Reference, Simon and Schuster and Prentice Hall International, 1996. Brief introduction to "speciesism" (taking differences in species as a reason to draw moral differences between

the way that members of that species are treated), with bibliography. (v7,#2)

Frey, R. G., Interests and rights: The case against animals. New York: Oxford University Press, 1980.

Frey, R. Mark, "To Everything There is a Season: Reinvest in Minnesota (RIM) and Soil Conservation", Journal of Agricultural Ethics 1(1988):291-304. The paper explores the severity of the problem of soil erosion and a variety of approaches to the problem. The typology of approaches includes doing nothing, individual party litigation, the state's invocation of public trust doctrine, and the state's exercise of its policy power. Frey is in St. Paul, Minnesota.

Frey, R. G. Review of Returning to Eden: Animal Rights and Human Responsibility. By Michael W. Fox. Environmental Ethics 5(1983):83-89.

Freyfogle, E. T., and Newton, J. L., "Putting Science in Its Place," Conservation Biology 16(no.4, 2002): 863-73. (v.13,#4)

Freyfogle, Eric T., "The Particulars of Owning," Ecology Law Quarterly 25(No.4, 1999):574-. (v.10,#2)

Freyfogle, Eric T., "The Ethical Strands of Environmental Law," University of Illinois Law Review, 4, 1994. The morality that underlies the environmental movement, and the extent to which environmental statutes reflect this new moral order in environmental law. The U. S. Congress's acts and pronouncements do not form a coherent moral order, nor do they convey a vision of ecological well-being. In result, environmental lawmaking is approaching a crisis of vision and imagination, stumbling on knotty issues such as nonpoint-source water pollution and declining wildlife habitat. Principles that could guide environmental lawmaking oriented by more encompassing, more deep-rooted issues of ecosystem health. Freyfogle teaches law at the University of Illinois. (v6,#2)

Freyfogle, Eric T., "Regulatory Takings, Methodically," ELR (Environmental Law Reporter) News and Analysis 31, pp. 10313-10321. "One of the most important ongoing changes in property law is the redefinition of ownership norms to protect the healthy functioning of the natural systems on which all life depends. Rights to use land are coming to depend on the land's natural features, and definitions of harm are coming to include disruptions of natural components such as topsoil, hydrologic systems, and biological diversity. The proper role for takings law is not to throw a wrench in the works of these much needed changes but rather to help guide them so that they occur in ways that maintain the health of private property as an institution" (p. 10321). (v.13,#1)

Freyfogle, Eric T., "Owning the Land: Four Contemporary Narratives," Journal of Land Use and Environmental Law 13(no. 2, Spring 1998):279-307. 1. The Libertarian ideal of autonomy. 2. The traditional understanding focused on economic opportunity. 3. A community-centered narrative that understands property as an evolving tool to meet community needs. 4. A biocentric narrative that looks to the land itself to prescribe the rules on how it can be used. A memorable expression of the last is Just v. Marinette County, a wetlands decision. The Court said: "An owner of land has no absolute and unlimited right to change the essential natural character of his land so as to use it for a purpose for which it was unsuited in its natural state and which injures the rights of others" (cited, p. 320). (v.10,#3)

Freyfogle, Eric T., "Ethics, Community, and Private Land." Ecology Law Quarterly 23(1996):631-661. Aldo Leopold advocated a land ethic. "Leopold was no lawyer and he gave little thought to how his land ethic, or any ecological informed land ethic, might fit together with the legal elements of private property rights. But as versions of his ethic have gained support, the issues has inevitably arisen. Is it possible, consistent with existing landed property rights, to push landowners to use their land more ethically? Is it possible to take the institution of private property, which has to do with private rights and economic

freedoms, and somehow combine it with an ecologically sound land ethic? Implicit in all of this speculation is the assumption that private property and land ethics are different animals, and not all that closely related. One has to do with private rights, the other with public responsibilities. One deals with legal entitlements, the other with moral suasion. ... Is it right to assume, as a point of beginning, such a wide divergence between property and land ethics? Perhaps they are more alike than we realize. Perhaps a certain kinship between them is hidden somewhere in the continuing reality of the community and in the still-lively value that we attach to community well-being--a kinship that, once understood might help us to find our way toward a private property regime that is ecologically, as well as economically sound." Freyfogle is professor of law at the University of Illinois, and one of the most philosophically literate of those writing in environmental law. (v7,#4)

Freyfogle, Eric T., "Boundless People, Boundless Land," pages 15-37, in Knight, Richard L., and Peter B. Landres, Stewardship Across Boundaries (Washington, DC: Island Press, 1998). "We see some of the character traits and tendencies that justify our continued use of certain boundaries: our ability to know and love only a human-size piece of land; our need to feel attached to the land and hence connected to our labor; our ingrained love of territory and our firm attachment to private property; our need to feel a part of a community; our desire for engagement with others in dignified ways. . . . Beyond these limits, though are other limits that now constrain us, and may of these limits we would do well to unbind and discard. Our love of individualism and love of liberty have simply become too strong, so much that they constrain our ability even to talk seriously about the common good. We are similarly hampered by our infatuation with the free market, with market-set valuations of things, and with the market's tendency to view nature as merely a collection of discrete resources. Intellectual limits like these have prompted us to bound the land needlessly and to make our boundaries more important than they ought to be. We somehow have to get away from them" (pp. 34-45). Freyfogle is in law at the University of Illinois. He has a book under this title forthcoming. (v.9,#3)

Freyfogle, Eric T., "The Construction of Ownership," University of Illinois Law Review, vol. 1996, no. 1, pages 173-187. Modern culture increasingly relies on patchwork remedies for societal problems. Freyfogle calls instead for a fundamental change in land-ownership jurisprudence. Current property law does little to discourage a landowner from acting in self-serving ways to accommodate immediate needs--a shortcoming that necessarily sacrifices the land's long-term health. We need to readjust our vision of our country's land-ownership norms to help nourish the land's health and reinvigorate our faded senses of local community. Freyfogle teaches law at the University of Illinois. (v7,#2)

Freyfogle, Eric T., "Land Ownership, Private and Wild," Wild Earth 5, no. 4 (Winter 1995): 71- . (v6,#4)

Freyfogle, Eric T., "The Price of a Sustainable Environment," Dissent, Spring 1998, 37-43. "In the end, market-based tools [for environmental conservation] must fit into a larger scheme of environmental policy that has as its principal aim not the promotion of markets, but the achievement and maintenance of a healthy land. Out of our deliberations on environmental goals should come new understandings of what it means to be a good citizen. Owning land must come to entail belonging to a natural community with obligations to respect the integrity and fertility of that community. Rights to use water must be understood as a form of stewardship, constrained by duties to use water in beneficial ways. The possession of a pollution permit does not mean that pollution is a good activity; such permits, however useful and legally protected, must never give rise to anything like a right to pollute" (p. 43). Freyfogle is in law at the University of Illinois. (v.9,#3)

Freyfogle, Eric T., "The Owning and Taking of Sensitive Lands," UCLA Law Review (University of California at Los Angeles) 43(1995):77-138. The institution of private land ownership is primarily a regime of private power--direct power over the land itself and indirect power over the people and other

life forms whose health and fates are linked to the land. In landed property schemes, boundary lines are drawn on the Earth and some owner acquires rights to control the encompassed space. When the law respects private rights in land, it supports and defends this private power, standing ready to sustain it when appropriate by the use of public force.

Private ownership sinks deep roots into the culture of the United States, in part because the nation has long defined itself in contrast with places where private ownership did not thrive. In the late twentieth century, no force has shaken private ownership more profoundly than the environmental movement and its parent science, ecology. What ecology tells us is that all forms of life are linked with, and dependent upon, all other forms of life, and ultimately with the land itself. Nature's order is more than just a jumbled collection of discrete objects, each understandable in isolation. It is a maze of interconnection and interdependence, an organic whole laced together by nutrients and energy flowing through primary producers up to the top carnivores, and then back to the soil to nourish new life.

Inevitably and appropriately the new wisdom of ecology is altering old ways of imagining the land and relating to it. Change, however, has not arrived easily, particularly in the case of private property law, which is one of the more important ways that a culture expresses its ties to the nonhuman natural world. The bumpiest transition has come in the case of ecologically sensitive lands, lands that have special value in sustaining the healthy functioning of larger biotic communities--wetlands, barrier islands, riparian corridors, endangered wildlife habitats, and the like. Before the age of ecology, owners of sensitive lands enjoyed the same rights as other owners, including the right to transform a land parcel extensively, radically altering its ecosystem role. Today, these owners are under siege. Left along, sensitive lands fulfill their ecosystem functions; altered for intensive human use, the disruptive ripples spread widely, if at times slowly and invisibly. Now that we understand the roles of these lands, what should it mean for a private person to own them? Excellent article, a must read for those following the debate in this area. Freyfogle teaches law at the University of Illinois. (v6,#4)

Freyfogle, Eric T., "Five Paths of Environmental Scholarship," University of Illinois Law Review, Volume 2000, no. 1, pp. 115-134. 1. Libertarians. 2. Simple Fixers. 3. Dispute Resolvers. 4. Progressive Reformers. 5. Advocates for the Land Community. Differences among them deal chiefly with underlying issues that are rarely joined and perhaps never well considered. Failure to address these issues more openly weakens the scholarly field as a whole, making it less useful in particular for nonlaw readers. Includes some speculations on student law journal article selection processes and their impacts on environmental law as an academic field. Freyfogle is professor of law, University of Illinois College of Law. (v.11,#3)

Freyfogle, Eric T., and Newton, Julianne Lutz, "Putting Science in its Place," Conservation Biology 16(no. 4, August 2002):863-873. A process-based approach, distinguishing between issues of substance and issues of process, will help clarify and isolate the various proper roles of science in the overall land management equation. This also clarifies when nature can be said to possess intrinsic value, why it is proper for conservation biologists to base their work on normative goals, and why arguments about ecosystem management are sometimes less fruitful than they ought to be. On balance a goal not overtly tied to science, such as land health, offers the best option for land management. Freyfogle is at the University of Illinois College of Law, Newton is in natural resources and environmental sciences, University of Illinois, Urbana. (v.13, #3)

Freyfogle, Eric T., "Illinois Life: An Environmental Testament," University of Illinois Law Review, volume 1997, number 4, pages 1081-1108. "The environmental movement in Illinois, now decades old, brings together diverse citizens from all around the state and varied walks of life. Some live amid urban skyscrapers; others in sparsely populated rural townships. What motivates them to act, individually and through groups, is a felt concern for the health of the Illinois landscape and all that dwells on it, including humans. The thinking of these citizens ranges widely, both in terms of how they comprehend environmental problems and what they believe ought to be done about them. Despite this variety,

particular values and hopes emerge over and over, in the daily talk of individual environmentalists, in the position papers of environmental groups, and in the growing literature of environmentalism" (pp. 1081-1082). Freyfogle is in law at the University of Illinois. (v.9,#3)

Freyfogle, Eric T., "Ownership and Ecology," Case Western Reserve (University) Law Review 43(1993):1269-1297. Private land ownership, the laws and institutions, and what this tells us about the relationship between people and the Earth. How much ecological wisdom and how much foolishness lies embedded within these basic ownership ideas. The law's basic messages about ownership and the human-land tie are misguided. The flaws emerge more plainly as we learn more about ecology and gain greater ability to sense how we are damaging the Earth. A major cause of the environmental crisis and a major impediment to change lies in our legal culture, our inherited sense of owning the land. The Supreme Court said, a century ago, "All property in this country is held under the implied obligation that the owner's use of it shall not be injurious to the community." "By now," adds Freyfogle, "We should know that the community of which we are a part includes the soils, the waters, plants, and animals that live with us on Earth" (p. 1296-7). Freyfogle teaches in the University of Illinois College of Law. (v5,#1)

Freyfogle, Eric T., "The Particulars of Owning," Ecology Law Quarterly 25 (no. 4, 1999);574-590. The U. S. Constitution expressly protects private property. But property rights themselves largely arise elsewhere, from independent sources, and only then gain protection from the Constitution's text. I. Property and the popular will. II. Levels of community. III. Private property and public policy. IV. Coda: Valuing the particulars. A new trend is to tailor property rights to the land, often misinterpreted as an attack on property rights, but in fact protecting the core values of property, which depend in part on land itself. Freyfogle teaches law at the University of Illinois. (v.10,#3)

Freyfogle, Eric T. *Why Conservation Is Failing and How It Can Regain Ground*. New Haven: Yale University Press, 2006. The real meaning of good land use and six key tasks that those who care about healthy land must address. Freyfogle is in law, University of Illinois.

Freyfogle, Eric T., *he Land We Share*. Reviewed by Robert McKim. *Journal of Agricultural and Environmental Ethics* 20(2007):215-219.

Freyfogle, Eric T., "A Sand County Almanac at Fifty: Leopold in the New Century," Environmental Law Reporter 30(2000)10058-10068. "Our libraries of data are more vast, but Leopold's peculiar talent lay less in his detailed knowledge than in his unmatched ability to integrate, to bring together, to nourish and heal, to imagine that long-term path toward fusion. As a people skilled in the opposite, in tearing down, fragmenting, discarding, degrading, and criticizing, we need Leopold as much as ever" (p. 10067). (v.11,#3)

Freyfogle, Eric T., "Community and the Market in Modern American Law," Pages 382-414 in Richards, John F., ed., Land, Property, and the Environment. Oakland, CA: ICS (Institute for Contemporary Studies) Press, 2002. Over the past century, U.S. laws and regulations have increasingly embedded property rights in a communal order, aimed in important part at protecting the natural environment. Aggregate calculations are hard to undertake, yet plentiful evidence suggests that these constraints have served not to contain economic growth but to help fuel it, by correcting the market's flaws in pricing and allocation and by fostering the kind of trust, social cohesiveness, and civic stability that any market needs to work well. In the ongoing drama of private property in America, the market is only one of the lead characters. Freyfogle is in law, University of Illinois at Urbana-Champaign. (v.13,#1)

Freyfogle, Eric T., "Local Value," Terra Nova 1(no. 2, 1996):29-39. Parcel of land are small pieces in a potent, market-based economy that has come to define the modern age, a system that operates on cash and values all things in terms of their cash equivalencies. Land is considered a commodity, and must look

appealing to people who have cash to spend. In this competition local lands have not fared well. Only nature continues to embrace these lots and to sense their worth, with lush weeds and sprouting trees covering more or less every unpaved spot. Living responsibly in a place means gaining an awareness of the local natural setting and trying to use that setting as a guide for the types of activities that are suitable for the land. It means mimicking nature, whenever possible, in deference to the more lasting wisdom that lies embedded within the land. Land is being mined by rich people who live elsewhere; while in fact the local people and these lands possess much intrinsic value. Freyfogle teaches law at the University of Illinois. (v7,#2)

Freyfogle, Eric T., "Land Ownership: Private and Wild," Wild Earth, Winter 1995/96, vol. 5, no. 4, pages 71-77. The word property shares etymological roots with such words as proper, appropriate, and propriety. Thus, embedded in the world, if not in today's version of the institution, are certain seemingly inescapable ideas--of rightful scale and proportion, of balance and order, of personal responsibility. To make something one's own--to transform it into one's property--is to make it part of one's life, an extension of one's person and character; it is to bring the thing within the fold of one's individual care and duty. Do these ethical ideas, we might wonder, lurk somewhere beneath the surface of American property law? Freyfogle teaches law at the University of Illinois.

Freyfogle, Eric T., Justice and the Earth: Images for our Planetary Survival. New York: Free Press, 1993. We all carry mental images of the natural world that help guide us in our daily interactions with the planet. Freyfogle shows how influential these guiding images are, and why we need to rethink them if we are to reverse the Earth's decline. We must reconsider familiar assumptions about owning property, about human superiority over other species, about the values of the free market, and the extent of our environmental knowledge. With examples from environmental controversies in Cape May, New Jersey, Ely, Minnesota, and on Utah's Burr Trail. How to replace outmoded, simplistic images with new images. Freyfogle is a professor of law at the University of Illinois and a naturalist. (v4,#3)

Freyfogle, Eric T., "Eight Principles for Property Rights in the Anti-Sprawl Age," William and Mary Environmental Law and Policy Review 23(1999):777-799. 1. Property as an Organic Institution. 2. Ownership and the Common Good. 3. Clarifying the Common Good. 4. Re-defining Land-Use Harm. 5. Tailoring Rights to the Land. 6. Sharing the Benefits of Development. 7. The Taking of Property. 8. Rhetoric Counts. (v.11,#3)

Freyfogle, Eric T., "Consumption and the Practice of Land Health," pages 181-201, in Westra, Laura, and Werhane, Patricia H., eds., The Business of Consumption: Environmental Ethics and the Global Economy (Lanham, MD: Rowman and Littlefield, 1998). A sound ethic of consumption needs to build upon an ethical consideration toward the land and its health. Land health encompasses, however vaguely, the kind of durable, flourishing, self-recreating communal life that is the mark of a lasting link between people and place. Land health is not an easy matter to come to grips with, particularly when land is understood as the entire ecological community in a place, including the human members. Nevertheless, land health is a foundational limit on consumption. Freyfogle is in law at the University of Illinois.

Freyfogle, Eric T., "The Dilemma of Wendell Berry," University of Illinois Law Review 1994, no. 2:363-385. Because all unsustainable actions must, by definition, cease one day, it is far better that we change those actions now, by conscious choice, while we are still able to carve out productive and satisfying lives. The first step is for each of us to turn inward and make those changes in our own lives that will enable us to live lightly on the land. Only so can we promote the lasting health of the natural and social communities of which we are inextricably a part. In this vision, Wendell Berry is a twentieth century prophet, who, as perceptively and energetically as anyone, has borne witness to the profound moral challenges of the environmental age. Freyfogle is professor of law, University of Illinois, and the author of Justice and the Earth. (v5,#4)

Freyfogle, Eric T., Bounded People, Boundless Lands: Envisioning a New Land Ethic. Washington, DC: Island Press, 1998. 207 pages. A philosophical examination of personal responsibility and the dominion of humans beings over Earth. Private property rights, responsible land ownership, the rights of wildlife, ecological health, presented in the context of contemporary events and legal cases. "On the eve of the new century, Americans are much in need of a more poetic sense of the land, a sense of its organic wholeness and beauty; its inner motion and energy, its subtle music and spirituality. To tend the land wisely is not just to use it efficiently; it is to recognize the land's sacredness and show it due respect.

When the land is rigidly divided, physically and in the hearts of people, it becomes harder for people to experience the sense of boundlessness Aldo Leopold felt ... before human-created boundaries reasserted their potent influence. ... A sense of boundlessness needs to undergird a new land ethic. ... The time must come when landowners concern themselves not just with a single parcel of land but with the landscape that includes it" (pp. 173-174). Freyfogle teaches law at the University of Illinois, Urbana-Champaign. (v.10,#1)

Freyfogle, Eric T., "The Land Ethic and Pilgrim Leopold," University of Colorado Law Review 61(1990):217-256. An examination of whether and how far the Leopold land ethic can be incorporated into natural resource law. Freyfogle is professor of law, University of Illinois. (v1,#3)

Freyfogle, Eric T., "Owning the Wolf: Green Politics: Property Rights, Ecology Rights," Dissent, Fall 1994, pp. 481-487. The ranchers who object to the wolf's return own the land the wolf wants to roam. If private property means anything so one argument goes it means the right to halt trespass by animals with two legs or four. Private property claims have become a rallying cry for anti-environmentalism, and these claims deserve a fair examination. What does it mean for a person to own land that is an integral part of an ecosystem of which humans are a part? Has there been a "takings" when the landowner is required to maintain these ecosystemic processes? Human institutions need reshaping in recognition of the functioning biotic communities where people live. Among the institutions that will require change, the institution of private property stands high on the list. Thoughtful, brief article, eminently suited for raising these issues with students. Freyfogle is professor of law, University of Illinois. (v5,#4)

Freyfogle, Eric T. "Water Rights and the Common Wealth." Environmental Law 26, no.1 (1996): 27. Freyfogle takes issue with the view that water marketing should be the primary tool to meet new needs for water in the West and to bring an end to the most environmentally damaging water uses. Recognizing that market reasoning only perpetuates the view that nature is merely a collection of resources, existing chiefly to serve human needs and easily shifted from place to place, Freyfogle encourages lawmakers to react by making the beneficial-use requirement a more meaningful construct. (v7, #3)

Freyfogle, ET, "Conservation and the Culture War", Conservation Biology 17(no.2, 2003):354-355.

Fribank, Les G. and Frank Corcella, "Genetically Modified Crops and Farmland Biodiversity," Science 289(1 September 2000):1481-1482. British birds that eat weed seeds and what happens to them when more pesticide can be applied to kill such weeds because the genetically modified crops are now pesticide resistant. The authors of an accompanying report conclude that effects on the local use of birds might be severe, but these authors think it is too soon to tell. (v.14, #4)

Frickel, S, "Scientist Activism in Environmental Justice Conflicts: An Argument for Synergy", Society and Natural Resources 17 (no.4, 2004): 369-376(8).

Frieden, Bernard J. The Environmental Hustle. Reviewed in Environmental Ethics 3(1981):85-94.

Friederici, Peter, "Return of the Jaguar," National Wildlife 36, no. 4, June/July 1998, pp. 48-51. Jaguars are back in the United States. Jaguars were once present in southern Arizona and New Mexico,

occasionally found throughout the U.S. Southwest, but were shot out and have been gone about half a century. But now they are returning, on their own, moving north from Mexico. Environmentalists, including some ranchers, welcome them, but not everyone is rolling out the welcome mat. The jaguar is not on the U.S. Endangered Species list, because it was judged extinct in the U.S. (v9,#2)

Friedland, David M., Hagerty, Timothy J. "NMA, CMA, and 'Federal Enforceability' Under the Clean Air Act." Journal of Environmental Law and Practice 3(no.4, Jan. 1996):59. Controls need not be "federally enforceable" to be considered in calculating "potential to emit" for status as a major source under the Clean Air Act. (v7,#1)

Friedland, Jonathan, "Green Chile: Across Latin America, New Environmentalists Extend Their Reach," The Wall Street Journal (3/26/97): A1. Environmentalism gains ground in Chile. As evidenced by a hit television series that takes as its theme the conflict between Chile's economic growth (the highest in Latin America) and protection of its "once-bountiful natural resources," Chile has South America's strongest and most broad-based environmental movement. "The ideology that growth will solve all our problems just isn't credible anymore; there has been too much damage to the environment and human welfare." For example, during the winter, the smog in Santiago (the capital) is so bad that hundreds of school children are hospitalized with respiratory ailments. There are 150 grass-roots environmental groups in Chile. "Billions of dollars in new investments, involving major foreign companies, are now hung up by administrative, legal and even physical challenges mounted by local citizens groups, environmental groups or a combination of the two." Conama, the country's environmental protection agency, was established in 1989 but hasn't had real regulatory authority until recently. Chile's president Eduardo Frei says that Conama won't approve projects that fail to meet the country's new environmental standards (ones he claims are the most rigorous in Latin America), but once a project is approved by Conama, he says "he won't permit people to halt development for environmental reasons." Conama's executive director says the agency tries to strike a balance, but "the absolute first priority of this country is achieving a growth rate which allows us to bring low-income groups out of poverty" (thus embracing the assumption that economic growth will solve the poverty problem). There are currently about 40 lawsuits against the agency, many relying on a clause in the Chilean constitution guaranteeing every citizen a right to a clean environment. The reporter of this article defines deep ecology as a view "which calls for preservation at all costs." (v8,#1)

Friedman, Rob. Review of Reading the Earth: New Directions in the Study of Literature and the Environment. Edited by Michael P. Branch, Rochelle Johnson, Daniel Patterson, and Scott Slovic. Environmental Ethics 23(2001):207-210. (EE)

Friedman, Rob. Review of Technical Communication, Deliberative Rhetoric, and Environmental Discourse: Connections and Directions. Edited by Nancy W. Coppola and Bill Karis. Environmental Ethics 23(2001):207-210. (EE)

Friedman, Rob. Review of Greenspeak: A Study of Environmental Discourse. By Rom Harré, Jens Brockmeier, and Peter Mülhäusle. Environmental Ethics 23(2001):207-210. (EE)

Friedman, Rob. Review of Green Culture: Environmental Rhetoric in Contemporary America. Edited by Carl G. Herndl and Stuart C. Brown. Environmental Ethics 23(2001):207-210. (EE)

Friedman, Thomas L., The Lexus and the Olive Tree: Understanding Globalization. New York: Farrar, Straus, and Giroux, 1999. 394 pages. Popular book by a leading free market apologist. "Because globalization as a culturally homogenizing and environment-devouring force is coming on so fast, there is a real danger that in just a few decades it could wipe out the ecological and cultural diversity that took millions of years of human and biological evolution to produce." But then globalization would itself be

unsustainable, lacking an ecological base. Friedman hopes that market principles can save environmental diversity, that the global network will be used to organize environmental defense, and that technology will reduce the volume of materials needed for the economy and engineer new genetic forms. Also, unless population growth slows, it will be impossible to protect the environment. Friedman is foreign affairs columnist for the NY Times. (v.11,#1)

Friedmann, John and Haripriya Rangan, eds. In Defense of Livelihood: Comparative Studies on Environmental Action. Kumarian Press, 1993. 220 pages, \$21.95. The product of a research program at the United Nations Research Institute for Social Development, this book presents case studies of struggles and innovative practices of local groups in seven regions of the developing world. The researchers asked the question: What happens when people unite to defend the land and natural resources that are the immediate sources of their livelihood?

Friend, Anthony M., "Economics, Ecology and Sustainable Development: Are They Compatible?" Environmental Values Vol.2 No.2(1992):157-170. "Quand un economiste vous repond on ne comprend plus ce qu'on lui avait demande." Andre Gide, Journal. ABSTRACT: The prevailing economic paradigm, in which a closed circular flow of production and consumption can be described in terms of 'natural laws' of the equilibrium of market forces, is being challenged by our growing knowledge of complex systems, particularly ecosystems. It is increasingly apparent that neo-classical economics does not reflect social, economic and environmental realities in a world of limited resources. The best way to understand the problems implicit in the concept of 'sustainable development' is provided by Ecological Economics--a new synthesis in which the traditional virtue of thrift is justified using modern ideas from systems theory and thermodynamics. KEYWORDS: Ecological economics, entropy, natural resources, sustainable development, thrift. Institute for Research on Environment and Economy, University of Ottawa, Institut de Recherche sur l'Environnement et l'Economie, Universite d'Ottawa, 5 Calixa Lavalee, Ottawa, Ontario, Canada K1N 6N5.

Friend, Tim, "A Wartime First: Dolphins Called to Clear Mines," USA Today, March 27, 2003. Dolphins in Iraqi war. For the first time, the U.S. Navy has deployed an undisclosed number of bottlenose dolphins to recognize mines using their echolocating solar and to mark the locations of the mines with special buoys. Dolphins have been previously used for "swimmer defense," to search for scuba divers who might have been trying to attach explosives on U.S. Navy vessels. The U.S. Navy also works with sea lions who have been taught to attach leg restraints to human interlopers they detect.

Frierson, Pamela. "Going, Going, Gone...to the Goonies." The Christian Science Monitor 89.98 (16 April 1997): 13.

Frierson, Patrick R., Review of: Ronald Sandler and Philip Cafaro (eds), Environmental Virtue Ethics, Environmental Values 15(2006):258-261.

Frierson, Patrick. "Metastandards in the Ethics of Adam Smith and Aldo Leopold." Environmental Ethics 29(2007):171-191. Adam Smith is not an environmentalist, but he articulated an ethical theory that is increasingly recognized as a fruitful source of environmental ethics. In the context of this theory, Smith illustrates in a particularly valuable way the role that anthropocentric, utilitarian metastandards can play in defending nonanthropocentric, nonutilitarian ethical standpoints. There are four roles that an anthropocentric metastandard can play in defending an ecocentric ethical standpoint such as Aldo Leopold's land ethic. First, this metastandard helps reconcile ecocentrism with theodicy, either of the religious sort - showing that God is good - or of the evolutionary sort - showing that ecocentrism is consistent with human ethical dispositions as evolved through a process of natural selection. Second, using anthropocentrism as a metastandard helps reconcile our moral interest in human welfare with a thoroughly ecocentric standpoint. Third, defending ecocentrism by appeal to an anthropocentric

metastandard provides a way of swaying die-hard anthropocentrists to adopt a more ecocentric perspective without showing disrespect to nature in the process. Finally, the systematic quasi-ecological connection between ecocentrism as an ethical standard and anthropocentrism as a metastandard has a beauty of its own that can provide additional motive to adhere to ecocentric ethical norms. (EE)

Friesen, L., "Targeting Enforcement To Improve Compliance With Environmental Regulations," Journal of Environmental Economics and Management 46(no. 1, 2003): 72-85. (v 14, #3)

Friskics, Scott, "Context Matters: Remarks on Environmental Education," International Society of Environmental Ethics Newsletter, vol. 13, no. 1 (Spring 2002), pp. 4-7. "For me, context is everything. It grounds my thinking and writing. I can't imagine talking about environmental ethics without making some reference to Montana's Rocky Mountain Front, Bob Marshall Wilderness Complex, Zortman-Landusky mine site, or other defining features of the place I inhabit. In order to speak, I have to be speaking from somewhere. The same goes for ethical action. For me, ethics is a matter of responsibility - being responsive to the call, the touch, the face of the other, regardless of whether it's the call of a meadowlark, the touch of a lover, or the face of a mountain. Ethical action seems rooted in these kinds of encounters - these dialogues with the others whom we meet and to whom we must respond.

Context is everything in teaching, too. I teach environmental ethics at Fort Belknap College, a tribally controlled community college located on the Fort Belknap Indian Reservation, home of the Gros Ventre (White Clay/Ah-Ah-Ne-Nin) and Assiniboine (Nakoda) Tribes. Ninety-five percent of the students in my class are American Indians - mostly Plains Indians. ... So, how does one go about teaching environmental ethics in this context?

Friskics teaches environmental ethics and works as a grant-writer at Fort Belknap College (P.O. Box 159; Harlem, MT, 59526). (v.13,#1)

Friskics, Scott, "How Does Nature Speak to Our Concern? The Case of Montana's Rocky Mountain Front" Pages 193-207 in Kaplan, Laura Duhan, Philosophy and Everyday Life (New York: Seven Bridges Press, 2001). People who love "the Front" (a rise of mountains at the edge of the plains) "speak of contact and encounter--either for the first time, over the course of a lifetime, or even across generations. They speak of a certain way of knowing this particular place, a knowledge that, despite an uncanny, ineffable quality, conveys an indwelling sense of beauty, specialness, sacredness, and wildness" (p. 199).

Alas, however, the oil and gas industry desires the Front, including some now protected areas. In a continuing controversy, the supervisor of the U.S. Forest Service Lewis and Clark Forest (Gloria Flora) made, commendably and surprisingly, a final decision to protect the Front from oil and gas leasing for at least 10-15 years. Her summary cites the strong sense of place felt by so many who testified at the hearings. Friskics concludes: "With a knowledge and certainty born of sustained contact with the being and things of the Rocky Mountain Front, I know that these mountains ought not--no, must not, be opened up to oil and gas (or mineral) development. Out of respect and love for the Front, we--I--must remain vigilant and active" (p. 206). Friskics teaches environmental ethics and works as a grant-writer at Fort Belknap College (P.O. Box 159; Harlem, MT, 59526). (v.13,#1)

Friskics, Scott, "Dialogue, responsibility, and oil and gas leasing on Montana's Rocky Mountain Front," Ethics and the Environment 8(no. 2, 2003):8-30. The aesthetic and emotive power of the Rocky Mountain Front in Montana, challenged by the oil and gas industry. "With a knowledge and certainty born of sustained contact with the beings and things of the Rocky Mountain Front, I know that these mountains ought not--no, must not--be opened up to oil and gas (or mineral) development." Friskics is at Fort Belknap College, a tribally controlled community college located on the Fort Belknap Indian Reservation in Montana. (E&E)

Friskics, Scott. "Dialogical Relations with Nature." Environmental Ethics 23(2001):391-410. I suggest

that our dialogical encounters with our fellow creatures furnish the experiential ground of ethical action with respect to them. Unfortunately, this ground is seldom realized or recognized in our society; our capacity for ethical action remains unmoored from its animating sources. Yet despite our habitual inattentiveness, nature's creatures may still grace us with their presence in dialogue. The works of Martin Buber and Henry Bugbee provide the theoretical framework within which I attempt to work through these ideas and interpret their ethical significance in the context of personal experience. (EE)

Friskics, Scott. "The Twofold Myth of Pristine Wilderness: Misreading the Wilderness Act in Terms of Purity." *Environmental Ethics* 30(2008):381-399. In recent years, the notion of wilderness has been roundly criticized by several prominent environmental philosophers and historians. They argue that the "received wilderness idea" is dualistic, ethnocentric, and static. According to these critics, this idea of wilderness finds clear expression in the Wilderness Act of 1964. However, the idea of wilderness so ably deconstructed by its critics bears little resemblance to the understanding of wilderness presented in the Wilderness Act. The critics assume a backward-looking, purity-based definition of wilderness that runs counter to the forward-looking, relativistic interpretation of the Wilderness Act that has guided and informed subsequent wilderness legislation, management, and visitation. Under the Wilderness Act, wilderness designation is less a matter of preserving remnants of "pristine" nature than establishing a covenant between humans and a particular place. Wilderness areas, so conceived, serve as potential sabbath places, whose ultimate significance is best understood in terms of their mutually informing relationship to the places where we live and work. Rather than detracting from our efforts to inhabit the Earth in more creative and sustainable ways, wilderness represents a vital part of larger landscapes of human inhabitation characterized by a diverse mixture of human-nature relational patterns. (EE)

Fritsch, Al, and Paul Gallimore. *Healing Appalachia: Sustainable Living through Appropriate Technology*. Lexington, KY: University Press of Kentucky, 2007. Appropriate technology applied to the Southern Appalachian region.

Fritsch, Albert J., and Warren E. Brunner, *Appalachia: a Meditation*. Chicago: Loyola Univ. Press, 1986.

Fritsch, Albert S., et al., *Environmental Ethics: Choices for Concerned Citizens*. Doubleday, 1980.

Frodeman, Robert, Dale Jamieson, Baird Callicott, Stephen M. Gardiner, Lori Gruen, Irene J. Klaver, Eugene Hargrove, Ben A. Minteer, Bryan Norton, Clare Palmer, Holmes Rolston, III, Ricardo Rozzi, James Sterba, William M. Throop, Victoria Davion, "Commentary on the Future of Environmental Philosophy," *Ethics and the Environment* 12(no. 2, 2007):117-150. Short commentaries by fifteen environmental philosophers gathered at the University of North Texas for two days in February 2007 to discuss the future of their field.

Frodeman, Robert, Review of Bruce V. Foltz, *Inhabiting the Earth: Heidegger, Environmental Ethics, and the Metaphysics of Nature*. *Environmental Ethics* 19(1997):217-219. (EE)

Frodeman, Robert, and Mitcham, Carl, "Geophilosophy: Philosophers and Geoscientists Thinking Together on the Future of the Earth Sciences," *GSA Today* (monthly newsletter of the Geological Society of America) 9(no. 7, July, 1999):18-19. Report on a workshop held in Boulder, CO, March 1999, funded by the National Science Foundation, of fifteen environmental philosophers meeting with geologists. Another report is in the *Hastings Center Report*, May-June, 1999, pp. 47-48. (v.10,#3)

Frodeman, Robert, ed., *Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community*. Upper Saddle River, NJ: Prentice Hall, 2000. 15 contributors. Part I. Rock Logic: The Nature of the Earth Sciences. Part II. The Earth Sciences in the Life of the Community. Includes: Polkinghorn, Brian, "A Multi-Disciplinary Approach to Managing and Resolving Environmental Conflicts"; Sarewitz,

Daniel, "Science and Environmental Policy: An Excess of Objectivity," (a geologist illustrates prevalent, false ideas of objectivity); Borgmann, Albert, "The Transparency and Contingency of the Earth"; Oelschlaeger, Max, "Natural Aliens Reconsidered: Causes, Consequences, and Cures"; McLean, Scott, Moores, Eldridge M., and Robertson, David A., "Nature and Culture" (report of a program by this name at the University of California, Davis); Part III. Philosophic Approaches to the Earth. Includes: Benammar, Karim, "Sacred Earth"; Lingis, Alphonso, "Ecological Emotions". And more. Frodeman is now at the Colorado School of Mines. (v.12,#3) Review by Maeve Borland, Journal of Agricultural and Environmental Ethics 14(2001):88-93. (JAEE)

Frodeman, Robert, "Earth Matters: The Earth Sciences, Philosophy and the Claims of Community," Philosophy and Geography 4 (No. 2, 2001): 244-248. Book reviewed by Stefanovic, Ingrid Leman. (P&G)

Frodeman, Robert. "Radical Environmentalism and the Political Roots of Postmodernism." Environmental Ethics 14(1992):307-19. I examine the close relationship between radical environmentalism and postmodernism. I argue that there is an incoherence within most postmodernist thought, born of an unwillingness or incapacity to distinguish between claims true from an ontological or epistemological perspective and those appropriate to the exigencies of political life. The failure to distinguish which differences make a difference not only vitiates postmodernist thought, but also runs up against some of the fundamental assumptions of radical environmentalism. Frodeman is in the department of philosophy, Fort Lewis College, Durango, CO. (EE)

Frodeman, Robert. "The Policy Turn in Environmental Philosophy." Environmental Ethics 28(2006):3-20. A policy turn in environmental philosophy means a shift from philosophers writing philosophy essays for other philosophers to doing interdisciplinary research and working on projects with public agencies, policy makers, and the private sector. Despite some steps in this direction, a policy turn remains largely unrealized within the community of environmental philosophers. Completing this shift can contribute to better decision making, help discover new areas for philosophic investigation at the intersection of philosophy and policy, and identify new employment prospects for philosophy graduates. (EE)

Frodeman, Robert, Review of Mitcham, Carl, Thinking Through Technology. Environmental Ethics 18(1996):111-112. (EE)

Froelich, A, "Army Corps: Retreating or Issuing a New Assault on Wetlands?", Bioscience 53(no.2, 2003):130.

Frome, Michael, Regreening the National Parks (Tucson, University of Arizona Press, 1991). \$ 29.95. Claims that the Park Service has been transformed from a professional to a political agency and betrayed its own values by emphasizing recreation and "short-order wilderness served like fast food" rather than the preservation of the nation's natural heritage. Claims that personnel are being forbidden to criticize public policy in which they have found conflict with conservation principles, and contends that, as the Park Service has become more bureaucratic, those for whom the environment deeply matters scarcely rise within its ranks. Frome is currently writer-in-residence at the Huxley College of Environmental Studies, Western Washington University. His earlier National Park Guide sold over half a million copies. (v2,#2)

Frome, Michael, Battle for the Wilderness. Salt Lake City, UT: University of Utah Press, 1997. Revised edition. What is wilderness? Wilderness as cultural heritage, scientific resource, recreational resource. Saving wilderness by law. And more.

Fromm, Harold. Review of Environmentalism and the Future of Progressive Politics. By Robert C.

Paehlke. Environmental Ethics 14(1992):81-85.

Frost, Mervyn. Ethics in International Relations: A Constitutive Theory. New York: Cambridge University Press, 1996. 264 pp. \$18.95. Frost argues that ethics is accorded a marginal position within the academic study of international relations. He examines reasons given for this and evaluates those ethical theories that do exist within the discipline. He elaborates his own ethical theory which he derives from Hegel and applies it to ethical problems in international politics today. (v8,#3)

Fruit of the Orchard: Environmental Justice in East Texas. Denton: University of North Texas Press, 2006. Contents include: (1) "Introduction" by Phyllis Glazer, (2) "A Tear in the Lens" by Roy Flukinger, and (3) "Fruit of the Orchard" by Tammy Cromer-Campbell, (4) "Preventing Future Winonas" by Eugene Hargrove, and (5) "Toxicological Myths" by Marvin Legator.

Fu, C., J. Wu, J. Chen, Q. Wu and G. Lei, "Freshwater fish biodiversity in the Yangtze River basin of China: patterns, threats and conservation," Biodiversity and Conservation 12(no. 7, 2003): 1649-1685. (v 14, #3)

Fu Hua, A Studies of Ecological Ethics, Huaxia Press, 2002. chapters: ecological ethics studies in western countries; a summary of Chinese scholars' studies of western ecological ethics; relations of man and nature; ecological ethics is essentially applied ethics; there is no ethical relationship between man and nature; the value of nature and its essence; questioning the rights of nature; deconstructing traditional anthropocentrism; reconstructing modern anthropocentrism; two approaches to ecological ethics. Professor Fu is at Beijing Administrative Management College.

Fu Hua, "On the Essence of an Eco-ethic," Ziran Bianzhengfa Yanjiu (Studies in Dialectics of Nature) 8(1999):64-68. In Chinese. (v.11,#1)

Fu Huan. *An Inquiry of Ecological Ethics*. Beijing: Huaxia Press, 2002.

Fudge, Robert S., "Imagination and the Science-Based Aesthetic Appreciation of Unscenic Nature," Journal of Aesthetics and Art Criticism 59(no. 3, Summer 2001):275-285. "A number of twentieth-century philosophers have suggested ways to develop an aesthetic appreciation of unscenic nature (including Holmes Rolston and Allen Carlson). ... Our appreciation should be science-based; science can reveal to us heretofore overlooked properties of natural objects, providing new opportunities for aesthetic experience. Recently, however, Emily Brady has argued against this approach, claiming instead that our appreciation should arise out of imaginative activity. In what follows, I argue that these two approaches are not only not mutually exclusive, but that the imagination is most effective in helping us develop an aesthetic appreciation of unscenic nature, precisely when it employs, and is guided by, scientific knowledge. Fudge is in philosophy, James Madison University, Harrisonburg, VA. (v.13,#1)

Fudge, Robert, Review of: Berleant, Arnold, ed., Environment and the Arts: Perspectives on Environmental Aesthetics. Environmental Values 13(2004):121-123. (EV)

Fuentes, Agustin, and Wolfe, Linda., eds., Primates Face to Face: The Conservation Implications of Human-Nonhuman Primate Interconnections. Cambridge: Cambridge University Press, 2002. The diverse range of relationships between humans and other primates and how this plays a critical role in conservation practice and programs. Fuentes is at Central Washington University, Ellensburg, WA. Wolfe is at East Carolina University, Greenville, NC. (v.13, #3)

Fuggle, R. F. and M. A. Rabie, eds., Environmental Management in South Africa. Cape Town and Johannesburg: Juta and Co., Ltd (P. O. Box 14373, Kenwyn 7790), 1992. ISBN 0 7021 2847 3. 823

pages, a large volume with over fifty contributors, the Bible of environmental management in South Africa. Replaces the 1983 Environmental Concerns in South Africa. (v6,#3)

Fuggle, R. F. and M. A. Rabie, eds., Environmental Management in South Africa. Cape Town and Johannesburg: Juta and Co., Ltd (P. O. Box 14373, Kenwyn 7790), 1992. ISBN 0 7021 2847 3. 823 pages, a large volume with over fifty contributors, the Bible of environmental management in South Africa. Replaces the 1983 Environmental Concerns in South Africa.

Fuhlendorf, SD; Engle, DM, "Restoring Heterogeneity on Rangelands: Ecosystem Management Based on Evolutionary Grazing Patterns," Bioscience 51(no. 8, 2001):625-632. (v.13,#1)

Fukuoka Masanobu, The Natural Way of Farming: The Theory and Practice of Green Philosophy. Tokyo and New York: Japan Publications, 1985, rev. ed., 1987. Translated by Frederic P. Metreud.
Fukuyama, F., Our Posthuman Future: Consequences of the Biotechnology Revolution. New York: Farrar, Straus and Giroux, 2002.

Fuller, RA; McGowan, PJ; Carroll, JP; Dekker, RW; Garson,PJ, "What does IUCN species action planning contribute to the conservation process?," Biological Conservation 112(no.3, 2003):343-349.

Fuller, Robert C. "American Pragmatism Reconsidered: William James' Ecological Ethic." Environmental Ethics 14(1992):159-76. In this paper, I argue that pragmatism, at least in its formulation by William James, squarely addresses the metaethical and normative issues at the heart of our present crisis in moral justification. James gives ethics an empirical foundation that permits the natural and social sciences a clear role in defining our obligation to the wider environment. Importantly, James' pragmatism also addresses the psychological and cultural factors that help elicit our willingness to adopt an ethical posture toward life. Fuller is in the department of Philosophy and Religious Studies, Bradley University, Peoria, IL. (EE)

Fuller, Robert C., Ecology of Care: An Interdisciplinary Analysis of the Self and Moral Obligation. How caring is the key to human and world survival. Philadelphia: Westminster/John Knox Press, 1992. Paper \$ 12.95. (v3,#1)

Fuller, Tony. "Changing Agricultural, Economic and Social Patterns in the Ontario Countryside," Environments 24(no.3, 1997):5. (v8,#3)

Fullerton, D. and West, S. E., "Can Taxes on Cars and on Gasoline Mimic an Unavailable Tax on Emissions?," Journal of Environmental Economics and Management 43(no.1, 2002): 135-57. (v.13,#2)

Fumento, Michael, Science Under Siege: Balancing Technology and the Environment. Morrow. 448 pages. \$ 27. Fumento debunks such popular cancer threats as Alar, dioxin, pesticides, electromagnetic fields, and food irradiation. Extracting human risks from lab tests on chemical-stuffed rats is absurd, especially absurd when used to project "zero-risk" environments. The American public is constantly warned of the dangers from tobacco, alcohol, and poor diet, and these dwarf any risks from chemical residues. Fumento is a lawyer-journalist who writes on environmental topics for Investor's Business Daily. (v4,#2)

Fumkin, Howard, ed., Environmental Health: From Global to Local. Jossey-Bass, 2005. Ecology and human health, toxicology, epidemiology, genetics and environmental health, environmental justice, climate change, developing nations, air pollution, energy production, environmental health ethics (by Andrew Jameton), transportation, water, food safety, solid and hazardous wastes, radiation, workplace safety, disaster preparedness, health benefits of contacting nature, risk assessment, legal remedies, and more.

Furlow, F. Bryant , "Newspaper Coverage of Biological Subissues in the Spotted Owl Debate, 1989-1993," The Journal of Environmental Education 26 (1994): 9-15.

Furrow, Dwight. "The Discomforts of Home: Nature and Technology in Hand's End." Research in Philosophy and Technology 15 (1995): 169. (v7, #3)

Furtak, Rick, "Review: Thoreau's Living Ethics," by Philip Cafaro. Thoreau Society Bulletin 249 (Fall 2004): 4-5. (v.14, #4)

Furuseth, Owen, and Cocklin, Chris. "An Institutional Framework for Sustainable Resource Management: The New Zealand Model," Natural Resources Journal 35(no.2, Sprg. 1995):243- . (v6,#4)

Furze, Brian, Review of Hurst, Philip, Rainforest Politics. Environmental Values Vol.2 No.1(1993):82.

Furze, Brian, "The World Agricultural System and Ethical Considerations Relating to the Rural Environment: Some Perspectives on Cause and Effect in Underdeveloped Countries", Journal of Agricultural Ethics 2(1989):59-67. Using the concept of capitalist world economy as a framework, this paper provides a structural analysis of the food production and distribution system within monopoly capitalism and its implications for countries of the underdeveloped world. Focusing on the impact of a dominant world food supply system on indigenous systems, considerations relating to environmental use and food production and distribution are raised. A call is made for a new agricultural ethic. Furze is in social science education at the University of New England, Australia.

Furze, Brian, Review of Shiva, Vandana, The Violence of the Green Revolution. Environmental Values Vol.2 No.1(1993):82.

Furze, Brian. "Ecologically Sustainable Rural Development and the Difficulty of Social Change." Environmental Values Vol.2 No.2(1992):141-156. ABSTRACT: This article explores the importance of environmental perception in the context of alternative agrarian social relations. Because environmental perception is socially constructed, the article is concerned with how those with an alternative agenda for agrarian practice attempt change, and the likely difficulties faced due to the structural requirements and effects of the dominant paradigm of development. It explores the need for a clear model of change, both in its outcomes and its change strategies, and the difficulties that may be faced. The article draws on a case study of a rural landsharing collective in Australia to contextualize these broader issues, and considers some of the implications of the findings for instigating the broader concern of an ecologically sustainable agrarian practice based on permacultural design. KEYWORDS: Permaculture, rural land sharers, sustainable agriculture, sustainable rural development. Dept. of Social Science, University of New England, Armidale, NSW 2351 Australia.

Furze, Brian; DeLacy, Terry; and Birkhead, Jim. Culture, Conservation, and Biodiversity: The Social Dimension of Linking Local Level Development and Conservation Through Protected Areas. New York: John Wiley and Sons, 1996. 290 pages. \$69.95 cloth. How social science understanding provides a framework for linking the complexities of local level development to the global economic, ecological, cultural and political frameworks. (v7, #3)

Gaard, Greta, Review of Mies, Maria, Shiva, Vandana, Ecofeminism and Val Plumwood: Feminism and the Mastery of Nature. Environmental Ethics 18(1996):93-98. (EE)

Gaard, Greta, "Explosion," Ethics and the Environment 8(no. 2, 2003):71-79.

Reflections on an explosion when a broken gas line filled a creek in the Pacific Northwest. Gaard is an

ecofeminist author. (E&E)

Gaard, Greta, "Women, Animals, and Ecofeminist Critique," Environmental Ethics 18(1996):439-441. Beth A. Dixon misrepresents an ecofeminist critique of oppression and the connections between women and animals. (EE)

Gaard, Greta, and Gruen, Lori, "Ecofeminism: Toward Global Justice and Planetary Health," Society and Nature 2 (no. 1, 19??):1-35. Gaard is in Women's Studies at the University of Minnesota, Duluth.

Gaard, Greta "Women, Water, Energy: An Ecofeminist Approach", Organization and Environment 14 (No. 2, June 2001) pp.157-72. Using contemporary examples ranging from the Arrowhead-Weston Project to Manitoba Hydro, Suma Energy 2, and the Columbia River dams, this article exposes the corporate appropriations of water power from the people and the land. Ecofeminism illuminates the way in which gendered , cultural assumptions about water, power and human relations have led to creating a water-power infrastructure that perpetuates environmental sexism, environmental racism, and environmental classism. As an alternative, an ecofeminist approach to water justice advocates strategies for bringing about an ecological democracy, an ecological economics, and a partnership culture in which water and energy flow freely. Gaard is associate professor of philosophy at Fairhaven College, Western Washington University. (v.13,#2)

Gaard, Greta, ed., Ecofeminism: Women, Animals, Nature. Philadelphia: Temple University Press, 1993. 331 pages. 12 articles. Samples: Josephine Donovan, "Animal Rights and Feminist Theory"; Huey-li Li, "A Cross-Cultural Critique of Ecofeminism." Gaard is professor of composition and women's studies at the University of Minnesota, Duluth. Reviewed by Deborah Slicer in Environmental Ethics 16(1994):315-318.(v3,#4)

Gaard, Greta, Ecological Politics: Ecofeminists and the Greens. Philadelphia: Temple University Press, 1998. An account of these two interconnected social movements from their grassroots origins in the 1970's to the 1996 presidential campaign. There is often a transition from a leftist and sometimes anarchist focus to an emphasis on electoral political action. Ecofeminists have shaped the green movement, but many have withdrawn, and from this disaffection, she worries about the compatibility of liberal feminism and cultural ecofeminism and patriarchal politics. Within the greens, there are conflicts over philosophy, conflicts over representation, and conflicts over strategy. Gaard teaches humanities in Fairhaven College at Western Washington University, and has been a member of both movements. (v8,#3)

Gaard, Greta. "Ecofeminism and Wilderness." Environmental Ethics 19(1997):5-24. I argue that ecofeminism must be concerned with the preservation and expansion of wilderness on the grounds that wilderness is an Other to the Self of Western culture and the master identity and that ecofeminism is concerned with the liberation of all subordinated Others. I suggest replacing the master identity with an ecofeminist ecological self, an identity defined through interdependence with Others, and I argue for the necessity of restoring and valuing human relationships with the Other of wilderness as integral to the construction and maintenance of an ecofeminist ecological self. I conclude that ecofeminists must be concerned with the redefinition, preservation, and expansion of wilderness. Gaard is in women's studies, University of Minnesota, Duluth. (EE)

Gaard, Greta. Review of The Greens and the Politics of Transformation. By John Rensenbrink. Environmental Ethics 15(1993):185-90.

Gaard, Greta. Review of Earth in the Balance. By Al Gore. Environmental Ethics 15(1993):363-69.

Gaard, Greta. Review of Feminism and Ecological Communities: An Ethic of Flourishing. By Chris J. Cuomo. Environmental Ethics 21(1999):333-336.

Gaard, Greta. "Milking Nature: an Eco-Feminist Critique of rBGH." The Ecologist 24 (no. 4, July, 1994): 202- . (v6,#1)

Gaard, Greta. Review of Woman the Hunter. By Mary Zeiss Stange. Environmental Ethics 22(2000):203-206.

Gaard, Greta. Review of Environmentalism and Political Theory. By Robyn Eckersley. Environmental Ethics 15(1993):185-90.

Gabbay, Shoshana. The Environment in Israel. Jerusalem: State of Israel, Ministry of the Environment, 1994. 225 pages. A political document of modest critical value. (Israel)

Gablik, Suzi. The Reenchantment of Art. New York: Thames and Hudson, 1991. Modern art exposes the unecological and unsustainable isolationism of a hypermasculinized culture. The challenge of the future is to transcend the disconnectedness and separation of the aesthetic from the natural and social. (v5,#3)

Gabrielson, Teena. "Green Citizenship: A Review and Critique." *Citizenship Studies* Vol. 12, no. 4 (2008): 429-46. Gabrielson reviews the literature on green citizenship and argues that greens need to broaden their approach to the concept of green citizenship and move beyond a tendency to privilege particular conceptions of the natural world and human relationships to it in order to promote a more inclusive and emancipatory environmental politics.

Gabrielson, Teena. "Green Citizenship: A Review and Critique." *Citizenship Studies* Vol. 12, no. 4 (2008): 429-46. Gabrielson reviews the literature on green citizenship and argues that greens need to broaden their approach to the concept of green citizenship and move beyond a tendency to privilege particular conceptions of the natural world and human relationships to it in order to promote a more inclusive and emancipatory environmental politics.

Gadgil, Madhav and Ramachandra Guha, Ecology and Equity: The Use and Abuse of Nature in Contemporary India. London: Routledge, 1995. 213 pages. Gadgil is at the Centre for Ecological Studies at the Indian Institute of Science. Guha is an independent writer. (v7,#1)

Gadgil, Madhav, and Ramachandra Guha, This Fissured Land: An Ecological History of India. Berkeley: University of California Press, 1993. Cloth, \$ 35.00. Paper, \$ 12. 274 pages.

Gadgil, Madhav and Ramachandra Guha, This Fissured Land: An Ecological History of India. Berkeley: University of California Press, 1992. Part I. A Theory of Ecological History. Part II. Towards a Cultural Ecology of Pre-modern India. Part III. Ecological Change and Social Conflict in Modern India. With much attention to forests, some also to agriculture and wildlife. (v5,#4)

Gadgil, Madheva, and Guha, Ramachandra, "Ecological Conflicts and the Environmental Movement in India," in Gahi, Dharam, ed., Development and Environment: Sustaining People and Nature (Blackwell: Oxford and Cambridge, 1994). (v.9,#4)

Gadon, Elinor W. The Once and Future Goddess: A Symbol of Our Time. Reviewed in Environmental Ethics 13(1991):275-80.

Gager, Dan, Hendee, John C., Kinziger, Mike, and Krumpke, Ed., "What Managers are Saying--and Doing--about Wilderness Experience Programs," Journal of Forestry 96(no. 8, 1998):33-37. A growing number of organizations take clients/members into the wilderness for personal growth, therapy, or education. Wilderness managers support these programs in principle, but they are concerned about the social and ecological impacts. One conclusion is that often the experience need not be on designated wilderness, as opposed to other forested or wild lands. Given the increasing crowds in wilderness areas, moving elsewhere may be more productive and less disruptive. (EE v.12,#1)

Gagneux, Pascal, James J. Moore and Ajit Varki, "The Ethics of Research on Great Apes," Nature 437(1 Sept. 2005):27-29. Deals with captive great apes, and is often provisional and exploratory. But the authors do hold that there should be no effort to make germline genetic modifications in great apes (no transgenic apes), that research should benefit the apes as well as humans, that apes should be maintained in groups that respect existing social bonds, that there should be no euthanasia as a means of population control, and that humans should intervene for the control of aggressive behavior within or between ape groups. They do not think great apes now in captivity can, or should, be returned to the wild.

Galef, BG; Laland, KN, "Social Learning in Animals: Empirical Studies and Theoretical Models," BioScience 55 (no. 6, June 2005): 489-500. The last two decades have seen a virtual explosion in empirical research on the role of social interactions in the development of animals' behavioral repertoires, and a similar increase in attention to formal models of social learning. Here we first review recent empirical evidence of social influences on food choice, tool use, patterns of movement, predator avoidance, mate choice, and courtship, and then consider formal models of when animals choose to copy behavior, and which other animals' behavior they copy, together with empirical tests of predictions from those models.

Gallagher, Kevin P, and Lyuba Zarsky. *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley*. Cambridge, MA: The MIT Press, 2007. The authors question foreign investment as a panacea for developing countries to kick-start modern industries and reduce poverty by showing how foreign investment in the information technology sector failed to deliver this in post-NAFTA Guadalajara. Foreign investment put many local information technology firms out of business, transferred very limited amounts of environmental sound technology, and created an "enclave economy" in which benefits were confined to an international sector not connected to the wider Mexican economy.

Gallagher, Padraig, Flannagan's Naturalized Ethics: Epistemology, Ecology, and the Limits of Pragmatism, M.A. thesis, Colorado State University, 2005. Critique of Owen Flannagan's work, especially his "Ethics Naturalized as Human Ecology" (1995) and his "pragmatic naturalism." Flannagan claims a parallel between biological ecology and human ecology through the concept of "flourishing," which has to be localized, flourishing in particular environments. Flannagan does recognize some transcultural human universals, but these nevertheless take their specifics in local cultural contexts. Gallagher argues that Flannagan is "methodologically infirm," because of the lack of criteria with which to judge better and worse in these locally flourishing groups, an evaluation needed for humans with their options in life choices, but not needed in biological ecology, where ethical choices do not apply.

Gallegos, Carl M. "Madagascar: Unrealized Potential in Natural Resources", Journal of Forestry 95(no.2, 1997):10. (v8,#1)

Gallon, Gary, "Green and Growing," Alternatives 27(no. 1, Winter 2001):22- . Environmental job numbers now rival those for the traditional sectors such as oil, chemicals and steel. (v.12,#2)

Gallusser, Werner A., "Landethik - Verantwortung aus Einsicht in die Mitwelt," in Albert Schweitzer-Studien, 1989, pp. 31-49. (v2,#2)

Gallusser, Werner A., Umweltgefährdung und Umweltsanierung in den USA. Fragenkreise 23571. Paderborn; München, 1984. Glusser is at the Universität Basel, Geographisches Institut. (v2,#2)

Galton, David, In Our Own Image: Eugenics and the Genetic Modification of People. London: Little, Brown, 2001. Genetic improvement of our offspring has already begun by choosing the "best" of several embryos produced during IVF. Not far ahead lies alteration of the embryo's genes. An analysis of the dangers and benefits of the genetic modification of people. (v.12,#4)

Galusky, Wyatt. Review of The Promise of Green Politics: Environmentalism and the Public Sphere. By Douglas Torgerson. Environmental Ethics 23(2001):95-98. (EE)

Gambell, Ray, "Whaling: A Christian Perspective," Science and Christian Belief 2(no. 1, April 1990):15-24. Dr. Ray Gambell is the Secretary of the International Whaling Commission and has been involved with the biology and management of whales since 1963. Whaling has a long history of depleting successive stocks and the whale has become the symbol of our mishandling of environmental matters in general. The biblical foundation for the human dominion of nature should be the source of a sound conservation ethic. It implies responsible stewardship, including the taking of no more than sustainable harvests. In the case of whales this has not happened, through ignorance and greed. The problem of humane killing of animals is highlighted, and whalers ought to cause death within a few minutes. The question of whether or not whales are intelligent is left open, but they are not made in the image of God, and are not, therefore, the equals of humans. Certain Arctic communities are dependent on whales with no reasonable alternatives available. Gambell is sensitive to the issue of whether humans ought to kill whales at all, but disagrees with Tom Regan's claim that whales have a right to life. (v1,#3)

Gambino, R, "Park Policies: A European perspective," Environments 30(no.2, 2002): 1-14.-

Gamborg, C. & Larsen, J.B. 2005. "Towards more sustainable forestry? The ethics of close to nature forestry." Silva Carelica 49:55-64. Across Europe, even aged, production oriented, intensively managed tree plantations are beginning to be regarded in the same way as old industrial complexes; they belong to a different era and should be abolished or converted to something else. What exactly should these "conventional" forests be converted into? For many, a promising approach to meet these new demands and to achieve more sustainability seems to be the management philosophy dubbed "close to nature." Even though this view has a lot to say for itself, there are problems that need attention from both scientific and ethical perspectives.

Gamborg, C. and Rune, F., "Economic and Ecological Approaches to Assessing Forest Value in Managed Forests: Ethical Perspectives," Society and Natural Resources 17(no. 9, 2004): 799-815(17). (v.14, #4)

Gamborg, C. & Larsen, J.B. 2003. "'Back to nature:' A Sustainable Future For Forestry?" Forest Ecology and Management 179: 559-571. We examine a trend in forestry which may be dubbed 'back to nature' and ask if it offers a sustainable future for forestry. We analyze what is actually meant by 'back to nature', which type of nature we want to 'get back' to, and how ensuing silvicultural philosophies can be defined. It might be difficult to pinpoint what a sustainable future for forestry entails, but it is clear that a sustainable future for forestry to a greater extent than previously will require balancing commodity and environmental and nature values both against one another and against any concerns felt to be relevant by the various stakeholders.

Gamborg, Christian and Sandoe, P. 2004. "Beavers And Biodiversity: The Ethics Of Ecological Restoration." In: Philosophy and Biodiversity. Oksanen, M. (ed.). New York: Cambridge University Press, pp. 217-236. We use the case of beaver reintroduction in southern Scandinavia to illuminate

philosophical issues underlying the value of biodiversity. Beaver reintroduction has been justified primarily on an ecological basis, defended on the grounds that it restores species richness and maintains evolutionary and ecological processes. However, as this case study illustrates, basic ethical questions regarding the origin and character of nature's value bear upon these factual issues. Appeals to the powerful concept of biodiversity are made both by the advocates and opponents of restoration, but with significantly different results. Gamborg is at the Danish Centre for Bioethics and Risk Assessment, The Royal Veterinary and Agricultural University, Copenhagen, Denmark.

Gamborg, Christian, "The Acceptability of Forest Management Practices: An Analysis of Ethical Accounting and the Ethical Matrix," Forest Policy and Economics 4(2002):175-186. Stakeholder approaches to forest management. The public is increasingly sensitive to, and aware of, the broader impact of forest management, not only on human welfare, but also on environmental values, such as nature conservation and biodiversity. Gamborg is at the Danish Forest and Landscape Research Institute, Department of Forestry, Horsholm, Denmark.

Gamborg, Christian and Sandoe, P. 2005. "Applying The Notion Of Sustainability Dilemmas And The Need For Dialogue." In: Holm, S. and Gunning, J. (eds.) Ethics, Law & Society I: 123-130. CCELS, Cardiff, Cardiff University. Revisits the strained yet ubiquitous notion of sustainability to see where and how it can make a contribution to improved agricultural and natural resource management and policy making.

Gamborg, Christian. Review of Wolvekamp, Forests for the Future: Local Strategies for Forest Protection, Economic Welfare and Social Justice. Environmental Values 9(2000):541.

Gamborg, Christian; Rune, Flemming, "Economic and Ecological Approaches to Assessing Forest Value in Managed Forests: Ethical Perspectives", Society and Natural Resources 17(no.9, October 2004): 799-815(17).

Gambrel, Joshua Colt. *The Virtue of Simplicity*. M.A. Thesis, Colorado State University, Spring 2008. Modern American life has become increasingly complex. A paradigm shift is needed, and this transformation can be accomplished by cultivating the virtue of simplicity, with a deeper questioning and discovering of more lasting needs and interests. A voluntary simplification of life questions our over-consumptive lifestyles, especially the impact on the ecosphere. Simplifying our lifestyles helps us produce empowerment, equity, and justice. The virtue of simplicity addresses responsibilities to us, our families, our place, and to the environment and animals; it means giving to ourselves a higher quality of life. The principal advisor was Philip Cafaro.

Gamer, Robert, Animals, Politics and Morality, 2nd ed., Reviewed by Michael Hauskeller, Environmental Values 15(2006):539-542.

Gamer, Robert, Animal Ethics, Reviewed by Michael Hauskeller, Environmental Values 15(2006):539-542.

Gamman, John K. Overcoming Obstacles in Environmental Policymaking: Creating Partnerships Through Mediation. Albany, NY: State University of New York Press, 1994. 250 pages. \$18.95 paper. \$57.50 cloth. Why policies and laws intended to protect the environment often do not work. The fundamental reasons why efforts to protect natural resources in the developing world generally fail. Why environmental initiatives originating in national governments, international foreign assistance agencies, and environmental groups suffer from a dysfunctional decision-making process. How to improve environmental policymaking by creating partnerships for sustainable development. Gammon is with the

Collaborative for Environmental Analysis and Conflict Resolution, Santa Cruz and Berkeley, CA. (v6,#1)

Gan Shaoping, "What kind ecological ethic do we need", Philosophical Research, 2002(8)

Gan Shaoping and Ye Jingde, Chinese Applied Ethics 2002. The Central Compilation & Translation Press, 2003. Includes three paper on environmental ethics: "Chinese political ethic for sustainable development"(by Chen Ying), "The holism of western environmental ethics and its problem"(by Fang Dongping), and "Approaching the new paradigm of relationship between man and nature".

Gander, H., Ingold, P. "Reactions of Male Alpine Chamois Rupicapra r. Rupicapra to Hikers, Joggers and Mountainbikers," Biological Conservation 79(1997):107.

Gandhi, Indira. "A Politician's Views on Why We Are Not Saving Our World." Environmental Conservation 22, no.4 (1995): 290. (v7, #3)

Gandy, Matthew, Concrete and Clay: Reworking Nature in New York City. Cambridge, MA: The MIT Press, 2002. Reviewed by Shippard, James W., in Environmental Values 12(2003):397-400. (EV)

Gandy, Matthew, "Ecology, Modernity, and the Intellectual Legacy of the Frankfurt School," Philosophy and Geography 1 (1997): 231-254. Gandy is lecturer in geography in the School of European Studies at the University of Sussex. (P&G)

Gandy, Matthew. "Crumbling Land: The Postmodernity Debate and the Analysis of Environmental Problems." Progress in Human Geography 20, no.1 (1996): 23. (v7, #3)

Gans, Jason, Murray Wolinsky, and John Dunbar, "Computational Improvements Reveal Great Bacterial Diversity and High Metal Toxicity in Soil," Science 309(26 August 2005):1387-1390. The complexity of soil bacterial communities has so far eluded effective measurement. There are more than 10^{16} procaryotes in a ton of soil compared to a mere 10^{11} stars in our galaxy. These authors use a computer projection to infer that the complexity is staggering. They also find, alas, that toxic metal pollution reduces this diversity by 99.9%, especially eliminating the rare taxa. The authors are in the bioscience division, Los Alamos National Laboratory.

Gao Yuyuan. "Is and Ought in Ecoethics." *Philosophical Trends* No. 3 (2007): 52-55.

Garber, Steven, and Hammitt, James K., "Risk Premiums for Environmental Liability: Does Superfund Increase the Cost of Capital," Journal of Environmental Economics and Management 36(No.3, 1998):267-. (v.10,#2)

Garcia, C. N., "Review of: High and Dry: The Texas-New Mexico Struggle for the Pecos River by G. Emlen Hall," Natural Resources Journal 43(no. 1, 2003): 333-334.

Garcia, Ramon MD, "Globalization and international geography: the questions of languages and scholarly traditions", Progress in Human Geography 27(no.1, 2003):1-6.

Gardiner, D., and Jacobson, L., "Will Voluntary Programs Be Sufficient to Reduce U.S. Greenhouse Gas Emissions? An Analysis of the Bush Administration's Global Climate Change Initiative," Environment 44(no.8, 2002): 24-33. (v.13,#4)

Gardiner, Robert W. "Between Two Worlds: Humans in Nature and Culture." Environmental Ethics 12(1990):339-52. In this essay, I set forth a view of humans as creatures living at once in two worlds: the

world of nature and the world of culture. I explore some of the tensions and paradoxes entailed by this position, as well as the implications for ethics, both interhuman and environmental. I also critique the distortions entailed by ethical stances which draw too heavily on one polarity or the other without taking sufficient account of the discontinuities between them. Gardiner is at the First Congregational Church, Southampton, MA. (EE)

Gardiner, Stephen M., *The Global Warming Tragedy and the Dangerous Illusion of the Kyoto Protocol*, Ethics and International Affairs, Vol. 18, No. 1, 2004, 23-39.

Gardiner, Stephen M., 'The Pure Intergenerational Problem', The Monist: Special Issue on Moral Distance, Vol. 86, No. 3, July 2003, 481-500.

Gardner, Bruce L., American Agriculture in the Twentieth Century: How it Flourished and What it Cost. Cambridge, MA: Harvard University Press, 2002. A bittersweet story. Enormous gains in productivity (bushels per acre), but declining value added to the U.S. economy. A hollow victory for farmers. Less than 10% of all farms accounted for more than 85% of farm income. The vast majority of farm households have turned to non-farm income; 80% of all farms earn more than 90% of their household income from non-farm sources. For them farming is almost a hobby. These families are not poor; they just make nothing farming. Big-agribusiness gives us cheap food but unbalanced bounty. Government programs have been messy, often wasteful, but more or less functional. Gardner has served as "the aggie" in the Senior Staff of the Council of Economic Advisors and as the "economist" Assistant Secretary at the U.S. Department of Agriculture.

Gardner, Gerald T., Stern, Paul C. Environmental Problems and Human Behavior. Needham Heights, MA: Allyn and Bacon, 1997. The behavioral dimensions of global and regional environmental problems such as the greenhouse effect, ozone depletion, deforestation, air pollution, and water pollution. What does our knowledge of human behavior tell us about the causes of environmental problems and about strategies for solving them? (v8,#1)

Gardner, Howard, *Intelligence Reframed*. New York: Basic Books, 1999. Gardner here adds a "naturalist intelligence" (pp. 48-52) to his earlier seven intelligences: linguistic, logico-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, and intrapersonal. Those gifted with naturalist intelligence are unusually sensitive to natural phenomena. Gardner thinks such naturalist intelligence has not been previously recognized or studied by psychologists. He also considers two further intelligences: spiritual and existential, but is less sure about the distinctiveness of these. Gardner is a psychologist at Harvard University.

Gardner, Stephen M., "A Perfect Moral Storm: Climate Change, Intergenerational Ethics and the Problem of Moral Corruption," Environmental Values 15(2006): 397-413. The peculiar features of the climate change problem pose substantial obstacles to our ability to make the hard choices necessary to address it. Climate change involves the convergence of a set of global, intergenerational and theoretical problems. This convergence justifies calling it a 'perfect moral storm'. One consequence of this storm is that, even if the other difficult ethical questions surrounding climate change could be answered, we might still find it difficult to act. For the storm makes us extremely vulnerable to moral corruption. (EV)

Gare, Arran E., Review of Zimmerman, Michael E., Contesting Earth's Future. Environmental Values 6(1997):113-115. (EV)

Gare, Arran, Nihilism Incorporated: European Civilization and Environmental Destruction. Bungendore, NSW, Australia: Eco-Logical Press, 1993. Australian \$ 19. The cultural roots of society's

environmentally destructive tendencies. A nihilistic world-orientation has pervaded ideas, social practices, institutions, and economic processes in the formation and development of European civilization, and come to dominate not only in Europe but been imposed on the rest of humanity. A deep moral and political decadence tends systematically to obliterate and possible action. For the companion volume, see Beyond European Civilization. Reviewed in Environmental Values 4(1985):278-280 by Susan Armstrong. Gare is in the Department of Philosophy and Cultural Inquiry at Swinburne University in Australia. (v4,#4)

Gare, Arran, Postmodernism and the Environmental Crisis. New York: Routledge, 1995. 192 pages. \$ 16.95, softcover. The first book to combine advanced cultural theory and environmental philosophy in a radically new vision--a postmodern "grand narrative." Marxist and postmodern approaches alike have failed to theorize the links between the ecological crisis, the globalization of capitalism, and the fragmentation and the disintegration of modernist culture. A successful ecological politics needs to forge a new worldview out of the postmodernist critique of Western civilization and a global ecological perspective. Gare is in philosophy at Swinburne University, Australia. (v6,#4)

Gare, Arran, Beyond European Civilization: Marxism, Process Philosophy and the Environment. Bungendore, NSW, Australia: Eco-Logical Press, 1993. Australian \$ 21. Offers an alternative future. Part I. Marxism was appropriated primarily by Russians to assimilate the domineering world orientation of Western Europeans to Russian culture, and yet to defend Russia from Western domination. So it is not surprising that the Soviet Union proved as environmentally destructive as the West. But there is a radical dimension to Marx's critique of capitalism that has been taken up and developed in Russia by Aleksandr Bogdanov, seeking to create a radically new culture. This movement needs to be resurrected. Part II. Process philosophy reconceives people as creative participants in the becoming of nature. On this foundation, and new ethics and political philosophy can be elaborated, and joined with the movement resurrected in Part I, to create an ecologically sustainable, post-European civilization. Reviewed in Environmental Values 4(1995):278-280 by Susan Armstrong. (v4,#4)

Gare, Arran. Nihilism Inc.: Environmental Destruction and the Metaphysics of Sustainability. Sydney: Eco-Logical Press, 1996. This work attempts to explain the failure of humanity effectively to confront the global environmental crisis, and thereby to reveal what is required to overcome it. The destruction of the environment on a global scale is the legacy of the expansion and domination of the world by European civilization, a civilization that is inherently destructive and implicitly nihilistic. Ecocide is characterized as applied nihilism. Environmentalists have failed because they have not fully appreciated the nature of this civilization, an appreciation that requires an understanding of the history and dynamics of European culture and its offshoots from Ancient Greece to the present. The first part of the book analyzes the origins and dynamics of Western civilization to reveal the origins of nihilism and to show how in the modern world nihilism has come to be embodied by institutions and individuals, while the second part is devoted to analyzing Marxism, Russian culture and the Soviet Union as a failed alternative to Western culture. These analyses reveal the need for a radical cultural transformation, a transformation which can only be effected on the foundation of a new metaphysics. The final part offers the required metaphysics--a revised version of process philosophy reformulating and integrating the insights of Hegel and those inspired by him--to clear the way for the creation of an environmentally sustainable civilization. Gare teaches philosophy at Swinburne University, Melbourne. (v8,#1)

Gare, Arran. Incorporated: European Civilization and Environmental Destruction: (Bungendore, Australia, Eco-logical Press, 1993). Review by Susan J. Armstrong in Environmental Values 4(1995):278-280. (EV)

Gareau, Brian J. "Dangerous Holes in Global Environmental Governance: The Roles of Neoliberal Discourse, Science, and California Agriculture in the Montreal Protocol." *Antipode* Vol. 40, no. 1 (2008):

102-30. Gareau argues that the Montreal Protocol on Substances that Deplete the Ozone Layer has recently been undermined by United States' protectionism. Drawing from empirical research he gathered while attending Montreal Protocol meetings to phase out methyl bromide from 2003 to 2006, he shows how the US has used a discourse of technical and economic infeasibility as a form of disguised protectionism.

Garfield, Jay L. Review of Analytical Philosophy of Technology. By Friedrich Rapp. Environmental Ethics 5(1983):361-65.

Garforth, C; Angell, B; Archer, J; Green, K, "Fragmentation or creative diversity? Options in the provision of land management advisory services," Land Use Policy 20(no.4, 2003):323-333. (v.14, #4)

Gargan, Edward A., "Weakness Seen in China's Economic Boom," New York Times, September 19, 1997, A5. Environmental degradation in China. The transformation of the Chinese economy is proceeding more rapidly than almost any nation in history. But its future remains shadowed by a fragile financial system, the absence of meaningful rule of law, growing corruption, and staggering levels of pollution, says a World Bank Report. A consequence of China's meteoric economic growth that now threatens sustained development is the country's alarming level of air and water pollution. Five of China's largest cities, including Beijing, Chongqing, and Guangzhou, are among the most polluted cities in the world. Not only does China suffer as many as 289,000 deaths a year because of high pollution levels, the country is also losing an estimated three to eight percent of its annual gross domestic product because of environmental degradation. See also Smil, Vaclav, "China Shoulders the Cost of Environmental Change" Environment 39 (no. 6, 1997):6-9, 33-37. (v8,#3)

Garland, John J. "The Players in Public Policy," Journal of Forestry 95(1997):13. (v8,#1)

Garland, Mark S. Watching Nature: A Mid-Atlantic Natural History. Washington, D.C.: Smithsonian Institution Press, 1997. 256 pp. \$15.95. Naturalist Mark Garland and illustrator John Anderton take readers on field trips among the highlands of West Virginia, the forested ridges and valleys of western Maryland and central Pennsylvania, the gently rolling Piedmont region around Washington, D.C., and the flat coastal plain extending from southern New Jersey to Virginia Beach. (v8,#3)

Garner, A. and McDaniel, J., "Spirituality and Sustainability," Conservation Biology 17(no. 4, 2003): 946-947.

Garner, R., "Animals, Politics and Justice: Rawlsian Liberalism and the Plight of Non-Humans," Environmental Politics 12(no. 2, 2003): 3-22.

Garner, Robert, "Biodiversity since Rio," Environmental Politics 8(no. 2, Summer 1999):148- . (v10,#4)

Garner, Robert, Environmental Politics. Reviewed by Avner de-Shalit. Environmental Values 6(1997):118. (EV)

Garner, Robert. "Labor Party Victory May Help Animals in Britain," The Animals' Agenda 17(no.4, 1997):33. Garner reports on how the "changing of the guard" during Britain's recent elections will impact animals. (v8,#3)

Garnett, Geoffrey P., Holmes, Edward C. "The Ecology of Emergent Infectious Disease." Bioscience 46(no.2, Feb.1996):127. Infectious diseases pose an ever-emerging threat to humanity. (v7,#1)

Garnett, S., Crowley, G. and Balmford, A., "The Costs and Effectiveness of Funding the Conservation of

Australian Threatened Birds," Bioscience 53(no. 7, 2003): 658-665.

Garnett, S., G. Crowley and A. Stattersfield, "Changes in the Conservation Status of Australian Birds Resulting from Differences in Taxonomy, Knowledge and the Definitions of Threat," Biological Conservation 113(no. 2, 2003): 269-276. (v 14, #3)

Garnett, Tara. "Farming the City: The Potential of Urban Agriculture," The Ecologist 26(no.6, 1996):299. By the turn of the century, the majority of the world's people will live in cities and urban areas. In the South, growing one's own food in cities is already a thriving response by the poor to the problems of obtaining food in an era of structural adjustment. In the North, the imperative to grow one's own food seems less immediate. But the arguments in favor of urban agriculture on the grounds of community and health regeneration are compelling, particularly for those living on low incomes. (v8,#2)

Garre, Arran, "MacIntyre, Narratives, and Environmental Ethics". Environmental Ethics 20(1998):3-21. While environmental philosophers have been striving to extend ethics to deal with future generations and nonhuman life forms, very little work has been undertaken to address what is perhaps a more profound deficiency in received ethical doctrines, that they have very little impact on how people live. I explore Alasdair MacIntyre's work on narratives and traditions and defend a radicalization of his arguments as a direction for making environmental ethics efficacious. Gare is in philosophy, Swinburne University, Hawthorn, Australia. (EE)

Garrett, Aaron V., ed., Animal Rights and Souls in the Eighteenth Century. Bristol, England: Thoemmes Press, 2000. Six volumes. Explores early discussions of moral theories concerning animals, placing them in historical and social context. Issues such as vivisection, animal souls and vegetarianism were live philosophical subjects 200 years ago. Six volumes reprinted here include complete works and edited extracts from such key eighteenth-century thinkers as Oswald, Primatt, Smellie, Monboddo and Jenyns. Many of the materials are rare and never previously reprinted. Garrett teaches philosophy at Boston University. Full online introduction: http://www.thoemmes.com/18cphil/animal_intro.htm. (v.11,#2)

Garrett, Gary W. and Odum, Eugene P., "The Twenty-First Century: The World at Carrying Capacity," Bioscience 50 (No. 4, 2000 Apr 01): 363- . (v.11,#4)

Garrett, Jan, "Aristotle, Ecology and Politics: Theoria and Praxis for the Twenty-First Century." In Creighton Peden and Yeager Hudson, eds., Communitarianism, Liberalism, and Social Responsibility (Lewiston, NY: The Edwin Mellen Press, 1991). Studies in social and political theory, v. 14. Social philosophy today; no. 6 (Papers from the International Social Philosophy Conference in Vermont in 1990). Environmental philosophers frequently differ over whether the proper motivation for environmental concern is love of nature or concern for human good. Aristotelian conceptions of knowing, education, action, and community can be used to construct an attractive middle road. Although a certain kind of ecological knowledge disposes us to wish well toward the ecosystems with which our lives are entwined, this falls short of an adequate politics, which must make human beings the primary focus and appeal to the human good. Though ecosystems are communities that warrant appropriate respect, they cannot inspire as intense a commitment as can social communities. Anthropocentric arguments for preserving such ecosystems will have greater ethical force, because our duties to other humans are stronger and the sense of solidarity within human communities is greater. Garrett is in philosophy at Western Kentucky University. (v5,#1)

Garrett, Laurie, "Nature and Homo sapiens," Wild Earth 10(no.3, Fall 2000):36- . (EE v.12,#1)

Garrison, Glenn Gregory, Moral Obligations to Non-human Creation: A Theocentric Ethic, Ph.D. thesis at the Southern Baptist Theological Seminary, Louisville, Kentucky, May 1994. Garrison finds that the

theocentric ethics of James Gustafson can be combined with the nonanthropocentric environmental ethics of Holmes Rolston to produce a more adequate environmental ethics from a religious perspective than others have so far been able to do. Among others he considers are James Nash, Arthur Peacocke, Albert Schweitzer, Paul Taylor, and Aldo Leopold. The theocentric valuation offsets an anthropocentric bias in historical and contemporary theology and makes for a more adequate appraisal of common planetary heritage and interdependence on Earth. Paul D. Simmons is the chair of the dissertation committee. (v5,#1)

Garrison, Philip. Waiting for the Earth to Turn Over: Identity and the Late-Twentieth-Century American West. Salt Lake City: University of Utah Press, 1996. 176pp. \$39.95 cloth, \$12.95 paper. Garrison's account of his slow accumulation of identity reveals how history and memory are interwoven as he shows us the remarkable landscape of the American West in a light both new to us and very, very old. (v8,#1)

Garrod, B, "Review of: Krishna B. Ghimire (ed.), The Native Tourist: Mass Tourism within Developing Countries," Environmental Politics 11(no.4, 2002): 142-143.

Garrod, B., "Review of: Rosaleen Duffy, A Trip Too Far: Ecotourism, Politics and Exploitation," Environmental Politics 12(no. 2, 2003): 169-170.

Garshelis, David L. "Sea Otter Mortality Estimated from Carcasses Collected after the Exxon Valdez Oil Spill," Conservation Biology 11(no.4, 1997):905. (v8,#3)

Garside, N, "The Obscured Potential of Environmental Politics", Environments 30(no.3, 2002):37-54.

Garvey, James. *The Ethics of Climate Change: Right and Wrong in a Warming World*. New York: Continuum International Publishing Group, 2008.

Gascoigne, N, Review Article: "YOUR PLACE OR MINE? Andrew Light and Jonathan M. Smith (Eds), Philosophies of Place," Research in Philosophy and Technology 21(no., 2001): 317-324.

Gaskell, G., Thompson, P. B. and Allum, N. "Worlds Apart? Public Opinion in Europe and the USA." Pages 351-375 in M. W., and Gaskell, G. eds. Biotechnology: The Making of a Global Controversy. Cambridge, UK: Cambridge University Press, 2002. (v.13,#4)

Gaskell, George, et al., "Worlds Apart? The Reception of Genetically Modified Foods in Europe and the U.S.," Science 285(1999):384-387. There are radical differences in public reception of genetically modified foods, generally rejected in Europe and the U.K., often on moral grounds, while people in the U.S. are generally untroubled by them. Why?

Gaskins Jr., Richard C., Sullivan, Shawn F., "New Clean Air Act Enforcement Provisions and the Defense of Enforcement Actions", Journal of Environmental Law and Litigation, 10(No.1, 1995):39- .

Gaskins, Richard H. Environmental Accidents. Philadelphia: Temple University Press, 1989. \$ 44.95. A study of the economic, moral, and legal issues surrounding harm resulting from environmental accidents, and compensation and responsibility for this harm. (v1,#2)

Gasparini, Bill. "Russia's Kamchatka: Land Of Surging Steam and Gurgling Mud." The Christian Science Monitor, vol. 88, 15 Nov. 1996, pp. 10-11.

Gasparini, Bill. "Checking Out The Bears of Kamchatka." The Christian Science Monitor, vol. 88, 15 Nov. 1996, p. 11.

Gasparini, William. "In a Land 'Back of the Beyond,' Reindeer Rule the Nomads." The Christian Science Monitor 89.105 (25 April 1997): 10.

Gaston, K; Warren, P; Thompson, K; Smith, R, "Urban Domestic Gardens (IV): The Extent of the Resource and its Associated Features," Biodiversity and Conservation 14 (no. 14, December 2005): 3327-3349.

Gaston, Kevin J., Rarity. London and New York: Chapman and Hall, 1994. 205 pages, paper. \$ 34.00. 1. What is rarity? 2. Abundances and range sizes: measuring rarity. 3. The non-independence of abundance and range size. 4. Spatial dynamics. 5. Temporal dynamics. 6. Causes of rarity. 7. Conservation and rarity. 8. Where next? This promises to be the definitive treatment on rarity. Gaston is an ecologist and entomologist at the Natural History Museum, London. (v5,#3)

Gaston, Kevin; Smith, Richard; Thompson, Ken; Warren, Phillip, "Urban domestic gardens (II): experimental tests of methods for increasing biodiversity," Biodiversity and Conservation 14(no.2, February 2005):395-413(19).

Gaston, KJ; Rodrigues, ASL, "Reserve Selection in Regions with Poor Biological Data", Conservation Biology 17(no.1,203):188-195.

Gatersleben, Birgitta. Review of: Bonnes, Mirila, Terence Lee and Mario Bonaiuto, Psychological Theories for Environmental Issues. Environmental Values 13(2004):547-550.

Gates, Barbara T., ed), In Nature's Name: An Anthology of Women's Writing and Illustration, 1780-1930. Chicago: University of Chicago Press, 2002. Reviewed by Julie Cook Lucas. Environmental Values 13(2004):412-414. (EV)

Gates, David M., Climate Change and its Biological Consequences. Sunderland, MA: Sinauer Associates, 1993. 280 pages. \$ 18.95. Gates believes that reliable theory data show that within a century the planet will be warmer than at any time in the past 120,000 years. He projects dramatic impacts. Gates is professor emeritus of biology at the University of Michigan. (v4,#2)

Gatesy, John and Arctander, Peter, "Hidden Morphological Support for the Phylogenetic Placement of Pseudoryx nghetinhensis with Bovine Bovids," Systematic Biology 49(2000):515-538. It's a new species of wild cow. No, maybe it's a goat. Well, at least it's a saola, the common name of a newly discovered large bodied mammal in the montane evergreen forests of Vietnam (Vu Quang region), a rare event today--and apparently not the only novel mammalian species there. All are endangered species. The interpretation of morphological and molecular evidence has differed. First it seemed that it should be placed with cows and buffalos (and so it was called the Vu Quang cow). Later analysis placed it closer to the sheep, goats, musk oxen. But these authors place it back closer to the cows. Or it may be a phylogenetic relict with no close extant relatives. Gatesy is at the University of Arizona, Tucson. Arctander is at the University of Copenhagen, Denmark. The original description is: Dung, V., et al, "A New Species of Living Bovid from Vietnam," Nature 363(1993):443-445. (v.13,#2)

Gatta, John, Making Nature Sacred: Literature, Religion, and the Environment in America from the Puritans to the Present. New York: Oxford University Press, 2004. The quest for "natural revelation" in American history, and how the imaginative challenge of "reading landscapes" has been influenced by biblical perspectives. Gatta is at the University of Connecticut, Storrs.

Gatto, Paola, Merlo, Maurizio. "Agriculture, Forestry and Global Warming," Land Use Policy

14(1997):76. (v8,#1)

Gatto, Paola, Review of Adger, W.N., Brown, K., Land Use and the Causes of Global Warming. (Chichester: John Wiley and Sons, 1994). Environmental Values 6(1997):366-367. (EV)

Gauci, G. Oil Pollution at Sea: Civil Liability and Compensation for Damages. Chichester John Wiley & Sons, 1997, 313pp. Reviewed by Simon Sneddon. Environmental Values 9(2000):252.

Gault, Richard. Review of Andrew McLaughlin. Regarding Nature: Industrialism and Deep Ecology: (Albany: State University of New York Press, 1993). (EV)

Gault, Richard. "In and Out of Time." Environmental Values 4(1995):149-166. This paper explores the nature of time and its relation to our concerns for the future. It is shown how a new sense of time, chronological time, emerged with the rise of science and modernity. This now familiar time is rarely questioned. Yet, it is argued, this time is intimately bound up with our contemporary problems and our failure to effect solutions. In analysing chronological time it is revealed that the future is devoid of reality in it. This absence of a real sense of the future explains our careless despoiling of the environment. To save our environment we need to resurrect a real sense for the future: only then can the future be truly valued. This means re-discovering another sense of time. This other time is named kairological time. In kairological time there is a more vivid awareness of the future. In this time, too, new ways of acting for the future are opened up. Possibilities for a wiser way to the future in part stem from a reevaluation of the past. So the sense of being out of time to save ourselves and our planet can be overcome by a living in this other time, kairological time. KEYWORDS: Time, future, philosophy of technology, history of time, history of science. Gault is in department of philosophy, King's College, Aberdeen. (EV)

Gault, Richard. Review of David Rothenberg. Hand's End: Technology and the Limits of Nature:(Berkeley: University of California, 1993). (EV)

Gauna, E, "An Essay on Environmental Justice: The Past, the Present, and Back to the Future", Natural Resources Journal 42(no.4, 2002):701-722.

Gauna, Eileen. "Federal Environmental Citizen Provisions: Obstacles and Incentives on the Road to Environmental Justice," Ecology Law Quarterly 22(no.1, 1995):1- . (v6,#4)

Gaus, Gerald F., "Respect for Persons and Environmental Values." Pages 239-264 in Kneller, Jane, and Axinn, Sidney, eds., Autonomy and Community: Readings in Contemporary Kantian Social Philosophy. Albany: State University of New York Press, 1998. When it comes to the treatment of animals and, especially the nonsentient environment, Kantian liberalism--like Kant's theory itself--strikes many as inadequate. Kant's theory is "person chauvinism." Is Kant hostile to including environmental values in the moral realm? Answering this question is surprisingly complex. It is true that a basic and widely embraced Kantian liberal argument puts supreme value on agency and project pursuit and this makes it well-nigh impossible to protect environmental values. But much contemporary Kantian liberalism goes astray because it misconstrues the nature of personhood and autonomy. Gaus defends an alternative understanding that is truer to Kant's own conception and provides a reformulated Kantian liberalism that can take environmental value seriously. Nevertheless, this revision will not satisfy the demands of many environmental philosophers. The fundamental commitments of Kantian liberalism preclude its being considered an environmental ethic. Gaus teaches philosophy and political science at the University of Minnesota, Duluth. (v9,#2)

Gaus, Gerald F., Value and Justification: The Foundations of Liberal Theory (Cambridge: Cambridge University Press, 1990). Part I is a theory of value. Part II is a theory of moral justification. Part I

concludes with a brief section on "Anthropocentrism and the Environment" (pp. 247-250). Gaus's "Affective-Cognitive Theory in no way precludes environmental objects or ecosystems from being rationally valued for themselves; a rational valuer may even see them as having a greater intrinsic value than humans. ... So, far from opposing ascriptions of intrinsic value to the environment, the Affective-Cognitive Theory has no difficulties embracing the qualities of environmental objects and systems to which environmental philosophers typically point as grounds of their intrinsic value. Richness, complexity, diversity, and organic unity are precisely those properties that evoke interest and so ground intrinsic valuing." Nevertheless such valuing is an activity of humans or other affective-cognitive valuers, and the question "Would the environment have value if there were no humans or valuers?" is "unimportant" or "moot," not false but "pointless." (v1,#4)

Gautam, Ambika; Shivakoti, Ganesh, "Conditions for Successful Local Collective Action in Forestry: Some Evidence From the Hills of Nepal," Society and Natural Resources 18(no.2, February):153-171(19).

Gautier, Catherine. *Oil, Water, and Climate: An Introduction*. Cambridge: Cambridge University Press, 2008. Gautier provides an introduction to the interconnections that link climate, energy, population, and water from scientific, political, and economic perspectives.

Gavora, J.S., "Practical and Ethical Considerations of Agricultural Research Assistance for the Third World", Journal of Agricultural Ethics 2(1989):307-322. This article focuses on aspects of food production and related agricultural research with specific examples from animal production. It discusses ethics of agricultural research in light of the utilitarian theory and compares livestock production in developing and developed countries. The article reviews the current status of biotechnology in developing countries and discusses several advanced animal technologies. It emphasizes the need for detailed assessment of potential impacts of technology on recipients. Gavora and Lister are in animal research at the Agriculture Centre, Ottawa.

Gavouneli, Maria, International Law and the Environment. Reviewed in Environmental Values 3(1994):88. (EV)

Gavouneli, Maria, Review of Magraw, Daniel Barstow, ed., International Law and Pollution. Environmental Values Vol.2 No.4(1993):371.

Gay, Hannah, "Wilderness Philosophy," Dialogue: Canadian Philosophical Review / Revue canadienne de philosophie 33(1994):661-675. Critical review of Max Oelschlaeger, The Idea of Wilderness. "This book is written by a committed environmentalist--one has the impression that the author simply had to write it--and it has the principal strengths and weaknesses one might expect from such serious commitment; genuine engagement on the one hand, lack of detachment on the other. As a self-identified post-Modern philosopher, Oelschlaeger is unlikely to see the latter as a major weakness." Gay is at Simon Fraser University. (v.10,#1)

Gaze, Peter, Rare and Endangered New Zealand Birds: Conservation and Management. Christchurch: Canterbury University Press, 1994. (v6,#4)

Geach, Bev and Bruce Cohen, eds., The Green Pages 1991/1992: Environmental Networking and Resource Directory for Southern Africa. 35 Rand, or US\$ 18. 206 pages. Published by the Weekly Mail, 1991, Johannesburg. Contact: The Green Pages, Box 260425, Excom 2023, South Africa. Fax 011 331-3339. (v6,#3)

Gebara, Ivone, Longing for Running Water: Ecofeminism and Liberation. Minneapolis: Fortress Press,

1999. Features the daily experiences of poor women in urban areas in Brazil. Indigenous peoples are subject to progressive elimination, racism is on the rise, poverty is the norm, natural "resources" (such as entire jungles, lakes, and rivers) are being swallowed by corporate greed. Her women face garbage in the streets, the smell of raw sewage in the alleys, a lack of drinking water or nutritious food, and inadequate health care. Gebara articulates the links between these daily realities and a patriarchal system of androcentrism and anthropocentrism. She argues for and appeals to a revised worldview that breaks with dualistic systems of domination, her hope based on a comprehensive theological stance. (v.13,#4)

Gebara, Sister Ivone, "Brazilian Women's Movements and Feminist Theologies," Ecotheology No 4 (Jan 1998):83-85.

GEC-O: The Newsletter of the ESRC Global Environmental Change Programme has produced its first two issues, with a circulation of over three thousand. This newsletter reports on the Global Environmental Change program launched in the United Kingdom by the Economic and Social Research Council and is said to be the largest ever UK social science research program ever undertaken on any topic in the UK. The goal is "to take global environmental issues to the heart of the social sciences in the international debate on global environmental change." The Newsletter will appear three times a year. Wye College also offers correspondence courses in environmental policy and management available to students anywhere in the world. For information contact Michael Redclift, Research Coordinator, ESRC Global Environmental Change Programme, Wye College (University of London), Near Ashford, Kent TN25 5AH, UK. (v3,#4)

Geddes, Robert, ed. Cities in Our Future. Washington, D.C.: Island Press, 1996. 200 pages. \$22.50 cloth. Urban and regional planners, architects, urban designers, and other experts from across North America examine the impact of a city's growth and form on the ability of its citizens to achieve and maintain social equity and environmental health. Case studies of five North American metropolitan areas are presented with analyses of their physical terrain, design, planning, and development. (v7, #3)

Gedicks, Al, The New Resource Wars: Native and Environmental Struggles Against Multinational Corporations. Boston: South End Press, 1993 (Institute for Social and Cultural Change, 116 St. Botolph Street, Boston, MA 02115; 800/533-8478). \$ 15. The corporate and government forces that assault native peoples and their lands, and the fierce resistance from native peoples and their environmental allies. Gedicks is professor of sociology at the University of Wisconsin-LaCrosse. (v4,#4)

Geering, Lloyd, "An Ecological Faith for the Global Era," Ecotheology Vol 6 (Jul 01/Jan 02):12-22. lloyd.g@clear.net.nz This article first sketches the secular, global and ecological era that humankind is now entering and shows why conventional Christianity is losing its relevance. It then discusses Christianity as a fluid cultural stream (rather than something with an unchangeable essence) that has the capacity to meet the needs of the emerging global culture. It explores, albeit tentatively and sketchily, the way in which such basic Christian concepts as God and Jesus Christ may continue to be drawn upon to refer to and nurture the religious experience of awe, wonder, gratitude and obligation in today's cultural and ecological context. It suggests ways in which the traditional religious rituals and festivals may be redirected to the celebration of the planetary conditions of life. It ends with an outline of spirituality in the global era.

Geertsema, W., Opdam, P., and Kropff, M. J., "Plant Strategies and Agricultural Landscapes: Survival in Spatially and Temporally Fragmented Habitat," Landscape Ecology 17(no.3, 2002): 263-79. (v.13,#4)

Gehrt, Stanley D. "The Human Population Problem: Educating and Changing Behavior." Conservation Biology 10, no.3 (1996): 900. (v7, #3)

Geisinger, Alex, "Sustainable Development and the Domination of Nature: Spreading the Seed of the Western Ideology of Nature," Boston College Environmental Affairs Law Review 27 (No. 1, Fall 1999): 43- . (v.11,#2)

Geisler, Charles C., Review of The Question of the Commons by James M. Acheson & Bonie J. McCay, Journal of Agricultural Ethics 1(1988):233ff.

Geist, Cathy and Galatowitsch, Susan M. "Reciprocal Model for Meeting Ecological and Human Needs in Restoration Projects." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):970- . (v10,#4)

Geist, H. J. and Lambin, E. F., "Dynamic Causal Patterns of Desertification," BioScience 54(no. 9, 2004): 817-829(13). Using a meta analytical research design, we analyzed subnational case studies (n =3D 132) on the causes of dryland degradation, also referred to as desertification, to determine whether the proximate causes and underlying driving forces fall into any pattern and to identify mediating factors, feedback mechanisms, cross scalar dynamics, and typical pathways of dryland ecosystem change. Our results show that desertification is driven by a limited suite of recurrent core variables, of which the most prominent at the underlying level are climatic factors, economic factors, institutions, national policies, population growth, and remote influences. At the proximate level, these factors drive cropland expansion, overgrazing, and infrastructure extension. Identifiable regional patterns of synergies among causal factors, in combination with feedback mechanisms and regional land use and environmental histories, make up specific pathways of land change for each region and time period. Understanding these pathways is crucial for appropriate policy interventions, which have to be fine tuned to the region specific dynamic patterns associated with desertification. (v.14, #4)

Geist, H. J. and Lambin, E. F., "Proximate Causes and Underlying Driving Forces of Tropical Deforestation," Bioscience 52(no.2, 2002): 143-50. (v.13,#2)

Geist, H., "Biodiversity in the Balance. Land Use, National Development, Land Use and Global Welfare," Land Use Policy 20(no. 2, 2003): 196-197. (v 14, #3)

Geist, Helmut J; Lambin, Eric F, "Dynamic Causal Patterns of Desertification", BioScience 54(no.9, 1 September 2004):817-829(13). Using a meta-analytical research design, we analyzed subnational case studies (n 3D 132) on the causes of dryland degradation, also referred to as desertification, to determine whether the proximate causes and underlying driving forces fall into any pattern and to identify mediating factors, feedback mechanisms, cross-scalar dynamics, and typical pathways of dryland ecosystem change. Our results show that desertification is driven by a limited suite of recurrent core variables, of which the most prominent at the underlying level are climatic factors, economic factors, institutions, national policies, population growth, and remote influences. At the proximate level, these factors drive cropland expansion, overgrazing, and infrastructure extension. Identifiable regional patterns of synergies among causal factors, in combination with feedback mechanisms and regional land-use and environmental histories, make up specific pathways of land change for each region and time period. Understanding these pathways is crucial for appropriate policy interventions, which have to be fine-tuned to the region-specific dynamic patterns associated with desertification.

Gelbard, Alene, "Population Stabilization, Human," Encyclopedia of Biodiversity 4: 799-810. Human population change has three components: births, deaths, and migration. On a global level, only births and deaths determine changes in population size. In the 1990s, more than 70 million people were added to the world's total population each year and it took only 12 years for the world's population to increase from 5 to 6 billion people. This growth will continue into the twenty-first century. How much growth will occur, and how quickly, and when or whether this growth will stabilize, depends on a host of factors. In

1994, the world community agreed on the need to stabilize global population growth. This article describes the history of global population growth, factors associated with this growth, and how countries view this growth. It concludes with a discussion of prospects for the stabilization of population in the future. (v.11,#4)

Gelbard, JL; Belnap, J, "Roads as Conduits for Exotic Plant Invasions in a Semiarid Landscape", Conservation Biology 17(no.2, 2003):420-432.

Gelbspan, Ross, "Global Warming and Political Power: The End of Nature and Beyond," Organization and Environment 18 (no. 2, June 2005).

Gelderloos, Orin, G., Eco-Theology. Glasgow: Wild Goose Publications, 1992. (Wild Goose Publications, Pearce Institute, 840 Govan Road, Glasgow G51 3UU, U.K.) 75 pages. Paper. ISBN 0 947988 55 6. Gelderloos examines post-Enlightenment translations of the Bible to find them biased by a cultural negation of nature. Bringing out fresh interpretations of language and context, he finds that the Hebrew and early Christian cultures were more congenial to modern ecological knowledge. This bridges the divide between scientific and theological perspectives, and uncovers much that is of ecological value in the biblical teachings. He hopes to reconcile the false humans/nature dichotomies of the Judeo-Christian tradition in the West and to rediscover an ecological harmony within the roots of that tradition. Wild Goose Publications is the publishing division of the Iona Community in Scotland. Gelderloos is professor of biology and environmental studies at the University of Michigan-Dearborn and has recently been visiting professor at the Centre for Human Ecology, University of Edinburgh. (v5,#1)

Gelernter, David, "In Rats We Trust: Making a Moral Case Against the Tyranny of Environmentalism." The Washington Post, November 17, 1996, p. C1, C5. "There is an anti-environmentalist position, with arguments and moral claims that are at least as compelling as the other side's." Gelernter cites the costs people have undergone to save the kangaroo rat; they were asked to create firebreaks by mowing rather than plowing up habitat, and, in a subsequent fire, some homes burned (although the General Accounting Office concluded no firebreaks would have worked). "Do we have a moral duty to ensure that every gene pool last forever? I can't see why we should." "We anti environmentalists hold to the Judeo-Christian view that man is emphatically not part of nature. We hold that human life has a different kind of value from animal life; that protecting and preserving human life is a moral duty that sweeps away all 'duties' to nature, and the very idea of duty to nature. ... Environmentalism started as a noble cause, but a Jew or Christian today has a moral obligation not just to disapprove of it but to fight it." Gelernter is a Yale University computer science professor. Good article to provoke class discussion. With reply: Schwartz, Daniel, "A Rabbi's Reply: In God's Green Earth We Trust." The Washington Post, December 1, 1996, p. C2. (v7,#4)

Geller, E. Scott, "Solving Environmental Problems: A Behavior Change," in Sylvia Staub and Paula Green, eds., Psychology and Social Responsibility: Facing Global Challenges. New York: New York University Press, 1992. (v3,#3)

Gellert, P.K., "Review of: Ross, Michael L., Timber Booms and Institutional Breakdown in Southeast Asia," Society and Natural Resources 16(no. 3, 2003):265-267.

Geltman, Elizabeth Glass. "Recycling Land: Encouraging the Redevelopment of Contaminated Property." Natural Resources and Environment 10, no.4 (1996): 3. (v7, #3)

Gennet, S, "The Ecological Benefits of EPA Actions: What Are They Worth?" BioScience 54 (no.3, 2004): 188-188(1).

Gentle, M. J., "Pain in birds." Animal Welfare 1(1992):237-247.

Genxu, W; Xiaoyin, G; Yongping, S; Guodong, C, "Evolving landscapes in the headwaters area of the Yellow River (China) and their ecological implications," Landscape Ecology 18(no.4, 2003):363-375. (v.14, #4)

Geoghegan, J, "The Value of Open Spaces in Residential Land Use," Land Use Policy 19(no.ER1, 2002): 91-98. (v.13,#2)

George, Jason, "Rescuers Try to Save Oil-Soaked Birds After Tanker Spill in Delaware River," New York Times, November 29, 2004, p. A21. Worst oil spill in the Delaware river in nearly a decade, 30,000 gallons leaked from a gash in a Greek-owned ship, flying a Cyprus flag, and importing oil from Venezuela. (v.14, #4)

George, Kathryn Paxton, "Biodiversity and Biotechnology", Journal of Agricultural Ethics 1(1988):175-192. Five arguments which attempt to ground our moral concern for biodiversity are reviewed and critiqued, not only for their consistency, but also for their power to move us to action. The final section of the paper shows how conflicts in the values of personal and environmental health can impair ethical action and especially policy formation. George is in philosophy, veterinary microbiology and pathology at Washington State University, Pullman.

George, Kathryn Paxton, "So Animal a Human..., or the Moral Relevance of Being an Omnivore", Journal of Agricultural Ethics 3(1990):172ff. It is argued that the question of whether or not one is required to be or become a strict vegetarian depends, not upon a rule or ideal that endorses vegetarianism on moral grounds, but rather upon whether one's own physical, biological nature is adapted to maintaining health and well-being on a vegetarian diet. Even if we accept the view that animals have rights, we still have no duty to make ourselves substantially worse off for the sake of other rights-holders. It is argued that generalizing the vegetarian ideal as a social goal for all would be wrongful because it fails to consider the individual nutritional needs of humans at various stages of life, according to biological differences between sexes, and because it would have the eugenic effect of limiting the adaptability of the human species. George is in philosophy at the University of Idaho, Moscow.

George, Kathryn Paxton, " The Use and Abuse of Scientific Studies", Journal of Agricultural and Environmental Ethics 5(1992)217-234. Professor Pluhar's attempts in "Who Can be Morally Obligated to be a Vegetarian?" to defeat my scientific claims are specious. Her methods violate the canons of fair reasoning. In contradistinction from good scientific reasoning, she downplays or ignores contravening causal explanations, relies on only a few studies or even single instance "data", takes hypotheses as fact, freely reinterprets conclusions and comments to suit her argument and nowhere cites the results of nutritional reviews from respected journals which would seriously undermine her position. George is in philosophy at the University of Idaho, Moscow.

George, Kathryn Paxton, Animal, Vegetable, or Woman: A Feminist Critique of Ethical Vegetarianism. Albany: State University of New York Press, 2000. Challenges the views of Tom Regan, Peter Singer, Carol Adams, and Dean Curtin, who assume the Principle of Equality to argue that no one should eat meat. These renowned individuals also violate the Principle of Equality, because they place women, children, adolescents, the elderly and many others in a subordinate position. An analysis of the nutritional literature on vegetarianism. Inconsistency arises in every major argument for ethical vegetarianism. Her own view is "feminist aesthetic semi-vegetarianism." George teaches philosophy at the University of Idaho. (v.11,#3)

George, Kathryn Paxton, "Discrimination and Bias in the Vegan Ideal", Journal of Agricultural and Environmental Ethics 7(1994):19-28. Traditional moral theorists (such as Evelyn Pluhar and Gary Varner

whose essays appear in this issue) argue that those who are at risk would be excused from a duty to attain the virtue associated with ethical vegan lifestyles. The routine excuse of nearly everyone in the world besides adult, middle-class males in industrialized countries suggests bias in the perspective from which traditional arguments for animal rights and (utilitarian) animal welfare are formulated. George is in philosophy at the University of Idaho, Moscow.

George, Kathryn George, "Use and Abuse Revisited: Response to Pluhar and Varner", Journal of Agricultural and Environmental Ethics 7(1994):41-76. In her recent "Counter-Reply" to my views, Evelyn Pluhar defends her use of literature on nutrition and restates her argument on moral vegetarianism. In his "Vegan Ideal" article, Gary Varner claims that the nutrition literature does not show sufficient differences among women, men, and children to warrant concern about discrimination. In this response I show how Professor Pluhar continues to draw fallacious inferences and avoids the main issue in my ethical arguments. I also argue that Professor Varner fails to make his case because he offers virtually no evidence from scientific studies on nutrition. Neither Varner nor Pluhar have responded sufficiently to the real issue in my arguments, that of discrimination and bias in the vegan diet. George is in philosophy at the University of Idaho, Moscow.

George, Kirstin, "Local and Grassroots: A Success Story from a Maine Land Trust," Wild Earth 10(no. 2, Summer 2000):89- . (v.12,#2)

George, William P. "Looking for a Global Ethic? Try International Law." Journal of Religion 76 (July 1996): 359-382.

George Wright Forum, vol. 10, no. 4, 1993, is a special issue on "Sustainability, Respect, and Responsibility," with thirteen articles. Examples: Edwin P. Pister, "Some Thoughts on Sustainability"; J. Baird Callicott, "Sustainability in a Historical-Philosophical Perspective"; Gary K. Meffe, "Sustainability, Natural Law, and the 'Real World'"; John J. Reynolds, "Sustainable Design and the U.S. National Park Service. Joseph C. Dunstan, Katherine L. Jope and Geoffrey M. Swan are guest editors. The George Wright Society is a nonprofit society for protected area professionals. The George Wright Society, P. O. Box 65, Hancock, MI 49930. (v5,#1)

Georgopoulos, Alexandros, *Environmental Ethics*. Athens: Gutenberg, 2002 (in Greek).

Gerber, Leah R., et al., "Do the Largest Protected Areas Conserve Whales or Whalers?" Science 307(28 January 2005):525-526. There are huge ocean areas in southern oceans that are protected areas but a main problem is that whales migrate out of these areas. New proposals from an International Whaling Commission study group. Gerber is in ecology, Arizona State University.

Gerber, Leah R. and DeMaster, Douglas P. "A Quantitative Approach to Endangered Species Act Classification of Long-Lived Vertebrates: Application to the North Pacific Humpback Whale." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):1203- . (v10,#4)

Gerber, Lisa, "Standing humbly before nature," Ethics and the Environment 7(no. 1, 2002):39-53. Humility is a virtue that is helpful in a person's relationship with nature. A humble person sees value in nature and acts accordingly with the proper respect. In this paper, humility is discussed in three aspects. First, humility entails an overcoming of self-absorption. Second, humility involves coming into contact with a larger, more complex reality. Third, humility allows a person to develop a sense of perspective on herself and the world. (E&E)

Gerber, Lisa, "The Art of Intimacy," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter

2001):79-83. This paper is an exploration of intimacy with non-human nature. I show that intimacy is like friendship in that it is a close and familiar relationships that develops over time and is marked by care and concern. Just as we have good reasons to value and promote friendships, we also have good reasons to value and promote intimacy with non-human nature. Gerber teaches in the University Honors Program, University of New Mexico, Albuquerque. (v.13,#2)

Gerber, Lisa, "The nature of water: Basia Irland reveals the 'is' and the 'ought'," Ethics and the Environment 8(no. 1, 2003):37-50. Basia Irland is an artist whose work revolves around water. Her vision is wide and she addresses ecological, social, and policy issues. Many of her works consist of portable sculptures which house maps, videos, natural objects, water samples, hydrologic reports, and research. In this paper I focus on two of her pieces, Desert Fountain and the Gathering of Waters project. I find these two pieces especially illuminating, because Irland reveals the nature of water, and also illustrates what our relationship to water should be. The ethical dimension of these pieces illustrates such values as harmony and reciprocity. Her work is a powerful statement about how we, individually and collectively, should interact with the natural world. I explore each of these pieces in turn, allowing her work to make the connections between what is and what ought to be. (E&E)

Gerber, Lisa . "What is So Bad about Misanthropy?" This paper is an exploration of the vice of misanthropy particularly as it manifests itself in people who love nature. Misanthropy is a hatred and disgust of humans, particularly of a group of humans. I look to wilderness to illustrate the vice of misanthropy. With regard to wilderness, misanthropy functions in three distinct spheres. First, there is misanthropy in the use of wilderness to flee other people. Second, there is misanthropy in the assumption that humans taint the wilderness. Finally, there is misanthropy in the assumption that humans can only relate to nature in a way that is harmful. In the end, we need to avoid misanthropy and its attendant despair. It is important that we see ourselves, not as a determined mass of people, but rather as individual people who are able to create positive change. Environmental Ethics 24(2002):41-55. (EE)

Gerber, Lisa, Environmental Virtues and Vices (Narcissism, Misanthropy, Humility, Attentiveness, Intimacy), Ph.D. thesis, 1999, Department of Philosophy, University of New Mexico. Virtue ethics is a better approach to environmental ethics than the extentionist position which allocates rights to animals, or the utilitarian position which takes into moral consideration all sentient creatures, or the land ethic position which seeks to promote the integrity and beauty of the biotic community. (1) Virtue ethics coherently explains why diverse examples, such as the killing of a sled dog and the destruction of a natural formation, are wrong. (2) More importantly, virtue ethics offers concrete ways in which to cultivate our characters in order to improve our relationship with nature. I explicate the vices of narcissism and misanthropy, and the virtues of humility, attentiveness, and intimacy. The adviser was Fred Schueler. (v.13,#4)

Gerlagh, R., and vander Zwaan, B. C. C, "Long-term Substitutability between Environmental and Man-made Goods," Journal of Environmental Economics and Management 44(no.2, 2002): 329-45. (v.13,#4)

Gerle, E., "Justice, Peace and Integrity of Creation," Ecotheology, No. 2, January, 1998, p. 59- . (v9,#2)

Gerle, Elizabeth, "A Response: Needing Inspiration from Many Sources," Ecotheology No 5/6 (Jul 98 / Jan 99):2-24.

Gerle, Elizabeth, "Justice, Peace and the Integrity of Creation," Ecotheology No 2 (Jan 1997):59-71.

German Advisory Council on Global Change. *Climate Change as a Security Risk*. London: Earthscan Publications, 2008. This new report is based on the findings of research into environmental conflicts, the causes of war, and of climate impact research. It appraises past experience but also ventures to cast a

glance far into the future in order to assess the likely impacts of climate change on societies, nation-states, regions and the international system. The core message of this report is that without resolute counteraction, climate change will overstretch many societies' adaptive capacities. In some regions of the world, this may result in internal destabilization processes and state failure with diffuse conflict structures, inter-state conflicts and an overstretching of the international system. Classic security policy cannot respond adequately to these new threats to international stability. Climate policy and strategies for adaptation to climate change are thus emerging as key elements of preventive security policy.

German Advisory Council on Global Change. *Climate Change as a Security Risk*. London: Earthscan Publications, 2008. This new report is based on the findings of research into environmental conflicts, the causes of war, and of climate impact research. It appraises past experience but also ventures to cast a glance far into the future in order to assess the likely impacts of climate change on societies, nation-states, regions and the international system. The core message of this report is that without resolute counteraction, climate change will overstretch many societies' adaptive capacities. In some regions of the world, this may result in internal destabilization processes and state failure with diffuse conflict structures, inter-state conflicts and an overstretching of the international system. Classic security policy cannot respond adequately to these new threats to international stability. Climate policy and strategies for adaptation to climate change are thus emerging as key elements of preventive security policy.

Germic, S., "Review of: Dennis C. Williams. God's Wilds: John Muir's Vision of Nature," Environmental History 8(no. 3, 2003): 493.

Germic, Stephen A., American Green: Class, Crisis, and the Development of Nature in Central Park, Yosemite, and Yellowstone. Blue Ridge Summit, PA: Lexington Books, 2001. The urban park and the frontier park, two kinds of public monuments that played a part in the formation of U.S. national identity. Geography, ecocriticism and narrative studies of the national(ist) importance of parks in the nineteenth century. Complicates conventional distinctions between the urban and the rural, city and frontier, east and west. The ideological implications of three efforts to legislate nature and space. (v.12,#2)

Gerrard, Michael B. "Territoriality, Risk Perception, and Counterproductive Legal Structures: The Case of Waste Facility Siting," Human Ecology 26(no.1, Mar. 1998):1017- . The placement of hazardous and nuclear waste facilities is an exercise fraught with difficulties. Local communities and states often object vehemently to any proposal that would place a new facility within their borders. One of the primary reasons for this difficulty is the failure of hazardous waste law to take into account the fundamental instinct of territoriality. (v9,#2)

Gerrard, Michael B. Whose Backyard, Whose Risk: Fear and Fairness in Toxic and Nuclear Waste Siting. Cambridge, MA: MIT Press, 1994. 335 pages. \$39.95 cloth. Gerrard criticizes the government for waffling on the problem, the media for trivializing the subject by using terms such as NIMBY ("not in my backyard"), and the fairness of forcing the facilities on economically less advantaged families. We ought not to try to find the best new locations for such sites, but reuse already contaminated Superfund sites. Gerrard is an environmental lawyer in New York. (v6,#1)

Gerrard, Michel B., Whose Backyard, Whose Risk: Fear and Fairness in Toxic and Nuclear Waste Siting. Review by David Sumner, Environmental Values 7(1998):122.

Gerrie, J, Review Article: "Fear And Loathing In The Global Village: Zygmunt Bauman, Globalization: The Human Consequences," Research in Philosophy and Technology 21(no., 2001): 371-372.

Gerrie, James B., "Environmental ethics: should we preserve the red herring and flounder?" Journal of Agricultural and Environmental Ethics 16(2003):63-76. Based

on a survey of some popular introductory anthologies and texts, I argue from my experience as a philosopher of technology that environmental philosophy might be conceived by some researchers in the field in terms of an overly narrow theoretical foundation. Many of the key figures in the field take as a basic assumption that the environmental crisis is fundamentally best explained in terms of some failing in the metaphysical outlooks of most people. However, philosophers of technology typically present at least two additional types of general explanation of the crisis. Environmental ethicists might benefit from consideration of these alternative ways of explaining the root causes of the ecological crisis. KEY WORDS: environmental ethics, philosophy of technology, technological dependency. (JAEE)

Gertler, Nicholas, and Ehrenfeld, John R., "A Down-to Earth Approach to Clean Production," Technology Review (MIT), Feb//Mar. 1996, pp. 48-56. Industrial symbiosis, modeled on the natural world where organisms rely on each other for nutrients, promises substantially to cut the environmental--and economic--costs of manufacturing. Ehrenfeld directs MIT's Program on Technology, Business, and Environment. (v.11,#1)

Gerwing, K and McDaniels, T, "Listening to the Salmon People: Coastal First Nations' Objectives Regarding Salmon Aquaculture in British Columbia," Society and Natural Resources 19 (no. 3, March 2006): 259-273.

Getches, D, "Water Wrongs: Why Can't We Get it Right the First Time?," Environmental Law 34(no.1, 2004):1-20.

--Giljum, S; Eisenmenger, N, "North-South Trade and the Distribution of Environmental Goods and Burdens: A Biophysical Perspective," Journal of Environment and Development 13(no.1, 2004):73-100. (v. 15, # 3)

Getches, David H. "Changing the River's Course: Western Water Policy Reform." Environmental Law 26, no.1 (1996): 157. With the Columbia River unable to support healthy salmon populations, Getches suggests that traditional instruments of water policy in the West--the beneficial use requirement of the prior appropriation doctrine and the idea of watershed management--can be reformed, with a community-based approach, to cure many of the Columbia's ills. (v7, #3)

Getliffe, Kate and Jane Calvert, Review of Joseph Murphy and Les Levidow, *Governing the Transatlantic Conflict over Agricultural Biotechnology*, Environmental Values 16(2007):279-281.

Getz, Wayne M., et al, "Sustaining Natural and Human Capital: Villagers and Scientists," Science 283(19 March 1999):1855-1856. Win-win solutions to saving natural and feeding people, with examples in Africa. Community-based natural resource management. Mostly large animals on which locals can make money from tourists and hunters. The ten authors are wildlife conservationists from several nations. (v.10,#1)

Gever, John, Robert Kaufmann, David Skole, and Charles Vorosmarty, Beyond Oil: The Threat to Food and Fuel in the Coming Decades. Niwot, CO: University Press of Colorado, 1991. \$ 19.95. (v7,#2)

Gever, John, Robert Kaufmann, David Skole, and Charles Vorosmarty, Beyond Oil: The Threat to Food and Fuel in the Coming Decades. University Press of Colorado, 1991. \$ 17.50 paper. 312 pages. (v2,#3)

Gezelius, SS, "Environmental Sustainability and Political Survival: A Comparative Analysis of the Cod Fisheries of Canada and Norway," Environmental Politics 11(no.4, 2002): 63-82.

Gezelius, Stig, "Food, Money, and Morals: Compliance Among Natural Resource Harvesters", Human Ecology 32(no.5, October 2004):615-634(20).

Gezon, Lisa L. *Global Visions, Local Landscapes: A Political Ecology of Conservation, Conflict, and Control in Northern Madagascar*. Walnut Creek, CA: AltMira Press, 2006. Gezon argues that local events continuously redefine and challenge global processes of land use and land degradation. She challenges analytical distinctions between separate "local" and "global" spaces, rather proposing that the global is one aspect of the local, to the extent that people in any given locale must act within the parameters of policies, authorities, and material conditions that have sources outside of the reach of immediate local networks. Her ethnographic study of Antankarana-identifying rice farmers and cattle herders in northern Madagascar weaves together an analysis of remotely sensed images of land cover over time with ethnographies of situated negotiations between human actors. She focuses in particular on the interplay of political authorities-including family-based elders, a regional indigenous authority, and an NGO charged with enforcement of conservation policies-in the context of specific contests over resource access.

Ghabbour, Samir, Review of IUCN/UNEP/WWF, Caring for the Earth. Environmental Values Vol.1 No.2(1992):171.

Ghai, Dharam P., ed., Development and Environment: Sustaining People and Nature. Oxford and Cambridge: Blackwell Publishers, 1994. 263 pages.

Contents include the following:

--Hviding, Edvard, Baines, Graham, B.K. "Community-based Fisheries Management, Tradition and the Challenges of Development in Marovo, Solomon Islands," pp. 13-40.

--Amanor, Kojo, "Ecological Knowledge and the Regional Economy: Environmental Management in the Asewea District of Ghana," pp. 41-68.

--Colchester, Marcus, "Sustaining the Forests: The Community-based Approach in South and South-East Asia," pp. 69-100.

--Gadgil, Madhav, Guha, Ramachandra, "Ecological Conflicts and the Environmental Movement in India," pp. 101-136.

--Joekes, Susan, Heyzer, Noeleen, Oniang'o, Ruth, Salles, Vania, "Gender, Environment and Population," pp. 137.

--Vivian, Jessica, "NGOs and Sustainable Development in Zimbabwe: No Magic Bullets," pp. 167-194.

--Ghimire, Krishna B. "Parks and People: Livelihood Issues in National Parks Management in Thailand and Madagascar," pp. 195-230.

--Utting, Peter, "Social and Political Dimensions of Environmental Protection in Central America," pp. 321-260. (v.9,#4)

Ghilarov, A. M. The changing place of theory in 20th century ecology : from universal laws to array of methodologies." Oikos 92(no. 2, 2001): 357-362.

Ghimire, Krishna B., ed., The Native Tourist: Mass Tourism within Developing Countries. London: Earthscan, 2001. Reviewed by Norman Dandy, Environmental Values 12(2003):266-267. (EV)

Ghimire, Krishna B., Pimbert, Michel P., eds. Social Change and Conservation. 342 pp. \$33.50 paper. Drawing on case studies from around the world contributors critically review current trends in protected area management and the prevailing concept of conservation, and show how the customary rights, livelihoods, well-being, and social cohesion of local people have been affected. The authors argue for a thorough overhaul of current conservation thinking and practice. (v8,#2)

Giampietro, Mario, "Sustainable Development: Scientific and Ethical Assessments", Journal of Agricultural and Environmental Ethics 5(1992):27-58. The problem of assessing the sustainability of human development is discussed in theoretical and practical terms. In Part I two theoretical tools for describing the challenge of assessing sustainable development are introduced and briefly discussed. In

Part II data illustrating the current terms of the dilemma of human development are presented and discussed within the theoretical frame provided in Part I. Giampietro is at the Istituto Nazionale della Nutrizione, Rome, Italy.

Gibbins, Ann M. Verrinder and Morrison, W. Douglas, Review of Superpigs and Wondercorn: The Brave New World of Biotechnology and Where It All May Lead, by W. Fox, Journal of Agricultural and Environmental Ethics 7(1994):126-131.

Gibbons, Ann. "Food for Thought." *Science* Vol. 316, no. 5831 (15 June 2007): 1558-60. Did the first cooked meals help fuel the dramatic evolutionary expansion of the human brain? Brains take a lot of energy, especially human brains, and this takes food. Also the human brain in evolutionary history expands greatly in size and rapidly. Richard Wrangham, Harvard primatologist, has been arguing that as humans learned to cook food this gave them a new energy source which fueled the rapid expansion of their brains, compared with other primates, such as chimpanzees, who never learned to cook. But his critics say that the timing is wrong: humans had big brains long before there is any evidence they cooked their food. This has led to debate over how long humans have used fire and in what ways. Fire has been used by hominoids for perhaps 800,000 years but there is evidence for cooking over fires only for about 100,000 years.

Gibbons, Ann. "Spear-Wielding Chimps Seen Hunting Bush Babies." *Science* Vol. 315, no. (23 February 2007): 1063. Chimps have been seen thrusting a pointed stick into a hole and pulling out a bush baby and eating it. They have been seen thrusting such sticks dozens of times, but only once with success (in 2,500 hours of observation). Chimps, of course, regularly thrust sticks (smaller ones) into termite mounds, draw it out, and eat the termites. Some wonder if they intend to hunt bushbabies, perhaps they only probe around with sticks and rarely luck up. Nevertheless, primatologists are excited about it.

Gibbons, E. F., Wyers, E. J., Waters, E, and Menzel, E. W., eds., Naturalistic Environments in Captivity for Animal Behavior Research. Albany: SUNY Press, 1994.

Gibbons, E. F., Jr., Durrant, B. S., and Demarest, J., eds., Conservation of endangered species in captivity. Albany: State University of New York Press, 1995.

Gibbons, J. Whitfield, Keeping all the Pieces: Perspectives on Natural History and the Environment. Washington: Smithsonian Institution Press, 1993. 208 pages. \$ 16.96, paper. The greatest insult we humans are inflicting on the environment in the ongoing and massive loss of global biological diversity. Why and how we must all become involved in keeping all the pieces. Gibbons is University of Georgia professor of ecology at the Savannah River Ecology Laboratory. (v4,#2, v5,#1)

Gibbons, J. Whitfield, David E. Scott, and Christopher T. Winne, "The Global Decline of Reptiles, Deje Vu Amphibians," Bioscience 50(no.8, 2000): 653-. (v.12,#3)

Gibbs, Lois Marie. Dying From Dioxin: A Citizen's Guide to Reclaiming our Health and Rebuilding Democracy. Boston, MA: South End Press, 1995.

Gibbs, M, "Toward a Strategy for Undertaking Cross-Cultural Collaborative Research," Society and Natural Resources 14(no.8, 2001): 673-88. (v.13,#2)

Gibbs, Walter, "Sweden's Welcome Pal Is Oslo's Big Bad Wolf," The New York Times, International, January 21, 2001, p. 6. Big bad wolves in Norway, but not Sweden. Norwegian officials plan to shoot most of Norway's two dozen wolves, although the wolves, which also range in Sweden, are welcome there. Wolves kill about 800 sheep each year, although other carnivores, such as lynx and wolverine, kill

many more (30,000). There are now about 70-80 wolves in Scandinavia, although nearby Russia has 30,000. (EE v.12,#1)

Gibeau, M. L., Clevenger, A. P., Herrero, S. and Wierzchowski, J., "Grizzly Bear Response to Human Development and Activities in the Bow River Watershed, Alberta, Canada," Biological Conservation 103(no.ER2, 2002): 227-36. (v.13,#2)

Gibert, J; Deharveng, L, "Subterranean Ecosystems: A Truncated Functional Biodiversity," Bioscience 52(no.6, 2002):473-482. (v.13, #3)

Gibson, Lynn. "The Changing Political Landscape and Ontario Countryside," Environments 24(no.3, 1997):62. (v8,#3)

Gibson, Robert, "Diversity Over Solidarity," Alternatives 26(no.4, Fall 2000):14- . What we have learned and where we have come in 30 years of eco-activism. (EE v.12,#1)

Gibson, Robert. "Two Proposals for Canadian Sustainable Communities." Alternatives 22, no.2 (1996): 23. (v7, #3)

Gibson, Tony. The Power in Our Hands. Reviewed ny Anthony Clayton. Environmental Values 8(1999):523. (EV)

Gibson, William E. "Theology and Ethics for a New Mission." Church and Society 80 (March/April, 1990): 5-15.

Giddens, Anthony, The Consequences of Modernity. Cambridge: Polity Press, 1991. The ecological crisis is a consequence of the economic and cultural tendency to divorce human life from earlier attachments to place and customs that once helped to keep people in closer contact with and concern for their environment (pp. 151ff).

Gifford, Fred. Review of The Preservation of Species. Edited by Bryan G. Norton. Environmental Ethics 10(1988):91-94.

Gifford, Richard E.II, A Philosophical and Historical Analysis of Dr. Rupert Sheldrake's Hypothesis of Formative Causation, Master's Thesis, Department of Philosophy, Lancaster University, September 1993.

Gifford, Richard E.II, A Philosophical and Historical Analysis of Dr. Rupert Sheldrake's Hypothesis of Formative Causation, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Gifford, Robert. Environmental Psychology: Principles and Practice. Second edition. Needham Heights, MA: Allyn and Bacon, 1997. (v8,#1)

Gifford, T, "Review of: John Warfield Simpson. Yearning for the Land: A Search for the Importance of Place", Environmental History 9 (no.1, 2004): 155.

Gilbar, Steven, ed., The Natural State: A Literary Anthology of California Nature Writing. Berkeley: University of California Press, 1998. 400 pages. \$ 16 paper. The first anthology of nature writing that celebrates California, with a great diversity of wild places. Forty writers, many familiar names, some less familiar. Gilbar is a California author, living in Santa Barbara. (v.9,#3)

Gilbert, Frederick F. and Donald G. Dodds, The Philosophy and Practice of Wildlife Management, 2nd ed. Malabar, FL: Krieger Publishing Co., 1992. Cloth. 313 pages. The first edition was in 1987. Includes analyses of conflicts and values in wildlife management, biological bases for management, habitat management, endangered species, exotics, urban wildlife, environmental impact assessment, international wildlife issues. Gilbert is professor of natural resources sciences at Washington State University, Dodds is a wildlife consultant in Nova Scotia. (v3,#3)

Gilbert, Gregory S., Hubbell, Stephen P. "Plant Diseases and the Conservation of Tropical Forests." Bioscience 46(no.2, Feb.1996):98. Conservation planners need to consider the roles diseases play in natural communities. (v7,#1)

Gilbert, P., "Borders, War and Justice," Journal of Applied Philosophy 18(no.3, 2001): 303-06. (v.13,#2)

Gilbert, Richard, et al. Making Cities Work. Review by Mark Pennington, Environmental Values 7(1998):492.

Gildart, Bert. "The Battle for Fish and Survival Along the Yukon." The Christian Science Monitor, 24 May 1994, pp. 10-11. The failure of chum salmon to run has pitted Athabaskan Indians against the Alaska Department of Fish and Game, which closed the Yukon River to subsistence fishing. (v5,#2)

Gildart, Bert. "What Another Century of Global Warming Could Do to Our Wilderness and How Wilderness Can Help us Fight Back." Wilderness (2007-2008): 24-28. Predicted effects radically change many of the over 700 wilderness areas in the United States, differing depending on the capacity of species to migrate. Likely there will be catastrophic mortality and the slow assembly of perhaps novel communities. At the same time, conservation of wilderness can help mitigate the effects of global warming. An acre of pine forest can offset the carbon emissions produced by one automobile.

Giljum, Stefan, and Hinterberger, Friedrich, "Wie misst man oekologische Nachhaltigkeit? Ein Vergleich ausgewählter Methoden des 'Physical Accounting' (article in German). How do we measure ecological sustainability? A comparison of selected physical accounting methodologies. Natur und Kultur, Vol. 1/2, 2000, pp. 26-43. Abstract: Energy and materials form the base for all natural and social processes on our planet. Thus, the implementation of ecological sustainability requires methodologies, which represent the metabolism of social systems in physical terms. This article presents four of the most influential approaches in physical accounting and defines criteria for a comparison of these methodologies. Understanding ecological sustainability as a global challenge demands for the application of comprehensive calculation methodologies, which indicate the demand for natural resources independent from the region of their occurrence. (v.11,#4)

Gilkey, Langdon, Nature, Reality, and the Sacred. Minneapolis: Fortress Press, 1993. 266 pages. Paper. Two partial apprehensions of nature have been vying for dominance in this century: religious, void of much influence from science, and scientific, unable to admit any reality beyond the empirical. Both views have led to the exploitation of nature, and the scientific may prove even more devastating from here onward. The fault lies not in the scientific knowledge of nature but in the assumed philosophy of science that accompanies most scientific and technological practice. Scientific knowing needs to be brought into relationship with other complementary ways of knowing, before there can be any adequate understanding of, relationship to, or conservation of the natural world. Gilkey is visiting professor at the University of Virginia, emeritus at the University of Chicago. (v5,#1)

Gilkey, Langdon, "Nature as the Image of God: Reflections on the Signs of the Sacred," Zygon 29(1994):489-505. Aspects of the scientific view of nature examined for signs or traces of the sacred, as early religious apprehension surely supposed. Nature's power and order, and the strange dialectic of life

and death are evident in modern biology, as also in all early religion. Gilkey is in religion at Georgetown University, formerly the University of Chicago. (v5,#4)

Gill, A. M., "Economically Destructive Fires and Biodiversity Conservation: An Australian Perspective," Conservation Biology 15(no.6, 2001): 1558-60. (v.13,#2)

Gill, N., "Aboriginal Pastoralism, Social Embeddedness, and Cultural Continuity in Central Australia," Society and Natural Resources 18(no. 8, September 2005): 699-714.

Gill, Sam D. Mother Earth: An American Story. University of Chicago Press, 1987. 196 pages. \$11.95 paper. Gill challenges the view that Mother Earth is an ancient and central Native American deity. (v5,#2)

Gilland, K., "The Swedish Election 2002 and the Swedish Greens," Environmental Politics 12(no. 2, 2003): 151-156.

Gillespie, Alexander, International Environmental Law, Policy and Ethics. Oxford, UK: Oxford University Press, 1997, 2000. Anthropocentrism. The self-interest justification for environmental protection. Religious justifications. Aesthetic, cultural, and recreational justifications. The rights of future generations as a justification for environmental protection. The growth of new, non-anthropocentric ideals within international environmental law. The moral considerability of animals. Respect for life. The land ethic.

Anthropocentric justifications are many though problematic, limited and not always coherent (roughly speaking, shallow ecology). These are dominant in international law, but they have increasingly been supplemented by non-anthropocentric considerations of the intrinsic value in nature (roughly speaking, deep ecology). These too are besieged by a number of faults and limitations that prevent them from becoming any panacea for environmental ethics. We need all the good arguments we can get, though we also must remember that summing up limited and contradictory arguments does not necessarily produce a good argument in total. Gillespie, in the Nottingham University Law School, is quite well-versed in philosophical environmental ethics and cites as many ethicists as he does legal documents. (v.13,#2)

Gillespie, Alexander. Review of Christopher Stone. The Gnat is Older Than Man: Global Environment and Human Agenda: (Princeton University Press, 1993). (EV)

Gillespie, Alexander. "Legitimizing a Whale Ethic." Environmental Ethics 25(2003): 395-410. Ethical discussions have entered into the discourse of the International Whaling Commission. In accordance with the existing approach in international environmental law, countries can legitimately choose not to exploit a resource in the traditional sense. Recognition of this possibility is important because it is commonly suggested that countries must adopt a lethal approach to so-called "sustainable whaling" as there are no other legitimate alternatives. However, the precedent of Antarctica suggests otherwise in international environmental law. Moreover, when the possibilities of the nonlethal utilization of whales via operations such as whale watching are examined, the legitimacy of the nonlethal choices is even stronger. (EE)

Gilligan, Ann Louise, "Lifestyle: Glenaraneen, Dublin Woman's Educational Project," Ecology No 1 (July 1996):103-105.

Gillilan, David M., Brown, Thomas C. Instream Flow Protection: Seeking a Balance in Western Water Use. Covelo, CA: Island Press, 1997. 432 pp. \$50 cloth, \$30 paper. A comprehensive overview of U. S. Western water use and the issues that surround it. (v9,#2)

Gillingham, Sarah and Lee, Phyllis C., "The impact of wildlife-related benefits on the conservation attitudes of local people around the Selous Game Reserve, Tanzania," Environmental Conservation 26(no. 3, Sept 01 1999):218- . (v10,#4)

Gillis, Anna Maria, "Weathering Warming in Colorado", Bioscience, 46(No.3, 1996):178- . Heating of a Rocky Mountain meadow shows that alterations in ecosystems provide important climate feedbacks.

Gillroy, John Martin, Justice and Nature: Kantian Philosophy, Environmental Policy, and the Law. Baltimore, MD: George Washington University Press, 2001. Criticizing the cost-benefit paradigm, Gillroy proposes an alternative way to conceptualize and create environmental policy, one that allows for the protection of moral and ecological values in the face of economic demands. Drawing on Kantian definitions of who we are as citizens, how we act collectively, and what the proper role of the state is, Gillroy develops a philosophical justification for incorporating non-market values into public decision making His new paradigm for justice toward nature integrates the intrinsic value of humanity and nature into the law. Gillroy is in environmental law and policy at Bucknell University. (v.12,#2)

Gillroy, John Martin. "Public Policy and Environmental Risk." Environmental Ethics 14(1992):217-37. In this essay, I argue that environmental risk is a strategic situation that places the individual citizen in the position of an imprisoned rider who is being exploited without his or her knowledge by the preferences of others. I contend that what is at stake in policy decisions regarding environmental risk is not numerical probabilities or consistent, complete, transitive preferences for individual welfare, but rather respect for the human agency of the individual. Human agency is a prerequisite to one's utility function and is threatened and exploited in the strategic situation that produces the imprisoned rider. This problem is created by the policy maker's assumption that his or her task is to assume rational preferences and aggregate them. The guidelines for evaluation and justification of policy should move beyond welfare preferences and involve an active state protecting human agency and empowering the imprisoned rider. Only in this way can we free all citizens (a priori) from fear of exploitation by those who would impose collective and irreversible risk on each of them in violation of their unconditional right to their own agency. Gilroy is at the Political Science Department, Trinity College, Hartford, CT. (EE)

Gillroy, John Martin, ed., Environmental Risk, Environmental Values, and Political Choices: Beyond Efficiency Trade-offs in Public Policy Analysis. Boulder, CO: Westview Press, 1993. Paper, 189 pages. Contributors: John Martin Gillroy, "Integrity, Intrinsic Value, and the Analysis of Environmental Risk"; Steven Kelman (Kennedy School of Government, Harvard), "Moral Domains, Economic Instrumentalism, and the Roots of Environmental Values"; Robert C. Paehlke (Political Science, Trent University, Ontario), "Environmentalism: Values to Politics to Policy"; Vincente Medina (Philosophy, Seton Hall University, New Jersey), "The Nature of Environmental Values"; Christopher J. Bosso (Political Science, Northeastern University, Boston), "Environmental Values and Democratic Institutions"; David E. Henderson (Chemistry, Trinity College), "Science, Environmental Values, and Policy Prescriptions"; William C. Gunderson (Political Science, Carthage College, Kenosha, Wisconsin), "Partisan Politics, Economic Growth, and the Roots of NIMBY: The Case of Montepellier France"; Talbot Page (Economics, Brown University, Providence, Rhode Island), "Environmental Values, the Economic Ethos, and NIMBY: The Rhode Island Case"; Barry G. Rabe (Health Politics, University of Michigan) and John Martin Gillroy, "Intrinsic Value and Public Policy Choice: The Alberta Case"; Douglas MacLean (Philosophy, University of Maryland), "Epilogue: Environmental Values and Economic Trade-offs--Conflict and Compromise." This anthology results from a symposium at Trinity College, Hartford, Connecticut, in March 1990. Gillroy is in political science there. (v5,#3)

Gillroy, John Martin, "Kantian Ethics and Environmental Policy Argument: Autonomy, Ecosystem Integrity, and Our Duties to Nature," Ethics and the Environment 3(1998):131-155. In this essay I will argue that, preconceptions notwithstanding, Immanuel Kant does have an environmental ethics which

uniquely contributes to two current debates in the field. First, he transcends the controversy between individualistic and holistic approaches to nature with a theory that considers humanity in terms of the autonomy of moral individuals and nature in terms of the integrity of functional wholes. Second, he diminishes the gulf between Conservationism and Preservationism. He does this by constructing an ideal-regarding conception of the former that values nature not as "merely" a thing to be used by human preferences and translated by markets, but as an essential component and prerequisite to the intrinsic autonomy of human beings. Simultaneously, he argues for a definition of preservation which places responsibility on humanity to harmonize moral agency with the functional integrity of natural systems. Here humanity and nature become the two unique and equally important components of what we might call the greater "Kantian ecosystem." In addition to the theoretical contributions of Kant's approach to our appreciation of the duties we owe to our natural environment, I will also suggest that "Kantian Conservationism" and "Kantian Preservationism" provide a sound moral basis for public policy arguments that wish to take the intrinsic value of humanity and nature into account. By requiring decision makers to consider citizens as ethical ends and nature as a functional end-in-itself, public choice becomes a process of restricting the use of the "kingdom of nature" to the essential requirements of "kingdom of ends." Gillroy is in environmental studies, Bucknell University, Lewisburg, PA. (E&E)

Gilmour, Brad, Huffman, Ted, Terauds, Andy, Jefferson, Charles. "Incentive Problems in Canada's Land Markets: Emphasis on Ontario," Journal of Agricultural and Environmental Ethics 9(1996):16-41. This specific issue addressed in this paper is urban encroachment on agricultural lands, and the problems it poses for both analysis and the conservation of the land resource. The purpose of our discussion is two-fold: (1) to identify where and why traditional analytical and regulatory approaches fail to resolve land use conflicts, and (2) to explore ways and means of resolving some of the dilemmas which society faces in making land use decisions. This paper's contribution is in the spirit of "Getting Incentives Right" for the inter-temporal transfer of wealth, as represented in trade-offs between environmental and resource endowments and human and physical capital. (JEEE) Efforts are placed on identifying what the appropriate price, levy, taxes, and grant ratios "ought" to be in order to encourage individuals in the marketplace to act in society's interest. (JEEE) We have also explored ways of efficiently transmitting those incentives through the market mechanism, without unduly relying on bureaucratic methods or suasion. Emphasis is placed on mechanisms that have little scope for preferential access and are subject to public scrutiny; emphasis on such self-disciplining approaches should result in less effort expended on (unproductive) lobbying activities and bureaucratic administration. Keywords: land use planning, zoning, transferable use rights, traditional benefit-cost analysis. (JAEE)

Gilpin, Robert, and Gilpin, Jean M., Global Political Economy: Understanding the International Economic Order. Princeton, NJ: Princeton University Press, 2001. Multinational corporations have much potential to influence political as well as economic life. The largest multinational corporations, such as General Motors, Ford and Mitsubishi enjoy total sales that exceed the gross national product of all but the most productive nations in the world. But the state can and ought retain its power. The authors advocate a "state-centric realism." The widening gap between the rich and the poor is almost invisible in this analysis.

Gimeno, Paul, "Éthique environnementale, valeur, anthropocentrisme et démocratie," Critique: Revue generale des publications francaises et etrangeres (Paris) 54(no. 612, 1998):225-245. In French. A critical review of some basic positions in "Anglo-Saxon" environmental ethics, Rolston, Callicott, Leopold, Regan, Singer, Taylor, Naess, and others. There are three deadly assumptions held concerning environmental ethics in Europe: (1) It is necessarily founded on a naturalistic theory of value. (2) Its theory of value necessarily reduces the value of human beings to that of the other animals. (3) The two preceding assumptions together determine a politics that contradicts modern democratic theory. These assumptions are false, as can be shown by attention to the writers above. (v.13,#2)

Gimona, Alessandro, Review of: Rosenzweig, Michael L., Win-Win Ecology: How the Earth's Species

can Survive in the Midst of Human Enterprise. New York: Oxford University Press, 2003.
Environmental Values 14(2005):278-281.

Gingras, Jacqui, "Evoking trust in the nutrition counselor: why should we be trusted?" Journal of Agricultural and Environmental Ethics 18(2005):57-74.

The virtue of trust is central to the work of dietitians working in nutrition counseling, especially in the context of disordered eating/eating disorders nutrition therapy. Indeed, dietitians are purported to be the most trusted source of information on nutrition and food by professional associations such as Dietitians of Canada. Here trust is explored through educational, relational, and virtue theory in order to elucidate trusts meaning and relevance to dietitians work and interactions with each other, including the general public. If dietitians are to continue to be trusted during times of skepticism in expert knowledge, reflexivity, active contestation, and moral testing in the context of our socio-political milieu need be employed so that we as a profession may respond to clients in respectful, authentic, meaningful ways; practices worthy of our trust.

Keywords dietetic practice - dietitian - disordered eating - education - ethics - nutrition counseling - third space. Gingras is in education, University of British Columbia, Vancouver, BC. (JAEE)

Ginsberg, J, "Enhancement of Survival or Abandonment of the Endangered Species Act?" BioScience 54 (no.3, 2004): 180-181(2).

Ginsberg, Paul. "Israel: The Pastoral Approach," Journal of Forestry 95(no.2, 1997):25.

Gioia, Dennis, A., "Why I Didn't Recognize Pinto Fire Hazards," in M. David Ermann and Richard J. Lundman, Corporate and Governmental Deviance. New York: Oxford University Press, 1996, 5th edition.

Giordano, M. A., "Managing the Quality of International Rivers: Global Principles and Basin Practice," Natural Resources Journal 43(no. 1, 2003): 111-136.

Giovinazzo, CT, "California's Global Warming Bill: Will Fuel Economy Preemption Curb California's Air Pollution Leadership?", Ecology Law Quarterly 30 (no.4, 2003): 893-954.

Giradot, N. J., Miller, James, and Xiaogan, Liu, Daoism and Ecology: Ways within a Cosmic Landscape. Cambridge, MA: Center for the Study of World Religions and Harvard University Press, 2001. Two dozen articles, from a conference on Daoism and Ecology, largely the views of scholars of religion and Daoism, including some practitioners, with discussions of the articles. Bibliography on Daoism and ecology. Giradot is in comparative religion, Lehigh University; Miller is a research fellow at Queen's University, Kingston, Ontario; Xiaogan is a Chinese scholar trained at Beijing University. (v.13,#1)

Gittins, John W., Local Distinctiveness and Sense of Place as Concepts and Tools for Promoting, Developing and Sustaining Community Based Environmental Action, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Gittins, John W., Local Distinctiveness and Sense of Place as Concepts and Tools for Promoting, Developing and Sustaining Community Based Environmental Action, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Gittleman, John L., Funk, Stephen M., MacDonald, David W., and Wayne, Robert K. eds., Carnivore Conservation. New York: Columbia University Press, 2002. Carnivore conservation, science, compromise, and tough choices. Gittleman is at the University of Virginia, Charlottesville. (v.13,#4)

Given, David R. Principles and Practice of Plant Conservation. Portland, OR: Timber Press, 1994. 264pp. \$39.95 cloth. A systematic treatment of conservation principles and practices for rare, threatened, or disappearing plant species. Detailed case studies from around the world and a comprehensive summary of current information and techniques on sustainable resource management, including economic implications.

Given, David R. "Forging a Biodiversity Ethic in a Multicultural Context," Biodiversity and Conservation 4(no. 8, Nov. 1995):877- . (v6,#4)

Gjerdaker, Svein, Lars Gule og Bernt Hagtvet, eds., Den Uoverstigelige Grense: Tanke og Handling i Miljøkampen (The Unbreachable Border: Thought and Action in the Environmental Struggle). Oslo: J. W. Cappelens Forlag, 1991. Essays by seventeen thinkers, mostly Norwegian philosophers and social scientists, from a conference held in Bergen in 1991. (Norway)

Gjerde, I., Saetersdal, M. "Effects on Avian Diversity of Introducing Spruce Picea Spp. Plantations in the Native Pine Pinus sylvestris Forests of Western Norway," Biological Conservation 79(no.2/3 1997):241-250.

Gladwin, Thomas N., Kennelly, James J., and Krause, Tara-Shelomith, "Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research," Academy of Management Review 20(1995):874-907. Modern management theory is constructed by a fractured epistemology, which separates humanity from nature and truth from morality. Reintegration is necessary if organizational science is to support ecologically and socially sustainable development. Requisites of such development, rejecting the paradigms of conventional technocentrism and antithetical ecocentrism on grounds of incongruences. A more fruitful integrative paradigm of "sustaincentrism" is articulated, and implications for organization science are generated as if sustainability, extended community, and our Academy of Management mattered. The authors are with the Global Environment Program, School of Business, New York University. (v.10,#1)

Glaesel, H, Book Review: "Dobbs, David. The Great Gulf: Fishermen, Scientists, and the Struggle to Revive the World's Greatest Fishery," Society and Natural Resources 15(no.5, 2002):463-464. (v.13, #3)

Glaeser, Bernhard. Environment, Development, Agriculture. Armonk, NY: M.E. Sharpe, 1995. The concept of human ecology might be the ideal means for creating a unified theoretical construct that will enable "greenery" and development to complement, rather than cancel out, each other. (v8,#1)

Glantz, Michael, ed., Drought Follows the Plow. New York: Cambridge University Press, 1994. \$ 19.95. Reversing an 19th century adage of the sodbusters, "rain follows the plow," the contributors here argue just the opposite, that droughts are often human-caused. Most of Earth's fruitful, rain-fed land is already in use. To try to farm marginal land, often arid or semiarid, can hasten agricultural drought. Such regions are ill-suited for farming in the first place and, with misguided human disruptions, a spiraling downward trend initiates, compounded when drought comes. Rich nations, like the U. S. and Australia can buy their way out of droughts, but in a country like Ethiopia, where an elite majority owns the good land and the majority must attempt to survive on marginal land, and where population growth is out of control, mass starvation is the likeliest scenario. Nature is likely to be blamed, because no one in government wants to admit responsibility for inept planning. Glantz is director of the Environmental and Societal Impacts Group at the National Center for Atmospheric Research, Boulder, Colorado. (v5,#4)

Glanz, James, "Sharp Drop Seen in Soil Erosion Rates," Science 285(1999):1187-1188; and Trimble, Stanley W., "Decreased Rates of Alluvial Sediment Storage in the Coon Creek Basin, Wisconsin, 1975-

1993," Science 285(1999):1244-1246. Sharp drop in soil erosion rates? A detailed study, including data across 140 years, shows much erosion earlier, but a sharp decline in recent years. From the 1970's to the 1990's sedimentation rates dropped to just 6% of their earlier peak, owing to better farming practices. But others say the study area is not typical of the United States as a whole, especially not of the western U. S. (v. 10, # 3)

Glassberg, Jeffrey. "North American Butterfly Association," Wild Earth 7(no.1, 1997):69. (v8,#2)

Glaser, Harold, "Naess's Deep Ecology Approach and Environmental Policy," Inquiry 39(no. 2, June, 1996):157-187. "A clarification of Naess's 'depth metaphor' is offered. The relationship between Naess's empirical semantics and communication theory and his deep ecology approach to ecophilosophy (DEA) is developed. Naess's efforts to highlight significant conflicts by eliminating misunderstandings and promoting deep problematizing are focused upon. These insights are used to develop the implications of the DEA for environmental policy. Naess's efforts to promote the integration of science, ethics, and politics are related to the National Environmental Policy Act (NEPA). The action-oriented aspect of deep ecology, its focus upon redirecting environmental policy, is also highlighted. The discussion is framed by Bryan Norton's contention, in Toward Unity Among Environmentalists, that Naess's deep/shallow distinction is not consequential. In the final section some of the uniqueness of Naess's contribution is intimated, the 'sturdiness' of deep ecology's foundation is considered, and directions for future theoretical and practical contributions are suggested. As will be observed, Naess has many important insights to offer, but some vexing issues persist. Glaser is at the New Jersey Institute of Technology, Newark. (v8,#3)

Glaser, Harold, Review of Norgaard, Richard B., Development Betrayed: The End of Progress and A Coevolutionary Revisioning of the Future. Environmental Values 5(1996):267-270. (EV)

Glaser, Harold. "On Warwick Fox's Assessment of Deep Ecology." Environmental Ethics 19(1997):69-85. I examine Fox's tripartite characterization of deep ecology. His assessment abandons Naess's emphasis upon the pluralism of ultimate norms by distilling what I refer to as the deep ecology approach to "Self-realization!" Contrary to Fox, I argue that his popular sense is distinctive and his formal sense is tenable. Fox's philosophical sense, while distinctive, is neither necessary nor sufficient to adequately characterize the deep ecology approach. I contend that the deep ecology approach, as a formal approach to environmental philosophy, is not dependent upon and embodies much more than any single ultimate norm. I discuss how Naess's deep ecology approach supports a wide diversity of ultimate norms. The only stipulation placed upon ultimate norms, to make them deep ecological ultimate norms, is that the so called deep ecology platform be derivable from them. The deep ecology approach is distinguished, in part, through its focus on diminishing environmentally degrading practices and policies by addressing root causes and by highlighting pseudo-conflicts. I present an interpretation of the deep ecology approach that highlights Naess's emphasis upon assisting individuals to arrive at thoroughly reasoned, consistent, and ecologically sound concrete decisions by supporting them in the articulation of their own personal ecological total views (ecosophies). Glaser is with the El Bosque Pumalin Foundation, San Francisco, and general editor of the selected works of Arne Naess, a nine-volume work to be published by Kluwer in 1998. (EE)

Glaser, Harold. Review of Max Oelschlaeger. Caring for Creation: An Ecumenical Approach to the Environmental Crisis: (New Haven, Conn.: Yale University Press, 1994). Environmental Ethics 17(1995):221-224. (EE)

Glassman, Jim, Samatar, Abdi Ismail. "Development Geography and the Third-World State," Progress in Human Geography 21(no.2, 1997):164. (v8,#3)

Glave, Dianne D., and Mark Stoll, eds. *To Love the Wind and Rain: African Americans and Environmental History*. Pittsburgh: University of Pittsburgh Press, 2005. The fourteen essays in this anthology focus on the relationships between African Americans, environmental justice, and rural, suburban, and urban environments in the US.

Glazebrook, Trish, "Gynocentric Eco-logics," Ethics and the Environment 10(no. 2, 2005):75-99. I wish to provide a diagnosis and etiology, and suggest a curative possibility for a disease of modernity I will call phallic logic. Symptomatic of this sickness are wide-spread social alienation, global domination and oppression on the basis of gender, race, class and color, and epidemic eco-destruction. A body of critique exists in ecofeminist analyses that experiences these symptoms as a single disease: the phallic logic of modernity. "Logic" in the sense used here is an epistemological term. Phallic logic is the structure of understanding that permeates patriarchy. This logic takes its paradigm from scientific objectivity, but even voices from within the sciences themselves are arguing that contemporary human being must establish new ways of thinking about nature. Glazebrook is in philosophy, Dalhousie University, Nova Scotia. (Eth&Env)

Glazebrook, Trish, "Karen Warren's Ecofeminism," Ethics and the Environment 7(no. 2, 2002):12-26.

Glazebrook, Trish, "Art or nature? Aristotle, restoration ecology, and flowforms," Ethics and the Environment 8(no. 1, 2003):23-36. Aristotle believed strongly in a distinction between artifact (techne) and nature (physis). He intended by "techne" more than is generally understood by the contemporary term "art," for he meant anything produced by human intention. The key point in distinguishing art from nature for him was that things in nature grow and develop on the basis of an internal principle of change, whereas artistic production requires an outside agent. Reason is requisite for artistic production. Yet some art may not meet this definition: artists may not always have a full conception of the work to be produced prior to its execution. Creativity can be emergent rather than intentional during the productive process, and may arise, for example, from the artist's interaction with the chosen material. Glazebrook is in philosophy, Dalhousie University. (E&E)

Glazebrook, Trish. Review of Karen Warren, Ecofeminist Philosophy: A Western Perspective on What It Is, and Why It Matters, Organization and Environment, 15, (No. 3, 2002): 344-7. Trish Glazebrook is an associate professor of philosophy at Dalhousie University, Halifax, Nova Scotia, Canada. (v.13, #3)

Glazebrook, Trish. Review of Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community. Edited by Robert Frodeman. Environmental Ethics 23(2001):215-218. (EE)

Gleason, Jennifer M., Johnson, Bern A., "Environmental Law Across Borders", Journal of Environmental Law and Litigation, 10(No.1, 1995):67- . (v7,#1)

Gleick, Peter H. The World's Water 2000-2001: The Biennial Report on Freshwater Resources. Covelo, CA: Island Press, 2000. 304 pages. Paper \$32. Freshwater resources and their use. The most significant trends worldwide, the most current data available. Brief reports on issues such as arsenic in groundwater in Bangladesh, the collection of fog as a source of water in remote regions, and more. (v.11,#4)

Gleick, Peter H., "Global Water: Threats and Challenges Facing the United States: Issues for the New U.S. Administration," Environment 43(no.2, 2001): 18-. The lack of clean water in developing nations undermines regional economic and political security. Poor management of U.S. water may also have destabilizing repercussions by threatening world food supplies. What can be done to address these issues. (v.12,#3)

Gleick, Peter H. The World's Water 1998-1999: The Biennial Report on Freshwater Resources.

Washington, D.C.: Island Press, 1998. \$29.95. 200 pp.

Gleick, Peter H., "Global Freshwater Resources: Soft-Path Solutions for the 21st Century," Science 302(2003):1524-1528. "Twentieth-century water policies relied on the construction of massive infrastructure in the form of dams, aqueducts, pipelines, and complex centralized treatment plants to meet human demands. These facilities brought tremendous benefits to billions of people, but they also had serious and often unanticipated social, economical, and ecological costs. Many unsolved water problems remain, and past approaches no longer seem sufficient. A transition is under way to a 'soft path' that complements centralized physical infrastructure with lower cost community-scale systems, decentralized and open decision-making, water markets and equitable pricing, application of efficient technology and environmental protection." While a soft path seems promising, political will is doubtful. More people lack clean water now than ever before. More lack healthy sanitation now than were alive on the planet in 1940. Gleick is at the Pacific Institute for Studies in Development, Environment, and Security, Oakland, CA.

Glenn, Jerome C., and Theodore J. Gordon, 2005 State of the Future. Washington, DC: American Council for the United Nations University, 2005. The Millennium Project. The eighth such annual report. 101 pages of report and 3,500 pages (!) on an accompanying CD. Section 4 is on Future Ethical Issues. Section 6 is on Emerging Environmental Security Issues. Section 7 on Sustainable Development Index and Quality and Sustainability of Life Issues. A subsection in print and on disk is "Protecting the Environment Due to its Inherent Moral Value."

Glennon, RJ; Culp, PW, "The Last Green Lagoon: How And Why The Bush Administration Should Save The Colorado River Delta," Ecology Law Quarterly 28(no.4, 2002):903-992. (v.13, #3)

Glick, Daniel. "Having Owls and Jobs Too." National Wildlife 33 (no. 3, August-September):8-13. In Oregon where protection of the northern spotted owl was supposed to destroy jobs, a booming economy debunks the "owl-vs.-jobs" tradeoff. Oregon has lost 14,300 jobs in the timber industry since 1988, with adverse effects on some rural mill towns, but the Oregon economy more than made up for that with new jobs elsewhere, often in wood technology. And former loggers are re-training.

Glidden, David, "Commonplaces," Philosophy and Geography 3 (1998): 169-190. Glidden is professor of philosophy at the University of California at Riverside. (P&G)

Glidden, David, "Borderline disorders," Philosophy and Geography 5 (No. 1, 2002): 19-27. Contribution to a symposium on the events of September 11, 2001 in New York City. Glidden is in the Department of Philosophy at the University of California, Riverside. (P&G)

Gliessman, Stephen R. *Agroecology: The Ecology of Sustainable Food Systems*. New York: CRC Press, 2006.

Global Assembly of Women and the Environment is a newsletter of the WorldWIDE Network. The July 1992 issue is "Gender and Environment: From Stockholm to Rio and Beyond." Contact: WorldWIDE Network, 1331 H. Street, NW, Suite 903, Washington, DC 20005. (v3,#3)

Global Biodiversity is published four times a year by the Canadian Museum of Nature, with distribution in 90 countries. The editor is Don McAllister. A website is <http://www.nature.ca/english/gbzine.htm>

Global Bioethics 12 (no. 1-4, 1999). A theme issue, Population Explosion: Religious and Environmental Confrontation. Global Bioethics is published at the Institute of Anthropology, University of Florence, Italy. Eleven contributors, growing out of a conference held in Xanthi, Thrace (Greece) in March 1999.

Includes:

- Gardikas, K., "How our species has tackled overcrowding in the past: Controversial issues and recent trends in world history"
- Falek, A., "The impact of epidemics on world population prospects for the 21st century: Genetic, epidemiologic and bioethical issues"
- Milani-Comparetti, M., "Birth control and ethical questions"
- and more. (v.12,#4)

Global Bioethics, Problemi di Bioetica, vol. 14, January 2001, no. 1. An online journal published at Firenze University, Italy and Firenze University Press. Special issue on environmental ethics. http://digital.casalini.it/fup/1128-7462_vol14_1.htm

- * C. L. Soskolne, "International transport of hazardous waste: legal and illegal trade in the context of professional ethics"
- * R. F. Noss, "Sustaining Ecological Integrity"
- * J. R. Sterba, "Environmental justice without environmental racism"
- * P. A. Vodopianov, "The Determining Factors of Ecosystem Stability Preservation"
- * Franco Pedrotti, "Biological Ethics in the Thought of Oscar De Beaux"
- * Philip Cafaro, "Less is More"
- * Mauro Tognon and Paolo Carinci, "Bioethics and Contaminated Vaccines"
- * Sven Arntzen, "Integrity and Uses of Nature"
- * Willy Weyns, "Policy impact assessment: the European Press union and the environment"
- * Rosangela Barcaro, "The Right to Die Debate: A Survey"
- * Stig Wandén, "Ethics, Prices and Biodiversity"
- * Gene C. Sager, "Environmental Education Ponderings From Down Under"
- * Global Bioethics: Domains and Mission Statement (v.12,#3)

Global Dialogue (Centre for World Dialogue, Nicosia, Cyprus) vol. 4, no. 1, 2002, is a theme issue on "The Fragile Biosphere." Contains:

- Pointing, Clive, "The Burden of the Past," pages 1-10. Two main events in human history have been the coming of agriculture and the arrival of technology exploiting fossil fuels. Humans are not dealing well with the undesirable results of the latter revolution.
- McNeill, J. R., "Earth, Wind, Water and Fire: Resource Exploitation in the Twentieth Century," pages 11-19. By the standards of the past the twentieth century was quite peculiar in the prodigality of its resource use.
- Wapner, Paul, "Ecological Displacement and Transnational Environmental Justice," pages 21-33. Generally scholars have failed to raise, in a sustained manner, issues of morality as it relates to transnational environmental issues.
- Bullard, Robert D., "Confronting Environmental Racism in the Twenty-First Century," pages 34-48. The causes and consequences of environmental racism, resulting from unequal interests and unequal power arrangements, benefitting the rich and impoverishing the poor.
- Guha, Ramachandra, "How Much Should a Person Consume?" pages 49-62. With particular attention to India and whether it should follow the West.
- Monbiot, George, interview, "If We Are Not Getting into Trouble, We are Not Being Effective," pages 63-66. Monbiot is a British environmental activist.
- Partridge, Ernest, "The Perils of Panglossism," pages 67-79. A critique of Julian Simon and other cornucopians.
- Godrej, Dinyar, "Climate Change: The Need for Action," pages 80-89. The evidence and the need for action is stronger than ever. But there is political impasse resulting from a lack of internationalism and naked, ultimately short-sighted national self-interest.
- Stone, Roger D., and D'Andrea, "Preserving the Forests: The Promise of Community Control," pages 90-102. Empowering local communities hardly guarantees an easy ride toward stable forests. But the

general failure of other forest management systems leaves the world with no better bet than community empowerment.

--Rolston, III, Holmes, "Justifying Sustainable Development: A Continuing Ethical Search," pages 103-113. Five contentious objections to sustainable development; how these can be met with sustainable development retaining moral force, and whether we can justify enforcing sustainability.

--Davion, Victoria, "Ecofeminism, Lifeboat Ethics and Illegal Immigration," pages 114-124. The debates over immigration (and lifeboat ethics) revisited through the lens of ecological feminism, with some attention to the resurgence of anti-immigration arguments since September 11.

--Waldau, Paul and Whitman, Sarah, "The Animal Invitation: Extending Human Rights to Other Apes," pages 125-137. Could individual animals other than humans plausibly be the direct, primary beneficiaries of legally enforced protections such as the right to remain alive and to be free from the domination of humans?(v.13, #3)

Global Ecology Handbook, The: What You Can Do About the Environmental Crisis. Boston: Beacon Press, 1990. \$ 16.95 paper. (v1,#4)

Global Environmental Change: Human and Policy Dimensions is a new international journal that addresses the human ecological and public policy dimensions of the environmental processes that are threatening the sustainability of life on Earth. The editor is Professor Martin Perry, Environmental Change Unit, 1a Mansfield Road, Oxford OX1 3TB, United Kingdom. The journal is published in cooperation with the United Nations University. (v4,#3)

Global Theme Issue on Poverty and Human Development, October 22, 2007. The Council of Science editors organized a Global Theme Issue on Poverty and Human Development in which science journals throughout the world simultaneously published articles of worldwide interest on October 27, 2007. Articles were published in 237 journals from 37 countries in all regions of the world on poverty and human development.

See: <<http://www.councilscienceeditors.org/globalthemeissue.cfm>>.

Global Tomorrow Coalition. The Global Ecology Handbook: What You Can Do About the Environmental Crisis, Boston: Beacon Press, 1990. \$ 16.95. (v1,#2)

Globalizations Vol. 5, no. 1 (2008). This issue contains the special forum "Global Action to Combat Global Climate Change." Contents include: (1) "Editorial: The Urgent Need for Global Action to Combat Climate Change" by Mark Armen, M. Martin Bosman, and Barry K. Gills (pp. 49-52), (2) "The Mitigation of Climate Change: Findings of the IPCC Working Group III" by Calum Miller (pp. 53-55), (3) "Combating Global Climate Change: From Light Bulbs to Photovoltaics" by UN Under Secretary General and UNEP Executive Director Achim Steiner (pp. 56-57), (4) "Climate Change as an Emerging Global Issue" by R.K. Pachauri (pp. 58-59), (5) "The Oil Depletion Protocol: A Response to Peak Oil" by C.J. Campbell (pp. 60-62), (6) "The IPCC and the Ozone Hole: A Warning from History" by Jan Oosthoek (pp. 63-66), (7) "Creating Low Carbon Communities: *One Planet Living* Solutions" by Pooran Desai OBE (pp. 67-71), (8) "Priorities for Decision Makers: Tackling Climate Change in a Time of Corporate Globalization" by Benedict Southworth (pp. 72-75), (9) "A New Environmental Deal for the 21st Century" by Susan George (pp. 76-77), (10) "Climate Change and Globalisation are Reinforcing Global Inequalities: High Time for a New Social Democratic Era" by Ulrich Beck (pp. 78-80), (11) "China: Facing the Challenges to Link Climate Change Responses with Sustainable Development and Local Environmental Protection" by Zhang Shiqiu (pp. 81-82), and (12) "Climate Change: A Global Call to Action" by Barry K. Gills (pp. 83-87).

Glosser, James W. and Waggoner, David K., "Animal Welfare Policy in the United States", Journal of Agricultural and Environmental Ethics 6(1993). In the United States there is a wide spectrum of feelings and views about animal welfare. At one extreme there is a view that animals are property, while at the

other extreme are those who believe animals have rights equal to human rights. The issue is complex, open-ended, and in large part still unresolved. If the industry does not effectively address the need for behavioural research on livestock animals, increased pressure will be exerted on Congress to legislate production practices. The U.S. livestock sector has a unique opportunity to bring about positive changes, in a reasonable fashion, in five important areas: (1) To correct misinformation and misconceptions about animal agriculture through educational efforts, especially focussed toward the young consumer; (2) To conduct the necessary research and be able to address concerns in the behavioural area. We presently have an extensive base of knowledge in the areas of production research, husbandry practices and disease prevention, but minimal information about the behaviour of livestock and poultry; (3) To develop self-regulatory practices within specific livestock groups which will satisfy the reasonable concerns of the general public and thus prevent a groundswell of support for government intervention and regulation; (4) To prevent the undue interference of government into livestock practices, as is occurring in other areas; and (5) To ensure that adequate efforts are being undertaken to meet the behavioural needs of livestock given the economic framework in which the industry must operate. Livestock producers should pursue simultaneous actions through self-regulation, public education and research to acquire additional information to fill the data gaps. Glosser is with the Animal and Plant Health Inspection Service, Department of Epidemiology, School of Veterinary Medicine, University of California, Davis, CA 95616. Waggoner is with Marketing and Inspection Services, United States Department of Agriculture, Washington, DC 20250.

Glover, James M., "Soul of the Wilderness Can We Stop Trying to Control Nature?" International Journal of Wilderness 6 (no. 1, April 2000):4-8. "The Western dream of controlling nature is deeply ingrained. Even in wilderness areas, it seems, we can't stop trying to control. I believe we need to take a lesson from Lao Tsu and other Eastern sages and recognize that the world cannot be ruled by interfering." Glover is in outdoor recreation at Southern Illinois University, Carbondale. (v.11,#2)

Glover, Leigh. *Postmodern Climate Change*. New York: Routledge, 2006. Glover discusses international political efforts such as the Kyoto Protocol in order to critique climate change science, global environmental politics, and global environmental management. He argues that modernity's usual economic, governmental, and scientific tools used to control climate change are inherently flawed, and the problem of climate change defies modernity's end.

Glowacinski, Z., Profus, P. "Potential Impact of Wolves Canis Lupus on Prey Populations in Eastern Poland," Biological Conservation 80(1997):99.

Gluckman, Peter, and Mark Hanson, Mismatch: Why Our Bodies No Longer Fit Our World. New York: Oxford University Press, 2006. Our bodies evolved as hunter-gatherers, but modern life is city-bound and abundantly nourished. The result is an explosion of lifestyle diseases, such as diabetes and obesity, and will lead to increasingly frequent epidemics. Gluckman is at University of Auckland, Hanson at the University of Southampton.

Glushenkova, Helena I., "Environmental Administrative Change in Russia in the 1990s" Environmental Politics 8(no. 2, Summer 1999):157- . (v10,#4)

Glynn, Simon, "Ethical Issues in Environmental Decision Making and the Limitations of Cost/Benefit Analysis (CBA)," Ethics and the Environment 1(no.1, 1996):27-39. Even the most extensively refined comparative cost/benefit analysis must be supplemented by other factors, irreducible to it, if we are to develop an adequate framework to guide policy decisions affecting technological design and innovation. Glynn teaches philosophy at Florida Atlantic University. (E&E)

Glynn, Simon. Review of *The Ethics of the Global Environment*. By Robin Attfield. Environmental

Ethics 23(2001):107-108. (EE)

Goble, Dale D., and Freyfogle, Eric T., Wildlife Law: Cases and Materials. New York: Foundation Press, 2002. Four sections: Private interests wildlife, inter-sovereign relations, wildlife conservation, and biodiversity. Goble is in law, University of Idaho. Freyfogle is in law, University of Illinois. (v.13,#4)

Gobster, Paul H., Hull, R. Bruce, eds. Restoring Nature: Perspectives from the Social Sciences and Humanities. 269 pages. Cloth \$50. Paper \$25. Using a recent controversy over ecological restoration efforts in Chicago as a touchstone for discussion, this book explores the difficult questions that arise during the planning implementation of restoration projects in urban and wildland settings. Ways in which restoration conflicts might be resolved, and examples of stewardship that show how volunteers and local residents can help make and maintain restored environments. (v.11,#4)

Gobster, Paul H., Haight, Robert G., and Shriner, Dave, "Landscape Change in the Midwest: An Integrated Research and Development Program," Journal Of Forestry 98 (No. 3, Mar 01 2000): 9- . Changes in landownership and development can increase the fragmentation of forest resources; a program in the North Central region examines these changes and explores strategies to stem negative consequences. (v.11,#2)

Gobster, Paul H., "An Ecological Aesthetic for Forest Management," Landscape Journal 18 (no. 1, spring 1999):54-64. "Although aesthetics and ecological sustainability are two highly regarded values of forest landscapes, practices developed to manage forests for these values can sometimes conflict with one another. I argue that such conflicts are rooted in our conception of forest aesthetics as scenery, and propose that a normative "ecological aesthetic" based on the writings of Aldo Leopold and others could help resolve conflicts between aesthetic and sustainability values. I then offer suggestions on how we might advance an ecological aesthetic in policy and planning programs, on-the-ground management, and research and theory development in landscape aesthetics." Gobster is a research social scientists with tue USDA Forest Service, North Central Research Station. (v.10,#3)

Gobster, PH; Palmer, JF; Crystal, JH, "Ervin H. Zube (1931-2002): The Significance and Impact of His Contributions to Environment-Behavior Studies", Environment and Behavior 35(no.2, 2003):165-186.

Godbee, J. F., and Shepard, J., "Water Quality, Wetlands, and Aquatic Systems," Journal of Forestry 100(no.7, 2002): 53. (v.13,#4)

Godfrey-Smith, William. "The Value of Wilderness." Environmental Ethics 1(1979):309-19. In this paper I explore various grounds on which wilderness can be regarded as something which we should value, and I draw attention to the problems of resolving conflict which are generated by these diverse grounds. I conclude that our attitudes toward nature are partially determined by a background of metaphysical assumptions which derive in particular from the philosophy of Descartes. These metaphysical preconceptions lead to the misconception that various alternative views about the natural environment are mystical or occult. Thus, an alternative non-Cartesian mode of conception involving holistic or systemic modes of thought is required in order to develop a satisfactory basis for our attitude toward the natural world. William Godfrey-Smith is now William Grey. He is in the department of philosophy, Australian National University, Canberra, Australia. (EE)

Godfrey-Smith, William. Review of Ecological Consciousness. Edited by Robert C. Schultz and J. Donald Hughes. Environmental Ethics 5(1983):355-59. William Godfrey-Smith is now William Grey.

Godfrey-Smith, Peter. Complexity and the Function of Mind in Nature. New York: Cambridge University Press, 1996. 324 pages. \$ 50, cloth. The relationship between intelligence and environmental

complexity. Philosophy of mind related to more general issues about the relations between organisms and environments. Godfrey-Smith is at Stanford University. (v7, #3)

Godfrey-Smith, William. See also Grey, William.

Godlovitch, Stan, ed., "Symposium: Natural Aesthetics," Journal of Aesthetic Education 33, no. 3., Fall, 1999. (v.13,#1)

Godlovitch, Stan, "Icebreakers: Environmentalism and Natural Aesthetics," Journal of Applied Philosophy 11(1994):15-30. "The only fitting regard for [nature] is a sense of mystery" and "the relevant special sense of mystery is ... a state of appreciative incomprehension, at best an acknowledgment of limits." But this need not involve a sense of awe or the sublime and natural science is irrelevant to nature appreciation. Godlovitch is in Parks, Recreation, and Tourism at Lincoln University, Canterbury, New Zealand. (v7,#2)

Godlovitch, Stan, "Valuing Nature and the Autonomy of Natural Aesthetics," British Journal of Aesthetics 38(no. 2, 1998):180-197. Aesthetic value in nature compared with aesthetic value in art works. Aesthetic responses to nature are numerous and multifarious and there seems to be no privileged aesthetic stance on which the aesthetic value of nature is to be judged. This also means that the science-based approach to aesthetics is not privileged (contra Carlson). Positive aesthetics of nature analyzed. There are numerous difficulties to making clear or affirming the positive aesthetics of nature (contra Carlson and Hargrove). These include the scope of the claim (landscapes, ecosystems, individual organisms?) and whether there can still be grading (more, less beautiful) even within positive aesthetics.

A more satisfactory account might be to take nature as it is in itself out of the realm of aesthetic value (as it has been removed from the realm of moral value). Nature is beyond beauty and ugliness. Still, an appropriate respect for nature, perhaps also a sense of mystery before the creativity and biodiversity there, ought to remain. "Nature as such must somehow be taken as it is, that it constitutes an autonomous and inexhaustible domain, that human-centered, nature-related distinctions are fundamentally limited, that nature is bound to outstrip our comprehension of and regard for it at any time in our history. Reflected in these views is nature as ... a 'magic well'." This will result in conservation and caring for nature. Godlovitch is at Lincoln University, Canterbury, NZ.

Godlovitch, Stan, "Valuing Nature and the Autonomy of Natural Aesthetics," British Journal of Aesthetics 38(no. 2, 1998):180-197. (v.13,#4)

Godlovitch, Stan, "Offending Against Nature," Environmental Values 7(1998): 131-150. Some environmental views characterise the human abuse of nature as an offence against nature itself. What conception of nature would best fit that characterisation? To focus upon such a conception, aesthetic offences against nature are examined and distinguished at the outset from moral offences. Aesthetic offences are divided into those internal to our cultural outlook and external to it. The external outlook, conceiving nature as a thing wholly apart from us, is shown to be necessary to any view of nature being offended against. Central to the external outlook is a conception of nature as the victim of offence without ever being itself an offending agent. Best fitting this is the notion of nature as primordially innocent. Given this metaphorical extension, the awkward consequence arises that any human use of nature constitutes thereby an abuse of it from the external standpoint. KEYWORDS: natural aesthetics, environmental ethics, nature, culture. Stan Godlovitch is at Lincoln University, New Zealand. (EV)

Godlovitch, Stan. "Things Change: So Whither Sustainability?" Environmental Ethics 20(1998):291-304. Two broad metaphysical perspectives deriving from Parmenides and Heraclitus have implications for our notion of sustainability. The Parmenidian defends a deep-seated orderliness and permanence in things, while the Heraclitian finds only chance and change. Two further outlooks, the nomic (or the big-picture

scientific) and the prudential, present differing accounts of our place in the world. While the nomic outlook accepts nothing privileged about the human perspective or even life itself, the prudential outlook is obviously welfare-centered. It is argued that nomic views, whether Parmenidian or Heraclitian, fail to provide any rationale for sustainability measures or concerns. The only such rationale comes from Parmenidian prudentialism, which, I argue, can operate only if it disowns at its peril the nomic point of view and couches sustainability entirely under the rubric of maximizing certain preferred opportunities drawn from collective self-love. But doing so merely evades rather than answers the tension imposed by the nomic Heraclitian for whom nothing lasts and nothing human counts specially in the measure. The liabilities of Parmenidian prudentialism are examined and found to be too great for any consistent notion of sustainability to bear. Godlovitch is in philosophy, Lincoln University, Canterbury, New Zealand. (EE)

Godlovitch, Stanley, Godlovitch, Rosalind, and Harris, John, eds., Animals, Men, and Morals: An Enquiry into the Maltreatment of Non-humans. New York: Taplinger Publishing Co., 1972. 240 pages.

Godoy R.A.; Gurven M.; Byron E.; Reyes-Garcia V.; Keough J.; Vadez V.; Wilkie D.; Leonard W.R.; Apaza L.; Huanca T.; Perez E., "Do Markets Worsen Economic Inequalities? Kuznets in the Bush," Human Ecology 32(no.3, June 2004):339-364(26). (v. 15, # 3)

Godoy, Ricardo, Franks, Jeffrey R. Claudio, Mario Alvarado. "Adoption of Modern Agricultural Technologies by Lowland Indigenous Groups in Bolivia: The Role of Households, Villages, Ethnicity, and Markets." Human Ecology, 26(no.3, 1998), p.351. (v.9,#4)

Godzinski, Ronald Peter, Jr., Hume's Emotivism and Callicott's Environmental Ethic. Colorado State University, Philosophy M.A. thesis, fall 1997. J. Baird Callicott's environmental ethics is founded on David Hume's moral epistemology. Hume has problems with the is/ought fallacy, which Callicott believes he can overcome with the model of environmental health. But making a rational appeal to persons to act ethically because they are motivated by environmental health is more complex than Callicott realizes. Further, Hume is either a subjectivist or an emotivist in ethics, and both views have been subjected to severe criticisms. Callicott's environmental ethics needs to face these criticisms. In fact, Callicott's whole line of reasoned argument in defense of ecosystems and duties to conservation is not really permissible, if Callicott really follows Hume, who does not concede the power of reason to motivate behavior. (v.8,#4)

Goebel, PC; Wyse, TC; Corace III, RG, "Determining Reference Ecosystem Conditions for Disturbed Landscapes within the Context of Contemporary Resource Management Issues," Journal of Forestry 103 (no. 7, Oct/Nov 2005): 351-356.

Goerch, Jaqueline M. "Patterns of Rarity in the Birds of the Atlantic Forest of Brazil," Conservation Biology 11(no.1, 1997):112. (v8,#2)

Goergen Jr M.T., "Commentary: Old-Growth: Science, Advocacy, and Public Values," Journal of Forestry 102(no.3, April/May 2004):1-1(1). (v. 15, # 3)

Goerner, Sally. "Chaos, Evolution and Deep Ecology." Pages 17-38 in Robin Robertson and Allan Coombs, eds., *Chaos Theory in Psychology and the Life Sciences*. Mahwah, NJ: Lawrence Erlbaum. The main concept in chaos theory is nonlinearity, in which opposing tendencies may be built into a single system, resulting in a world that is extremely versatile and subtle. Chaos theory more accurately describes the world in its ability to account for the phenomena normally labeled as accidental, anomalous, or mysterious. The evolving ecological universe is lawful and physical but not completely predictable, controllable, or knowable. Order is hidden in chaos, a result of interdependent variables coaffecting each other, which creates wholes out of parts. Such themes can be integrated into deep ecology.

Goerz, Catherine S., The Rhetoric of Earth First!: An Organic Systems Analysis. M.A. thesis, Speech Communication Department, Colorado State University, Fall 1996. An analysis of the independent and adaptive nature of the radical environmental organization Earth First!. Earth First! was founded on the principles of biocentrism and ecodefense for the purpose of protecting the wilderness. The organization responded to the perceived environmental crisis by aggressively confronting and resisting the political institutions and corporations responsible for the damage. Strengthened by diverse internal structures and human resources, the movement attempted to persuade the establishment to reevaluate current environmental policy and to make changes in favor of ecological preservation and regulation. Earth First!'s rhetoric is examined with an organic systems analysis. This approach to social movements conceives the organization to be a collectivity that must interact and adapt with the external environment in order to evolve. By analyzing the internal relationships and resources, the communication channels, and rhetorical environment surrounding the movement, the revolutionary nature of Earth First! is revealed. The thesis advisor was James R. Irvine. (v9,#2)

Goetzl, Alberto, "Consumption and Concerns: A Delicate Balance," Journal of Forestry 98(no.10, OCT 01 2000):19- . Americans need to make the connection between their demands as consumers and their concerns about natural resources. (EE v.12,#1)

Goff-Yates, Amy L. "Karen Warren and the Logic of Domination: A Defense." Environmental Ethics 22(2000):169-181. Karen Warren claims that there is a "logic of domination" at work in the oppressive conceptual frameworks informing both sexism and naturism. Although her account of the principle of domination as a connection between oppressions has been an influential one in ecofeminist theory, it has been challenged by recent criticism. Both Karen Green and John Andrews maintain that the principle of domination, as Warren articulates it, is ambiguous. The principle, according to Green, admits of two possible readings, each of which she finds flawed. Similarly, Andrews claims that the principle is fundamentally inadequate because it cannot distinguish cases of oppressive domination from cases of nonoppressive domination. In this paper, I elucidate Warren's views and defend her against these and other criticisms put forward by Green and Andrews. I show that Warren's account of "the logic of domination" successfully illuminates important conceptual features of oppression. (EE)

Goff-Yates, Amy Lee, Beasts of Burden: Women, Animals, and Oppression, Ph.D., 1999, Department of Philosophy, Women's Studies, University of Kentucky, Ecofeminists maintain that the oppression of nature, and specifically animals, is connected to the oppression of women. I clarify this claim and argue that it is reasonable. Ecofeminists often describe the connection as conceptual. I distinguish material and formal conceptual connections. I defend the views of two influential ecofeminists who find a conceptual connection. I then offer an analysis of the concept of oppression which elucidates both the conceptual and cultural features. Oppression is a wrongful institutionalized hierarchy wherein the members of a subordinate group suffer ultimately for the benefit of persons in a dominant group. A dominant cultural ideology maintains and attempts to justify this unjust social arrangement. The oppression of women and the oppression of animals are conceptually connected because the ideologies that inform their oppressions share important and necessary features.

I argue that it makes sense to ascribe oppression to the condition of animals today because both the conceptual and cultural features of oppression apply. It is reasonable to describe animals as oppressed and given that the oppressions of women and animals are connected by a common structure of oppressive ideology, the treatment of animals is a feminist issue. The advisor was Joan C. Callahan. (v.13,#4)

Goffi, J.-Y., Le philosophe et ses animaux. Nimes: Jacqueline Chambon, 1994.

Goforth, Robyn L., and Carol R. Goforth, "Appropriate Regulation of Antibiotics in Livestock Feed," Boston College Environmental Affairs Law Review 28(no.1, 2000 Fall): 39-. (v.12,#3)

Go»aszewska, M., (ed.), Poznanie i doznanie. Eseje z estetyki ekologii (Cognition and Impression. Essays on Aesthetics of Ecology), UNIVERSITAS, Kraków, 2000. (v.13,#1)

Go»aszewska, M., (ed.), Poznanie i doznanie. Eseje z estetyki ekologii (Cognition and Impression. Essays on Aesthetics of Ecology), UNIVERSITAS, Kraków, 2000.

Goldberg, Carey, "Fish Are Victorious Over Dam as US Agency Orders Shutdown," New York Times (11/26/97): A12. See under Harden, Blaine. (v.8,#4)

Goldberg, S, Review Article: "Toward a bodily conception of self," in Jose Luis Bermudez, Anthony Marcel and Naomi Eilan (Eds), The Body and The Self," Research in Philosophy and Technology 21(no., 2001): 373-376.

Goldblatt, David, Social Theory and the Environment (Cambridge: Polity Press, 1996). Reviewed by Jo Smith. Environmental Values 6(1997):239-241. (EV)

Goldemberg, José, "What is the Role of Science in Developing Countries?" Science 279(1998):1140-1141. Developing countries should not expect to follow the research model that led to the scientific enterprise of the United States and elsewhere. Many scientists from developing countries, trained in the United States and Europe, returned to their own nations and tried to imitate what was being done in developing countries. India, for example, had a nuclear research program, which failed, and was largely irrelevant to the needs of India. Developing countries need a science that is relevant to their local circumstances and needs, which includes appropriate technology for sustainable development. Goldemberg is at the University of Sao Paulo, Brazil. (v9,#1)

Goldfarb, Theodore, ed. Taking Sides: Clashing Views on Environmental Issues. Reviewed in Environmental Ethics 8(1986):89-90.

Goldfarb, Theodore D., eds., Taking Sides: Clashing Views on Controversial Environmental Issues, 4th edition (Guilford, CT: The Dushkin Publishing Group, 1991). \$ 10.95 softcover. A new edition of an introductory reader that is being regularly updated. About half of the thirty-six selections are new. The book is cast in a yes/no debate format around 18 issues, e.g. "Does Wilderness Have Intrinsic Value?" "Is Brazil Serious about Preserving its Environment?" "Does Global Warming Require Immediate Action?", and authors, who often originally wrote in somewhat different contexts, are chosen to say yes or no. All the readings are at popular level. This can be a good book to wake up sleepy freshmen; there is an instructor's manual with test questions. But it tends to be noisy and the debate formate is not always the best for serious analysis of these questions in more advanced courses. Goldfarb is an environmental chemist at the State University of New York at Stony Brook. (v2,#1)

Goldfarb, Theodore D., ed., Taking Sides: Clashing Views on Controversial Environmental Issues. 5th edition. Guilford, CT: Dushkin Publishing Group, 1993. Paper. 372 pages. As before, in debate format: somebody argues yes; somebody argues no. New issues are: Did the United Nations Summit produce useful results? Will the "greening" of multinational corporations lead to environmental improvements? Should energy policy focus on reducing the use of fossil fuels? Will environmental degradation be a feature of international conflicts in the future? The format gets interest going, but, if not carefully used, can generate as much heat as light. Goldfarb is an environmental chemist at the State University of New York at Stony Brook. (v4,#4)

Goldin, Owen, and Kilroe, Patricia, eds., Human Life and the Natural World: Readings in the History of

Western Philosophy. Peterborough, Ont.: Broadview Press, 1997. (Broadview Press, P. O. Box 1243, Peterborough, Ont. K9J 7H5, Canada; 3576 California Road, Orchard Park, NY 14127 USA) With distributors in the U.S., U.K., and Australia. Twenty-seven readings from classical philosophers or theologians (sometimes literary figures or scientists), from Xenophon, Plato, Aristotle, through Thomas Aquinas, Francis of Assisi, René Descartes, to John Stuart Mill, Friedrich Engels, and Ralph Waldo Emerson. "Although the environmental problems that have rekindled interest in these issues have only recently taken center stage in Western intellectual and political discourse, the general issues to which philosophical reflection on these issues leads are not new. Indeed, they are among the oldest of philosophical questions, questions to which philosophers must continually return" (p. ix) Looking into figures of the past reveals how our own thought has been shaped, and sometimes those who see an idea first see what it most clearly amounts to. "Current debates in the field of environmental philosophy contain echoes, developments, and distortions of [these classical] positions. In order to better understand the roots of these critical debates, we must turn to the study of their historical sources" (p. xix). Goldin is in philosophy at Marquette University. Kilroe is in anthropology and linguistics at the University of Wisconsin-Milwaukee. (v8,#2)

Goldin, Owen, "Porphyry, Nature, and Community," History of Philosophy Quarterly 18 (2001): 353-371. Porphyry (232-304 A.D.) was a student of Plotinus. An analysis of the main argument of De Abstinencia 3 to the effect that animals are ethical subjects, since they are rational and obligations of justice hold in regard to all rational beings. The argument does not follow from Porphyry's own theory of justice, but is meant to show that ethical obligations to animals follow from the principles of the Stoics, who ground their theory of justice on an ethic of community. The author compares Porphyry's argument with Callicott's environmental ethic of community. Goldin is in philosophy at Marquette University. (v.13,#1)

Goldman, Michael, *Imperial Nature: The World Bank and Struggles for Social Justice in the Age of Globalization*. New Haven: Yale University Press. The World Bank is part of a conspiracy to impose on the world a "green neoliberalism" that enriches the global North at the expense of poor in the Third World. This process has its roots in colonialism and its goal is the establishment of power relationships similar to those of the colonial past. The changes brought about by the World Bank do benefit some people more than others. Some poor people have received schooling, gained access to potable water and electricity, experienced improved productivity, and gained better access to markets along newly constructed roads. But in many other cases people are forced to move, their primary livelihood destroyed or new goods and services threaten existing social and cultural norms. Goldman is in sociology, University of Minnesota.

Goldman, Michael, "'Customs in common': The Epistemic World of the Commons Scholars," Theory and Society 26(1997):1-37. Despite the fact that the famous model of natural resource use espoused by biologist Garrett Hardin, the "tragedy of the commons," has been thoroughly debunked by social scientists of most stripes, the model's assumptions--e.g. that selfish individuals using a common pool resource will overconsume to the detriment of all--have not only survived but fruitfully multiplied, as if driven by higher laws of natural selection. Its seeds have sprouted, for example, in works of natural scientists who apply biology's behavioral laws to complex social realities. It thrives deep in the soul of most commons theorists, even those fervently opposed to Hardin's model, who ply their trade by identifying, protecting, managing, saving, developing, and making efficient commons throughout the world. This commons-tragedy discourse has also shaped the thinking on the new "global commons," led by academicians and policymakers striving to direct supranational decision-making on the gray areas of global real estate: the earth's ozone, deep seas, "biodiverse" reserves (e.g. the Amazon), the North and South poles, the air waves, and so on. In other words, an old, dubious framework once applied to questions of local commons (i.e how to stop self-interested shepherds from destroying community pastures), is now being applied to saving our global commons.

In fact, the commons metaphor is an important icon of the "development world." It is being used as a hidden and not-so-hidden institution of domination and imperialism in North-South relations, in an effort to restructure the commons, to "privatize," "develop," "make more efficient," "valorize," "get the price right," in the service of crisis-ridden capitalisms. This does not stop destructive practices; it rather normalizes and further institutionalizes them, putting commoners throughout the world at even greater risk. Goldman is at the University of California, Berkeley. (v.10,#1)

Goldman, Michael. *Imperial Nature: The World Bank and Struggles for Social Justice in the Age of Globalization*. New Haven: Yale University Press, 2005.

Goldman, Patti A., Boyles, Kristen L. "Forsaking the Rule of Law: The 1995 Logging Without Laws Rider and Its Legacy," Environmental Law 27(no.4, 1997):1035- . Analysis of the litigation that occurred over the 1995 Logging Without Laws Rider. Abandoning the rule of law left federal agencies unfettered and unaccountable to the public, federal courts unwilling and unable to exert control, and the environment unprotected. (v9,#2)

Goldsmith, Edward, "Archaic Societies and Cosmic Order - A Summary," The Ecologist 30 (No. 1, Jan 01 2000): 15- . Archaic Societies had a word for the path that must be taken to maintain the order of the all-encompassing Cosmos on which human welfare depends. (v.11,#2)

Goldsmith, Edward, "Religion at the Millennium.," The Ecologist 30 (No. 1, Jan 01 2000): 4- . Mainstream religion in our atomised societies is but an interpersonal relationship between an individual and his God. We must revive the theological underpinnings of our original Religions in which the individual related to society, the natural world and the cosmos. (v.11,#2)

Goldsmith, Edward, "Scientific Superstitions: The Cult of Randomness and the Taboo on Teleology," The Ecologist 27 (Sept. 1997):196-. To make sense of modern science requires the postulation of a number of totally unrealistic dogmas, among them the randomness of life processes and hence their purposelessness. (v.8,#4)

Goldsmith, Edward, Peter Bunyard, Nicholas Hildyard, Patrick McCully, Imperiled Planet: Restoring our Endangered Ecosystems. Cambridge: MIT Press, 1990. \$ 39.95. By the editors of The Ecologist. (v1,#4)

Goldsmith, Edward, "Hell on Earth," The Ecologist 30(no.7, OCT 01 2000):40- . We have changed the face of the planet almost unrecognisably over the last 200 years - and now we talk of re-engineering ourselves to adjust to it. Edward Goldsmith says we have missed the point again. (EE v.12,#1)

Goldsmith, Edward, The Way: An Ecological World View. London: Rider, 1992. £ 12.99. 442 pages. Life has a purpose, which ecology can help discover. Penetrating criticisms of mainstream biological philosophy, sometimes idiosyncratic, advocates a kind of Lamarckianism. Goldsmith founded The Ecologist and is a thinker unconstrained by the conventions of academia. (v4,#4)

Goldsmith, Edward, The Way: An Ecological World View, revised and enlarged edition. Athens: University of Georgia Press, 1998. 541 pages. Sample chapter titles: Ecology is a unified organization of knowledge. Ecology seeks to establish the laws of nature. Ecology studies natural systems in their Gaian context. Ecology is holistic. Ecology is teleological. Ecology is qualitative. Ecology is subjective. Ecology is emotional. Ecology is a faith. Ecology reflects the values of the biosphere. Natural systems are homeostatic. Natural systems are homeorhetic. Life processes are dynamic. Life processes are creative. Gaia is the source of all benefits. Man is psychically maladjusted to the world as depicted by the paradigm of science. The great reinterpretation requires a conversion to the world-view of ecology. 66 short chapters. The first edition was published in 1992 in the UK. Goldsmith was long the editor of

The Ecologist. (v9,#2)

Goldsmith, Edward, The Way: An Ecological World View. Revised and enlarged (second) edition. Foxhole: Dartington (Devon, UK): Themis Books, an imprint of Green Books, Ltd., 1996. 553 pages. A revision of the 1992 edition. 66 short chapters. Samples: Ecology is holistic. Ecology is emotional. The ecosphere is one. Gaia is alive. Life processes are dynamic. Living systems are intelligent. Cooperation is the primary Gaian relationship. Goldsmith was with the journal, The Ecologist, for twenty-five years. Reviewed by Stan Rowe in The Trumpeter 14 (no. 1, 1997):40-43. (v9,#1)

Goldsmith, Emanuel S., Review of Marvin C. Shaw, Nature's Grace: Essays on H. N. Wieman's Finite Theism. American Journal of Theology and Philosophy 18 (no. 1, 1997):97-100. (v8,#1)

Goldsmith, Zac. "Why Globalisation is Bad for Your Health." The Ecologist 29(no. 3, May 1999):189- . (v.11,#1)

Goldstein, Daniel J., "A Biotechnological Agenda for the Third World", Journal of Agricultural Ethics 2(1989):37-51. Third World countries should exploit the genetic information stored in their flora and fauna to develop independent and highly competitive biotechnological and pharmaceutical industries. The necessary condition for this policy to succeed is the reshaping of their universities and hospitals--to turn them into high-caliber research institutions dedicated to the creation of original knowledge and biomedical invention. Goldstein is in chemical biology at the University of Buenos Aires, Argentina.

Goldstein, Daniel J., "Ethical and Political Problems in Third World Biotechnology", Journal of Agricultural Ethics 2(1989):5-36. If the present trend continues, underdeveloped countries will continue to be testing grounds for biological materials and agents, sources of valuable germplasm, and markets for high-value-added products and processes invented and manufactured in the First World. This article recommends that the international organizations collaborate in the urgent task of educating the Third World political leaders and administrators in the real problems connected with the generation of high technology. Goldstein is in chemical biology at the University of Buenos Aires, Argentina.

Goldworth, Amnon, "Publicly Funded Scientific Entrepreneurs Are Not Entitled to Profit From Their Discoveries", Journal of Agricultural and Environmental Ethics 4(1991):192-199. In a debate: Are publicly funded scientific entrepreneurs entitled to profit from their discoveries?

Golf and the Environment: Environmental Principles for Golf Courses in the United States. 15 pages. Developed through collaborative research and dialogue with some seventeen groups, for example, Audubon International, National Wildlife Federation, Friends of the Earth, Sierra Club, United States Golf Association, National Golf Foundation, American Farmland Trust, and others. Copies from The Center for Resources Management, 1104 East Ashton Avenue, Suite 210, Salt Lake City, UT 84106. (v9,#1)

Gollain, F, "Anti-Globalisation Movements: Making and Reversing History," Environmental Politics 11(no.3, 2002): 164-167.

Golley, Frank B., "Deep Ecology from the Perspective of Environmental Science," Environmental Ethics 9(1987):45-55. An initial attempt to show that two basic Deep Ecology principles--self-realization and biocentric equality--can be plausibly interpreted from the perspective of ecological science. (Katz, Bibl # 1)

Golley, Frank, A Primer for Environmental Literacy. New Haven: Yale University Press, 1998. 254 pages. \$ 18.00 softback; 37.50 hardback. Presents the key concepts of the environmental sciences in an

accessible style that can be understood by those who are not natural scientists. Unique in breadth and simplicity. Uses a top-down approach, beginning with the Earth and going to the individual. Comments on the ethical, social and political implications of the concepts, presented in an implication section in each chapter, offering insight into the philosophy of the author. Tested in five classes on environmental concepts for the Environmental Ethics Certificate Program at the University of Georgia. Golley is Research Professor at the Institute of Ecology of the University of Georgia and is currently Chair of the Environmental Ethics Certificate Program. (v.9,#4)

Golley, Frank B., "Valuing the American Environment," Ethics and the Environment 2(1997):67-69. Frank Golley introduces the presentations at the 1996 forum titled "Valuing the American Environment" sponsored by the Humanities Center of the University of Georgia. Golley is in ecology at the University of Georgia. (E&E)

Golley, Frank B. "Deep Ecology from the Perspective of Environmental Science." Environmental Ethics 9(1987):45-55. Deep ecology is examined from the perspective of scientific ecology. Two norms, self-realization and biocentric equality, are considered central to deep ecology, and are explored in brief. Concepts of scientific ecology that seem to form a bridge to these norms are ecological hierarchical organization, the exchange of energy, material and information, and the development of species within ecosystems and the biosphere. While semantic problems exist, conceptually it appears that deep ecology norms can be interpreted through scientific ecology. Golley is at the Institute of Ecology, University of Georgia, Athens, GA. (EE)

Golley, Frank B., A History of the Ecosystem Concept in Ecology: More Than the Sum of the Parts. New Haven: Yale University Press, 1993. 353 pages. \$ 30.00. The development of the ecosystem concept in the late nineteenth and early twentieth centuries. How ecosystem studies dominated ecology in the 1960's and became a key element of the International Biological Program biome studies in the United States. How current research uses the ecosystem concept. Golley is research professor of ecology, University of Georgia, and former president of the Ecological Society of America. He is also on the faculty of environmental ethics at the University of Georgia. (v4,#2)

Golliher, Jeffrey and Logan, William Bryant, eds., Crisis and the Renewal of Civilization: World and Church in the Age of Ecology. New York: Continuum, 1996. 144 pages. Twenty-three homilies on environmental issues delivered over the past two decades at the Cathedral of St. John the Divine in New York City. Al Gore, Carl Sagan, Rene Dubos, Amory Lovins, Thomas Berry, John Kenneth Galbraith, Timothy C. Weiskel, James Lovelock, Maurice Strong, and others. (v9,#1)

Golodetz, Alisa D., Foster, David R. "History and Importance of Land Use and Protection in the North Quabbin Region of Massachusetts (USA)," Conservation Biology 11(no.1, 1997):127. (v8,#2)

Golten, R, "Review of: Translating Property: The Maxwell Land Grant and the Conflict over Land in the American West, 1840-1900 by Maria E. Montoya", Natural Resources Journal 43 (no.3, 2003): 921-924.

Gomes, Mary, editor, "Ecopsychology and Social Transformation," theme issue of ReVision: A Journal of Consciousness and Transformation, 20, No. 4, Spring 1998. With seven contributors, for example, Nelson, Melissa, "A Psychological Impact Report for the Environmental Movement," pp. 37-43. (v9,#2)

Gomez-Pompa, A, "The Role of Biodiversity Scientists in a Troubled World", BioScience 54 (no.3, 2004): 217-225(9). Biotic resources are under all kinds of old and new threats. Ecosystem transformation in many areas of high biodiversity has not diminished, in spite of national and international meetings, agreements, and discussions. The main reasons to protect these resources are that little information is available on those we know exist and that the great majority of resources are yet to be discovered. One argument used to convince the general public and governments of the need to preserve biological

resources is that there are many potential uses of unknown plants, animals, or microorganisms: New medicines, foods, chemicals, and genes are there to be discovered. Unfortunately, this argument has been overused and, as a result, has created unrealistic expectations of great riches and spurred stringent legal measures to restrict biodiversity research. The limits placed on biodiversity research and on access to biological resources are becoming a major obstacle to scientific discovery. Major projects have been suspended following unjustified criticisms. In this article, I discuss possible explanations for this problem and present some possible solutions.

GomezPompa (Gómez-Pompa), Arturo and Andrea Kaus, "Taming the Wilderness Myth," BioScience 42 (no. 4, April 1992):271-279. "Environmental policy and education are currently based on Western beliefs about nature rather than on reality." "The perspectives of the rural populations are missing in our concept of conservation. Many environmental education programs are strongly biased by elitist urban perceptions of the urban world. This approach is incomplete and insufficient to deal with the complex context of conservation efforts and home and abroad. It neglects the perceptions and experience of the rural populations, the people most closely linked to the land, who have a firsthand understanding of their surrounding natural environment as teacher and provider." "Until we understand that the tropical forests are 'both artifact and habitat,' we will be advocating policies for a mythical pristine environment that exists only in our imagination." The authors argue that, especially in Mexico and the Amazon, the pre-European landscape was already managed intensively by the indigenous peoples and that there was no undisturbed wilderness. Gómez-Pompa is professor of botany at the University of California Consortium on Mexico and Kaus is a graduate student in anthropology at the University of California, Riverside. (v3,#3)

Gompper, M. E., "Top Carnivores in the Suburbs? Ecological and Conservation Issues Raised by Colonization of Northeastern North America by Coyotes," Bioscience 52(no.2, 2002): 185-90. (v.13,#2)

Gompper, Matthew E., Stacey, Peter B., Berger, Joel. "Conservation Implications of the Natural Loss of Lineages in Wild Mammals and Birds," Conservation Biology 11(no.4, 1997):857. (v8,#3)

Goncalves, Eduardo, "Lies, dam lies," The Ecologist 31(no.5, 2001):48-49. Eduardo Goncalves explains how the EU is funding an illegal mega-dam project in Portugal which is threatening both people and wildlife (v.12,#4)

Goni, Raquel, Polunin, Nicholas V.C., and Planes, Serge, "The Mediterranean: Marine protected areas and the recovery of a large marine ecosystem," Environmental Conservation 27(no.2, JUN 01 2000):95- . (EE v.12,#1)

Gonick, Larry and Outwater, Alice, The Cartoon Guide to the Environment. New York: HarperCollins, 1996. Irreverent humor that at the same time educates into environmental fundamentals. Environmental science, chemical cycles, life communities, food webs, agriculture, population growth, energy and raw materials, waste disposal, recycling, cities, pollution, deforestation, ozone depletion, and global warming. Gonick is a cartoonist; Outwater is an environmental engineer. (v10,#4)

Gonick, Larry, Cartoon Guide to the Environment. New York: HarperCollins, 1996. 229 pages. (v10,#4)

Gonyou, H.W., "Animal Welfare: Definitions and Assessment", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. Several types of definitions and means of assessing welfare are discussed in an attempt to reconcile differences which may be counter-productive in addressing welfare issues. Various groups should use similar terminology and it is suggested that well-being be used in the context of the current state of the animal, while welfare refer to a more general concept including

past, present and future implications for the animal's well-being. Legal, public and technical definitions of welfare serve different purposes and will necessarily differ. All of these definitions are interdependent and are affected by, and affect, each other. It is suggested that all definitions should attempt to reflect the animals' perspective on their own welfare. Although the ideal means of assessing welfare may lie in determining animals' mental experiences, our ability to do this is limited at this time. A more practical approach is to assess several behavioural, physiological and pathological variables. Reliance on a specific variable or a "cut-off" point may be appropriate in a legal definition of welfare, but should be avoided in scientific studies. The study of animal welfare should not focus only on assessing well-being or the effects of poor welfare, but should also determine behavioural, physiological and pathological factors which predispose animals to environmental stressors. Only then can we focus on developing improved management systems rather than eliminating poor ones. Gonyou is in the Department of Animal Sciences, University of Illinois, 1207 W. Gregory Dr., Urbana, U.S.A. 61801.

Gonzales, P, "Review of: Robert Picciotto, Warren van Wicklin & Edward Rice, Involuntary Resettlement: Comparative Perspectives", Natural Resources Journal 42(no.4, 2002):985-987.

Gonzalez, George A. Review of Oran R. Young, The Institutional Dimensions of Environmental Change: Fit, Interplay and Scale, Organization and Environment, 16, (No. 2, 2003): 265-67. Gonzalez is assistant professor in political science, University of Miami, Coral Gables, Florida.

Gonzalez, J; Palahi, M; Pukkala, T, "Integrating Fire Risk Considerations in Forest Management Planning in Spain: A Landscape Level Perspective," Landscape Ecology 20 (no. 8, December 2005): 957-970.

Good Housekeeping, April 1991, contains a considerable section on saving the Earth, including a message from President Bush, articles by Michael Oppenheimer, Gregg Easterbrook, Norman Myers, Stephen H. Schneider, Amory Lovins, Bill McKibben, and others on global warming, acid rain, landfills, pollution, diapers, wildlife, wetlands, energy, and other topics. (v2,#1)

Goodall, Chris. *How to Live a Low-Carbon Life*. London: Earthscan, 2007. Goodall discusses how to reduce your carbon footprint. See also the website: <<http://lowcarbonlife.net>>.

Goodall, Jane, Through a window: My thirty years with the chimpanzees of Gombe. Boston: Houghton Mifflin Company, 1990.

Goodall, Jane and Bekoff, Marc, The Ten Trusts: What We Must Do to Care for the Animals We Love. San Francisco: HarperSanFrancisco, 2002. In alternating narratives, distinguished by typeface, Goodall and Bekoff outline a 10-point course. The trusts include the simple, but vital, call to "rejoice that we are part of the animal kingdom" and to "respect all life"; they urge us to be willing to learn what animals have to teach, to be good stewards of the whole earth, to teach children to respect and to love nature and to have "the courage of our convictions".

Goodall: "I have seen that appeal for help in the eyes of so many suffering creatures. An orphan chimp tied up for sale in an African market; an adult male [chimp] looking out from his five-by-five-foot sterile cell in a medical research laboratory; a dog, emaciated and starving, abandoned by her owner in the beach in Dar es Salaam; an elephant chained to a cement floor by one front and one hind foot. I have seen it in the eyes of street children, and those who have seen their families killed in the 'ethnic cleansing' in Burundi."

Bekoff: "As big-brained, omnipresent, powerful and supposedly omniscient animals, we are the most powerful beings on Earth. We really are that powerful, and with that might are inextricably tied innumerable staggering responsibilities to be ethical human beings. We can be no less." Goodall is famed for her researches on chimpanzees; Bekoff is an animal behaviorist at the University of Colorado. (v.13,#4)

Goodall, Jane, "The Power of One," Time, August 26, 2002, p. A62. One-page essay in a Time theme section on the coming Green Century. "I feel deep shame when I look into the eyes of my grandchildren and think how much damage has been done to Planet Earth since I was their age. Each of us must work as hard as we can now to heal the hurts and save what is left."

Goodall, Jane, and Berman, Philip, Reason for Hope: A Spiritual Journey. Warner Books, 1999. Jane Goodall's return to religious faith, facing the realities of environmental destruction, animal abuse, and genocide, especially as she has known them in Africa. Her studies with the chimpanzees have enhanced, not ended her belief in God. She shares a spiritual epiphany during a visit to Auschwitz, and an experience before the rose window in the Cathedral of Notre Dame, hoping for spiritual power to overcome the evils in the world. She recalls bravery in the face of chimpanzee imprisonment in medical laboratories. There is a chapter on individuals, corporations, and countries that are doing the right thing. "Together we must reestablish our connections with the natural world and with the Spiritual Power that is around us. And then we can move, triumphantly, joyously, into the final stage of human evolution--spiritual evolution" (p. 267). Wendy Wasserstein, a Pulitzer prize-winning playwright, calls Goodall, "one of the ten most influential women ever." (v10,#4)

Goodbody, Axel, Review of: Simonis, Udo E., Die Rousseau-Frage - ökologisch definiert. Berlin: Edition sigma, 2002. Environmental Values 13(2004):123-125. (EV)

Goodell, Jeff. *Big Coal: The Dirty Secret Behind America's Energy Future*. New York: Houghton Mifflin, 2006. Abundant, cheap coal provides about half the electricity Americans use, and 120 new coal-fired plants are currently in development. If this rush is not halted, the chances "of stabilizing the climate are virtually zero." China is also "the world's premier coal junkie."

Goodenough, Merry. "Public Participation in a State-Assumed Wetlands Permit Program: The Michigan Example." Journal of Environmental Law and Litigation 10, no.2 (1995): 221. (v7, #3)

Goodenough Ursula, "At Home with Ecology," Science and Spirit 11(no. 4, November/December 2000):18-19. The sacred depths of nature emerge from the common ground of subjective, cultural and natural dwellings. Might this be religion? Life is a coral reef. We each leave behind the best, the strongest deposit we can. But what's important is the reef. The metaphor goes to the heart of ecology. Goodenough is in biology at Washington University. (v.11,#4)

Goodenough, Ursula W., "The Religious Dimensions of the Biological Narrative," Zygon 29(1994):603-618. Three concepts--meaning, valuation, and purpose--are central to the entire biological enterprise, and the continuation of this enterprise is a sacred religious trust. Goodenough is a cell/molecular biologist at Washington University, St. Louis. (v5,#4)

Goodenough, Ursula, The Sacred Depths of Nature. New York: Oxford University Press, 1998. 160 pages. A modern understanding of biology can be reconciled with our timeless spiritual yearnings for reverence and continuity. Evolution, sexuality, emotions, death--these can be seen in ways that scientists and non-scientists alike come to appreciate that the origins of life and the universe are no less meaningful because of our increasingly scientific understanding of them. Goodenough is in biology at Washington University, St. Louis. (v.9,#4)

Goodin, David K. "Schweitzer Reconsidered: The Applicability of Reverence for Life as Environmental Philosophy." *Environmental Ethics* 29(2007):403-421. As the last great philosopher of the will, Albert Schweitzer rejected the radical individualism of Nietzsche and the pessimistic-mystical detachment of Schopenhauer, and instead sought to create a true social ethic. Schweitzer's particular contribution was to

move further than Nietzsche to reconcile philosophy with natural science while simultaneously preserving and transforming the sense of mysticism and higher world-order principles from Schopenhauer. He joined this new cosmology to the virtue ethics of Aristotle, and recovered one key element of his ontology of becoming to transcend the Humean "is/ought" gap for ethics. The result is a philosophy that is as much biographical of Schweitzer himself as it is systematic. This result is both the strength and greatest weakness of his reverence-for-life ethic. It is tailor-made for contemporary environmental ethics: it has applications in many strands of environmental thought, including deep ecology, ecofeminism, and ecotheology, and may attract considerable interest from environmental movements that seek to cultivate deep personal conviction. (EE)

Goodin, Robert E., "Property Rights and Preservationist Duties." Pages 192-221 in Oddie, Graham and Perrett, Roy W., eds., Justice, Ethics and New Zealand Society. Auckland, New Zealand: Oxford University Press, 1992. Revised from Inquiry 33 (1990):401-432. Property rights are often thought to conflict with preservationist duties. But that is so only if property rights entail the right to destroy. Property rights, properly analyzed, are fully compatible with (and might even entail) preservationist duties. Goodin is in philosophy in the Research School of Social Sciences, Australian National University, Canberra.

Goodin, Robert, "A Green Theory of Value." Pages 61-86 in Mulvaney, D. J., ed., The Humanities and the Australian Environment. Canberra: Australian Academy of the Humanities, 1991.

Goodin, Robert E., Green Political Theory. Cambridge: Polity Press, 1992. 240 pages. Paper. Goodin argues that two pairs of ideas are wrongly thought by green thinkers to belong together. First is the combination of recommendations on public policy and the adoption of green personal lifestyles. These are only connected one way, Goodin says. Green lifestyle recommendations imply, but are not implied by, green policy recommendations. Second, there is the connection between green values--the recognition of value in a natural context independent of human life--and green political agency, typically committed to democratic, devolved and participatory processes. Again, Goodin argues, these are not as tightly connected as many green thinkers suppose. Green value theory has priority over the ideals of agency put about by many greens. Moreover the green theory of agency cannot be derived from the green theory of value: "to advocate democracy is to advocate procedures, to advocate environmentalism is to advocate substantive outcomes: what guarantee can we have that the former procedures will yield the latter sort of outcomes? More generally, how can we guarantee that localized, or nonviolent, action will always best protect the global environment?" Absent a satisfactory answer to these questions, Goodin urges that it is the theory of value, not of political agency, that truly defines the core of the green political agenda. Goodin is Professor of Philosophy at the Research School of the Social Sciences, Australian National University and edits the new Journal of Political Philosophy. (Thanks to Andrew Brennan.) Achterberg, Wouter, Review of Goodin, Robert, Green Political Theory. Environmental Values 3(1994):79-80. (v4,#4)

Goodin, Robert E.; Pateman, Carole; and Pateman, Roy. "Simian Sovereignty." Draft paper. Sovereignty never amounted to much, morally speaking. Now it is not even what little it used to be. By the standards now prevailing, the great apes are as deserving of something like "sovereign prerogatives"--the right to organize and control their own collective lives within a patch of land protected by international law from foreign incursion--as are other serious claimants to sovereign status in the world today. The great apes are, in all the ways that matter, just as deserving of the protection of the international community as any other of the territorially-based communities that we dub "nation-states." Goodin is in philosophy and political theory at the Research School of Social Sciences, Australian National University, Canberra. Carole Pateman and Roy Pateman are in political science at UCLA. Contact Robert E. Goodin, Philosophy, RSSH, Australian National University, Canberra ACT 0200. Fax 61 6 249 3294. E-mail: goodinb@coombs.anu.edu.au

Goodin, Robert E., ed., The Politics of the Environment. Aldershot, Hants, UK; and, Brookfield, VT: Edward Elgar, 1994. 599 pages. Not cheap: \$ 140.00. Designed as a reference collection. Part I. Environmental Ethics, ten classical articles reprinted, from Passmore, Stone, Feinberg, Tribe, Sagoff, Hill, Elliot, Naess, Donald Regan, Plumwood. Part II. Environmental Action, 24 articles reprinted. The final article is: Goodin, Robert E., "International Ethics and the Environmental Crisis," reprinted from Ethics and International Affairs, 4(1990):91-105. (v.9,#4)

Goodland, Robert and Herman Daly, "Poverty Alleviation Is Essential for Environmental Sustainability," The World Bank Environmental Department, Divisional Working Paper 1993-42. More than one-fifth of humanity lives in poverty; nearly two-thirds of humanity subsist on less than \$ 2 per day. The numbers of poor are increasing. The world is hurtling away from environmental sustainability. Five views are contrasted on how to alleviate poverty: the trickle-down theory, that the North must consume more to expand markets for Southern raw materials. The elitist choice, that the rich foster poverty because it creates low wage labor. Capital seeks cheap labor. Anthropocentric, people-centered environmentalism, places humans at the center of the cosmos, the rest is derivative. The biocentric view claims that the living ecosystem is central; humans are part of it. We have a duty to conserve the whole. Redistributive justice asserts that poverty can be alleviated directly by improving access of the poor to shelter, clothing, food, education, and security. The authors are with the World Bank. Copies from World Bank, Environment Department, Washington, DC 20433. Fax 202/477-0565. (v4,#2)

Goodland, Robert, "Ethical Priorities in Environmentally Sustainable Energy Systems: The Case of Tropical Hydropower," a paper given at a conference in Montreal, Quebec, in May, "Energy Needs in the Year 2000 and Beyond: Ethical and Environmental Perspectives." Includes six ethical-environmental criteria. Two of them: "Environmental impact is roughly proportional to area inundated. Therefore, the proposed dam must have the highest feasible ratio of power production per area inundated. If not, then the project has a higher than necessary environmental impact, which could be unethical." "The proposed site and surroundings have no centers of species endemism, rich biodiversity or other special features. If not, the ethics of extinction of species have been disregarded." (v4,#2)

Goodland, Robert, "South Africa: Environmental Sustainability and the Empowerment of Women," Impact Assessment, a special publication of this journal, June 1995, from a conference of the International Association of Impact Assessment, Durban, South Africa. Impact Assessment is based in the Department of Resource Development, Michigan State University. Copies from RJA Goodland, Environment Department, The World Bank, Washington, DC 20433. Fax 202/477-0565. In common with most nations, South African Society also is hurtling away from environmental sustainability at present, largely because of widespread inequity, poverty, inadequate consumption per capita, and rapid population growth which undermines future consumption per capita. This situation is reminiscent of some U. S. data on black/white ratios too. South Africa's black 76 percent majority earns only 36 percent of the national income, whereas the white 13 percent minority earn 54% of the national income (with the colored population in between). This strains environmental sources of raw materials, as well as environmental sinks for assimilating wastes. Environmentally sustainability is quintessentially a social concern. Environmental sustainability needs social sustainability--the social scaffolding of people's organizations that empower self-control and self-policing in people's management of natural resources. The main element of social responsibility germane here is empowerment of women. Includes a good bibliography. (v7,#1)

Goodland, Robert, Herman E. Daly, and Salah El Serafy, eds. Population, Technology, and Lifestyle. Washington: Island Press, 1992. Ten articles: samples: Daly: "From Empty-world economics to Full-world economics: Recognizing an Historical Turning Point in Economic Development"; Goodland, "The Case that the World Has Reached Limits"; Robert Costanza, "The Ecological Economics of Sustainability: Investing in Natural Capital"; Jan Tinbergen and Roeffie Hueting, "GNP and Market

prices: Wrong Signals for Sustainable Economic Success that Mask Environmental Destruction." The editors, who are philosophically quite sophisticated, are with the World Bank. (v4,#1)

Goodland, Robert, "The Concept of Environmental Sustainability," Annual Review of Ecology and Systematics 26(1995)1-24. A review of the current debate about environmental sustainability, and related growth, limits, scale, and substitutability. The paths leading to environmental sustainability in each country or sector will differ, but the goals remain constant. Conceptualizing this is far from an academic exercise. Ensuring, within two human generations, that as many as 10 billion people are decently fed and housed without damaging the environment on which we all depend represents a monumental challenge. Goodland is with the World Bank. (v7,#1)

Goodman, David, Watts, Michael J., eds. Globalising Food: Agrarian Questions and Global Restructuring. London and New York: Routledge. Reviewed by Andrew N. Rowan, Journal of Agricultural and Environmental Ethics 11(1998):61-63.

Goodman, David and Michael J. Watts, eds. Globalising Food: Agrarian Questions and Global Restructuring. Review by Andrew N. Rowan, Journal of Agricultural and Environmental Ethics 11(1999):61-63. (JAEE)

Goodman, Jordan and Walsh, Vivien, The Story of Taxol: Nature and Politics. New York: Cambridge University Press, 2001. 296 pp. \$ 28.00. Taxol is an extract from yew trees, from which is derived paclitaxel, the single most prescribed anti-tumor agent. Development of the drug took from 1966 until approval in 1992, amidst controversy. The Pacific yew (*Taxus brevifolia*) is found, infrequently, in Pacific Northwest old growth forests, home to the spotted owl. Environmental groups opposed destruction of the forests for the yew bark (partially at a time when benefits of taxol were uncertain); bark collectors legal and illegal became involved; media loved the controversy. Bristol-Myers Squibb developed a semi-synthesis that uses the needles, not the bark, and therefore does not require destroying the tree.

Reviewed by McGuire, William P., "Developments from a Beneficial Bark," Science 292(2001):1073-1074. McGuire adds that when Bristol-Myers Squibb's exclusive rights to paclitaxel expired, it came to light that the company had used patents to block the entry of several generic and less expensive alternatives, thereby reducing the availability of the drug to cancer patients who needed it. (v.12,#2)

Goodman, PS, "Assessing Management Effectiveness and Setting Priorities in Protected Areas in KwaZulu-Natal," Bioscience 53(no.9, 2003):843-850. (v.14, #4)

Goodman, Russell. "Taoism and Ecology." Environmental Ethics 2(1980):73-80. Although they were in part otherworldly mystics, the Taoists of ancient China were also keen observers of nature; in fact, they were important early Chinese scientists. I apply Taoist principles to some current ecological questions. The principles surveyed include reversion, the constancy of cyclical change, wu wei ("actionless activity"), and the procurement of power by abandoning the attempt to "take" it. On the basis of these principles, I argue that Taoists would have favored such contemporary options as passive solar energy and organic farming. Goodman is in the department of philosophy, University of New Mexico, Albuquerque, NM. (China)

Goodman, Steven M., Patterson, Bruce D., eds. Natural Change and Human Impact in Madagascar. Washington, D.C.: Smithsonian Institution Press, 1997. 434 pp. \$75 cloth, \$35 paper. Describing the past dynamism of island environments and analyzing the causes of the disappearance of many of the island's endemic species, the contributors also assess future prospects for preserving Madagascar's remaining natural areas while sustaining a healthy human economy. (v8,#3)

Goodpaster, K. E., and K. M. Sayre, eds. Ethics and Problems of the 21st Century. Reviewed in Environmental Ethics 2(1980):373-78.

Goodpaster, Kenneth E. "On Stopping at Everything: A Reply to W. M. Hunt." Environmental Ethics 2(1980):281-84. Contrary to W. Murray Hunt's suggestion, living things deserve moral consideration and inanimate objects do not precisely because living things can intelligibly be said to have interests (and inanimate objects cannot intelligibly be said to have interests). Interests are crucial because the concept of morality is noncontingently related to beneficence or nonmaleficence, notions which misfire completely in the absence of entities capable of being benefited or harmed. Goodpaster is at the Harvard Business School, Harvard University, Boston, MA. (EE)

Goodrich, Lawrence J. "Nevada's Quest No to Get Dumped On." The Christian Science Monitor 89.94 (10 April 1997): 4.

Goodrich, Lawrence J. "Superfund and a Tale of a \$76,000 Trash Bill." The Christian Science Monitor 89.73 (12 March).

Goodrich, Lawrence. "A Taxing Flight Over How to Save Family Farms." The Christian Science Monitor, vol. 89, 5 March 1997, p. 4.

Goodrich, Lawrence. "How a Dog Sled Trail Wends Its Way Into a Spending Bill." The Christian Science Monitor, vol. 89, 30 Dec. 1996, pp. 1-8.

Goodrum, John. "Situation Ethics," Bugle: Journal of Elk and the Hunt, vol. 10, no. 3 (Summer 1993):79-81. Goodrum, while hunting, discovered coyotes taking turns chasing a fawn, progressively tiring it until they were able to kill it, while the doe and mother watched helplessly. Torn between the deer and the coyotes, and reflecting on his own role as a hunter-predator, he let the coyotes kill the fawn, later to regret it, and subsequently concludes that out of respect for his own humanity he ought to have had compassion on the suffering deer, although he also admires the coyotes. Goodrum was once an intense hunter, then gave up hunting for nearly a decade to think through his relationship with animals, then resumed bowhunting last year. Bugle is the journal of the Rocky Mountain Elk Foundation. (v5,#1)

Goodstein, Eban. *Fighting for Love in the Century of Extinction: How Passion and Politics Can Stop Global Warming*. Danvers, MA: University Press of New England, 2007. Eban discusses how global warming threatens to destroy huge numbers of species, tear at the web of our ecosystems, and reshape human habitation on the planet. He recounts economic, medical, agricultural incentives for preserving species diversity with vignettes detailing sublime moments Goodstein has spent in nature on a kayak trip in Alaska, on a mountain trek, and childhood memories of Tennessee hills.

Goodwin, J.P., Bartlett, Dale, Fox, Camilla. "Opening the Cages: Freedom from Fur Farms," The Animals' Agenda 17(no.1, 1997):22. J. P. Goodwin chronicles the Animal Liberation Front's direct action campaign, while Dale Bartlett and Camilla Fox discuss how the fur trade is targeted on other fronts. (v8,#2)

Goodwin, Neva R., Ackerman, Frank, Kiron, David. The Consumer Society. Washington, D.C.: Island Press, 1997. 385pp. Many contributors, an anthology of rather brief summaries of the most important and influential writings on the economic, environmental, ethical, and social implications of a consumer society and consumer lifestyles. The collection should interest anyone concerned with the deeper implication of consumerism. Foreword by John Kenneth Galbraith. Sample articles: David A. Crocker, "Consumption, Well-Being, and Virtue"; Alan Durning, "Asking How Much Is Enough"; Mark Sagoff,

"The Allocation and Distribution of Resources"; John Maynard Keynes, "Economic Possibilities for our Grandchildren." And many more. The editors are at the Global Development and Environment Institute, Tufts University, Medford, MS.

Goodwin, Neva. "An Overview of Climate Change: What does it mean for our way of life? What is the best future we can hope for?" Working Paper No. 08-01. Global Development and Environment Institute, Tufts University, 2008. Abstract: This paper starts with the question of whether climate change will require a significant reduction of consumption among the richer people in the world, and ends with the most optimistic picture the author can conjure up, of the world in the year 2075. That hopeful picture is of a world in which inequalities among and within nations have been substantially reduced. The challenges and adjustments confronting humanity in the coming decades provide an opportunity that could be used to mitigate climate change in ways that can improve the circumstances of the poor. Ecological reasons to reduce throughput of energy and materials in economic systems urge the abandonment of high-consumption life-styles. The 21st century will be an era of many losses, but it is conceivable that societies will successfully make the transition from goals of economic growth, as understood in the 20th century, to goals of maintaining and increasing sustainable well-being. Goodwin is an economist and is the co-director of the Global Development and Environment Institute. The paper can be downloaded as a pdf at:

<<http://www.ase.tufts.edu/gdae/Pubs/wp/08-01OverviewOfClimateChange.pdf>>.

Goodwin, Susan Lieberman, "Conservation Connections in a Fragmented Desert Environment; The U.S.-Mexico Border," Natural Resources Journal 40(no.4, Fall 2000):989-. (v.12,#4)

Gooneratne, Wilbert, Obudho, Robert A., eds. Contemporary Issues in Development Policy: Perspectives from Eastern and Southern Africa. Brookfield, VT: Ashgate, 1997. 376pp. \$76.95 cloth. Reiterates the importance of local and regional development in promoting recovery and growth in Africa. Gooneratne is with the United Nations Centre for Regional Development. Obudho is at the University of Nairobi. (v8,#1)

Gootee, R; Stresser, SR; Everett, RL; Baumgartner, DM, "Improved Regulatory and Land Management Agency Relations Through a Shared View of Biological Capacity," Society and Natural Resources 16(no.9, 2003):827-834. (v.14, #4)

Gorbachev, Mikhail, "The Ecological Imperative," text is printed in Earth Ethics, Fall 1990. "An international code of ecological ethics ... should be binding on all countries." Gorbachev's address to the 1990 Global Forum on Human Survival in Moscow, January 1990. (v1,#4)

Gordon, Anita and David Suzuki, It's a Matter of Survival (Cambridge, MA: Harvard University Press, 1991). 288 pages. \$ 19.95 cloth. The environmental crisis is forcing us to reexamine the entire value system that has governed our lives for the past two thousand years. Gordon and Suzuki rebut technological optimism and the belief that continued economic growth is a prerequisite for environmental reform. Sustainable development is an intellectual fog; the only answer is a conserver society. (v2,#2)

Gordon, David F., and Wolpe, Howard. "The Other Africa: An End to Afro-Pessimism," World Policy Journal 15(no. 1, spring 1998):49- . (v9,#2)

Gordon, Deborah, Steering a New Course: Transportation, Energy, and the Environment. Covelo, CA: Island Press, 1991. \$ 34.95 cloth, \$ 19.95 paper. 250 pages. How the transportation system contributes to environmental problems and how to fix it. Alternative fuels, advances in mass transit, ultra-fuel efficient vehicles, high-occupancy vehicle facilities, telecommuting and alterative work schedules. (v2,#3)

Gordon, John C., and Joyce K. Berry. *Environmental Leadership Equals Essential Leadership: Redefining Who Leads and How*. New Haven: Yale University Press, 2006. Environmental and natural resource organizations, universities, as they contend with complex, long-term problems.

Gordon, John C., and Joyce K. Berry. *Environmental Leadership Equals Essential Leadership: Redefining Who Leads and How*. New Haven: Yale University Press, 2006. Gordon and Berry discuss green organizations that are increasingly demanding better leadership and management.

Gordon, Robert E., Jr. and George S. Dunlop, "Creature Comfort: The Revitalization of American Wildlife," Policy Review, Summer 1990, no. 53. How sound scientific management has succeeded in bringing back large populations of deer, bighorns, black bear, alligators, bald eagles, moose, mountain lions, Gila trout, javelina, turkeys. This shows nature's resiliency but does not support any "let nature take its course" nonmanagement policy. Both authors are with the National Wilderness Institute in Washington, D.C. (v1,#4)

Gore, Al, "Earth in the Balance: An Interview with Senator Al Gore," Christian Century, April 8, 1992. An interview growing out of Gore's Earth in the Balance. (v3,#1)

Gore, Al, Ziemia na krawedzi (Earth in the Balance), ETHOS Press, 1996. Polish edition of U. S. Vice-President Gore's book. (v9,#2)

Gore, Al, Earth in the Balance: Ecology and the Human Spirit. Boston: Houghton Mifflin, 1992. \$ 22.95. 407 pages. Senator Gore has been in the U. S. Congress for fifteen years and made an intensive study of environmental issues. Now that the cold war is over, he argues, the central strategic threat is that presented by humans to the global environment. He proposes a "Global Marshall Plan" for the environment. He wishes to redefine gross national product to account for the ecological costs of growth. The root of our current problem is spiritual, as well as political. If civilization is to persist, it must make the rescue of the environment its organizing principle. (v3,#1)

Gore, Al. "In Memoriam: Edmund Sixtus Muskie", Environmental Law 26(no.3):759. U. S. Vice President Al Gore celebrates the life and accomplishments of Edmund Sixtus Muskie, father of the Clean Water Act. Gore encourages bipartisan efforts by elected officials to continue Ed Muskie's work.

Gore, Al. Earth in the Balance. Reviewed in Environmental Ethics 15(1993):363-69.

Gore, Al. *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It*. Emmaus, PA: Rodale, 2006. Both the book and the DVD are quite favorably reviewed by Rush Holt, U.S. Congress, House of Representatives (New Jersey), in "Trying to Get Us to Change Course," *Science* Vol. 317, no. 5835 (13 July 2007): 198-99.

Gorelick, Steve, "Big Mac Attacks: Lessons from the Burger Wars," The Ecologist 27 (Sept. 1997):173-. (v.8,#4)

Gorke, Martin, "Was spricht für eine holistische Umweltethik? (article in German). What speaks for ethical holism? Natur und Kultur, Vol. 1/2, 2000, pp. 86-105 Abstract: Ethical holism ascribes intrinsic value to all natural things and whole systems. I argue in favor of this ethic in three steps: Firstly I expose that there is an elemental intuition which supports holism. Secondly I show that holism can be rationally justified: The universal character of the moral point of view doesn't permit to exclude any natural entities from the moral community. Thirdly I advance arguments that preservationists should remain pragmatic holists. (v.11,#4)

Gorke, Martin. "In Defense of The Death of Our Planet's Species." Environmental Ethics 28(2006):335-336. (EE)

Gorlin, Rena, ed., Codes of Professional Responsibility, 3rd. ed., Washington, DC: BNA (Bureau of National Affairs) Books, 1994. \$75. This hardcover volume contains 51 official codes of ethics issued by 45 associations in business, health, and law--most in full text. Each code is fully indexed, facilitating comparative analysis of codes and professions. Data on each association (address, phone, etc.) and a brief discussion of its code's development and implementation are also provided. The Resources section lists hundreds of U.S. and worldwide organizations, educational programs, periodicals, and bibliographies on ethics, professionalism, and public policy. (v6,#2)

Gorlin, Rena, ed., Codes of Professional Responsibility, 3rd ed. Washington, DC: BNA Books, 1994. \$75, hardcover. Contains 51 official codes of ethics issued by 45 associations in business, health, and law--most in full text. Each code is fully indexed, facilitating comparative analysis of codes and professions. Data on each association (address, phone, etc.) and a brief discussion of its code's development and implementation are also provided. The resources section lists hundreds of U.S. and worldwide organizations, educational programs, periodicals, and bibliographies, on all areas of ethics, as well as on professionalism in general and public policy. Ordering address: BNA Books, The Bureau of National Affairs, Inc., 300 Raritan Center Pkwy., P.O. Box 7814, Edison, NJ 08818- 7814. (v6,#4)

Gorman, Christine. "What's It Worth to Find a Cure?" Time, July 8, 1996, p. 53. Animal rights versus AIDS research. Whose life is more precious? Box story. (v7, #3)

Gorman, James, "Yosemite and the Invention of Wilderness," New York Times, Sept. 2, 2003, Section F (Science), page 1. Rebecca Solnit is a writer (a dozen books) and a hiker (one book is Wanderlust: A History of Walking) who has lately been following the trail of the idea of wilderness. She believes that the American idea of pristine wilderness is "a powerful, profoundly mistaken fantasy." Much of this fantasy arise in Yosemite where most of the early photographers did not include people, but Yosemite had people in it when the Europeans arrived, native Americans were there. Soldiers "un-peopled" it. These people had, for instance, been setting forest fires. Well, now that residents are gone, and especially in the parts of the High Sierra that even the native Americans mostly just visited, it would be interesting to hike with her through her mythological wilderness. (v 14, #3)

Gorman, M. E., Mehalik, M. and Werhane, P. Ethical and Environmental Challenges to Engineering. Upper Saddle River, NJ: Prentice Hall, 2000. (v.11,#2)

Gorman, M.E., Transforming Nature: Ethics, Invention and Design. Boston: Kluwer Academic Publishers, 1998. (v.11,#2)

Gorman, Michael E., Mehalik, Matthew M., Werhane, Patricia H. Ethical And Environmental Challenges to Engineering: A Casebook in Engineering and Environmental Ethics. Upper Saddle River, New Jersey: Prentice Hall, 2000. 256 pp. The first casebook designed specifically for engineering and environmental ethics, this text features multi-faceted, real-life cases of design and managerial dilemmas in a variety of settings. Background readings that illustrate how one can integrate ethical and environmental challenges into engineering decisions are incorporated throughout. It includes various cases that can be adapted to a variety of classroom settings, including cases on engineering design, environmental ethics, cultural diversity, management, engineering dilemmas. It presents real-life events showing engineering students certain situations they will encounter on the job. (v10,#4)

Gorman, Paul, "Awakenings: Spiritual Perspectives on Conservation," Nature Conservancy Magazine 53 (no. 1, Spring, 2003):20-29. With 12 "personal faith" interviews of persons motivated by their religious

faith to conservation. Cover story in this issue.

Gorringe, T. J., A Theology of the Built Environment: Justice, Empowerment, Redemption. Cambridge: Cambridge University Press, 2002. The divine grounding of our built environment. Ownership of land, urban and rural housing, the built environment in terms of community and art. Two concluding chapters set this built environment within the environmental crisis. Gorringe is at the University of Exeter. (v 14, #3)

Gorte, Ross W., "Multiple Use in the National Forests: Rise and Fall or Evolution?" Journal of Forestry 97 (no. 10, November, 1999):19-23. Nobody much likes "multiple use" any more; "ecosystem management" has replaced it. But is this multiple use rejected or resurrected under a more fashionable name? Different commentators see it different ways. "Multiple use" seemed unable to resolve conflicts when they grew intense. "Ecosystem management" seems fuzzy, an uncertain replacement, although "ecosystem management" in some form is likely to be official management policy for the foreseeable future. Gorte is a natural resource economics and policy specialist with the U.S. Library of Congress. (v.12,#3)

Gorte, Ross W. "Multiple Use in the National Forests: Rise and Fall or Evolution?" Journal of Forestry 97(No. 10, Oct. 1999):19- . Is multiple use dead? Or has it simply morphed into ecosystem management? A look at the management history of the national forests provides some clues. (v10,#4)

Gorton, Matthew and White, John and Chaston, Ian, "Contested Space: The Rural Idyll and Competing Notions of the Good Society in the U.K.," Philosophy and Geography 2 (1998): 157-177. Gorton is research officer in the Department of Agricultural Economics at Wye College. White is a lecturer in the Faculty of Business at the University of Plymouth. Chaston is director of studies in the Faculty of Business at the University of Plymouth. (P&G)

Gorton, Slade, Kays, Juli. "Legislative History of the Timber and Salvage Amendments Enacted in the 104th Congress: A Small Victory for Timber Communities in the Pacific Northwest." Environmental Law 26(1996):641. U.S. Senator Slade Gorton and his natural resources legislative assistant Juli Kays, discuss the purpose and scope of the salvage logging rider. Responding to Professor Axline's criticisms of the salvage logging rider, they explain that its purposes are to restore forest health and jobs in timber communities. (v7,#2)

Goetz, André, Capitalism, Socialism, Ecology. New York: Routledge, 1994. 240 pages. Paper, \$ 19.95. Translated by Chris Turner. Technological developments have transformed the nature of work and the structure of the workforce, and we face grave risks posed by a dual society with a hyperactive minority of full-time workers confronting a majority who are, at best, precariously employed. There is a key social conflict in Western societies in terms of the distribution of work and the form and content of nonworking time, all affecting the relationship of humans to the natural world. (v5,#1)

Goetz, André. Ecology as Politics. Reviewed in Environmental Ethics 5(1983):189-90.

Goslee, S, "Riparian Areas of the Southwestern United States," Landscape Ecology 20 (no. 8, December 2005): 1029-1030.

Goslee, Sarah, "Ecological Issues in a Changing World," Landscape Ecology 21 (no.4, May 2006): 629-630 (2).

Gosling, David, A New Earth: Covenanting for Justice, Peace and the Integrity of Creation. London: CCBI, Inter-Church House, 1992. 108 pages. £5.95. ISBN 0-85169-222-2. The history of the

ecumenical movement's concern with the environment, tracing the connection between debt, sustainability, biotechnology, and eco-justice. Well documented and a sophisticated study. The churches have a concern for the planet as an essential part of their ecumenical responsibility. "There can be no satisfactory solutions to the world's problems which do not take into account the structural links between the state of the environment and the systematic violations of justice and peace which occur." Gosling was director of Church and Society for the World Council of Churches and is currently a fellow in the University of Cambridge at Clare Hall. (v5,#4)

Gosling, David, Ethics, Religion and Biodiversity. Reviewed in Environmental Values 3(1994):89-90. (EV)

Gosling, David, Review of Engel, J. Ronald and Joan Engel, eds., Ethics of Environment and Development. Environmental Values Vol.1 No.3(1992):276.

Goss J., "Geography of consumption I," Progress in Human Geography 28(no.3, 1 June 2004):369-380(12). (v. 15, # 3)

Goss, Jon, "Geographies of consumption: the work of consumption," Progress in Human Geography 30 (no.2, April 2006): 237-249 (13).

Goss, M.J. and Barry, D.A.J. "Groundwater Quality: Responsible Agriculture and Public Perceptions." Journal of Agricultural and Environmental Ethics 8(1995):52-64. The chief sources of groundwater contamination on farms come from point sources and diffuse sources. Possible point sources are feedlots, poorly-sited manure piles, septic sewage-treatment systems - all of which can release nitrate, phosphates and bacteria - and sites of chemical spills. Diffuse sources are typified by excess fertilizer leaching from a number of arable fields. The basis of quality standards for drinking-water is discussed in relation to common contaminants present on farms. Samples of drinking-water were collected in 1991-1992 from wells on about 1,200 farms in order to study the quality of rural groundwater in Ontario. Analysis showed that approximately one third of wells were contaminated with bacteria, 14% were contaminated with nitrate, two wells were contaminated with pesticide, but 40% were considered unsafe because of the presence of at least one contaminant. These values were similar to those reported for similar regions in the U.S. There was no significant effect of agricultural practice on the proportion of contaminated samples. One response of Ontario's farmers to information on water quality has been to initiate their own program, the "Environmental Farm Plan," which has 23 modules by which the risk of environmental contamination can be assessed. Government policies for agriculture can be expected to influence farming practices. However, the literature suggests that the consequences of policies aimed at reducing environmental contamination are poorly understood, not least because the instruments used for implementation can have widely differing impacts. The need for discussions on the ethics surrounding the relationship between food producers and consumers with regard to environmental contamination is identified. (JAEE)

Gosseries, Axel, "L'éthique environnementale aujourd'hui (Environmental Ethics Today)," Revue Philosophique de Louvain 96(no. 3, 1998):395-426. In French. An overview of contemporary debates in environmental ethics. In the first section: a distinction between environmental protection, nature conservation, and biodiversity conservation. These three policies are autonomous and the last two are difficult to justify from an ethical point of view. Second section: interspecific justice, with a dilemma of the anti-speciesist. Third section: intergenerational justice. Final section: international justice, various criteria of allocation for greenhouse gasses emissions reduction.

"The article does a very good job, a very solid analysis. The author approaches environmental ethics in terms of: (A) its basic tenets and (B) the dilemmas/controversies stemming from these tenets. There are three basic tenets: (1) the protection of the environment, (2) the need to include creatures other than humans within our ethic, (3) the need to consider intergenerational and international factors. Each of

these is divided into sub-tenets. The problems stemming from each are briefly explored. In no way does the author attempt to resolve the multiplicity of problems described. Indeed, there is doubt that any general conceptual scheme can contain and/or coordinate them." (Thanks to Pete A. Y. Gunter.)

Gosseries, Axel, Review of Catherine Larrère and Raphaël Larrère Du bon usage de la nature. Pour une philosophie de l'environnement, Ethics and the Environment 3(1998):111-115.

Gosseries, Axel, Review of Roberts, Melinda A., Child vs. Childmaker: Future Persons and Present Duties in Ethics and the Law, Ethics and the Environment 6(no. 2, 2001):114-118. (E&E)

Gosseries, Axel, Review of Catherine Larrère, Les philosophies de l'environnement, Ethics and the Environment 3(1998):111-115.

Gossling (Gössling), S., and J. Hultman, Ecotourism in Scandinavia. New York: Oxford University Press, 2006. Both authors are at Lund University, Sweden.

Gossling, Stefan, "Tourism -- Sustainable Development Option?," Environmental Conservation 27(no.3, 2000 Sep 01): 223-. (v.12,#3)

Gotlieb, Yosef. Development, Environment and Global Dysfunction: Toward Sustainable Recovery. Delray Beach, FL: St. Lucie Press, 1996. Gotlieb offers an alternative conceptual framework to development. Rather than striving for unlimited economic growth, the processes described are aimed at building a future in which quality of life, community and ecological welfare replaces unevenly distributed economic growth and technological quick-fixes. (v7,#1)

Gottfried, Robert R. Economics, Ecology, and Roots of Western Faith: Perspectives from the Garden. Lanham, Md: Rowman and Littlefield, 1995. 160 pages. \$18.95 paper. \$47.50 cloth. The ancient Hebrew worldview, found in the Torah and the New Testament, is remarkably "green." Its holistic approach and emphasis on the importance of relationships bear a striking resemblance to ecology and can serve to reorient Western thinking without the necessity of leaving Western tradition. (v6,#1)

Gottgens, JF; Perry, JF; Fortney, RH; Meyer, JE; Benedict, M; Rood, BE, "The Paraguay-Parana Hidrovia: Protecting the Pantanal with Lessons from the Past," BioScience 51(no.4, 2001):301-308. (v.12,#4)

Gottlieb, Paul D. "The 'Golden Egg' as a Natural Resource: Toward a Normative Theory of Growth Management." Society and Natural Resources 8 (no. 1, 1995):49- . (v6,#1)

Gottlieb, Robert, Environmentalism Unbound: Exploring New Pathways for Change. Cambridge, MA: The MIT Press, 2001. A new strategy for social and environmental change that involves reframing and linking the movements for environmental justice and pollution prevention. The environmental movement's narrow conception of "environment" has isolated it from vital issues of everyday life, such as workplace safety, healthy communities, and food security, that are often viewed separately as industrial, community, or agricultural concerns. This fragmented approach prevents an awareness of how these issues are also environmental ones. Gottlieb is in urban and environmental policy at Occidental College. (v.12,#2)

Gottlieb, Robert and Margaret FitzSimmons, Thirst for Growth: Water Agencies as Hidden Government in California (Tempe: University of Arizona Press, 1991). 285 pages. \$ 35.00 California water agencies have been a hidden government, driven by a mission of growth, and water development in California faces a quite problematic future. Both authors are in Urban Planning at UCLA. (v2,#1)

Gottlieb, Robert, "Beyond NEPA and Earth Day: Reconstructing the Past and Envisioning a Future for Environmentalism," Environmental History Review 19 (no. 4, 1995):1-14. Environmentalism, developing out of the past, needs to be reconstructed to see how it is embedded in the social, or the urban and industrial sphere, connecting natural environments, human environments, and daily life. U. S. environmentalism, in its more than 100 year history, needs to be seen as a response to and indeed an extension of the changes to landscape and society wrought by urban and industrial forces. Environmentalism has been powerfully influenced and ultimately framed by these urban and industrial forces. There are today essential two broad categories of environmental activity, a mainstream and an alternative environmentalism. Mainstream environmentalism remains focused on policy and power, on accomplishing change by helping construct, influence, and watchdog the environmental policy system. Alternative environmentalists focus on people and on place. They accomplish change by being ornery, argumentative, mistrustful, and by mobilizing their base, often against one or another dimension of that same environmental policy system. Gottlieb is at the University of California, Los Angeles. (v7,#2)

Gottlieb, Robert, Forcing the Spring: The Transformation of the American Environmental Movement. Washington: Island Press, 1993. 413 pages. Hardbound, \$ 27.50. Gottlieb thinks that environmentalism began as the conservation of wild nature but has been increasingly broadened and transformed to include industries, cities, agriculture, pollution issues, public health issues. He wants to shift the debate from one focused exclusively on the protection and management of the natural world to a wider discussion of American social development in harmony with nature. Is the environmental movement capable of transcending its origins and changing the very fabric of American social life? Gottlieb teaches environmental policy in the Urban Planning Program at UCLA. (v4,#2)

Gottlieb, Robert. *Reinventing Los Angeles: Nature and Community in the Global City*, Cambridge, MA: The MIT Press, 2007. Using history, theory, and personal narrative, Gottlieb discusses the emergence of Los Angeles as a global city and its continuing evolution. He examines how immigration and economic globalization intersect with changes in the politics of land use, transportation, and water by discussing grassroots accounts and activists responses to re-envision the Los Angeles River as a natural resource, Arroyofest, the closing of the Pasadena Freeway for a day of bike riding and walking, and immigrants' initiatives to create urban gardens and connect with their countries of origin.

Gottlieb, Roger S., A Spirituality of Resistance: Finding a Peaceful Heart and Protecting the Earth. Lanham, MD: Rowman and Littlefield, 2003. A study of how people get caught up in social forces that lead to genocide, as happened in the Holocaust, and how they also are caught up in social forces that are leading to ecocide, impending in the environmental crisis. Our celebration of nature can be authentic only if it exists alongside resistance; what we do matters as much as what we feel. Large, impersonal bureaucracies can grow irrational, and this cries out for resistance. Such anger is born of love, and Gottlieb's intensity of resolution, coupled with forceful argument speaking the truth to power, is all too rare today, and urgently needed. Gottlieb is at Worcester Polytechnic University. An earlier version of this appeared in 1999, published by Crossroad Publishing Co. (v 14, #3)

Gottlieb, Roger S., ed., Liberating Faith: Religious Voices for Justice, Peace, and Ecological Wisdom. Lanham, MD: Rowman and Littlefield, 2003. Part VIII is "This Sacred Earth: Religion and Environmentalism." 15 readings: indigenous peoples, Buddhism, Judaism, Islam, The Earth Charter, evangelical Christianity, theological basis of animal rights, and more. Gottlieb is in philosophy, Worcester Polytechnic Institute, Massachusetts. (v.14, #4)

Gottlieb, Roger S., ed., This Sacred Earth: Religion, Nature, and Environment. New York: Routledge, 1995 (to be released in November). A comprehensive survey of sacred texts, classical literature, and a broad spectrum of the new ecotheological writings. Multicultural sources. A unique, historical and

critical introduction to the theory and practice of religious environmentalism. Part I: The Moment of Seeing: Selections from Nature Writers Linking Nature and Spirit. Part II: How Have Traditional Religions Viewed Nature? Part III: Ecotheology in the Age of Environmental Crisis: Transforming Tradition. Part IV: Ecology in an Age of Environmental Crisis: Ecofeminist Spirituality. Part V: Ecotheology in an Age of Environmental Crisis: Spiritual Deep Ecology. Part VI: Religious Practice for a Sacred Earth. Part VII: Ecology, Religion and Society. Four dozen or so authors. (v6,#2)

Gottlieb, Roger S., ed. The Ecological Community. New York: Routledge, 1997. 384 pp. Contents: Peter Wenz, "Environmentalism and Human Oppression"; John O'Neill, "Time, Narrative and Environmental Politics"; Wm. Throop, "The Rationale for Environmental Restoration"; Gus diZerega, "Empathy, Society, Nature, and the Relational Self: Deep Ecology and Liberal Modernity"; Avner de-Shalit, "Is Liberalism Environment-Friendly?"; David Macauley, "Be-wildering Order: On Finding a Home for Domestication and the Domesticated Other"; Roger Gottlieb, "A Sleepless Ethicist and Some of His Acquaintances, Including the Monoculturalist, the Poetic Naturalist, the Very Famous Biologist, the Happy Scientist, and a Few Heroic Antimodernists"; Eric Katz, "Imperialism, and Environmentalism"; Steven Vogel, "Habermas and the Ethics of Nature"; Robert Kirkman, "The Problem of Knowledge in Environmental Thought: A Counterchallenge"; Holmes Rolston, III, "Feeding People versus Saving Nature?"; Michael Zimmerman, "Ecofascism: A Threat to American Environmentalism?"; Andrew Light, "Materialists, Ontologists, and Environmental Pragmatists"; David Schlosberg, "Challenging Pluralism: Environmental Justice and the Evolution of Pluralist Practice"; Mark Wallace, "International Justice, Neopreservationism, and Sustainable Spirituality"; Mark Michael, "International Justice and Wilderness Preservation"; Brian Luke, "Solidarity Across Diversity: A Pluralistic Rapprochement of Environmentalism and Animal Liberation"; Carl Mitcham, "The Sustainability Question." Gottlieb teaches philosophy and humanities at Worcester Polytechnic Institute. (v7,#4)

Gottlieb, Roger S., "Saving the World: Religion and Politics in the Environmental Movement," pages 151-177 in Gottlieb, Joining Hands: Politics and Religion Together for Social Change. Cambridge, MA: Westview Press, 2002. Gottlieb argues that religion and politics, often at odds, can and ought to complement each other for effective solving of global problems. This chapter argues that the environmental problem, if a secular and political problem, is equally a religious and spiritual problem. Various of the world faiths have addressed environmental policy issues, and effective activism here needs to ally both religious and political motivations. Gottlieb is in philosophy, Worcester Polytechnic Institute, Worcester, MA. (v.13,#4)

Gottlieb, Roger, (ed.). The Ecological Community. Review by Clare Palmer, Environmental Values 7:(1998):479.

Gottlieb, Roger S., Joining Hands: Politics and Religion Together for Social Change. Boulder, CO: Westview Press, 2002. How politics and religion can cooperate in making society more just, environmentally sustainable and humanly fulfillable; and religion more authentic and holy. Gottlieb is in philosophy, Worcester Polytechnic Institute. (v.13, #3)

Gottlieb, Roger S., A Spirituality of Resistance: Finding a Peaceful Heart and Protecting the Earth. New York: Crossroad Publishing Co., 1999. 195 pages. \$ 25.00. Chapter 4: "A Sleepless Ethicist and Some of His Acquaintances, Including the Monoculturalist, the Poetic Naturalist, and the Very Famous Biologist." Chapter 5. "Finding a Peaceful Heart and Protecting the Earth. "What can we hope for? In his own lifetime the Ethicist has seen a worldwide movement improve the condition of women throughout the world. He knows that his individual actions are a minuscule part of a similarly vast effort to reorient society toward environmental sanity. He hopes that as this effort unfolds it will lead us to be more unassuming both in our self-assessment as a species and our desires for a 'better life'--even though achieving this self-assessment might require a difficult and contentious social transformation. We may

learn that a truly 'higher standard of living' cannot be achieved until we curtail our current environmental aggression, and that no amount of toys will cure our loneliness for both natural and human community. We might learn that false expertise should not be trusted, and that a monocultured earth is very lonely; and that to love either people or the earth we need to love both" (pp. 134-135). Gottlieb is in philosophy at Worcester Polytechnic Institute, Worcester, MA. (v10,#4)

Gottlieb, Roger, "Spiritual Deep Ecology and the Left," Capitalism, Nature, and Society 6 (no. 3, 1995):1-20, 41-45. This essay attempts a reconciliation between spiritual deep ecology and neo-marxist political theory by exhibiting some of the social origins and political implications of each perspective for the other. The essay forms the basis for a symposium with responses by Robyn Eckersley, Andrew McLaughlin, John Barry, and David Pepper, and a rejoinder by Gottlieb. (v7,#2)

Gottlieb, Roger, "The Transcendence of Justice and the Justice of Transcendence: Mysticism, Deep Ecology, and Political Life," Journal of the American Academy of Religion 67(1999):149-166. The search for some wisdom that transcends the perils and pains of ordinary existence is "mysticism," at the heart of the world's religions. A danger is that this search can become merely aesthetic or serve as a spiritual by-pass of the moral and the political. In our own social setting our collective violence towards the environment has led to a return--on something approaching a mass scale--of a mysticism that takes the earth and all its life as an ultimate truth.

From the heart of the spiritual impulse and the memories of countless generations in which forest and grassland, bird and wolf and salmon were our home and family and intimate enemy, comes Deep Ecology. The Deep Ecology of which I speak here is not the version presented in the technical language of philosophical ethics, where debates about varieties of intrinsic as opposed to instrumental value take place. Rather I speak of a passionate, spiritually oriented, mystical communion with the earth and its many beings, a recognition of kinship with those beings that requires no more philosophical justification than does the connection we feel with our parents, pets, or lovers. As such, Deep Ecology is a spiritual philosophy; and the deepest experiences that animate its adherents are profoundly mystical.

Deep Ecology has been criticized by emphasizing wilderness while forgetting toxic dumps, for love of trees and lack of concern for children. These criticisms have helped move Deep Ecology towards an understanding that environmentalism needs to embrace the concerns of environmental justice: an awareness of any resistance to the unfair distribution of responsibility for and suffering from humanity's attacks on the environment. Can we really love nature if these things escape our vision?

Gottlieb teaches philosophy at Worcester Polytechnic Institute, Worcester, MA. (v.10,#1)

Gottlieb, Roger S., *A Greener Faith: Religious Environmentalism and Our Planet's Future*, Oxford University Press, 2006. In a time of darkening environmental prospects, frightening religious fundamentalism, and moribund liberalism, the remarkable and historically unprecedented rise of religious environmentalism is a profound source of hope. Theologians are recovering nature-honoring elements of traditional religions and forging bold new theologies connecting devotion to God and spiritual truth with love for God's creation and care for the Earth. And religious people throughout the world are transforming the meaning of their faiths in the face of the environmental crisis. The successes and significance of religious environmentalism are manifest in statements by leaders of virtually all the world's religions, in new and "green" prayers and rituals, and in sophisticated criticisms of modern society's economy, politics, and culture. Most important: from the Evangelical Environmental Network to the Buddhist prime minister of Mongolia, the National Council of Churches to tree-planting campaigns in Zimbabwe, religious environmentalism has become a powerful component of the world environmental movement. Stories of faith based environmentalism provide a bright picture of the faith community's capacity for caring for God's creation. The remarkable and historically unprecedented rise of religious environmentalism is a profound source of hope. Theologians are recovering nature honoring elements of traditional religions and forging bold new theologies connecting devotion to God and spiritual truth with love for God's creation and care for the Earth. Gottlieb is in Philosophy at Worcester Polytechnic Institute. Reviewed

by David G. Hallam, "Green Religion Needs to Get Greener," Harvard Divinity Bulletin 34(no. 1, Autumn 2006):96-98, as a great book which doesn't go far enough.

Gottlieb, Roger, ed., *The Oxford Handbook of Religion and Ecology* (New York: Oxford University Press, 2006) and Roger Gottlieb, *A Greener Faith: Religious Environmentalism and Our Planet's Future* (New York: Oxford University Press, 2006). Reviewed by Anna Peterson in *Journal of Agricultural and Environmental Ethics* 21(2008):607-608.

Goudie, Andrew S., Editor in Chief, Encyclopedia of Global Change: Environmental Change and Human Society. 2 vols. Oxford: Oxford University Press, 2002. Articles on all kinds of changes in the environment caused by humans, intentionally, accidentally, and the relation of these to natural changes. A three-article entry on "Ethics," vol. 1, pp. 396-401, contains:

-O'Neill, John, "An Overview"

-Turner, R. Kerry, "Intergenerational Equity"

-Rolston, III, Holmes, "Environmental Bioethics," a two-page summary of types of environmental ethics.

Also:

-Oelschlaeger, Max, "Wilderness," vol. 2, pp. 531-534.

Other articles on Sustainable Development, Belief Systems (includes Ecocentrism, Deep Ecology), Conservation, Environmental Law, Environmental Movements, Gaia Hypothesis, Valuation (including Climate Change Valuation Studies), Religion. (v.12,#4)

Goudzwaard, Bob and Harry DeLange (De Lange), Beyond Poverty and Affluence. Grand Rapids, MI: Wm. B. Eerdmans, 1994. 176 pages. \$ 15. Co-published with the World Council of Churches. Today's widespread problems of poverty, unemployment, and environmental degradation are rooted in--and thus can never be resolved by--the dominant contemporary economic models of growth. The authors argue for an economy of care, or an economics of enough, with twelve concrete, feasible proposals for moving present-day society in such a direction. (v5,#3)

Goudzwaard, Bob, and Harry de Lange, Beyond Poverty and Affluence: Toward an Economy of Care. Grand Rapids, MI: William B. Eerdmans, 1994. Translated from Dutch. 160 pages. \$ 14.99. "In 1960, the richest 20% of the world's population had incomes 30 times greater than the poorest 20%. By 1990, the richest 20% were getting 60 times more." In the U.S., "at the start of the 1980's, a Chief Executive Officer made about 29 times as much as the average worker. Today that multiple is close to 100 times." More people are now homeless in the U.S. than at any time since the Great Depression. Between 1979 and 1989, when the GNP increased 25 percent, the rate of child poverty increased 21 percent. The economic view that "restoration of industrial production growth will remedy poverty, environmental degradation, and unemployment" is "thoroughly simplistic," because "like a virus that has developed a resistance or immunity to the cure, or like a pest that has developed a defense against the pesticide, these economic malaises have now become immune to the remedy of increased production growth." We should embrace an economics of enough by adopting "income and employment levels ...[with] the objectives of providing sufficient care for human subsistence needs, the quality of labor, the sustainability of agricultural and urban ecosystems, and improved development opportunities, especially for the poorest countries of the Third World." "Human well-being, both of ourselves and of others, requires first and foremost a lifestyle of restraint, not luxury." A sobering book. The authors are well known Dutch economists, Goudzwaard, a former member of the Dutch parliament, is at Free University of Amsterdam. de Lange is at University of Utrecht. (v6,#4)

Gough, N., "Learning with Environments: Towards an Ecological Paradigm for Education," In Robottom, I., ed., Environmental Education: Practice and Possibility. Victoria, Australia: Deakin University Press, 1987.

Gould, Kenneth A.; Schnaiberg, Allan; and Weinberg, Adam S. Local Environmental Struggles: Citizen Activism in the Treadmill of Production. New York: Cambridge University Press, 1996. 304 pages. \$59.95 cloth, \$17.95 paper. The authors critique the modern environmental mantra, "think globally, act locally," by analyzing the opportunities and constraints on local environmental action posed by economic and political structures at all levels. Three cases studies: a wetlands protection project, water pollution of the Great Lakes, and consumer waste recycling, demonstrate the challenges facing citizen-worker movements. (v7, #3)

Gould, Kenneth A., David N. Pellow, and Allan Schnaiberg. *The Treadmill of Production: Injustice and Unsustainability in the Global Economy*. Boulder, CO: Paradigm Publishers, 2008. The authors elaborate upon Schnaiberg's concept of the treadmill of production—capitalist economies behave like a "treadmill of production" that continuously creates social and ecological harm through a self-reinforcing mechanism of increasing rates of production and consumption. They discuss the causes of environmental degradation, the limits of environmental protection, and how and why institutional decision makers fail to protect human well-being and the environment.

Gould, Kenneth A., and Tammy L. Lewis, eds. *Twenty Lessons in Environmental Sociology*. Oxford: Oxford University Press, 2008. Contents include: (1) "An Introduction to Environmental Sociology" by Kenneth Gould and Tammy Lewis, (2) "The Social Construction of Nature: Of Computers, Butterflies, Dogs, and Trucks" by Stella Capek, (3) "Theories in Environmental Sociology" by Luis Barbosa, (4) "The State and Policy: Imperialism, Exclusion, and Ecological Violence as State Policy" by David Pellow, (5) "Labor Productivity" by Allan Schnaiberg, (6) "Corporate Power: The Role of the Global Media in Shaping What We Know About the Environment" by Elizabeth Campbell, (7) "The Science of Nature and the Nature of Science" by Richard York, (8) "Technological Change and the Environment" by Kenneth Gould, (9) "Population, Demography, and the Environment" by Diane Bates, (10) "Environmental Inequality and Environmental Justice" by Michael Mascarenhas, (11) "Environmental Health" by Sabrina McCormick, (12) "From Farms to Factories: The Environmental Consequences of Swine Industrialization" by Bob Edwards and Adam Driscoll, (13) "Understanding Disaster Vulnerability: Floods and Hurricanes" by Nicole Youngman, (14) "Climate Change: Why the Old Approaches Aren't Working" by J. Timmons Roberts, (15) "U.S. Environmental Movements" by Robert Brulle, (16) "Labor and the Environment" by Brian Obach, (17) "Environmental Movements and The Global South" by Tammy Lewis, (18) "Indigenous Cultures: Environmental Knowledge, Practice, and Rights" by Bahram Tavakolian, (19) "Sustainable Development" by Kenneth Gould and Tammy Lewis, and (20) "Conclusion: Unanswered Questions and the Future of Environmental Sociology" by Kenneth Gould and Tammy Lee.

Gould, Kenneth A., and Tammy L. Lewis, eds. *Twenty Lessons in Environmental Sociology*. Oxford: Oxford University Press, 2008. Contents include: (1) "An Introduction to Environmental Sociology" by Kenneth Gould and Tammy Lewis, (2) "The Social Construction of Nature: Of Computers, Butterflies, Dogs, and Trucks" by Stella Capek, (3) "Theories in Environmental Sociology" by Luis Barbosa, (4) "The State and Policy: Imperialism, Exclusion, and Ecological Violence as State Policy" by David Pellow, (5) "Labor Productivity" by Allan Schnaiberg, (6) "Corporate Power: The Role of the Global Media in Shaping What We Know About the Environment" by Elizabeth Campbell, (7) "The Science of Nature and the Nature of Science" by Richard York, (8) "Technological Change and the Environment" by Kenneth Gould, (9) "Population, Demography, and the Environment" by Diane Bates, (10) "Environmental Inequality and Environmental Justice" by Michael Mascarenhas, (11) "Environmental Health" by Sabrina McCormick, (12) "From Farms to Factories: The Environmental Consequences of Swine Industrialization" by Bob Edwards and Adam Driscoll, (13) "Understanding Disaster Vulnerability: Floods and Hurricanes" by Nicole Youngman, (14) "Climate Change: Why the Old Approaches Aren't Working" by J. Timmons Roberts, (15) "U.S. Environmental Movements" by Robert Brulle, (16) "Labor and the Environment" by Brian Obach, (17) "Environmental Movements and The

Global South” by Tammy Lewis, (18) “Indigenous Cultures: Environmental Knowledge, Practice, and Rights” by Bahram Tavakolian, (19) “Sustainable Development” by Kenneth Gould and Tammy Lewis, and (20) “Conclusion: Unanswered Questions and the Future of Environmental Sociology” by Kenneth Gould and Tammy Lee.

Gould, Kenneth A., David N. Pellow, and Allan Schnaiberg. *The Treadmill of Production: Injustice and Unsustainability in the Global Economy*. Boulder, CO: Paradigm Publishers, 2008. The authors elaborate upon Schnaiberg’s concept of the treadmill of production: capitalist economies behave like a “treadmill of production” that continuously creates social and ecological harm through a self-reinforcing mechanism of increasing rates of production and consumption. They discuss the causes of environmental degradation, the limits of environmental protection, and how and why institutional decision makers fail to protect human well-being and the environment.

Gould, Stephen J., "The Golden Rule--A Proper Scale for Our Environmental Crisis," Natural History, September 1990. Gould's proposal for "an appropriate environmental ethic." The usual environmental ethics rests on two mistaken premises: "(1) That we live on a fragile planet now subject to permanent derailment and disruption by human intervention; (2) that humans must learn to act as stewards for this threatened world." Both premises reflect false pride. Concerning the latter premise: "We are one among millions of species, stewards of nothing. By what argument could we, arising just a geological microsecond ago, become responsible for the affairs of a world 4.5 billion years old, teeming with life that has been evolving and diversifying for at least three-quarters of that immense span? Nature does not exist for us, had no idea we were coming, and doesn't give a damn about us." Concerning the former premise: "We are virtually powerless over the earth at our planet's own geological time scale." "We can surely destroy ourselves, and take many other species with us, but we can barely dent microbial diversity and will surely not remove many millions of species of insects and mites. On geological scales, our planet will take good care of itself let time clear the impact of any human malfeasance." (v2,#1)

Gould, Stephen Jay, "A Special Fondness for Beetles," Natural History, January 1993. J. B. S. Haldane's quip that God has an inordinate fondness for beetles leads Gould to examine the estimates for the numbers of beetles in the world. A conclusion: "Our world is incredibly strange and therefore supremely fascinating." Gould is a paleontologist at Harvard University. (v4,#2)

Gould, Stephen Jay, "What Is a Species?" Discover, December 1992. "Species are almost always objective entities in nature. ... Species are not arbitrary units, constructed for human convenience, in dividing continua. Species are the real and objective items of nature's morphology. They are 'out there' in the world as historically distinct and functionally separate populations 'with their own historical role and tendency.' ... Species are unique in the Linnean hierarchy as the only category with such objectivity. ... By grasping the objective status of species as real units in nature ... we may better comprehend the moral rationale for their preservation. You can expunge an arbitrary idea by rearranging your conceptual world. But when a species dies, an item of natural uniqueness is gone forever. Each species is a remarkably complex product of evolution--a branch on a tree that is billions of years old. ... Species are living, breathing items of nature. We lose a bit of our collective soul when we drive species (and their entire lineages with them), prematurely and in large numbers, to oblivion." Gould earlier wrote, "I also appreciate that we cannot win this battle to save species and environments without forging an emotional bond between ourselves and nature as well--for we will not fight to save what we do not love." ("Unenchanted Evening," Natural History, September 1991. (v3,#4)

Gould, Stephen Jay, "An Evolutionary Perspective on Strengths, Fallacies, and Confusions in the Concept of Native Plants." Pages 11-19 in Joachim Wolschke-Bulmahn, ed., Nature and Ideology: Natural Garden Design in the Twentieth Century. Washington, DC: Dumbarton Oaks Research Library and Collection, 1997. Available at <http://www.doaks.org/natur002.pdf> in

<http://www.doaks.org/WONAC.html>. Gould applies his long-standing focus on contingency in natural history to the idea of native and exotic plant species. "Native" does not mean optimally adapted, only locally competent, adequately adapted. Such plants are often poorly competitive against invasives. Exotics can frequently outcompete the natives; they are in fact better adapted. Also natives can become weedy, especially in disturbed soils. The most we can say is that "natives grow appropriately" (p. 15) in their "native" ecosystems.

We cannot say, however, that such natives are in an "appropriate place," because their being there is fortuitous, accidental. "The deepest principle of evolutionary biology [is] the construction of all current biological phenomena as outcomes of contingent history" Native plants being in their places is "laced with chaos, contingency, and genuine randomness" (p. 16). "Native" does not mean much more than "got there accidentally earlier," certainly not "intrinsically suited" as an adapted fit to the place, on account of being there a long time. That the natives were better suited (including indigenous peoples such as native Americans) to their landscapes is "romantic drivel" (p. 17)--despite Gould's having already said that they "grow appropriately." Other paleontologists are not so enamored with Gould's heavy emphasis on contingency. John Maynard Smith, leading theoretical biologist, complains that "Gould is giving non-biologists a largely false picture of the state of evolutionary theory" (quoted in Robert Wright, "The Accidental Creationist," New Yorker, Dec. 15, 1999, p. 56).

Still, Gould likes the natives, though he thinks this has to be on ethical or aesthetic grounds, not scientific grounds. "I do not understand the appeal of the ethical argument that we should leave nature alone and preserve as much as we can of what existed and developed before our very recent geological appearance. Like all evolutionary biologists, I treasure nature's bounteous diversity of species. ... Cherishing native plants does allow us to defend and preserve a maximal amount of local variety" (p. 18). He thinks we ought to "set aside large areas for rigidly minimal disturbance, so that we never forget, and may continue to enjoy, what nature accomplished during nearly all of her history without us." But Gould struggles for a rationale, since these accomplishments of these appropriately growing plants are so contingent. Perhaps the best one is "democratic," "a sensitive cultivation of all plants, whatever their geographic origin" (p. 19). As usual Gould is provocative, and, as usual, not without some confusions himself. (v.12,#4)

Goulet, Denis, Development Ethics, Chinese translation, translator: Gao Shi et al.. Publisher: Social Sciences Documentation Publishing House, 2003

Goulet, Denis, "Ethics and Development," National Geographic Research and Exploration 8(no. 2, 1992):138-147. The global quest for development raises difficult ethical questions about the relation between having goods and being good, the foundations of justice in society, and the proper human stance toward nature. The failure of reductionist economic approaches to development opens the door to ethics to find its place in development debates and practice. Goulet is at the University of Notre Dame. (v4,#1)

Gourlay, Laurie. "Temagami Diary," Alternatives 23(no.2, 1997):10. Ontario's government plans to open up for mining and logging 58 percent of one of the last stands of old growth pine. (v8,#2)

Gover, Kevin, Cooney, James B. "Cooperation between Tribes and States in Protecting the Environment." Natural Resources and Environment 10(no. 3, Winter 1996):35. (v7,#1)

Gowans, Matthew, A Latter-day Saint Environmental Ethic, M. A. thesis, Colorado State University, summer 2001. The Church of Jesus Christ of Latter-day Saints supports a strong environmental ethic. This is developed (1) in teaching regarding the intrinsic value of the "soul," a concept applied not only to humans but to animals, plants, and all living beings (recalling both Biblical and Mormon texts and Aristotle's concept of soul). All creation can express a kind of joy in life. (2) Teachings regarding stewardship show that God expects humans to be stewards of the Earth, a concept defended against criticisms. The principle of sacrifice emphasizes human interdependency and selfless sacrifice. (3)

Latter-day saints work for a promised "Zion," a vision of harmony and flourishing on Earth. (v.12,#3)

Gowans, Matthew and Philip Cafaro. "A Latter-Day Saint Environmental Ethic." Environmental Ethics 25(2003):375-394. The doctrines and teachings of the Church of Jesus Christ of Latter-day Saints support and even demand a strong environmental ethic. Such an ethic is grounded in the inherent value of all souls and in God's commandment of stewardship. Latter-day Saint doctrine declares that all living organisms have souls and explicitly states that the ability of creatures to know some degree of satisfaction and happiness should be honored. God's own concern for the well-being and progress of all life, and His sacrifice through Jesus Christ, illustrate the generous way that He expects His children to exercise their brief stewardship of this world. In addition, the important role nature has played in the religious lives of Latter-day Saint members, from the Prophet Joseph Smith to the present day, argues strongly for wilderness preservation as a spiritual resource for future generations. (EE)

Gowdy, John M. Review of J. Lemons, and D. Brown, eds. Sustainable Development: Science, Ethics and Public Policy. Environmental Values 8(1999):403. (EV)

Gowdy, John M. "Progress and Environmental Sustainability." Environmental Ethics 16(1994):41-55. One of the most pervasive ideas in Western culture is the notion of progress. Among economists, it is synonymous with economic growth. According to advocates of unlimited growth, more growth will result in a cleaner environment, a stable population level, and social and economic equality. Although most environmentalists do not subscribe to the growth ethic, they generally cling to a notion of progress by arguing that there has been continual enlightenment in public attitudes toward the environment and that this enlightenment can lead to environmental salvation. I argue that there is no convincing argument for past human progress and no reason to believe that it will occur in the future. Once we abandon notions of progress, we free ourselves to concentrate on making do with what we have rather than placing our hopes on some future material or ethical utopia. Gowdy is in the department of Economics, Rensselaer Polytechnic Institute, Troy, NY. (EE)

Gowdy, John M., and Peg R. Olsen, "Further Problems with Neoclassical Environmental Economics." Environmental Ethics 16(1994):161-171. We examine the merits of neoclassical environmental economics and discuss alternative approaches to it. We argue that the basic assumptions of the neoclassical approach, embodied in the indifference curve, make that model inappropriate for environmental analysis. We begin by assuming that the basic postulates of the neoclassical model hold and then argue that even this ideal state is incompatible with environmental sustainability. We discuss the role of the discount rate, the exclusive emphasis on marginal choices, and the assumption of perfect information. Gowdy is in economics at Rensselaer Polytechnic Institute. Olsen is director of the Eastern New York Chapter of the Nature Conservancy. (EE)

Gowdy, John, ed., Limited Wants, Unlimited Means: A Reader on Hunter-Gatherer Economics and the Environment. Washington, DC: Island Press, 1998. Humans, it is said, have unlimited wants and limited means to satisfy these wants, so the end result is scarcity. The central irony of this book is the claim that the hunter-gatherers had structured their lives so that they needed little, wanted little, and for the most part had all the means to satisfy their needs at their immediate disposal, living much more rewarding lives than ours. Sample contents: Marshall Sahlins, "The Original Affluent Society"; James Woodburn, "Egalitarian Societies"; Paul Shepard, "A Post-Historic Primitivism"; Eleanor Leacock, "Women's Status in Egalitarian Society: Implications for Social Evolution." Gowdy is in economics at Rensselaer Polytechnic Institute, Troy, NY. (v9,#1)

Gowdy, John M. and Sabine O'Hara. Economic Theory for Environmentalists. Delray Beach, FL: St. Lucie Press, 1995. The implications of neoclassical economic theory and how it relates to the environment and environmental activity. Each chapter outlines the concepts of economic theory and the

relevance of its environmental and policy implications. (v7,#1)

Gowdy, John M. and Sabine O'Hara, Economic Theory for Environmentalists. Delray Beach, FL: St. Lucie Press, 1995. 192 pages. \$ 40. The theory of the consumer. The theory of the firm. General equilibrium and welfare economics. Pareto optimality and perfect competition. Market failure. From supply and demand to social and ecological context. (v8,#2)

Graber, Linda H. Wilderness as Sacred Space. Reviewed in Environmental Ethics 1(1979):186-88.

Grace, Patrick, Is There Any Hope or Are We Completely Screwed? A Study of Some Implications for our Environment Due to the Changing Values of Experience, Master's Thesis, Department of Philosophy, Lancaster University, September 1993.

Grace, Patrick, Is There Any Hope or Are We Completely Screwed? A Study of Some Implications for our Environment Due to the Changing Values of Experience, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Graffy, Elisabeth, "Expert Forecasts and the Emergence of Water Scarcity on Public Agendas," Society and Natural Resources 19 (no.5, May-June 2006): 465-472 (8).

Grafton, R.Q., T. Kompas, and R.W. Hilborn. "Economics of Overexploitation Revisited." *Science* Vol. 318, no. 5856 (7 December 2007): 1601. Profits from fisheries are maximized at population sizes larger than those that produce a sustainable yield, which drives overexploitation. Revising some classical accounts, the authors model ways to make sustainable population sizes economically viable by using incentives, quotas, and community harvesting rights.

Gragson, T and Grove, M, "Social Science in the Context of the Long Term Ecological Research Program," Society and Natural Resources 19 (no. 2, February 2006): 93-100.

Gragson, T and Bolstad, P, "Land Use Legacies and the Future of Southern Appalachia," Society and Natural Resources 19 (no. 2, February 2006): 175-190.

Graham, Alistair, Eyelids of Morning: The Mingled Destinies of Crocodiles and Men (San Francisco: Chronicle Books, 1990). The Nile crocodiles, a classic study, reissued after being long out of print. Originally published in 1973. \$ 24.95 in paper. (v1,#3)

Graham, K.M., Irradiation: A Canadian Folly. Reviewed by Chris Findlay. Journal of Agricultural and Environmental Ethics 9(1996):83-85. (JAEE)

Graham, M; Miller, C, "Disclosure of Toxic Releases in the United States," Environment 43(no. 8, 2001):8-20. (v.13,#1)

Graham, OL, "Review of: Jeanne Nienaber Clarke and Hanna J. Cortner, The State and Nature: Voices Heard, Voices Unheard in America's Environmental Dialogue" Environmental History 8(no.1, 2003):155-156.

Graham, Wade, "MexEco?: Mexican Attitudes toward the Environment," Environmental History Review 15, no. 4, Winter 1991. (v3,#1)

Gramling, B., "A Review of: Chiarappa, Michael J. and Kristin M. Szylvian , Fish for All: An Oral History of Multiple Claims and Divided Sentiment on Lake Michigan," Society and Natural Resources

18(no. 8, September 2005): 772-772.

Gramling, Carolyn, "Proposed Fisheries Bill Falls Short, Critics Say," Science 309(30 September 2005):2146-2147. Proposed legislation seeks to reauthorize the 1976 Magnusen-Stevens Fishery Conservation and Management Act, but critics say it falls far short of the overhaul of the U.S. oceans policy called for by two U.S. commissions. Critics say the bill looks good on the surface but actually masks its own inadequacies, so that what is in fact a setback "will be spun and sold as if this is an improvement." For example the existing mandate requires overfished species to be off limits for ten years, but the new bill has only a two year relaxation period.

Granberg-Michaelson, Wesley, ed. Tending the Garden: Essays on the Gospel and the Earth. Grand Rapids, MI: Eerdmans, 1987. Essays by Christian theologians, biblical scholars, cultural critics and a poet.

Granberg-Michaelson, Wesley, Redeeming the Creation: The Rio Earth Summit: Challenge for the Churches. Geneva: World Council of Churches (WCC) Publications, Risk Book Series, 1992. \$ 6.95. World Council of Churches, 150 route de Ferney, P. O. Box 2100, 1211 Geneva 2, Switzerland. Available in the U.S. from World Council of Churches Distribution Center (in Pennsylvania), 800/523-8211. A brief, rather insightful account of the presence and policy of the World Council of Churches in the debates surrounding the Earth Summit. Could be useful in religion classes or church study groups. (v3,#3)

Granberg-Michaelson, Wesley, Ecology and Life: Accepting our Environmental Responsibility. Waco, TX: Word Books, 1988.

Granberg-Michaelson, Wesley. The Call to Take Care of the Earth. San Francisco: Harper and Row, 1984. Christian approaches to ecology.

Grande, John K., Balance: Art and Nature. Montreal/New York: Black Rose Books, 1994. Art and the environment, art as a new way of looking at humanity and nature. Artistic expression can and does play an important role in changing the way we perceive our relation to the world we live in. One chapter title: "Nature is the art of which we are a part."

Grande, Sandy Marie Angl s. "Beyond the Ecologically Noble Savage: Deconstructing the White Man's Indian." Environmental Ethics 21(1999):307-320. I examine the implications of stereotyping and its intersections with the political realities facing American Indian communities. Specifically, I examine the typification of Indian as ecologically noble savage, as both employed and refuted by environmentalists, through the lenses of cognitive and social psychological perspectives and then bring it within the context of a broader cultural critique. I argue that the noble savage stereotype, often used to promote the environmentalist agenda is nonetheless immersed in the political and ideological parameters of the modern project. Finally, I reassert the right and, more importantly, the authority of Native American peoples to ultimately define for themselves their respective identities and destinies. (EE)

Grange, Joseph, "The Nature of Things," Journal of Speculative Philosophy, 8, no. 2 (1994): 97-111. (v5,#4)

Grange, Joseph, "Being, Feeling, and Environment," Environmental Ethics 7(1985):351-364. The philosophies of Spinoza and Heidegger as the source of a "unitive vision" of reality is developed as a basis for environmental studies. (Katz, Bibl # 1)

Grange, Joseph. Nature: An Environmental Cosmology. Albany: State University of New York Press,

1997. 352 pages. \$ 19.95. Drawing on Whitehead, in contrast to both analytic philosophy and the continental tradition, Grange constructs a metaphysics to reflect what is true and right and fitting about how humans should act as participants in a finite and intrinsically interconnected world. Celebrates the very real glories of nature without sentimentalism and without any depreciation of human beings. Reviews and critiques the major positions in ecological ethics. Grange is in philosophy at the University of Southern Maine, Portland. (v7,#4)

Grange, Joseph. "Being, Feeling, and Environment." Environmental Ethics 7(1985):351-64. Despite the 300 years of philosophy separating them, Spinoza and Heidegger are committed to a unifying vision of the human and the natural. Such a perspective encourages a renewed understanding of the place of feelings in environmental studies. Neither untrustworthy reactions nor neutral reading of environmental stimuli, human feelings are the basic way in which we encounter the world. The primordial character of emotions in both Spinoza and Heidegger follows from their commitment to the unity of reality. An understanding of both thinkers opens up being, feeling, and environment as the proper subject matter of ecology. Environmental studies will begin to advance again when it dedicates itself to the potential riches of such a unitive vision. Grange is at the Philosophy Dept., University of Southern Maine, Portland, ME. (EE)

Grant, BR; Grant, PR, "What Darwin's Finches Can Teach Us about the Evolutionary Origin and Regulation of Biodiversity," Bioscience 53(no.10, 2003):965-975. (v.14, #4)

Grant, C. Val, Winker, Kevin. "The Role of Taxonomy and Systematics," Conservation Biology 11 (no.3, 1997): 594. The organisms we seek to save need to be identifiable in the field, not just when dead in the laboratory. (v8,#2)

Grant, Don Sherman, III. "Religion and the Left: The Prospects of a Green Coalition." Environmental Ethics 19(1997):115-134. Religionists and leftists have aligned themselves with several green causes, but have yet to engage each other in a real discussion of environmental issues. I try to establish the basis for a dialogue between those segments of the religionist and leftist traditions that appear to have the most promise for forging a united green front. I label these two subgroups constructive postmodern religionists and constructive postmodern leftists. I summarize the key ideas shared by each group, discuss how each can rectify some of the weaknesses of the other, and consider some potential philosophical barriers to their union. I conclude by issuing a call for dialogue on the issues presented here. Grant is in sociology, University of Arizona, Tucson. (EE)

Grant, James P., ed., The State of the World's Children 1991, published for UNICEF by Oxford University Press, 1991. Of particular interest is the section on "The Population Question," where Grant argues that reducing infant mortality through better nutrition and health care today will not lead to greater population increases tomorrow, nor to increased environmental degradation, but, to the contrary, will reduce the future birthrate and contribute to environmental conservation. A careful, nuanced claim, based on statistical data showing that, whereas early declines in mortality rates typically do not reduce birthrates, later declines in mortality do reduce them sharply, and that most developing nations are now at this point. This is important reading for anyone concerned with population growth, children, and the environment. James P. Grant is executive director of UNICEF. (v2,#2)

Grant, Lindsey, The Collapsing Bubble: Growth and Fossil Energy. Seven Locks Press, Santa Ana, CA, 2005. The worlds dwindling energy resources. The energy debate has been cast in the wrong terms. But with a bit of luck we may be able to create a more harmonious balance with the rest of the biosphere, at much lower population levels and less consumptive habits. Lindsey Grant is a retired Foreign Service Officer, formerly Deputy Secretary of State for Environmental and Population Affairs.

Grant, Lindsey, ed., Elephants in the Volkswagen: Facing the Tough Questions about our Overcrowded Country. W. H. Freeman, 1992 272 pages, \$ 22.95. Essays on population and development. The U. S. population today is 252 million, but based on "carrying capacity," how much human activity the country's land, air, and water resources can sustain on a long-term basis, the optimum population may be no more than 135 million. "Population growth may wipe out the progress we are trying to make in other areas of public policy." (v3,#2)

Grant, Lindsey, Juggernaut: Growth on a Finite Planet. Santa Ana, CA: Seven Locks Press, 1996. 310 pages. \$ 18.95. Population growth is leading us to a world we do not want, more crowded, with less personal freedom, more polluted and paved over, with less room for biodiversity. The first half of the book deals with world trends. The second half of the book focuses on the U.S. The U.S. population is growing by approximately 10% per decade. Alone among the rich industrialized nations, America's population is still growing because of a higher rate of fertility and generous immigration policies. Both in terms of curbing effluents and preserving wildlands, ending population growth will be the key. Grant is a former U.S. foreign service officer and Deputy Assistant Secretary of State for Environment and Population Affairs. (v.8,#4)

Grant, Lindsey. Too Many People: The Case for Reversing Growth. Santa Ana, CA: Seven Locks Press, 2000. "The recent growth of human populations has imperiled the pursuit of economic prosperity and social justice and has placed undue strain on the natural support systems that all creatures depend upon." In this short handbook (102 pages), Grant examines some of the major issues of our times and argues that uncontrolled population growth lies at their heart. "Food, water, land, air, climate, and energy resources are all threatened by ever increasing numbers of people inhabiting the Earth." A clear, straightforward text, ideal as a supplement for classes in environmental ethics that seek to treat population issues. (EE v.12,#1) Grant was formerly a Foreign Service Officer, National Security Council, Department of State Policy Planning, and also Deputy Assistant Secretary of State for Environment and Population Affairs. (v.12,#2)

Grant, Peter R., Grant, B. Rosemary. "The Rarest of Darwin's Finches," Conservation Biology 11(no.1, 1997):119. (v8,#2)

Grashof Bokdam, C. J. and Langevelde, F., "Green Veining: Landscape Determinants of Biodiversity in European Agricultural," Landscape Ecology 20(no. 4, May 2005): 417-439.

Grassie, William, Reinventing Nature: Science Narratives as Myths for an Endangered Planet, Ph. D. thesis, spring 1994, in the Department of Religion, Temple University, Philadelphia. The dissertation is a hermeneutical inquiry into the possibilities of a mythological treatment of the modern scientific cosmology in the light of global environmental and economic crises. Paul Ricoeur is used to develop a hermeneutical approach to science. This is used to reconstruct science as mythos, illustrated in Thomas Berry and Brian Swimme's The Universe Story, where scientific cosmology is read as value-laden natural history. In turn this is reassessed using Donna Haraway, and a radical postmodern hermeneutics that is suspicious of one-true stories. The conclusion is a hermeneutical conversation between human and nonhuman nature as a model for environmental ethics. The dissertation advisor was John Raines. William Grassie, P. O. Box 586, 650 Brandywine Creek Road, Unionville, PA 19375. (v5,#1)

Gratwicke, Brian, Elizabeth L. Bennett, Steven Broad, Sarah Christie, Adam Dutton, Grace Gabriel, Craig Kirkpatrick, and Kristin Nowell. "The World Can't Have Wild Tigers and Eat Them, Too." Conservation Biology Vol. 22, no. 1 (2008): 222-23. The risks posed to wild tigers from reopening trade of tiger parts from captive tigers, as proposed in China, is a risk we cannot afford to take. We would be gambling with the future of one of the world's most iconic species. The lead author Gratwicke is with the

Save the Tiger Fund, National Fish and Wildlife Foundation in Washington.

Gray, Elizabeth Dodson. Why the Green Nigger? Reviewed in Environmental Ethics 2(1980):187-91.

Gray, Gary C. Wildlife and People: The Human Dimensions of Wildlife Ecology: (Champaign, University of Illinois Press, 1993). Reviewed by Richard Perkins in Environmental Values 4(1995):90.

Gray, Gary G., Wildlife and People: The Human Dimension of Wildlife Ecology. Champaign, IL: University of Illinois Press, 1993. 260 pages. \$ 39.95. (v4,#2)

Gray, Gary C., ed., Wildlife and People: The Human Dimension of Wildlife Ecology. Champaign, IL: University of Illinois Press, 1993. (v5,#1)

Gray, Gary G., Wildlife and People: The Human Dimensions of Wildlife. Urbana-Champaign: Illinois University Press, 1993. \$ 34.95. (v4,#4)

Gray, P., Hodgins, E. and Veale, B., "Water, Water Everywhere? Understanding and Protecting Our Nation's Most Valuable Resource," Environments 29(no.1, 2001): 39-66. (v.13,#2)

Gray, Patricia M., Krause, Bernie, Atema, Jelle, Payne, Roger, Krumhansl, Carol, and Baptista, Luis, "The Music of Nature and the Nature of Music," Science 291(5 January 2000):52-54. "Rather than being the inventors of music, we are latecomers to the musical scene." The authors find music not only in humans but in whales, birds, even insects. Whale and bird songs, if genetically disposed, are also acquired. "Whales from different oceans sing completely different songs." Whales and birds seem to prefer patterned tones and rhythms rather similar to those humans prefer. "The similarities among human music, bird song, and whale song tempt one to speculate ... that there is a universal music awaiting discovery." This would be rather like Platonic mathematics. "Do musical sounds in nature reveal a profound bond between all living things?"

Such pervasive "music" is discovered partly by discoveries about animal sounds, but also by redefining the term "music," somewhat similarly to the way animal "culture" is often as much a redefinition of "culture" as new discoveries about animal behavior. Acquired bird songs are here part of their "culture" (p. 53) "Music has been defined as patterns of sound varying in pitch and time produced for emotional, social, cultural and cognitive purposes." Songs, seemingly synonymous with music, "can be defined as any rhythmic repeated utterance whether by a bird, a frog, an insect, a whale or a human being." There is no discussion here of the functional nature of such calls (territorial calls, mating, group location) and whether and how this relates to aesthetic capacities and experience. An accompanying article is:

--Tramo, Mark Jude, "Music of the Hemispheres," Science 291(5 January 2000):54-56. Music is universal in human cultures and this seems to indicate that the human brain is constructed so as to produce and enjoy music. Areas of the brain that may be involved in different aspects of music perception and performance. (EE v.12,#1)

Gray, R.H., "Corporate Reporting for Sustainable Development: Accounting for Sustainability in 2000 A.D." Environmental Values 3(1994):17-45. This paper is principally concerned with (a) outlining the range of possibilities that exist for organizations which wish to undertake environmental and sustainability reporting and (b) suggesting particular approaches as the more desirable. There is an important difference between environmental reporting and reporting for sustainability, but are both shown to be essential and practicable. It is argued, however, that there is little or no prospect of widespread, systematic reporting by corporations without a major regulatory initiative. KEYWORDS: Accounting, environmental accounting and reporting, social reporting, sustainability. Gray is with the Dept. of Accounting and Business Finance, University of Dundee, U.K. (EV)

Grayson, Donald K., "The Archaeological Record of Human Impacts on Animal Populations," Journal of World Prehistory 15(no. 1, 2000):1-68. Humans in the past had widespread influence on wild animal populations, most dramatically in the Pacific Islands, especially Oceania. There were also evident influences on continental populations. Three main factors were involved: hunting for animal prey, humans setting fires, and human introductions, deliberately and accidentally, of nonnative animals, often carrying diseases. On islands these interruptions regularly led to extinctions, although predation alone did not. Vegetational change and the introductions of exotics were more significant. The Polynesians may have caused the extinction of half the endemic avifauna of Hawaii. Indigenous people typically overhunted the large prey first, and then turned to smaller prey. There is little evidence that indigenous peoples were good conservationists. They depleted resources almost everywhere. "Conservationists may well be clamoring for an answer to the question whether indigenous peoples conserve biodiversity, but archaeologists answered that question long ago" (p. 49).

But Grayson is equally convinced that overhunting did not cause extinctions on continents, especially not in North America and probably not in Australia. The overhunting hypothesis would require hunting a variety of now extinct mammals in substantial numbers, and there should be kill sites. But "such evidence exists only for mammoth and, far less securely, for mastodon. There is no evidence that people hunted, or even scavenged any of the other ungulates--or sloths, dayspodids (armadillos), glyptodonts (armadillo-like), or rodents. ... Horses and camels are extremely well represented in the late Pleistocene record of North America, but there are no kill sites for them" (p. 37). Also the timing of the extinctions is problematic. Climate is a more likely factor.

On continents too there was no widespread change in the flora. "It is also true that there is no evidence for significant, colonization-linked anthropogenic impacts on North American vegetation of the sort that are so evident in such places as New Zealand, Hawaii, Mangaia (Cook Islands), Yap, Easter Island" (p. 42). (v.13,#2)

Greker, M., "Strategic Environmental Policy Eco-Dumping or A Green Strategy?," Journal of Environmental Economics and Management 45(no. 3, 2003): 692-707. (v 14, #3)

Greater Yellowstone Coalition, Blueprint for the Future: Sustaining Greater Yellowstone. Bozeman, MT: Greater Yellowstone Coalition, 1994. 230 pages. \$ 20.00. A blueprint for a sustainable Yellowstone ecosystem. 41 case studies, a thorough analysis for anyone who believes, or doubts, that a sustainable Yellowstone area is feasible. Greater Yellowstone Coalition, P. O. Box 1874, Bozeman, MT 59771. (v5,#2)

Greeley, Andrew, "Religion and Attitudes toward the Environment," Journal for the Scientific Study of Religion 32(1993):19-28. (v8,#3)

Green Brigades, or (in Polish) Zielone Brygady is a Polish environmental journal/newsletter, now in its fifth year, published under the auspices of the Chemists' Scientific Club at the Jagiellonian University in Cracow, Poland. ISSN 1231-2134. Sixty issues have been published in Polish and twelve in English, with a current circulation of 3,000 in Polish and 1,500 in English, a quite large circulation by Polish standards. The journal seeks to exchange information between various groups active in the fields of ecology, wildlife conservation, environmental protection, animal rights, vegetarianism, and healthy lifestyles. Some issues in the 1994, no. 2 issue: "Campaign to keep the Vistula River Wild," "International Biosphere Reserve in the Eastern Carpathian Mountains (Bieszczady Mountains)," "Hour of Destiny for Bialowieza Primeval Forest" (Europe's last remaining stand of lowland ancient forest, dating back to 8,000 B.C.)," an article on "The Polish Society for Nature Protection, Salamandra. Piotr Rymarowicz and Laurel Sherwood are editors. Address: Slawkowska 12/24 (IV p.), PL-31-014 Krakow, Poland. Phone 48: (country code) 12 (city code) 222147, ext. 15. Fax: 222264. E-mail: zielbryg@gn.apc.org

Green, Colin. Review of D. Pearce, and E.B. Barbier, Blueprint for a Sustainable Economy, London: Earthscan, 2000, Environmental Values 10(2001):563. (EV)

Green, Colin. Review of Acutt and Mason, eds., Environmental Valuation, Economic Policy and Sustainability: Recent Advances in Environmental Economics. Environmental Values 9(2000):537.

Green, DM, "The ecology of extinction: population fluctuation and decline in amphibians", Biological Conservation 111(no.3, 2003):331-343.

Green, Dorothy, ed., Descent of Spirit: Writings of E. L. Grant Watson. Grant Watson (1885-1970) wrote on the natural history of Australia, especially the wonder and beauty of biological adaptations. (v1,#3)

Green, Dorothy. *Managing Water: Avoiding Crisis in California*. Berkeley: University of California Press, 2007. Green discusses watershed and water policy, especially in the Los Angeles area, with an inquiry into whether California is sustainable. Green is an activist in conservation in California.

Green Electronics. A special report in IEEE Spectrum, vol. 31, no. 8, August 1994. Includes Patricia A. Dillon, "Salvageability Becoming Law." Legislation is driving electronics companies to prepare for products for later recycling. The effort foreshadows a future in which most of the content of obsolete electronic products will be reclaimed.

Green, Elizabeth E., "The Travail of Creation and the Daughters of God: Ecofeminism and Eschatology," Ecotheology No 1 (July 1996):61-70.

Green, JL et al., "Complexity in Ecology and Conservation: Mathematical, Statistical, and Computational Challenges," BioScience 55 (no. 6, June 2005): 501-510.

Creative approaches at the interface of ecology, statistics, mathematics, informatics, and computational science are essential for improving our understanding of complex ecological systems. For example, new information technologies, including powerful computers, spatially embedded sensor networks, and Semantic Web tools, are emerging as potentially revolutionary tools for studying ecological phenomena. These technologies can play an important role in developing and testing detailed models that describe real-world systems at multiple scales. Key challenges include choosing the appropriate level of model complexity necessary for understanding biological patterns across space and time, and applying this understanding to solve problems in conservation biology and resource management.

Green, Judith M. "Retrieving the Human Place in Nature." Environmental Ethics 17(1995):381-396. The present worldwide ecological crisis challenges both some fundamental Western cultural assumptions about human relationships to nature and the efficacy of democratic institutions in transforming these relationships appropriately and in a timely manner. I discuss what kind of ecophilosophy is most feasible and desirable in guiding rapid and effective response to the present crisis in the short term, as well as positive cultural transformation in the West toward sound natural and social ecology in the longer term. I argue that decontextualized liberal ecophilosophies and related deep ecologies are inadequate to these purposes and propose a Green transformative framework that "re-replaces" humans within nature, "re-repositions" our understanding of ourselves in relation to the land, "re-repairs" intrinsic values in nature with human responsibilities, and "re-re-directs" the effective use of participatory democratic institutions in trans-forming public policy. Green is in the department of philosophy, University of Seattle. (EE)

Green, Karen, "Freud, Wollstonecraft, and Ecofeminism: A Defense of Liberal Feminism." Environmental Ethics 16(1994):117-134. I examine recent arguments to the effect that there are significant logical, conceptual, historical, or psychosexual connections between the subordination of

women and the subordination of nature and argue that they are all problematic. Although there are important connections between women's emancipation and the achievement of important environmental goals, they are practical connections rather than conceptual ones. Green is in philosophy, Monash University, Australia. (EE)

Green, Karen, "Two Distinctions in Environmental Goodness," Environmental Values 5(1996):31-46. In her paper, "Two Distinctions in Goodness" (The Philosophical Review 92(1983):169-95), Christine Korsgaard points out that while a contrast is often drawn between intrinsic and instrumental value there are really two distinctions to be drawn here. One is the distinction between intrinsic and extrinsic value, the other is that between having value as an end and having value as a means. In this paper I apply this contrast to some issues in environmental philosophy. It has become a commonplace of environmentalism that there are intrinsic values in nature. What is usually meant by this is that some values in nature are not merely instrumental to human ends. By using the notion of intrinsic value to express this philosophers have developed positions which are open to a number of meta-ethical and practical objections. The view that there are objective values in nature, which are independent of human interests, is better served by an environmental philosophy which sees most value in nature as objective, extrinsic value. The resulting environmental ethic is sketched and some apparent difficulties discussed. KEYWORDS: Intrinsic value, instrumental value, meta-ethics, subjectivism, biocentrism. (EV)

Green Pages, The: Your Everyday Shopping Guide to Environmentally Safe Products (New York: Random House, 1990). \$8.95. 238 pages. (v2,#1)

Green, Rhys E. et al., "Farming and the Fate of Wild Nature," Science (28 January 2005):550-555. Farming is already the greatest extinction threat to birds (the best known group) and the situation will grow worse especially in developing countries. Two solutions have been proposed (1) wildlife-friendly farming, which boosts densities of wild populations on farmland but may decrease agricultural yield and (2) land-sparing farming, which minimizes demand on farmland by increasing yield. The authors propose a way to resolve the tradeoffs between these two approaches, but generally hold that high-yield farming will allow more species to persist. Green is in zoology, University of Cambridge, UK. With critical comment about dimensions these authors overlook, and reply, Science 308(27 May 2005):1257.

Green, Ronald M. *Babies by Design: The Ethics of Genetic Choice*. New Haven: Yale University Press, 2007. Parents have autonomy over their future children. This includes the right of parents to undertake genetic changes that they believe will benefit their child and enhance his or her life prospects. Embryo selection to avoid inherited disease is already in practice; therapeutic gene alteration to avoid diseases in embryos is on the horizon. We will afterward move to genetic enhancement and make future people "better than well." This includes cosmetico-genomics, where parents use prenatal or preconceptual genetics to improve a child's height, reduce his or her chances of obesity, and even select a child's skin or hair color. What about intellectual ability, athletic ability, and sexual attractiveness? For doubts about such eugenics, see *The Case against Perfection* by Michael Sandel (Cambridge, MA: Harvard University Press, 2007).

Greenbaum, Allan, "Nature Connoisseurship," Environmental Values 14(2005): 389-407. Environmentalists who seek to protect wild nature, biodiversity and so on for its own sake manifest a disposition to value the interesting at least on par with the useful. This disposition toward the interesting, which provides the affective and cognitive context for the discovery of intrinsic values in nature and the elaboration of ecocentric ethics, does not arise simply from learning about nature but is part of a more general socially inculcated cultural system. Nature connoisseurship exhibits formal parallels with art connoisseurship. The abstraction-oriented cultural system which prizes 'disinterested interest' is characteristic of culturally rich fractions (or subdivisions) of the middle class in modern Western societies. Valuing nature for its own sake (like valuing, for its own sake, the domination of nature) is not

a 'natural' response to nature but a disciplined cultural accomplishment. Greenbaum is in social science, York University, Toronto, Ont. (EV)

Greenbaum, Allan. "Environmental Thought as Cosmological Intervention." Environmental Values 8(1999):485-497. ABSTRACT: An important tradition in popular and academic environmentalist thought concentrates on cosmological issues, to do with overarching (or underlying) views about the nature of reality and the place of humanity in nature. This tradition connects the environmental crisis with anthropocentric and mechanistic cosmologies, and tries to address this crisis through cosmological critique and reconstruction - a practice I call "cosmological intervention". This practice presupposes a link between "world view" and "ethos". I argue that an environmentalist ethos does not necessarily or automatically follow from the world view elements propounded in cosmological interventions. Rather, world view symbolises ethos. Cosmologies favoured by environmentalists describe the abstract and necessary properties of the world in ways which reflect those concrete and contingent properties of the world that the ecology movement seeks to protect, extend and celebrate. KEYWORDS: Cosmology, worldview, deep ecology, environmental thought. Allan Greenbaum 873 Palmerston Ave., Toronto, Ontario, Canada M6G 2S3. (EV)

Greenberg, Michael, Schneider, Dona. Environmentally Devastated Neighborhoods: Perception, Policies, and Realities. New Brunswick, NJ: Rutgers University Press, 1996. 300pp. \$60 cloth. Beginning with a call for a definition of "environment" that fits the realities of neighborhoods, the authors argue for and propose policy initiatives that address all the desperate needs of these beleaguered places. (v7,#4)

Greene, A, "Review of: Harriet Ritvo, The Animal Estate: The English and Other Creatures in the Victorian Age; Stephen Budiansky, The Covenant of the Wild: Why Animals Chose Domestication," Environmental History 7(no.4, 2002): 685-686.

Greenfield, Joanna, "Hyena," The New Yorker 52(no. 34, November 11, 1996):74-81. The author is attacked by a hyena in a reserve in Israel, while servicing the pen in which it is caged. There is an Israeli reserve housing all of the animals mentioned in the Bible. With some graphic prose about the attack, and about hyenas in Kenya. "Spotted hyenas are the sharks of the savanna, superpredators and astounding recyclers of garbage. They hunt in large, giggling groups, running alongside their prey and eating chunks of its flesh until it slows down through loss of blood, or shock, or sheer hopelessness, and then the hyenas grab for the stomach and pull the animal to a halt with its own entrails or let it stumble into the loops and whorls of its own body."

Greenhouse Defect, The." The Christian Science Monitor, vol. 89, 10 March 1997, p. 20.

Greenhouse, Linda, "Justices Bar Wide U.S. Role Under the Clean Water Act," New York Times (01/10/01): A13. U.S. Supreme Court decisions weakens wetland's protection. A 15 year-old protection for isolated wetlands used by migratory birds was struck down by the court as unjustified federal intrusion into states' traditional rights to manage land and water. The U.S. Army Corp of Engineers was given the right to regulate "navigable waters" and those that abut them by the Clean Water Act of 1972. It later adopted the "migratory bird rule" that regulated the dredging and filling of ponds and wetlands separate from navigable rivers or their tributaries, in part because migratory birds that cross state lines used these wetlands. The Court held that the rule extended beyond the intention of Congress when it adopted the Clean Water Act. Because few states protect such isolated wetlands, the ruling could end protection for as much as 20 percent of the country's wetlands. Over 50 percent of the nation's wetlands have already been lost. (v.12,#2)

Greenpeace, E. V., Deutsches Institut für Wirtschaftsforschung. The Price of Energy. Brookfield, VT: Ashgate, 1997. 192 pp. \$63.95. The economic effects of an ecological tax reform is examined and shows

that such a tax reform is economically acceptable and environmentally positive even if implemented in one "pioneer" country alone.

Greenpeace, E. V., Deutsches Institut für Wirtschaftsforschung. The Price of Energy. Brookfield, VT: Ashgate, 1997. 192 pp. \$63.95. The economic effects of an ecological tax reform is examined and shows that such a tax reform is economically acceptable and environmentally positive even if implemented in one "pioneer" country alone.

Greenway, R., "The Wilderness Effect and Ecopsychology," In Roszak, T., Gomes, M. E., and Kanner, A. D., eds., Ecopsychology: Restoring the Earth, Healing the Mind. San Francisco: Sierra Club Books, 1995.

Greenway, Robert, "Wilderness Experience and Ecopsychology," International Journal of Wilderness 2(no. 1, May 1996):26-30. Wilderness participants often speak of a feeling of "expansion" or "reconnection" in wilderness which can be interpreted psychologically as an expansion of "self." Greenway teaches psychology at Sonoma State University, California. (v7,#2)

Greenway, William, "Animals and the Love of God," Christian Century, June 21, 2000, vol. 117, no. 19, pp. 680-681. "The primary hierarchical division in Genesis is not between humans and the rest of creation; it is between God and creation." "To repress our sympathy for animals leads to an all the more destructive disrespect for them and for all creation." Greenway teaches at Austin Presbyterian Theological Seminary, Austin, TX. (v.11,#2)

Greenwood, Dan, "Non-Market Coordination: Towards an Ecological Response to Austrian Economics," Environmental Values 17(2008):521-541. Although the ecological tradition tends to favour a substantive role for non-market institutions in securing objectives such as environmental sustainability, Green theorists have paid relatively little attention to the important challenge posed to such proposals by the pro-market arguments of Austrian economics. The methods of ecological economics, such as multiple criteria evaluation, offer important potential for responding to the Austrian thesis that democratic, non-market institutions face a coordination problem in the face of complexity. However, the development of an adequate ecological response to the Austrians requires clarification of the conceptual underpinnings and potential scope of such methods.

Gregersen, Niels H., Parsons, Michael W. S., and Wasserman, Christolph, eds., The Concept of Nature in Science and Theology. Studies in Science and Theology, vol. 3 (1995), Part I. Geneva, Switzerland: Labor et Fides, S. A., 1997. ISBN 2-8309-0859-7. Relatively short articles by two dozen theologians. Part I, this part, is on nature more generally. Part II (in press) will be more specific: epistemology and quantum reality, biology and theology, ecology and theology, ethics and human nature. Gregersen is in systematic theology at the University of Aarhus, Denmark. (v.8,#4)

Gregg, N. Taylor, "Sustainability and Politics: The Cultural Connection," Journal of Forestry 90(1992)(no. 7, July):17-21. "To major questions have emerged from the current crisis over forest management practices. While much of the argument justifiably seems to have concerned whether we have the scientific knowledge and techniques to manage wisely, a more fundamental question remains: 'Manage for what?' ... Foresters can probably manage for whatever values the public wants--but the current problem lies in achieving a consensus for what those values are. ... There is also a lack of value consensus within the profession itself, as evidenced by the ongoing debate within the Society of American Foresters over the appropriate substance of a land ethic canon." The SAF has subsequently adopted a land ethic canon, see below. Includes discussion of a survey of the value systems of professional foresters. Gregg is former editor of the Journal of Forestry. (v3,#4)

Gregorios, Paulis. Review of Umweltkrise-Folge des Christentums? By Udo Krolzik. Environmental Ethics 3(1981):377-79.

Gregory, Frederick, Nature Lost? Natural Science and the German Theological Traditions of the Nineteenth Century. Cambridge: Cambridge University Press, 1992.

Gregory, Robin S., "Incorporating Value Trade-offs into Community-Based Environmental Risk Decisions," Environmental Values 11(2002):461-488. Although much attention has been given to the role of community stakeholders in developing environmental risk-management policies, most local and national initiatives are better known for their failings than their successes. One reason for this continuing difficulty, we contend, is a reluctance to address the many difficult value trade-offs that necessarily arise in the course of creating and evaluating alternative risk-management options. In this paper we discuss six reasons why such trade-offs are difficult and, for each, present helpful techniques from the decision sciences along with case study examples of successful applications. (EV)

Gregory, Robin, Sara Lichtenstein, and Paul Slovic, "Valuing Environmental Resources: A Constructive Approach," Journal of Risk and Uncertainty 7(1993):177-197. Contingent valuation methods for environmental values have been increasingly used in recent years, but much doubt exists about their validity. The authors here argue that the usual form of such surveys puts unreasonable cognitive demands on the person surveyed; they are asked to place monetary value on goods that are not represented in their minds in monetary form. Such surveys ought not to be thought of as discovering what values the respondent already has, but rather as a means of helping the respondent construct explicitly values that he or she only holds tacitly. They suggest a new approach, based on the value-structuring capacities of multi-attribute utility theory and decision analysis. The authors are with Decision Research, Eugene, Oregon. (v5,#4)

Gregory, S., Li, H., and Li, J., "The Conceptual Basis for Ecological Responses to Dam Removal," Bioscience 52(no.8, 2002): 713-23. (v.13,#4)

Greider, William. One World, Ready or Not: The Manic Logic of Global Capitalism. New York: Simon and Schuster, 1997. Although the rapid spread of free market capitalism has created many pockets of prosperity, the world economy has spun out of control and is heading for a cataclysmic fall. There are three ominous, converging trends. First, the world will soon be awash in surplus goods. Profitability depends on producing goods where wages are too low for workers to purchase these goods, and selling where wages are high, but there will not be enough well-paid workers to buy these goods. Second, there is the rapid, constant flow of money across borders, with those who control this flow having more power than governments, and insisting on high returns where these will not be possible. Third the planet cannot sustain rapid industrialization for the masses in under-developed countries without irreparable environmental damage. The losers in the global economy--those earning rock bottom wages, those who suffer when growth slows, those who live with the worst effects of environmental degradation--far outnumber the winners. Nevertheless, Greider suggests much can be done, and he is generally pro-growth. Reviewed by Jeffrey E. Garten in Harvard Business Review, January/February 1997. (v8,#1)

Grendstad, Gunnar, "The New Ecological Paradigm Scale: Examination and Scale Analysis," Environmental Politics 8 (No. 4, 1999 Winter): 194- . (v.11,#4)

Grenier, M. B., D. B. McDonald, and S.W. Buskirk. "Rapid Population Growth of a Critically Endangered Carnivore." Science Vol. 317, no. 5839 (10 August 2007): 779. The authors discuss a notable population recovery of released black-footed ferrets in the Shirley Basin of Wyoming, after a lag that seemed to portend population extinction, and also after the population went through a genetic bottleneck that reduced genetic variability. Efforts to release captive endangered animals back into the wild often fail, but this seems a success story.

Grescoe, Taras. *Bottomfeeder: How to Eat Ethically in a World of Vanishing Seafood*. New York: Bloomsbury USA, 2008. Grescoe was shocked at what he found on a nine month, worldwide search for a delicious and humane plate of seafood. He critiques the \$55 billion dollar-a-year seafood industry that is engaged in unregulated fishing practices, causing out of control pollution, and contributing to climate change. In response he offers a practical, ethical guide to eating seafood.

Greve, Michael S., *The Demise of Environmentalism in American Law*, Washington, DC: AEI Press, 1996. 147 pages.

Grewal, Varinder Singh, *Strengthening Environmental Impact Assessment in India: Comparison of EIA in the United States, Western Australia, the Philippines, and India*, 1996, San Jose State University, M.S. thesis, in environmental sciences. 87 pages. In India, uncontrolled population growth, poverty, urbanization and industrialization without proper infrastructure, the abysmal state of sanitation and filth, and deforestation and unprofessional agricultural practices are pushing the nation toward ecological disaster. Behind these problems are the bureaucratic and political hurdles, the general public's lack of understanding of environmental ethics, and the government's lack of environmentally sound economic-policy making capabilities. Environmental Impact Assessment (EIA) could be used to address these issues. An examination of existing administrative EIA procedures in India in comparison to the National Environmental Policy Act (NEPA) in the United States and different EIA models from other countries. In conclusion, eight recommendations would result in more effective implementation of EIA procedures in India. The advisor was Lynne Rulio. (v.10,#1)

Grey, Mary, "Dodabetta Mountain and the Medicinal Plants Development Area," *Ecotheology* No 7 (July 1999):108-111.

Grey, William, "The Ethics of Human Genetic Engineering," *Australian Biologist* 9 (no. 1, March 1996):50-56.

Grey, William, "Possible Persons and the Problems of Posterity," *Environmental Values* 5(1996):161-179. The moral status of future persons is problematic. It is often claimed that we should take the interests of the indefinite unborn very seriously, because they have a right to a decent life. It is also claimed (often by the same people) that we should allow unrestricted access to abortion, because the indefinite unborn have no rights. In this paper I argue that these intuitions are not in fact inconsistent. The aim is to provide an account of trans-temporal concern which resolves the prima facie inconsistency between commonly held intuitions about our obligations to future persons. I argue that our intuitions can be reconciled provided that we explicate obligations to the future in terms of impersonal principles subject to retroactive person-affecting constraints. KEYWORDS: Future persons, duty to posterity, Parfit (EV)

Grey, William, "A Critique of Deep Ecology." *Journal of Applied Philosophy* 3, no. 2 (1986): 211-216. Grey criticizes the type of Deep Ecology position that relies on "non-Western" anti-technological attitudes, and he urges that we develop an environmentally conscious world-view based on science. He also criticizes Deep Ecologists for talking of a "paradigm" of Deep Ecology: this suggests one and only one acceptable Deep Ecology view. (Katz, Bibl # 1)

Grey, William, "Anthropocentrism and Deep Ecology", *Australasian Journal of Philosophy*, 71 (1993):463-75. A predominant theme in environmental philosophy is the claim that we need to correct an anthropocentric bias in our attitudes to the nonhuman world, and in particular to extend moral concern across time and across species. This is the central claim of "deep ecology", which maintains that the uncritical acceptance of anthropocentric values has abetted reprehensible practices with respect to the

nonhuman world. In this paper the author argues that this central claim of "deep ecology" is mistaken and provides a defence of qualified anthropocentrism. Deep ecology is a response to human activities which have a detrimental impact on the planet's living systems. These judgments, however, are possible only if we assume a set of values based on human preferences. It is the short-sighted and narrow self-regarding conception of human well-being that needs to be rejected, not anthropocentrism.

Grey, William, "Environmental Value and Anthropocentrism," Ethics and the Environment 3(1998):97-103. The critique of traditional Western ethics, and in particular its anthropocentric foundations, is a central theme which has dominated environmental philosophy for the last twenty years. Anthropocentrism is widely identified as a fundamental source of the alienating and destructive attitudes towards the nonhuman world which are a principal target of a number of salient ecophilosophies. This paper addresses a problem about articulating the concern with anthropocentrism raised by the influential formulations of deep ecology by nature liberation proponent Val Plumwood. Grey is in philosophy, University of Queensland, Brisbane, Australia. (E&E)

Grey, William, Bennett, David, Rawles, Kate, Holland, Alan, "Obituaries of Richard Sylvan," Environmental Values 5(1996):265-266. (EV)

Grey, William. See also Godfrey-Smith, William.

Grier, Peter, "US Makes Gains in Fuel Efficiency Despite Reputation as Gas-Guzzler," The Christian Science Monitor 86 (24 August 1994): 8. (v5,#3)

Grier, Peter. "When Saving the Dolphins Clashes with Free Trade, New World Order in Doubt." The Christian Science Monitor, 6 July 1994, p. 7. (v5,#2)

Griffin, David R. et al, Founders of Constructive Postmodern Philosophy, Chinese translation, translator: Bao Shibin. Publisher: Central Compilation & Translation Press, 2002.

Griffin, Donald R., Animal Minds. Chicago: University of Chicago Press, 1992. 310 pages. \$ 24.95 hardbound. Continuing a series of earlier books, Griffin maintains that animals do think, now with further evidence from animal behavior, the philosophy of mind, and cognitive science. Griffin is at the Museum of Comparative Anatomy, Harvard. (v4,#2)

Griffin, Donald R. Animal Thinking. Reviewed in Environmental Ethics 8(1986):179-82.

Griffin, Emilie, Wilderness Time: A Guide for Spiritual Retreat. San Francisco: HarperSanFrancisco, 1997. 109 pp. \$ 13.00 paper. Griffin emphasizes the gospel's picture of Jesus withdrawing from community into wilderness, in retreat for the sake of return to community. Distills some of the experiences of the Renovaré movement. (v8,#3)

Griffin, Gary J., "Blight Control and Restoration of the American Chestnut," Journal Of Forestry 98 (No. 2, Feb 01 2000): 22- . Enhancing blight resistance, along with site selection and other forest management practices, is critical for restoring the American chestnut. (v.11,#2)

Griffin, N., "Lifeboat U.S.A." International Journal of Moral and Social Studies 3:3 (1988): 217-238, and 4:1 (1989): 17-35. This two-part article is a detailed examination of the problem of the commons in environmental ethics. According to Garrett Hardin, the logic of the commons requires a policy of "triage" concerning aid to the non-industrialized world. Griffin attacks this view on both a theoretical and a factual level: Hardin's logic is incapable of proving the superiority of rational egoism; and the facts of third world development and production do not fit the model of medical triage. (Katz, Bibl # 2)

Griffith, Bede, "Return to the Centre. (And Environmental Protection)," The Ecologist 30 (No. 1, Jan 01 2000): 9- . There is much to learn from the wisdom inherent in primal religions. (v.11,#2)

Griffith, James Jackson, "Applying Systemic Thinking for Teaching Disturbed Land Reclamation in Brazil." Using systemic thinking to teach environmental rehabilitation to undergraduate students at Federal University of Viçosa, Minas Gerais, in Brazil. Griffith is in forestry engineering there. Request at copy at: <griffith@ufv.br>

Griffiths, I., "Review of: Jennifer Clapp, Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries," Environmental Politics 12(no. 1, 2003): 260. (v 14, #3)

Grifo, Francesca, and Rosenthal, Joshua, eds. Biodiversity and Human Health. Washington, D.C.: Island Press, 1996. 350 pages. \$50 cloth, \$29.95 paper. An overview of the mechanics, background, and implications of voluntary certification programs. The history of certification, the development of an internationally agreed upon set of forest management principles, and the various certification programs currently underway. (v7, #3)

Grifo, Francesca, Rosenthal, Joshua, eds. Biodiversity and Human Health. Covelo, CA: Island Press, 1997. 399 pp. \$50 cloth, \$29.95 paper. Exploring the human health consequences of the loss of biological diversity, contributors discuss the uses and significance of biodiversity to the practice of medicine today and develop strategies for conservation of these critical resources. (v8,#2)

Grigg, Gordon, Hale, Peter, and Lunney, Daniel, eds., Conservation through Sustainable Use of Wildlife. Brisbane, Qld: Centre for Conservation Biology, 1996. 360 pages. \$A 50. (Centre for Conservation Biology, The University of Queensland, Brisbane, Queensland 4072, Australia. Phone 07 3365 2527 Fax 07 3365 4828 Email P.Hale@mailbox.uq.edu.au) Traditional fishing by Torres Strait Islanders, the commercial use of kangaroos, and much more. From a conference held there in 1994. (v7,#4)

Grigsby, W, "DeGregori, Thomas. Agriculture and Modern Technology: A Defense," Society and Natural Resources 15(no.5, 2002):461-462. (v.13, #3)

Grigsby, WJ; "The Gendered Nature of Subsistence and Its Effect on Customary Land Tenure", Society and Natural Resources 17 (no.3, 2004): 207-222(16).

Grijalva, James M. *Closing the Circle: Environmental Justice in Indian Country*. Durham: Carolina Academic Press, 2008. Grijalva shows how federal-state partnerships of United States environmental law fails in Indian country where state regulatory jurisdiction is constrained by federal Indian law, leaving a void of effective environmental regulation that threatens the survival of American Indian tribes. He argues that a potential solution to this problem is to provide state-like status to sovereign tribal governments.

Grijalva, TC; Berrens, RP, "A Question of Standing: Institutional Change and Rock Climbing in Wilderness Areas", Society and Natural Resources 16(no.3, 2003): 239-248.

Grim, John A., Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community. Cambridge, MA: Center for the Study of World Religions and Harvard University Press, 2001. Pressures threatening indigenous peoples and ways of life; their modes of resistance and regeneration by which these communities maintain a spiritual balance with larger cosmological forces while creatively accommodating current environmental, social, economic, and political changes. Grim is in religion, Bucknell University. (v.13,#1)

Grime, K., "Review of: Tickle, A. And Welsh, I., editors, Environment and Society in Eastern Europe," Progress in Human Geography 25(no.4, 2001): 686. (v.13,#2)

Grimes, L., "Important Bird Areas in Africa and Associated Islands. Priority Sites for Conservation," Biological Conservation 114(no. 1, 2003): 155-156.

Grimm, David. "This Man Wants to Green Your Lab." *Science* Vol. 318, no. 5847 (5 October 2007): 39-41. Allen Doyle, a soil ecologist at the University of California, Santa Barbara, finds that too many scientists, though they may be green at home, forget about whether their labs are green. Getting the research done and published takes top priority, with the ecological footprint of the lab ignored. Doyle lists many ways to save money, be more efficient, and "green" at the same time. He finds some scientists co-operative, but most still have no time to think about it. In his own lab building, he saved \$16,000 a year just by turning off unused ventilation hoods. Some of the major issues include recycling plastic tubes and old electronics.

Grimm, Lydia T. "Sacred Lands and the Establishment Clause: Indian Religious Practices on Federal Lands," Natural Resources & Environment 12(no.1,1997):19. (v8,#3)

Grimm, Nancy B., Grove, J. Morgan, and Redman, Charles L., "Integrated Approaches to Long-Term Studies of Urban Ecological Systems," Bioscience 50 (No. 7, 2000 July 01): 571- . (v.11,#4)

Grimshaw, Michael, "Seeing through God: Towards an Eco A/Theology," Ecotheology Vol 6 (Jul 01/Jan 02):186-199. migrimshaw@phil.canterbury.ac.nz Although often viewed as an aberration in theology, the application of deconstructionist thought provides a way of approaching the theological task that enables issues of context to be debated in a new way. By applying notions of inter-textuality to the basis provided by the liminal / of Mark C Taylor's a/theology, it is possible to trace a path from land/scape to in/scape to a theo/scape. By in turn deconstructing Taylor's a/theology, an eco a/theology is proposed that raises the possibility of framing god as presence in absence. As such, God is that which holds together and frames the views through which we perceive and create the world. Theology becomes eco a/theology not in a universalist, globalistic narrative, but rather that which takes seriously the contested claims of contextual theologies and hints at a knowledge and experience of 'God' that is located in an experience of the local context.

Grinde, Donald A, and Bruce E. Johansen, Ecocide of Native America: Environmental Destruction of Indian Lands and Peoples. Clear Light Press, 1995. \$24.95. Argues for the Native American policy of sustainability, and reports on contamination of reservations by industrial and radiation waste. (v6,#2)

Grizzle, Raymond E., and Barrett, Christopher B., "The One Body of Christian Environmentalism," Zygon 33(1998):233-253. Using a conceptual model consisting of three interacting spheres of concern--environmental protection, human needs provision, and economic welfare--central to most environmental issues, we map six major Christian traditions of thought. Our purpose is to highlight the complementarities among these diverse responses in order to inform a more holistic Christian environmentalism founded on one or more of the major tenets of each of the six core traditions. Our approach also incorporates major premises of at least the most moderate versions of biocentrism, ecocentrism, and anthropocentrism. We label this holistic approach "cosmocentrism" and use it as the basis for a preliminary description of the notion of "pluralistic stewardship." We argue that only such holistic environmental perspectives, where societal needs are more directly coupled with environmental protection, and a pluralism of worldviews are acknowledged as potentially contributing to such efforts are capable of successfully addressing the complex issues we face today. We note that, at the international level in particular, Christian thought and secular environmentalism already have been moving in such a direction. Grizzle teaches environmental studies at Taylor University, Upland, NY. Barrett is in

economics, Utah State University. (v9,#2)

Grizzle, Raymond E., "Environmentalism Should Include Human Ecological Needs," BioScience 44(1994):263-268. In most environmentalism, "human ecological needs are not explicitly considered. Humans are viewed as protectors of the environment but not direct participants in ecosystem processes. I find this view incomplete because it does not address the full range of ecological relationships between humans as a species and their environment. ... This shortcoming seriously undermines the prospect for further consensus among environmentalists. ... [We need] a more holistic environmentalism ... Humans are part of nature and subject to the same broad principles as are other organisms. Clearly, humans are in some ways different from other species, but I see no compelling reason for excluding them from nature. ... We can be thought of as a potential predator, prey, competitor, and/or symbiont." Grizzle teaches biology at Campbell University, Buies Creek, N. C. (Thanks to Naomi Krogman, University of Southwestern Louisiana.)

Groom, Geoff; Mucher, C.; Ihse, Margareta; Wrבka, Thomas, "Remote Sensing in Landscape Ecology: Experiences and Perspectives in a European Context," Landscape Ecology 21 (no.3, April 2006): 391-408 (18).

Groombridge, Brian and the World Conservation Monitoring Centre, Global Biodiversity: Status of the Earth's Living Resources. London and New York: Chapman and Hall, 1992. 585 pages, an oversized volume. \$ 59.95 hardbound. With sponsorship by the leading world conservation organizations. With a section on "Valuing Biodiversity." (v4,#2)

Gropp, R., "Are University Natural Science Collections Going Extinct?," Bioscience 53(no. 6, 2003): 550. (v 14, #3)

Gropp, RE, "United States Geological Survey: Science Serving Society," Bioscience 53(no.10, 2003):924-925. (v.14, #4)

Gross, Michael, Life on the Edge: Amazing Creatures Thriving in Extreme Environments. Plenum, 1998. \$ 25.95. The extent to which living organisms, predominantly single-celled, are found thriving in situations so extreme as to have been assumed, until recently, to be unable to support life. Bears on the origin of life on Earth, also the possibility of extra-terrestrial life. Also the ingenuity of life on Earth. (v.9,#4)

Gross, Paul R., Levitt, Norman, and Lewis, Martin W., eds., The Flight from Science and Reason. New York: New York Academy of Sciences, 1996. Distributed by Johns Hopkins University Press. 593 pages. A large volume with many contributors worried about the deconstruction, relativizing, contextualizing, or whatever, of science. One section is on the environment:

--Lewis, Martin, W., "Radical Environmental Philosophy and the Assault on Reason," pp. 209-230. The resentment of science embedded in fashionable ecomania must subvert or misdirect serious and necessary environmental initiatives. Lewis is the author of Green Delusions.

--Rothman, Stanley, and Lichter, S. Robert, "Is Environmental Cancer and Political Disease?," pp. 231-245. Scientists working in cancer epidemiology have a far different view of what constitutes a serious threat of environmental cancer than nonscientists who regard themselves as activists for environmental sanity. Rothman teaches government at Smith College. Lichter is the author of Keeping the News Media Honest.

--Denfeld, Rene, "Old Messages: Ecofeminism and the Alienation of Young People from Environmental Education," pp. 246-255. Contrasts the romantic eco-radicalism endemic among "difference" or "gender" feminists with the serious and committed environmentalism that it displaces or discourages. Young people, and young women especially, have had deflected their serious interest in environmental questions

by the sectarianism, the woolly self-righteousness, and the disdain for science that have characterized ecofeminism. Fortunately, "the message of ecofeminism, and of the environmental movement that adopts it, is unlikely ever to gain widespread support among upcoming generations" (p. 253). Denfeld is the author of The New Victorians: A Young Woman's Challenge to the Old Feminist Order. (v9,#2)

Gross, Rita M., "Toward a Buddhist Environmental Ethic," Journal of the American Academy of Religion 65(1997):333-353. The key is the concept of trishna, desire (Sanskrit), or tanha (Pali). "More is not better whether it is more people or more consumables. 'Growth,' the god we worship is a false idol, needing to be replaced by 'no growth,' if not by 'negative growth.' 'Growth' and 'more' represent the unbridled reign of trishna, not appreciation and reverence for the interdependent matrix of the environment in which we live and upon which we depend unconditionally ... With enough meditation and contemplation of interdependence, trishna will give way to equanimity." Gross is in religion at the University of Wisconsin, Eau Claire. (v8,#3)

Grossinger, Richard, ed., Ecology and Consciousness: Traditional Wisdom on the Environment. Berkeley, CA: North Atlantic Books, 1992.

Grossman, David, "An Overview of the Potential for Wildlife Utilisation in Bophuthatswana," NKWE Journal, Journal of Environmental Conservation in Bophuthatswana (official journal of the Bophuthatswana National Parks and Wildlife Management Board), no. 2, December 1992. Contact David Grossman and Associates, P. O. Box 29038, Sandringham 2131, South Africa. (v6,#3)

Group of Green Economists, The, Ecological Economics. London: Zed Books, 1992. The Group of Green Economists, associated with the German Greens, draw on various environmental, women's and human rights movements to argue that there are practical alternatives to the vast inequalities and social and environmental dislocations caused by two centuries of market-led industrialization and European colonial rule. (v4,#1)

Grove, Richard H., Ecology, Climate and Empire: Studies in Colonial Environmental History. Cambridge, UK: The White Horse Press, 1997. 250 pages. Concerns about climate change are far from being a uniquely modern phenomenon. The origins of present-day environmental debates about soil erosion, deforestation and climate change in early colonial administrators, doctors and missionaries. "Marginal" land and its ecology in the history of popular resistance movements. Grove is in environmental history at Australian National University and the University of Cambridge. (v9,#1)

Grove, Richard H., "Origins of Western Environmentalism." Scientific American 27 (no. 1, July 1992):42-47. Strategies to preserve nature arise early in the colonial period, in reaction to concerns about exploitation and abuse. Scientists played an important part in this burgeoning concern. Grove, a geographer at Cambridge in charge of the environmental history unit, thinks that the role of scientists in conservation history needs more recognition. (v3,#4)

Grove, Richard H., Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860. Cambridge, UK: Cambridge University Press, 1995, 1997. Grove is at the Institute of Advanced Studies, Australian National University, Canberra. (v.10,#3)

Grove, Robin. "Afterword: On 'Sound Science', the Environment, and Political Authority." Environmental Values 8(1999):277-282. Robin Grove, White Centre for the Study of Environmental Change Lancaster University Lancaster LA1 4YT, UK. (EV)

Grove-White, Robin, and Mike Michael. "Talking about Talking about Nature: Nurturing Ecological Consciousness." Environmental Ethics 15(1993):33-47. The increasing effort, both lay and academic, to encourage a transition from an "I-It" to an "I-Thou" relation to nature is located within a typology of ways

of "knowing nature." This typology provides the context for a particular understanding of human conversation which sees the relation as a cyclical process of "immersion" and "realization" from which a model of the dialectic between "I-It" and "I-Thou" relations to nature can be developed. This model can be used to identify practical measures that can be taken as first steps toward a balance between these relations, both in general and in the context of science-oriented nature conservation organizations such as English Nature in Britain (formerly, the Nature Conservancy Council). Grove-White is at the Centre for Study of Environmental Change, Lancaster University, Lancaster, UK. Michael is at the School of Independent Studies, Lancaster University, Lancaster, UK. (EE)

Grove-White, Robin and Bronislaw Szerszynski, "Getting Behind Environmental Ethics." Environmental Values Vol.1 No.4(1992):285-296. ABSTRACT: There are major problems in the way in which the environmental 'ethics' question is now being framed--problems which could lead to growing confusion and disillusionment, unless they are rapidly addressed and understood. It is on such problems that this paper focuses. We point to three dimensions of the environmental 'phenomenon' which prevailing accounts of environmental ethics are tending to overlook. We then identify several ways in which incomplete ethical models tend to be reflected in actual environmental policy discourse. Finally, we suggest three hitherto-absent ingredients which will need to be recognised if future models of the ethics question are to be able to reflect, and hence to engage adequately with, social reality. KEYWORDS: Culture, ethics, environmental policy, hermeneutics, technocracy. Centre for the Study of Environmental Change, Lancaster University, UK.

Grove-White, Robin. "Environment and Society: Some Reflections." Environmental Politics 4(Winter 1995):265. (v7,#2)

Groves, A. L., "Review of: Reflections on Water: New Approaches to Transboundary Conflicts and Cooperation, ed. Joachim Blatter and Helen Ingram," Journal of Environment and Development 11(no.3, 2002): 316-17. (v.13,#4)

Groves, Juliam McAllister. Hearts and Minds: The Controversy Over Laboratory Animals. Philadelphia: Temple University Press, 1997. \$49.95 cloth, \$18.95 paper. Groves tries to look past the placards and sound bites to get to the intellectual and psychological reasons that people use to explain their positions. She discards worn generalizations and offers a nuanced portrait of people who are seriously engaged in reconciling their ethics and their behavior. (v8,#1)

Grubb, M., C. Vrolijk and D. Brack. The Kyoto Protocol: A Guide and Assessment. London: Earthscan and Royal Institute of International Affairs, 1999. Review by Clive Spash, Environmental Values 10(2001):556. (EV)

Gruen, Lori, Review of Biehl, Janet, Rethinking Ecofemist Politics. Environmental Values Vol.1 No.1(1992):90.

Gruen, Lori and Dale Jamieson, eds., Reflecting on Nature: Readings in Environmental Philosophy. New York: Oxford University Press, 1994. 384 pages. Paper, \$ 24.95. The first anthology to highlight the problems of environmental justice and sustainable development. A multicultural perspective, featuring feminist and minority scholars and scholars from developing countries. Biodiversity loss, the meaning and significance of wilderness, population and overconsumption, and the human use of other animals. Readings span centuries of philosophical, naturalist, and environmental writing--Aristotle, Locke, Darwin, and Thoreau--as well as contemporary figures like Bernard Williams, Thomas Hill, Jr., and Jonathan Glover. Val Plumwood, Bill Devall, Murray Bookchin, and John Dryzek comprise a radical ecology section. The sections are: I. Images of Nature. II. Ethics and the Environment. III. Alternative Perspectives. IV. Sustainable Development and International Justice. V. Contemporary Issues and Controversies. Another fine anthology added to a list of a dozen anthologies and single authored volumes

that have appeared in the last two years, see listing in Newsletter, 4, 3. Both authors are in philosophy at the University of Colorado. (v4,#4)

Gruen, Lori, "On the Oppression of Women and Animals," Environmental Ethics 18(1996):441-444. Beth Dixon is unable to understand what is problematic about the categorical division between humans and other animals and so is unable to understand the ecofeminist argument against the oppression of animals. (EE)

Gruenfeld, Jay, Purple Hearts and Ancient Trees: A Forester's Life Adventures in Business, Wilderness, and War. Seattle, WA: Peanut Butter Publishing, 1998. 352 pages. Gruenfeld is an industrial forester and wilderness enthusiast. He runs his own forestry consulting business in the Seattle area, specializing in international log marketing. He earned two forestry degrees from Colorado State University and was a Fulbright scholar at Oxford University in philosophy and politics. He was an infantryman in combat in World War II in the Pacific, wounded five times and awarded the Purple Heart three times. Wilderness is vital to Gruenfeld, primarily because wilderness is the setting for his favorite forms of outdoor recreation. Nevertheless he would open up existing designated wilderness to commercial timber harvesting of about 25% of the total volume. The war theme returns in the Pacific Northwest, where there is a "war" between contesting parties over the future of the forests. (v.9,#3)

Grumbine, Ed, "No Going Back to Tradition," Review of: Meffe, G. K., L. A. Nelson, R. L. Knight, and D. A. Shenborn, Ecosystem Management: Adaptive, Community-Based Conservation. Washington, DC: Island Press, 2003. (v. 15, # 3)

Grumbine, R. Edward "Viable Populations, Reserve Size, and Federal Lands Management: A Critique," Conservation Biology, vol. 4, no. 2, June 1990. Current viable population theory and reserve size studies suggest that biological diversity for North American national parks and forests is inadequately protected, a problem compounded by lack of landscape-level management, competition between federal land management agencies, and bureaucratic inertia. An ecosystem management model for reform is outlined. (v1,#2)

Grumbine, R. Edward, Environmental Policy and Biodiversity. Washington, DC: Island Press, 1994. 416 pages. 21 articles. \$ 22.00 paper. \$ 45.00 hardbound. Four parts: Conservation Biology: Theories and Principles for Policy and Management; Toward a Common Law of Ecosystem Management; Applying Conservation Biology in the Real World: Case Studies; Conservation Science, Politics, and Policy-Making. Sample articles: Michael Soule and Daniel Simberloff, "What Do Genetics and Ecology Tell Us about the Design of Nature Reserves?"; Daniel J. Rohlf, "Six Biological Reasons Why the Endangered Species Act Doesn't Work and What to Do about It"; Susan MacKenzie, "Great Lakes Intergovernmental Cooperation: A Framework for Endangered Species Conservation"; Donald Ludwig, Ray Hilborn, and Carl Walters, "Uncertainty, Resource Exploitation, and Conservation: Lessons from History." Grumbine is director of the Sierra Institute, University of California Extension, Santa Cruz. (v5,#4)

Grumbine, R. Edward, Ghost Bears: Exploring the Biodiversity Crisis. Washington, DC: Island Press, 1992. 336 pages. \$ 25.00 hardcover. A species centered approach will ultimately fail to protect ecosystems and diversity. Using the fate of the endangered grizzly bear (the "ghost bear") to explore the causes and effects of species loss and habitat destruction, Grumbine surveys the big picture, weaving together conservation biology, natural history, environmental policy, law, ethics, and grassroots activism into a comprehensive conservation strategy. Grumbine urges that humanity enter into a greater partnership with nature, working with it, rather than attempting to control it. Reed Noss says, "I have seen no better rendering of modern conservation science into readable prose." Grumbine is Director of the Sierra Institute, University of California Extension, Santa Cruz. (v3,#4)

Grumbine, R. Edward, "What is Ecosystem Management?" Conservation Biology 8(no. 1, March 1994):27-38. The evolving model of ecosystem management is analyzed for a working definition. There are five specific goals: maintaining viable populations, ecosystem representation, maintaining ecological processes, such as natural disturbance regimes, protecting evolutionary potential of species and ecosystems, and accommodating human use in the light of these goals. Short-term and long-term policy implications are reviewed, including evaluation success. Ecosystem management is not just about science nor is it simply an extension of traditional, resource management. It requires a fundamental reframing of how humans may work with nature. Grumbine directs the Sierra Institute, University of California Extension, Santa Cruz. (v5,#2)

Grumbine, R. Edward. "Reflections on "What is Ecosystem Management?" Conservation Biology 11 (no.1, 1997):41. Ten dominant themes of ecosystem management, described in a previous paper, reviewed on the basis of feedback from managers actively implementing ecosystem management. Key points include the importance of managing for ecological integrity, the need for social as well as scientific data, suggestions for implementing cooperation strategies and conservation partnerships, a pragmatic definition of adaptive management, and first steps toward changing the structure of natural resource organizations. Grumbine is at the Sierra Institute, University of Santa Cruz, CA. (v8,#2)

Grumbine, R. Edward, "Cooperation or Conflict? Interagency Relationships and the Future of Biodiversity for U.S. Parks and Forests," Environmental Management 15, no.1, 1990. So far the Forest Service and the National Park Service have done little cooperatively to implement the biodiversity mandates of such laws as the Endangered Species Act and the National Forest Management Act. The ideological and political histories of the Forest Service and the Park Service are explored to determine the roots of interagency conflicts. Several recent models of cooperative reform are critiqued. Cooperation must be framed within conservation biology and must place primary emphasis on ecosystem patterns and processes as well as on individual species. Management policies must be reframed within a context of ecocentric values. Grumbine is Director, the Sierra Institute, University of California, Santa Cruz. (v1,#4)

Grumbine, R. Edward. "Using Biodiversity as a Justification for Nature Protection," Wild Earth 6(1996):71. (v8,#1)

Grumbine, R. Edward, "Wildness, Wise Use, and Sustainable Development." Environmental Ethics 16(1994):227-249. Ideas of wilderness in North America are evolving toward some new configuration. Current wilderness ideology, among other weaknesses, has been charged with encouraging a radical separation between people and nature and with being inadequate to serve the protection of biodiversity. Sustainable development and "wise use" privatization of wildlands have been offered as alternatives to the Western wilderness concept. I review this wilderness debate and argue that critical distinctions between wildness and wilderness and self and other must be settled before alternatives can be considered. I look closely at arguments for sustainable development and argue that the limits on the human use of nature are discounted and technological management of wildlands is emphasized. I also argue that the "wise use" response to wilderness is a radically utilitarian option that does not contribute to evolving ideas of wilderness or sustainability and that replacing the sustainable development idea with sustainable landscape protection might better serve both wildness and human projects. Finally, I offer the ways of life of post-migratory ecosystem-based cultures as models of appropriate human behavior within a management framework of habitat protection for viable populations of all native species and conclude that our purpose in protecting wildness is not to preserve nature or to improve it, but rather to learn a sense of limits from it and to model culture after it. Grumbine is with the Sierra Institute, University of California, Santa Cruz. (EE)

Grun (Grün), Mauro, Review of J.B. Callicott and F.J. da Rocha, Earth Summit Ethics. Environmental Values 7(1998):367.

Grundy, K. J., and Gleeson, B. J. "Sustainable Management and the Market: The Politics of Planning Reform in New Zealand." Land Use Policy 13, no.3 (1996): 197. (v7, #3)

Grunert, Suzanne C. Environmental Economics, Sustainable Development, "Green" Marketing, Eco-management, and the Like: A highly selective, partly annotated bibliography of research conducted in Europe and North America since the 70's. Aarhus, Denmark, CeSaM Working Paper No. 5 (Science Park Aarhus, Gustav Wieds Vej 10, DK-8000 Aarhus C, Denmark), 1995. 112 pages. This bibliography contains some 800 references on all kinds of aspects under the general heading "ecology and economy." It picks up the European references likely to be missed in American-based bibliographies. Books, anthologies, articles, working papers, and conference papers are listed. Most articles are provided with a summary and many books are annotated descriptively by the author. Also available as a database on Macintosh "Endnote." Grunert is in marketing at Odense University, Odense, Denmark. (Thanks to Martin Ishoy, Theology, University of Aarhus.)

Grunwald, Michael, "Departmental Differences Show Over ANWR Drilling," Washington Post (10/19/01): A1. ANWR debate rages on. Drilling for oil in Alaska's Arctic National Wildlife Refuge (ANWR) continues to be hotly contested. Proponents have recently been arguing for the drilling on national security grounds, as a way of lessening the U.S.'s dependence on foreign oil. Opponents of ANWR drilling argue that even if proponents are right that there is a 2-3 year U.S. supply of oil there (rather than the 6 month supply the opponents claim), the oil won't be available for years. Opponents also argue that raising automobile fuel efficiency standards would save us more oil overall and sooner. At recent Congressional hearings, U.S. Interior Secretary Gale Norton was accused by opponents of slanting her testimony about whether or not drilling would affect the Porcupine Caribou Herd which uses ANWR's coastal plain (where the oil is) to calve. Norton had asked Interior's own Fish and Wildlife Service for information on this issue and then selected only that part of their report that suited her pro-drilling purposes. She also cited a peer-review caribou study that concluded oil development would have no impact on the caribou.

Opponents argued that the study was funded by BP Exploration (British Petroleum is one of the companies hoping to drill in ANWR). Given the conflicting studies, it seems reasonable to assume that we do not know how significantly the Porcupine Herd would be affected by oil development. But this uncertainty can itself be seen as a reason to forgo this development. Alaska's Gwich'in Indians continue to hunt this herd as part of a largely subsistence way of life. Significant disturbance of these caribou would threaten their cultural survival. Even a small chance of causing cultural genocide would seem to be enough to prohibit an optional activity of this sort. For a helpful discussion of the ANWR debate, see Sandra Hinchman, "Endangered Species, Endangered Culture: Native Resistance to Industrializing the Arctic" paper given at Seventh World Wilderness Congress, November 2-8, 2001, Port Elizabeth, South Africa. Paper available from Hinchman at shinchman@stlawu.edu. Hinchman is Professor of Government at St. Lawrence University in Canton, New York. (v.12,#4)

Grutter, Theo, Dancing with Mosquitoes: To Liberate the Mind from Humanism--A Way to Green the Mind. New York: Vantage Press, 2000. Introduced as a "non-scholarly, eclectic piece of writing, which has turned quite unplanned into some rather unconventional research into the roots of ecology," by the author, who adds that "all my income to support our family for the last 35 years has come from a few years logging and then from fishing." "It has been slow for me to bring my activity at sea into harmony with my thoughts. ... Some ideas, though, only make sense when one becomes accustomed to stepping out of the bewitching circle humanism draws around itself" (pp. xvii-xviii). (v.11,#3)

Gruzalski, Bart. Review of Beyond Growth: The Economics of Sustainable Development. By Herman Daly. Environmental Ethics 21(1999):93-96.

Gruzalski, Bart. Review of Ethics of Consumption. Edited by David A. Crocker and Toby Linden. Environmental Ethics 22(2000):329-332.

Gruzalski, Bart. "Gandhi's Contributions to Environmental Thought and Action." Vinay Lal raises doubts about Gandhi's status as an environmentalist but argues that Gandhi had "a profoundly ecological view of life." I take issue with Lal's claims and, to set the record straight, describe Gandhi's contributions to environmental thought and action. When we look at the aims of contemporary environmental spokespersons and activists, Gandhian themes are dominant. Gandhian biocentrism and Gandhi's recommendation not to harm even nonsentient life unnecessarily are familiar in contemporary environmental thinking. Gandhian non-violence is both a technique of environmental activists and, for some, one of the constituents of the world for which they struggle. Gandhi emphasized simple living, an important theme for many who are concerned about looming ecological crises. Taking a broader perspective, Gandhi criticized what we today call globalization and encouraged, in its place, the decentralization of economic activities. Gandhi's emphasis on decentralization and local economic self-reliance led to the Chipko movement in India. Gandhi's emphasis on small-scale economies, on self-reliant communities, and on appropriate technology paved the way for the "small is beautiful" approach. Gandhi's recommendation that we live in self-reliant rural communities, if implemented, would significantly decrease that consumption which is causing climate change and straining the capacity of the planet. Environmental Ethics 24(2002):227-242. (EE)

Grzybowski, Donald M., et al, "A Historical Perspective Leading Up to and Including the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks," Pace Environmental Law Review 13 (no. 1, 1995): 49-74. (v8,#2)

Guclu, K; Karahan, F, "A review: the history of conservation programs and development of the national parks concept in Turkey", Biodiversity and Conservation 13 (no.7, 2004): 1373-1390(18).

Gudorf, Christine E. and Huchingson, James E., Boundaries: A Casebook in Environmental Ethics. Washington, DC: Georgetown University Press, 2003. The Everglades, Java forests, endangered ecosystems or endangered cultures in Madagascar, nuclear waste, coral reefs, hydropower or free-flowing rivers, genetically modified foods, hunting in India, xenotransplants. Gudorf and Huchingson are in religious studies, Florida International University. (v.14, #4)

Gudynas, Eduardo, "Política ambiental: ¿Global o latinoamericana" ("Environmental Politics: Global or Latin-American?" Evidencia (San José, Costa Rica) 1, no. 5, 10-12, 1991. (v3,#2)

Gudynas, Eduardo, "Una Extraña Pareja: Los Ambientalistas y el Estado en America Latina" ("The Odd Couple: Environmentalists and the State in Latin America"), Ecología Política (Barcelona, Spain) 3(1992):51-64. (v3,#2)

Gudynas, Eduardo and Graciela Evia, La Praxis por la Vida: Introducción a las metodologías de la Ecología Social (Praxis for Life: Introduction to the Methodologies of Social Ecology). 276 pages. Paperback. Montevideo, Uruguay: CIPFE (Centro de Investigación y Promoción Franciscano y Ecología) and CLAES (Centro Latino Americano de Ecología Social), 1991. Gudynas is academic dean and professor at the Franciscan University of Latin America in Montevideo and in charge of environment and development programs at CLAES. Evia is a researcher and coordinator of the Latin American Network on Social Ecology. (v3,#2)

Gudynas, Eduardo. Review of Filosofía ambiental. By Daniel Vidart. Environmental Ethics 10(1988):271-73.

Guehlstorf, Nicholas P., "Understanding the Scope of Farmer Perceptions of Risk: Considering Farmer Opinions on the Use of Genetically Modified (GM) Crops as a Stakeholder Voice in Policy," *Journal of Agricultural and Environmental Ethics* 21(2008):541-558. In the beginning, policy debates between critics and advocates of genetically modified (GM) crops focused on scientifically determined risks. Ten years later, the argument between environmentalists or consumers and regulators or industry has changed into a discussion about the implementation of more democratic policymaking about GM farming. A notable omission from the political debate about food biotechnology in the United States, however, is the opinion of farmers who cultivate the GM crops. Policymakers should value practical knowledge based on experiences from farmers, not only scientific industry reports or consumer product opinions. This project uses in-depth interviews to create an original mail survey that uses the practical discourse of farmers in order to explore the relationship of farmer attitudes and GM agriculture. Although national research indicates that larger yields are the most common reason for GM adoption, qualitative information suggest that the potential of GM crops to increase revenue per acre does not truly reflect all the concerns of modern farmers. For example, farmers who use GM seeds indicate that they constantly question the social impacts of their agricultural practices. As such, GM policies should be restructured as a political rationalization of both economic modeling and political theory because this research suggests that farmers' business decisions are utility calculations that consider economics without ignoring environmental and political contexts. Farmers' concerns about non-economic risks suggest that they need more information about GM crops and that governmental policies should respond to their interests, as they are more democratic or pluralistic than industry or consumer arguments. The author is in the Political Science Department and Environmental Sciences Program, Southern Illinois University Edwardsville, Edwardsville, IL.

Guelke, Jeanne Kay. Review of *The Natural History of the Bible: An Environmental Exploration of the Hebrew Scriptures*. By Daniel Hillel. *Environmental Ethics* 29(2007):91-93. (EE)

Guelke, Jeanne Kay. "Looking for Jesus in Christian Environmental Ethics." *Environmental Ethics* 26(2004):115-134. Jesus' teachings on neighborliness, frugality, support for the poor, and nonviolence should become more central to Christian environmental ethics. His action-oriented teachings do not explicitly mention nature, yet should have a beneficial collateral effect on environments when practiced by Christian communities. This issue affects Christian economics, simple causality models of environmental beliefs and impacts, and "love of nature" theology. (EE)

Guelke, Jeanne Kay. Review of Judaism, Environmentalism and the Environment: Mapping and Analysis. By Manfred Gerstenfeld. *Environmental Ethics* 24(2002):223-224. (EE)

Guerrer, Y; Alexander, N; Chase, J.; and O'Brien, M, eds. Values and the Environment: A Social Science Perspective. Chichester, West Sussex, UK: John Wiley & Sons, 1995. 256 pp. (v8,#2)

Guerrier, Yvonne, Alexander, Nicholas, Chase, Jonathan, O'Brien, Martin, eds. Values and the Environment: A Social Science Perspective. Chichester, UK and New York: John Wiley and Sons, 1995. 220 pp. Contains:

--Redclift, Michael R., "Values and Global Environmental Change," pp. 7-18. The way science and social science have developed since the nineteenth century have divorced the study of nature from the study of society and this makes it particularly difficult to address environmental issues.

--Clift, Roland, Burningham, Kate, Löfstedt, Ragnar E., "Environmental Perspectives and Environmental Assessment," pp. 19-32. Using wind power and the use of wind turbines, the authors critique the ways engineers traditionally assess environmental problems.

--Parker, Jenneth, "Enabling Morally Reflective Communities: Towards a Resolution of the Democratic Dilemma of Environmental Values in Policy," pp. 33-50. An "expert" model contrasted with a "process model," where the aim is to develop morally reflective communities that can take stewardship over the

local environment.

--Smith, Mick, "A Green Thought in a Green Shade: A Critique of the Rationalisation of Environmental Values," pp. 51-60. Challenges "experts" such as environmental economists and moral philosophers, who claim to have conceptual systems and methodologies to evaluate the natural world. They fail to recognize that their frameworks arise from and support the society they wish to criticise.

--Chase, Jonathan, Panagopoulos, Ioannis S., "Environmental Values and Social Psychology: A European Common Market or Commons' Dilemma?" pp. 67-80. Identity processes are important factors in valuing the environment. Particular identities tend to emphasise different values.

--Clark, Judy, "Cormcrakes and Cornflakes: The Question of Valuing Nature," pp. 81-94. A review and criticism of the contingent valuation method.

--Burningham, Kate, "Environmental Values as Discursive Resources," pp. 95-104. Discourse analysis, a set of theoretical and methodological approaches based on linguistics and psychology, used to critique the assumption that one can simply uncover people's values.

--Pearson, Peter J.G., "Environmental Priorities in Different Development Situations: Electricity, Environment and Development," pp. 111-124. The domestic problems of individual states as these are or are not shared by groups of states. Developing countries and industrialized do not face the same economic issues in respect of energy use, and do not have the same priorities.

--Hedger, Merylyn McKenzie, "Wind Farms: A Case of Conflicting Values," pp. 125-138. Wind farms in the U.K., especially Wales.

--Doupé, Michael John, "Orthodoxy and the Judiciary's Approach to Environmental Impairment: Legal Foresight and Environmental Myopia," pp. 139-150. The judiciary's response to environmental problems through the interpretation of laws in England, especially water pollution.

--Bonnes, Mirilia, Bonaiuto, Marino, "Expert and Layperson Evaluation of Urban Environmental Quality: The 'Natural' versus the 'Built' Environment," pp. 151-164. Expert vs. layperson and their apparent inconsistencies.

--Uzzell, David L., Rutland, Adam, Whistance, David, "Questioning Values in Environmental Education," pp. 171-182. Secondary education.

--Dibble, Dominic, "Education for Environmental Responsibility: An Essential Objective," pp. 183-194. A general call for new educational strategies for environmental education.

--Haigh, Martin J. "World Views and Environmental Action: A Practical Exercise," pp. 195-208. Hands-on experience not primarily with the physical constituents of natural environments but with their cultural, aesthetic, and social meanings.

Guerrier is at South Bank University, UK; Alexander at the University of Ulster, UK; Chase and O'Brien at the University of Surrey, UK. (v9,#1)

Guevara, Sergio and Javier Laborde. "The Landscape Approach: Designing New Reserves for Protection of Biological and Cultural Diversity in Latin America." *Environmental Ethics* 30(2008):251-262. One of the greatest challenges for Latin America and the Caribbean, the most biologically and culturally diverse region in the world, is to halt the loss of species caused by habitat destruction and land degradation. Up to now, setting aside protected natural areas is considered the most effective alternative to conserve biodiversity. Protected areas, however, are under increasing assault by agricultural, silvicultural, and industrial development that surround and isolate them, reducing their habitat quality at the landscape scale. Among the different types of protected areas that have been proposed, biosphere reserves stand out for their attempt to compatibilize social development and conservation. Their management is the most amenable to integration of natural and human disturbance, inclusion of traditional management techniques, and participation by social and economic sectors in the administration. Biosphere reserves have proliferated all over the world, and today there are 531 of them located in 105 countries, where they protect vast ecological and cultural diversity. Even though the design of biosphere reserves is based on the landscape concept, it has yet to take into account ecosystem scales, possible long-term effects of disturbances, and better integrate and give higher consideration to the knowledge and experience of numerous ethnic groups that live within them. However, doing so requires a transformation of the

function of the core, buffer, and transition areas. The current design of biosphere reserves is centripetal because the main function of the buffer zone is to protect biodiversity in the core. We propose a centrifugal model, where biodiversity of the core spreads freely toward the area of greater human influence with the buffer zone functioning as a connector. This connectivity can promote land-use practices that are in alignment with both ecosystems functioning and biodiversity conservation in natural, semi-natural, urban and industrial landscapes. (EE)

Guha, R, "The Prehistory of Community Forestry in India," Environmental History 6(no.2, 2001):213-238. (v.12,#4)

Guha, Ramachandra, The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya (Berkeley, University of California Press, 1990). \$ 29.95. A study of India's forests, its people, and its state. Guha focuses on a series of peasant movements against commercial forestry, up to and including the Chipko (hug the trees) movement. The author claims that Chipko, mistakenly characterized solely as an environmental movement, is above all a peasant struggle in defense of forest rights. (v1,#3)

Guha, Ramachandra, "The Prehistory of Community Forestry in India," Environmental History 6(no.2, 2001 Apr 01): 213-. (v.12,#3)

Guha, Ramachandra, Environmentalism: A Global History. New York: Longman. Reviewed by Sheppard, James W. Ethics and the Environment 8(no. 2, 2003):132-139.

Guha, Ramachandra, The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya. Berkeley: University of California Press, 1989, 1990. 214 pages. Domination and resistance in the forests of the Himalayas, scientific forestry and the alienation of humans from nature, rebellion and protest against commercial forestry over the decades of this century, the Chipko movement. "Third World capitalism, then (seen in such commercial forestry), is a gross caricature of European capitalism, reproducing and intensifying its worst features without holding out the promise of a better tomorrow" (p. 195). "From an ecological perspective, therefore, peasant movements like Chipko are not merely a defense of the little community and its values, but also an affirmation of a way of life more harmoniously adjusted with natural processes" (p. 196). Guha is with the Nehru Memorial Museum and Library in New Delhi.

Guha, Ramachandra, "Radical American Environmentalism and Wilderness Preservation: A Third World Critique," Environmental Ethics 11(1989):71-83. Criticism of the basic tenets of deep ecology in their application to Third World policies, but the argument rests on equating deep ecology with "wilderness preservation." The Third World is still trapped in the framework of anthropocentric use-values for nature. (Katz, Bibl # 2)

Guha, Ramachandra, "The Authoritarian Biologist and The Arrogance of Anti-Humanism: Wildlife Conservation in the Third World," The Ecologist 27(no. 1, January/February 1997):14-20. "Five major groups together fuel the movement for wildlife conservation in the Third World. The first are city-dwellers and foreign tourists who season their lives a week or a month at a time with sojourns in 'the wild'. Their motive is straightforward: pleasure and fun. The second group comprises ruling elites who view the protection of species, the tiger in India, for instance, as central to the retention or enhancement of national prestige. Spurring on this process is a third group, international conservation organizations, such as the International Union for Conservation and Nature (IUCN) and the Worldwide Fund for Nature (WWF), which work to 'educate' people and politicians to the virtues of biological conservation. A fourth group consists of functionaries of the state Forest of Wildlife Service which is mandated by law to control the parks. While some of these officials are inspired by a love of nature, the majority--at least in India--are often motivated by the power and benefits (overseas trips, for example) that come with the job.

The final group are biologists, who believe in wilderness and species preservation for the sake of 'science'.

These five groups tend to be united in their hostility to the farmers, herders, swiddeners and hunters who have lived in the 'wild' from well before it became a 'park' or 'sanctuary'. They regard these human communities as having a destructive effect on the environment, their forms of livelihood aiding the destruction of species and contributing to soil erosion, habitat simplification, and worse. Their feelings are often expressed in strongly pejorative language."

"Wildlife conservation programs in the Third World have all too often been premised on an antipathy to human beings. ... This prejudice against people is leading to new forms of oppression and conflict. Biologists, who seek to preserve wilderness for the sake of 'science', have been a major force in fomenting such prejudice." Guha is a historian in Bangalore, India.

Guha, Ramachandra. "Radical American Environmentalism and Wilderness Preservation: A Third World Critique." *Environmental Ethics* 11(1989):71-83. (EE) I present a Third World critique of the trend in American environmentalism known as deep ecology, analyzing each of deep ecology's central tenets: the distinction between anthropocentrism and biocentrism, the focus on wilderness preservation, the invocation of Eastern traditions, and the belief that it represents the most radical trend within environmentalism. I argue that the anthropocentrism/biocentrism distinction is of little use in understanding the dynamics of environmental degradation, that the implementation of the wilderness agenda is causing serious deprivation in the Third World, that the deep ecologist's interpretation of Eastern traditions is highly selective, and that in other cultural contexts (e.g., West Germany and India) radical environmentalism manifests itself quite differently, with a far greater emphasis on equity and the integration of ecological concerns with livelihood and work. I conclude that despite its claims to universality, deep ecology is firmly rooted in American environmental and cultural history and is inappropriate when applied to the Third World. Guha is at the Centre for Ecological Sciences, Indian Institute of Science, Bangalore, India. (EE)

Guha, Ramachandra. *How Much Should a Person Consume? Environmentalism in India and the United States*. Berkeley: University of California Press, 2006. Environmental philosophy in India is "agrarian," contrasted with "wilderness" in the U.S. Guha wants an inclusive "social ecology" framework that goes beyond both "partisan ideologies" to a richer understanding of controversies over large dams, state forests, wildlife reserves and conservation.

Guichard, Frederic; Levin, Simon A; Hastings, Alan; Siegel, David, "Toward a Dynamic Metacommunity Approach to Marine Reserve Theory", *BioScience* 54(no.11, November 2004):1003-1011(9). Coastal habitats have recently received much attention from policymakers, but marine reserve theory still needs to integrate across scales, from local dynamics of communities to biogeographic patterns of species distribution, recognizing coastal ecosystems as complex adaptive systems in which local processes and anthropogenic disturbances can result in large-scale biological changes. We present a theoretical framework that provides a new perspective on the science underlying the design of marine reserve networks. Coastal marine systems may be usefully considered as metacommunities in which propagules are exchanged among components, and in which the persistence of one species depends on that of others. Our results suggest that the large-scale distribution of marine species can be dynamic and can result from local ecological processes. We discuss the potential implications of these findings for marine reserve design and the need for long-term monitoring programs to validate predictions from metacommunity models. Only through an integrated and dynamic global perspective can scientists and managers achieve the underlying goals of marine conservation.

Guillermo, K. S., Monkey business: The disturbing case that launched the animal rights movement. Washington, DC: National Press Books, 1993.

Guiste, Averil. "Ontario's Environmental Bill of Rights Weakened But Still Viable." Alternatives 22(Jul. 1996):9. (v7,#2)

Guix, Juan Carlos, "Evidence of Archaeophytes in Amazonian Forests: An Assessment to Seed Dispersal by Indians in pre-Columbian Times," in Rabistch W, Klingenstein F., Essi F, eds. Fourth European Conference on Biological Invasions, Vienna. Neobiota. Bfn-Skripten 184:140. Bundesamt für Naturschutz. Bonn, 2006. The author finds significant numbers of large-fruited or seeded plant species near former Indian settlements and argues that this suggests the participation of humans in seed dispersal, especially along river margins and especially of palms. The humans may have carried (or defecated) the seeds there, or they may have been involved in agriculture. Guix is in biology, Universitat de Barcelona, Barcelona, Spain. jcguix@pangea.org

Gujja, Biksham, and Finger-Stich, Andrea. "What Price Prawn? Shrimp Aquaculture's Impact in Asia." Environment 38, no.7 (1996): 12. While it generates enormous profits, the aquaculture industry exacts a steep environmental price on coastal landscapes. (v7, #3)

Gulbrandsen, L. H., "The Evolving forest Regime and Domestic Actors: Strategic or Normative Adaptation?," Environmental Politics 12(no. 2, 2003): 95-114.

Gulick, John, "The "Disappearance of Public Space": An Ecological Marxist and Lefebvrian Approach," Philosophy and Geography 2 (1998): 135-155. Gulick is a Ph.D. candidate in the Department of Sociology at the University of California, Santa Cruz. (P&G)

Gulick, Walter B., "The Bible and Ecological Spirituality," Theology Today 42(2)(1991):182-194. Gulick is in Philosophy and Religious Studies, Eastern Montana College, Billings.

Gullison, Raymond E., Peter C. Frumhoff, Josep G. Canadell, Christopher B. Field, Daniel C. Nepstad, Katherine Hayhoe, Roni Avissar, Lisa M. Curran, Pierre Friedlingstein, Chris D. Jones, and Carlos Nobre. "Tropical Forests and Climate Policy." Science Vol. 316, no. 5827 (18 May 2007): 985-86. New science underscores the value of a climate policy initiative to reduce emissions from tropical deforestation. Tropical deforestation released about 1.5 billion metric tons of carbon to the atmosphere annually throughout the 1990s, accounting for almost 20% of anthropogenic emissions. Drought-induced tree mortality, logging, and fire may double such emissions in the near future.

Gunderson, Lance H., Holling, C. S., Light, Stephen S., eds. Barriers and Bridges to the Renewal of Ecosystems and Institutions. New York: Columbia University Press, 1996. 593pp. \$52.50 cloth. Continuing a series on adaptive environmental management, the authors review the management histories in the New Brunswick forests, the Everglades, the Chesapeake Bay, the Columbia River, the Great Lakes, and the Baltic Sea, demonstrating how people and ecosystems coevolve. In addition, contributors from the social sciences suggest broad critical strategies for surmounting barriers and renewing damaged ecosystems. (v7,#4)

Gunewardena, Nandini, and Mark Schuller, eds. *Capitalizing on Catastrophe: Neoliberal Strategies in Disaster Reconstruction*. Walnut Creek, CA: AltMira Press, 2008. An international group of scholars and professionals critically examine how local communities around the world have prepared for and responded to recent cataclysms. The book's principal focus is the increasing trend to rely on the private sector to deal with natural disasters and other forms of large-scale devastation, from hurricanes and tsunamis to civil wars and industrial accidents. Called "disaster capitalism" by its critics, the tendency to contract private interests to solve massive, urgent public problems may be inevitable but is extremely problematic - especially with respect to peoples who need help the most. Can private relief groups give the highest priority to potential and actual victims of large disasters, for example, if that means devoting

fewer resources to protecting tourism and other profitable industries?

Gunn, Alastair S. "Traditional Ethics and the Moral Status of Animals." Environmental Ethics 5(1983):133-54. Most philosophical discussion of the moral status of animals takes place within a context of traditional ethics. I argue that the conceptual apparatus of utilitarianism and rights theory is historically and logically tied to an individualistic, atomistic concept of society. The liberal-democratic tradition is thus an unsuitable framework for understanding, analyzing, and solving environmental problems, including the moral status of animals. Concepts such as stewardship or trusteeship are more appropriate for the development of an environmental ethic. Gunn is at the Philosophy Dept., University of Waikato, Hamilton, New Zealand. (EE)

Gunn, Alastair S. "Why Should We Care about Rare Species?" Environmental Ethics 2(1980):17-37. Concern for the fate of rare species leads us to ask why the extermination of species is wrong. No satisfactory account can be given in terms of animal rights, and a speciesist perspective can yield at best only a case for preservation of those species which enough people happen to care about. An attempt is made to analyze the concept of rarity, and its relation to value. Finally, it is suggested that the problem can be resolved only in terms of an environmental ethic, according to which the existence of each species, and of ecological wholes, is held to have intrinsic value. Gunn is at the Philosophy Dept., University of Waikato, Hamilton, New Zealand. (EE)

Gunn, Alastair S. "The Restoration of Species and Natural Environments." Environmental Ethics 13(1991):291-310. My aims in this article are threefold. First, I evaluate attempts to drive a wedge between the human and the natural in order to show that destroyed natural environments and extinct species cannot be restored; next, I examine the analogy between aesthetic value and the value of natural environments; and finally, I suggest briefly a different set of analogies with such human associations as families and cultures. My tentative conclusion is that while the recreation of extinct species may be logically impossible, the restoration of natural environments raises only (formidable, no doubt) technical difficulties. Opponents of destructive developments which do not exterminate species, therefore, had better look elsewhere, rather than relying on the claim that restoration is logically impossible. Gunn is in the department of philosophy, University of Waikato, Hamilton, New Zealand. (EE)

Gunn, Alastair S. and P. Aarne Vesilind. Environmental Ethics for Engineers. Reviewed in Environmental Ethics 10(1988):177-79.

Gunn, Alastair S., McCallig, Carolyn, "Environmental Values and Environmental Law in New Zealand," Ethics and the Environment 2(1997):103-119. We examine the relation between environmental ethics and environmental law, focusing on the New Zealand Resource Management Act 1991. This is a comprehensive and philosophically grounded statute that was the first of its kind in the world. We analyze key concepts in the law including sustainability, resources, stewardship, natural character, and intrinsic law, which we try to resolve from a "weak anthropocentric" position. Gunn is on the faculty in philosophy, McCallig a graduate student, at the University of Waikato, Hamilton, New Zealand. (E&E)

Gunn, Alastair S. "Rethinking Communities: Environmental Ethics in an Urbanized World." Environmental Ethics 20(1998):341-60. Humans have largely transformed the natural environment and there is scarcely an area of the world which has not been affected by human activity. Human domination of the environment, in particular by the creation of infrastructure, urbanization, and conversion to agriculture, has mostly proceeded in an unplanned and frequently destructive manner. Almost fifty percent of humans already live in cities and this proportion will continue to grow. However, issues of urbanization are little addressed in the environmental philosophical literature. I explore community and sustainability in an urban context, drawing on the work of the landscape architect Ian McHarg who, I argue, may have more to offer an urbanized world than iconic figures such as Aldo Leopold. Gunn is in

philosophy, University of Waikato, Hamilton, New Zealand. (EE)

Gunn, Alastair S., and Tudhope, Kelly A., "The Report of the (New Zealand) Royal Commission on Genetically Modified Organisms: Ethical, Cultural and Spiritual Issues of Field Release," Organic NZ, September/October 2002, pp. 12-13. "We think the Commission's recommendations are wrong because it didn't give enough weight to ethical and cultural concerns, and underestimated risks. Furthermore, it derives conclusions that are inconsistent with both the general principles that it praises and with much of the material submitted to it, and advocates a dangerous experiment that carries serious risk of irreversible harm." "We think any field release is undesirable, because of the environmental and cultural risks and potential loss of intrinsic value." "The Report is a bit of a puzzle because someone reading it might almost imagine that the first half was written by staff from the Department of Conservation and the second half by the Business Roundtable." Gunn is in philosophy, University of Waikato. Tudhope is a law/philosophy student at the University of Waikato, New Zealand. (v.13,#4)

Gunn, Alastair S. Book Review of Ethics and the Built Environment. Edited by Warwick Fox. Environmental Ethics 26(2004):217-220. (EE)

Gunn, Alastair S., "Environmental Ethics and Trophy Hunting," Ethics and the Environment 6(no. 1, 2001):68-95. In the environmental literature, there is a spectrum of views on hunting. At one end is the view that hunting is justified only for self protection and for food, where no other reasonable alternative is available. Most writers also agree that hunting is sometimes justified in order to protect endangered species and threatened ecosystems where destructive species have been introduced or natural predators have been exterminated. Others accept hunting as part of cultural tradition or for the psychological well being of the hunter, sometimes extended to include recreational hunting when practiced according to "sporting" rules. Nowhere in the literature, so far as I am aware, is hunting for fun, for the enjoyment of killing, or for the acquisition of trophies defended. However I argue that trophy hunting is essential in parts of Africa for the survival of both people and wildlife. Gunn is in philosophy, University of Waikato, Hamilton, New Zealand. (E&E)

Gunn, Alastair S. Review of Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism. By Warwick Fox. Environmental Ethics 15(1993):181-83.

Gunn, Alastair S. "Environmental Ethics and Tropical Rain Forests: Should Greens Have Standing?" Environmental Ethics 16(1994):21-41. Almost everyone in the developed world wants the logging of tropical rain forests to stop. Like Antarctica, they are said to be much too important and much too valuable to be utilized just for development and are said to be part of a global heritage. However, it is not that simple. People in the developing world consider our criticisms to be ill-informed, patronizing, and self-serving. We are seen as having "dirty hands." They hold that we neither have nor deserve moral standing as critics until we change our trade policies, rhetoric, and extravagant lifestyles. Gunn is in the department of philosophy, University of Waikato, Hamilton, New Zealand. (EE)

Gunn, Alastair S., and P. Aare Vesilind, Environmental Ethics for Engineers. Chelsea, Michigan: Lewis, 1986. Pp. 153. A good introductory textbook on environmental issues and engineering practice. Although designed for the specific use of engineering undergraduates, it would be useful in any course on moral problems. There is a brief introduction to the ethical dimensions of engineering and to the theoretical arguments in environmental ethics. The remainder of the book is a collection of essays and environmental disaster case-studies. The philosophy essays include Aldo Leopold's "The Land Ethic," Garrett Hardin's "Tragedy of the Commons," and excerpts from Christopher Stone's "Should Trees Have Standing?" These classics in the field of environmental ethics are all accessible to the nonspecialist. (Katz, Bibl # 1)

Gunn, Alastair S. "The Female is Somewhat Duller." Environmental Ethics 24(2002):109-110. (EE)

Gunnarsdottir, A., "Physical Attractiveness of an Animal Species as a Decision Factor for its Preservation," Anthrozoös 14(no. 4, 2001):204-215.

Gunster, Shane, "'You Belong Outside': Advertising, Nature, and the SUV," Ethics and the Environment 9(no. 2, 2004):4-32. Images of nature are among the most common signifiers of utopia in commercial discourse, tirelessly making the case that a certain commodity or brand will enable an escape from the malaise and drudgery of urban existence. The invocation of natural themes has been especially prominent in the marketing and promotion of sport utility vehicles over the past decade. Speeding through deserts and jungles, fording raging rivers, and even scaling the heights of Mt. Everest, the SUV is routinely depicted in the most spectacular and remote natural locations. These fanciful themes now attract the scorn of many who draw upon them to underscore the rather glaring contradictions between how these vehicles are marketed and how they are actually used: the irony of using pristine images of a hyper-pure nature to motivate the use of a product that consumes excessive amounts of natural resources and emits high levels of pollutants lies at the core of the growing public backlash against the SUV. While generally sympathetic to this critical perspective, I argue that we need to think through the role of nature in constructing the promotional field of these vehicles in a more rigorous fashion that is often the case. Gunster teaches advertising and media studies at Simon Fraser University in Burnaby, British Columbia. (E&E)

Gunter, Pete A. Review of Catherine Larrère and Raphaël Larrère, Du bon usage de la nature: Pour une philosophie de l'environnement. Environmental Ethics 20(1998):329-24.

Gunter, Pete A. Y., The Big Thicket: An Ecological Reevaluation. Denton, TX: University of North Texas Press, 1993. \$ 14.95. 230 pages. A study of the Big Thicket National Preserve, historical and biological background, where to go, what to see, and why it matters. Gunter is professor of philosophy at the University of Texas and has spent much of his life in conservationist activities at the Big Thicket. (v4,#3)

Gunter, Pete A.Y., Review of Zimmerman, Michael, Contesting the Earth's Future: Ecology and Postmodernity. Ethics and the Environment 2(1997):95-98. (E&E)

Gunter, Pete A. Y., and Oelschlaeger, Max, Texas Land Ethics. Austin: University of Texas Press, 1997. 156 pages. Contents: What is a Land Ethic? Texas: The Land and its Communities of Life. Texas: A State of Neglect. Land Ethics and Economics. Are Land Ethics Practical? The Big Thicket. Gunter and Oelschlaeger are both in philosophy at the University of North Texas. (v9,#1)

Gunter, Pete A. Y., The Big Thicket, revised edition. Denton, TX: University of North Texas Press, 1993. Updated from the earlier book of 1972, the first book predating (and pivotal in) designating the Big Thicket National Biological Preserve and the Trinity River National Wildlife Refuge. (v9,#1)

Gunter, Pete. Review of Conservation for the Twenty-first Century. Edited by David Western and Mary Pearl. Environmental Ethics 13(1991):95-96.

Gunter, Pete. Review of Du Droit de détruire: essai sur le droit de l'environnement. By Martine Remond-Gouilloud. Environmental Ethics 14(1992):371-72.

Gunter, Peter A., Review of Catherine Larrère, Les Philosophies de l'environnement. Environmental Ethics 20(1998):329-24.

Gunton, TI; Day, JC; Williams, PW, "Evaluating Collaborative Planning: The British Columbia Experience", Environments 31 (no.3, 2003): 1-12.

Guo, Jerry. "River Dolphins Down for the Count, and Perhaps Out." *Science* Vol. 314, no. 5807 (22 December 2006): 1860. The river dolphin, or baiji, has not been found in a six-month, 3,500 kilometer survey of the Yangtze River, and many conclude that it is extinct. The dolphin has been in decline due to the environmental degradation of the river, resulting from China's booming economy. This is the first cetacean to go extinct in modern times.

Guo, Z; Xiao, X; Gan, Y; Zheng, Y, "Landscape planning for a rural ecosystem: case study of a resettlement area for residents from land submerged by the Three Gorges Reservoir, China," Landscape Ecology 18(no.5, 2003):503-512. (v.14, #4)

Gupta, Aarti, "Governing Trade in Genetically Modified Organisms: The Cartagena Protocol on Biosafety," Environment 42(no. 4, May 1, 2000):22- . Despite widely varying priorities, intense negotiations have finally paid off in the development of a worldwide agreement concerning the transport and use of genetically modified organisms. (v.12,#2)

Gupta, G.K. "Farewell to Our Garden in Calcutta." The Christian Science Monitor, vol. 89, 7 March 1997, p 16.

Gupte, M, "Reexamining Participatory Environmental Policy: Social Stratification and the Gender Dimension", Society and Natural Resources 16(no.4, 2003):327-334.

Gupte M., "Participation in a Gendered Environment: The Case of Community Forestry in India," Human Ecology 32(no.3, June 2004):365-382(18). (v. 15, # 3)

Gurd, D. B., Nudds, T. D. and Rivard, D. H., "Conservation of Mammals in Eastern North American Wildlife Reserves: How Small Is Too Small?," Conservation Biology 15(no.5, 2001): 1355-63. (v.13,#2)

Gurdebeke, S., D. Debakker, N. Vanlanduyt and J. Maelfait, "Plans for a Large Regional forest in Eastern Flanders (Belgium): Assessment of Spider Diversity and Community Structure in the Current forest Remnants," Biodiversity and Conservation 12(no. 9, 2003): 1883-1900. (v 14, #3)

Guroian, Vigen, "The Christian Gardener: An Orthodox Meditation," Christian Century 113(no. 7, February 28, 1996):228-231. "When I garden, earth and earthworm pass between my fingers and I realize that I am made of the same stuff. When I pinch the cucumber vine and the water drips from capillaries to soil, I can feel the blood coursing through my body." "We are not only God's fellow workers in the garden; we ourselves are the garden." Guroian teaches theology and ethics at Loyola College in Baltimore. (v7,#1)

Guroian, Vigen, *The Fragrance of God*. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 2006. A call to rejoice in the beauty of creation. God fills and blesses this blooming, growing planet. Christians will do well to spend more time outdoors.

Guruswamy, Lakshman D. "The Convention on Biological Diversity: Exposing the Flawed Foundations." Environmental Conservation 26(No. 2, June 1999):79- . (v10,#4)

Guruswamy, Lakshman D., and McNeely, Jeffrey A., eds. Protection of Global Biodiversity: Converging Strategies. Durham: Duke University Press, 1998. 440 pp. \$23.95. The magnitude of the problem and the obstacles to its solutions. (v.10,#1)

Gustafson, Donald. Review of Animal Thinking. By Donald R. Griffin. Environmental Ethics 8(1986):179-82.

Gustafson, Donald. Review of Animal Thought. By Stephen Walker. Environmental Ethics 6(1984):275-76.

Gustafson, EJ, et al., "The Relationship between Environmental Amenities and Changing Human Settlement Patterns between 1980 and 2000 in the Midwestern USA," Landscape Ecology 20 (no. 7, November 2005): 773-789.

Gustafson, James M. A Sense of the Divine: The Natural Environment from a Theocentric Perspective. Cleveland, OH: Pilgrim Press, 1994. Chapter 1: For many people there is at least an implicit "sense of the divine" in nature that often underlies other reasons for concern for the environment. A theocentric perspective provides one way to describe and understand this sense of the divine and in turn to elicit it more deeply and fully. Chapter 2: Human accountability and the conflicts of purpose that lead inevitably to ambiguous moral choices, and perhaps in some cases to tragic ones. Moral ambiguity pervades medical and economic choices as well, but in ecological issues it has particular dimensions, as humans intervene with the natural world. The task of ethics is to reduce, if not eliminate it, but success can only be limited. Chapter 3: An ideal-typology of different stances of responsibility toward nature, with some discussion of the religious or theological correlates of each type. One type, humans as participants in nature, is appropriate to a theocentric perspective. Chapter 4: Some relevant academic disciplines, those that contribute to discussion and resolutions of environmental policy. Can the disciplinary arcs be closed to form an integrated view of the environment? This is our human responsibility, but premature closure is likely to lead to policies and actions that are directed by limited values and interests. The parts seldom, if ever, come into a whole harmonious equilibrium. Nothing can exist independently; everything exists interdependently. Anything which exists in a proper condition is in equilibrium with everything else. Well balanced treatment. Anyone who thinks that theologians do not do their homework in other disciplines should read this book. Gustafson is in theological ethics at Emory University and the author of Ethics from a Theocentric Perspective, 2 vols, University of Chicago Press, 1981 and 1984, a widely discussed work, which he here elaborates in the direction of ecological ethics.

Thomas, J. Mark, ed. Evangelicals and the Environment. Theme issue of Evangelical Review of Theology 17 (no. 2. 1993). (Paternoster Periodicals, P.O. Box 300, Carlisle, Cumbria, CA3 0QS, U.K.) Thirteen articles under the headings: Biblical and Theological Perspectives, The Praxis of Sustainable Development, Case Studies in Christian Environmental Stewardship. Thomas teaches social ethics at Madison Area Technical College, Madison, WI. (v6,#1)

Guth, James L., Green, John C., Kellstedt, Lyman A., and Smidt, Corwin E., "Faith and the Environment: Religious Beliefs and Attitudes on Environmental Policy," American Journal of Political Science 39(1995):364-382. (v8,#3)

Guthman, Julie, *Agrarian Dreams: The Paradox of Organic Farming in California* (Berkeley, CA: The University of California Press, 2004) and Albert Howard, *The Soil and Health: A Study of Organic Agriculture* (Lexington, KY: The University Press of Kentucky). Reviewed by Paul B. Thompson in *Journal of Agricultural and Environmental Ethics* 21(2008):297-301.

Guthrie, Stewart Elliott, Faces in the Clouds. New York: Oxford University Press, 1993. A study in anthropomorphism, reading human features into nature. Chapter 5: Anthropomorphism in the Arts. Chapter 6: Anthropomorphism in Philosophy and Science. Although scientists in particular try to avoid it, they are constantly guilty of it. Chapter 7: Religion as Anthropomorphism. Anthropomorphism is the core of religious experience.

Guthrie, Stewart Elliott, Faces in the Clouds. New York: Oxford University Press, 1993. A study in anthropomorphism, reading human features into nature. Chapter 5: Anthropomorphism in the Arts.

Chapter 6: Anthropomorphism in Philosophy and Science. Although scientists in particular try to avoid it, they are constantly guilty of it. Chapter 7: Religion as Anthropomorphism. Anthropomorphism is the core of religious experience.

Gutierrez, Jorge L.; Jones, Clive G., "Physical Ecosystem Engineers as Agents of Biogeochemical Heterogeneity," BioScience 56 (no.3, March 2006): 227-236 (10). Physical ecosystem engineers are organisms that physically modify the abiotic environment. They can affect biogeochemical processing by changing the availability of resources for microbes (e.g., carbon, nutrients) or by changing abiotic conditions affecting microbial process rates (e.g., soil moisture or temperature). The consequences of physical ecosystem engineering for biogeochemical processes can be predicted by considering the resources or abiotic conditions that limit or promote a reaction, and the effect of physical ecosystem engineering on these resources or abiotic conditions via the control they exert on material flows and heat transfer.

Gutierrez, M, "Review of: Indigenous Landscapes A Study in Ethnocartography. By Mac Chapin and Bill Threlkeld. Center for the Support of Native Lands, Arlington, VA," Human Ecology 30(no.4, 2002): 551-554.

Gutiérrez, Daniel Eduardo, "El Pensamiento Ambiental En Argentina. Una Aproximación Panorámica," *International Society for Environmental Ethics Newsletter* 19, no, 2 Spring/Summer, 2008, pp. 12-2. English translation: "Environmental Thought in Argentina: A Panoramic View," pp. 20-28. The author is Professor in Environmental Philosophy and Professional Ethics at Universidad de Flores, Ciudad de Buenos Aires, and Professor of Philosophy and Education at CESALP Institute (Centro de Salud y Aptitud de La Plata), Ciudad de La Plata, Argentina. Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

Gutzler, DS, "Review of: Ecological Climatology: Concepts and Applications By Gordon B. Bonan," Natural Resources Journal 43(no.4, 2003):1291-1295. (v. 15, # 3)

Gutzwiller, K., and W. Barrow, "Bird Communities, Roads and Development: Prospects and Constraints of Applying Empirical Models," Biological Conservation 113(no. 2, 2003): 239-243. (v 14, #3)

Guyot, G., Clobert, J. "Conservation Measures for a Population of Hermann's Tortoise Testudo Hermanni in Southern France Bisected by a Major Highway," Biological Conservation 79(no.2/3 1997):251.

Guzman, HM; Guevara, C; Castillo, A, "Natural Disturbances and Mining of Panamanian Coral Reefs by Indigenous People," Conservation Biology 17(no.5, 2003):1396-1401. (v.14, #4)

Haab, Timothy C. "Referendum Models and Negative Willingness to Pay: Alternative Solutions," Journal of Environmental Economics and Management 32(1997):251.

Haapala, Arto, (ed.), The City as a Cultural Metaphor. Studies in Urban Aesthetics, 1998 (ISBN 952-5069-05-2, ISSN 1239-193x). Vol. 4, International Institute of Applied Aesthetics Series. Contributions by Finnish, North American, UK, Danish, Russian and Italian philosophers. Available from: International Institute of Applied Aesthetics, Kannaksenkatu 22, 15140 Lahti, Finland. Tel. +358 3 782 7858. (v.10,#2)

Haapala, Arto, "Aesthetics, Ethics, and the Meaning of Place", in Ales Erjavec, Lev Kreft and Marija Bergamo (utg.), Proceedings of the XIVth International Congress of Aesthetics Pt. I, Acta philosophica XX (Ljubljana: Filozofski institut ZRC SAZU, 1999), pp. 253-264. (v.12,#3)

Haas, Peter M., Saving the Mediterranean: The Politics of International Environmental Cooperation. Columbia University Press, 1990. 303 pages. \$ 42.00. (v2,#3)

Haas, Peter M., Robert I. Keohane, and Marc A. Levy, eds., Institutions for the Earth: Sources of Effective International Environmental Protection. Cambridge, MA: MIT Press, 1993. 340 pages. \$ 17.95 paper. The factors influencing organized responses to seven international problems (ozone, acid rain, the Baltic and North Seas, oil pollution, fisheries management, pesticide use, population). A study of the institutions that make solutions to international environmental problems possible. Haas is in political science at the University of Massachusetts, Amherst, Keohane is in international peace at Harvard University. Levy is in politics and international affairs at Princeton University. (v4,#3)

Haas, Peter M., Robert O. Keohane, and Marc A. Levy, eds., Institutions for the Earth: Sources of Effective International Environmental Protection. Cambridge, MA: MIT Press, 1993. 340 pages. \$ 17.95 paper. Seven international problems: oil pollution from tankers, acid rain in Europe, pollution of the North Sea and Baltic, stratospheric ozone depletion, mismanagement of fisheries, overpopulation, and misuses of farm chemicals. Analyses such institutions as the United Nations Environment Programme, the Intergovernmental Maritime Organization, the Food and Agriculture Organization, the United Nations Fund for Population Assistance, and others. The authors are political scientists at the University of Massachusetts, Harvard University, and Princeton University. (v4,#2)

Haas, Peter M., Keohane, Robert O., and Levy, Marc A., Institutions for the Earth: Sources of Effective International Environmental Protection. Cambridge, MA: MIT Press, 1993. Seven international environmental issues: ozone, European acid rain, the Baltic and North Seas, oil pollution of oceans, fisheries, pesticides, population, and what the proliferating international institutions can and cannot do. State sovereignty is not incompatible with progress in solving difficult problems, but the most effective institutions must penetrate the state politically to a high degree. (v6,#2)

Habel, Norman C., Cant, Garth, and Eaton, Heather, "Editorial: Voices and Silences - Ecotheological Perspectives from Canada, Australia and New Zealand," Ecotheology Vol 6 (Jul 01/Jan 02):5-11.

Habel, Norman, "Key Ecojustice Principles: A 'Theologia Crucis' Perspective," Ecotheology No 5/6 (Jul 98 / Jan 99):114-125.

Habel, Norman C., "Report: The Earth Bible: Progress Report, March 2001," Ecotheology Vol 6 (Jul 01/Jan 02):200-204.

Haber, Gordon C. "Biological, Conservation, and Ethical Implications of Exploiting and Controlling Wolves." Conservation Biology 10, no.4 (1996): 1068. (v7, #3)

Haberl, Helmut, "Energetischer Stoffwechsel und nachhaltige Entwicklung" (in German: Societal energetic metabolism and sustainable development), Natur und Kultur 1 (No. 1, 2000): 32-47. Since the neolithic revolution the total energy input of mankind has risen by several orders of magnitude. Given current trends, societal energetic metabolism could reach over 50% of terrestrial NPP as early as 2050. This precludes the possibility to return to a biomass-based energy system in order to solve fossil-energy related sustainability problems. A combination of energy conservation and new renewable sources is a prerequisite for sustainable development. (v.11,#2)

Habgood, John, The Concept of Nature. London: Darton, Longman and Todd, 2002. Gifford Lectures at the University of Aberdeen, 2000. Chapters: 1. Words and Things (Realism and Social Construction of Nature). 2. Studying Nature. 3. Respecting Nature. 4. Following Nature. 5. Improving Nature. 6. Nature's God. Meanings of the complex word "nature" in ancient classical thought and in the natural sciences, environmentalism, ethics, genetics, and theology. The natural and the unnatural. Laws of nature and whether these can guide our conduct. Habgood is the former Archbishop of York and an

honorary fellow, King's College, Cambridge. (v.13,#4)

Habito, Ruben L. F. Healing Breath: Zen Spirituality for a Wounded Earth. Maryknoll, NY: Orbis Books, 1997. 125pp. \$15 paper. Habito locates the sickness in human hearts that causes us to deal harshly with one another and with the Earth. His vision and method are proposed to counteract the effects of that sickness, to develop healing habits of mind and heart. (v8,#1)

Hackel, Jeffrey D. "Community Conservation and the Future of Africa's Wildlife." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 4, August 1999):726- . (v10,#4)

Hacker, J.E., Cowlshaw, G. Williams, P.H. "Patterns of African Primate Diversity and Their Evaluation for the Selection of Conservation Areas," Biological Conservation 84(no.3, 1998):251. (v9,#2)

Hacker, R.R., Review of Taking Stock: The North American Livestock Census, by Donald E. Bixby, Carolyn J. Christman, Cynthia J. Ehrman, and D. Philip Sponenberg, Journal of Agricultural and Environmental Ethics 7(1994):245-246.

Hadjilambrinos, Constantine. "A Review of Plastics Recycling in the USA With Policy Recommendations," Environmental Conservation 23(no.4 1996):298. (v8,#3)

Hadjilambrinos, Constantine. "An Egalitarian Response to Utilitarian Analysis of Long-Lived Pollution: The Case of High-Level Radioactive Waste." Environmental Ethics 22(2000):43-62. High-level radioactive waste is not fundamentally different from all other pollutants having long life spans in the biosphere. Nevertheless, its management has been treated differently by policy makers in the United States as well as most other nations, who have chosen permanent isolation from the biosphere as the objective of high-level radioactive waste disposal policy. This policy is to be attained by burial deep within stable geologic formations. The fundamental justification for this policy choice has been provided by utilitarian ethical analysis. It, in turn, has been supported primarily by assumptions, based on expert opinion, about the ultimate safety of geologic disposal. However, close analysis of these assumptions reveals that the safety of geologic disposal is highly uncertain. Moreover, factors such as the possibility for human intrusion into repository sites make it impossible to even guess at the ultimate consequences of any policy choice pertaining to the final disposal of high-level radioactive waste. I discuss why utilitarian ethics cannot be used to determine the efficacy of such policy choices. I then develop an alternative approach which is based on egalitarian principles of procedure and utilize it to explore policy proposals which promote justice and equity in the high-level radioactive waste management process. I argue that there are two possible solutions to the high-level radioactive waste dilemma: (1) an amendment to the U.S. Constitution to create an institution to advocate on behalf of the interests of future generations and (2) the active management of the waste in monitored, retrievable facilities in perpetuity. Of these two options, I find maintaining surveillance and vigilance in perpetuity to safeguard high-level radioactive waste to be preferable because of its political and ethical efficacy. (EE)

Hadley, John, "Critique of Callicott's Biosocial Moral Theory," Ethics and the Environment 12(no. 1, 2007):67-78. J. Baird Callicott's claim to have unified environmentalism and animal liberation should be rejected by holists and liberationists. By making relations of intimacy necessary for moral considerability, Callicott excludes from the moral community nonhuman animals unable to engage in intimate relations due to the circumstances of their confinement. By failing to afford moral protection to animals in factory farms and research laboratories, Callicott's biosocial moral theory falls short of meeting a basic moral demand of liberationists. Moreover, were Callicott to include factory farm and research animals inside the moral community by affording them universal or non-communitarian rights, his theory would fall foul of environmentalists who seek to promote ecosystem stability and integrity via therapeutic hunting. If factory farm and research animals can have rights irrespective of their particular

circumstances, then so can free-roaming animals from overabundant and exotic species. Hadley is at Charles Stuart University, New South Wales, Australia.

Hadley, John. "Nonhuman Animal Property: Reconciling Environmentalism and Animal Rights." *Journal of Social Philosophy* Vol. 36, no. 3 (2005): 305-15. From the article: "I will broaden the debate about property in environmental ethics by suggesting a different way that private ownership could help protect natural areas and the nonhuman animals that inhabit them. As a check on human intervention in natural areas that is destructive of habitat, a nonhuman animal property rights regime (structured along the lines I suggest) can secure the maintenance of ecosystem stability and ensure the vital interests of nonhuman animals are respected. The key moral demands of environmentalism and animal rights can be met by extending the scope of property ownership beyond the human species to other sentient animals that have a vital interest in using natural goods" (p. 305).

Haemig, PD, "Symbiotic nesting of birds with formidable animals: a review with applications to biodiversity conservation," Biodiversity And Conservation 10(no.4, 2001):527-540. (v.12,#4)

Haenn, Nora, "The Power of Environmental Knowledge: Ethnoecology and Environmental Conflicts in Mexican Conservation," Human Ecology 27(no. 3, Sept 01 1999):477- . (v10,#4)

Hafner, J., "Review of: Shiva, Vandana. Water Wars: Privatization, Pollution, and Profit," Society and Natural Resources 16(no. 5, 2003): 468-469. (v 14, #3)

Hager, Alan V. "The Tidelands Oil Controversy: The Prize and the Responsibility," Natural Resources & Environment 10(no.1. Summer 1995):44- . (v6,#4)

Hagler, Mike. "Deforestation of the Deep: Fishing and the State of the Oceans," The Ecologist 25(no.2/3, Mar. 1995):74- . Some of the damage being done to marine ecosystems through overfishing may be irremedial; a critique of "scientific management" methodology; the impact of industrial fishing on "non-target" species; by-catch and discards; driftnets and dolphins; the suffering seas. (v6,#4)

Hagmann, Michael, "EPA, Critics Soften Stance on Pesticidal Plants," Science 284 (9 April 1999):249. Pesticidal plants. Plant geneticists are engineering plants that produce their own pesticides (as many do naturally). The Environmental Protection Agency is proposing to require those introducing any such plants for general use to submit data showing that these plants are safe for humans and the environment. But opponents say the rule is unrealistic, casting too broad a net. Other say the proposed rule has too many exceptions. After four years of controversy, there are some prospects of reaching workable regulations. (v. 10,#1)

Haigh, Martin J., George Revill and John R. Gold, "The Landscape Assay: Exploring Pluralism in Environmental Interpretation," Journal of Geography in Higher Education 19, no. 1 (1995). (v6,#2)

Haight, Robert G. "Wildlife Models: Predicting the Effects of Habitat Restoration", Journal of Forestry 94(no.12, 1996):4. (v7,#4)

Haila, Yrjö, and Richard Levins, Humanity and Nature: Ecology, Science and Society. London: Pluto Press, 1992. Paper. 270 pages. What program can ecology set for society? Ecological patterns, examples from the taiga. Practicing ecology, research, data, theory, hypothesis testing. Language and how theories refer to the world. Traditions and their influence on world views. Health as part of the ecosystem. Diseases. Coevolution of host and parasite. Noninfectious diseases. Agricultural ecology, sustainable agriculture. The social history of nature. How does nature change? Political ecology? Local versus general solutions. Nature: Appropriation versus appreciation? The general argument takes issue with the mistaken belief that earlier in history humans existed in harmony with nature and that this

harmony has become recently "unbalanced." Human activity should be included as part of nature and the authors hope to establish the connection between ecological knowledge and radical politics. Haila is a research fellow at the Academy of Finland, based at the Department of Zoology in Helsinki. Levins is in the Department of Public Health at Harvard Medical School and a population biologist. He is an author, with Richard Lewontin, of The Dialectical Biologist. (v5,#2) (Finland)

Haila, Yrjö and Richard Levins, Humanity and Nature: Ecology, Science and Society. London: Pluto Press, 1992. Paper. 270 pages. What program can ecology set for society? Ecological patterns, examples from the taiga. Practicing ecology, research, data, theory, hypothesis testing. Language and how theories refer to the world. Traditions and their influence on world views. Health as part of the ecosystem. Diseases. Coevolution of host and parasite. Noninfectious diseases. Agricultural ecology, sustainable agriculture. The social history of nature. How does nature change? Political ecology? Local versus general solutions. Nature: Appropriation versus appreciation? The general argument takes issue with the mistaken belief that earlier in history humans existed in harmony with nature and that this harmony has become recently "unbalanced." Human activity should be included as part of nature and the authors hope to establish the connection between ecological knowledge and radical politics. Haila is a research fellow at the Academy of Finland, based at the Department of Zoology in Helsinki. Levins is in the Department of Public Health at Harvard Medical School and a population biologist. He is an author, with Richard Lewontin, of The Dialectical Biologist. (v4,#4)

Hailwood, Simon A. "The Value of Nature's Otherness." Environmental Values 9(2000):353-372. ABSTRACT: Environmentalist philosophers often paint a holistic picture, stressing such things as the continuity of humanity with wider nature and our membership of the 'natural community'. The implication seems to be that a non-anthropocentric philosophy requires that we strongly identify ourselves with nature and therefore that we downplay any human/non-human distinction. An alternative view, I think more interesting and plausible, stresses the distinction between humanity and a nature valued precisely for its otherness. In this article I discuss some of its main elements, and some of the difficulties involved with keeping nature's otherness in focus. Firstly (in sections 1-5), I try to clarify what I take to be the otherness-based position by distinguishing it from the apparently similar views of John Passmore, Robert Elliott and Keekok Lee, and some opposed holistic views, especially of J. Baird Callicott. Then, in the second half of the article (sections 6-7), I argue that if nature is valued in virtue of its otherness, this value is best thought of as an extrinsic, final and objective good, where 'objectivity' is a 'method of understanding', in Thomas Nagel's sense. Although I give some reasons for preferring an otherness account to certain alternative positions, I make no overall attempt to 'prove' that nature is valuable for its otherness. My aim is to show that, if it is, then this seems the best way to understand that value. KEYWORDS: Otherness, nature, holism, intrinsic value, objectivism.

Hailwood is in the Department of Philosophy, Liverpool University, 7 Abercromby Square, Liverpool L69 3BX, UK. (EV)

Hailwood, Simon, How to be a Green Liberal: Nature, Value and Liberal Philosophy. Chesham, UK: Acumen, 2004. Reviewed by Marcel Wissenburg in Environmental Values 14(2005):140-142.

Hailwood, Simon. "Landscape, Nature, and Neopragmatism." *Environmental Ethics* 29(2007):131-149. A popular if controversial claim, and troublesome for environmental philosophy, ethics, and related disciplines, is that "there is no such thing as nature." The social constructionist version of this claim makes it difficult to draw a distinction between human and nonhuman nature. In response, first, the concept of landscape can be helpful in drawing this distinction. Second, taking this approach is consistent with at least one interpretation of Richard Rorty's neopragmatism. Constructionism can be divided into two forms: moderate and radical. Moderate constructionism allows the landscape/nature distinction; radical constructionism excludes it. Rorty's claim that independent reality is "the world well lost" apparently marks him as a radical constructionist. Nevertheless, the core doctrines of his neopragmatism constitute a moderate constructionism, allowing the nature/landscape distinction. The real problem is

Rorty's anthropocentric instrumentalist characterization of pragmatic justification. Left in place, it renders neopragmatism a form of radical social constructionism. Redescribing the terms of justification in less anthropocentric instrumentalist terms is consistent with the anti-Platonist core of neopragmatism. Thus redescribed, neopragmatism is fully consistent with the landscape/nature distinction. Anthropocentric instrumentalism, not social constructionism per se, is the problem. (EE)

Hains, Chris, Development and Conservation Issues in Africa, M. A. thesis, Colorado State University, summer 2001. The thesis evaluates ways in which development and nature conservation, both valuable goals, can be achieved in Africa. Objections to prevailing forms of development, that they do not succeed for pragmatic reasons and that Western ideas about development and conservation are misplaced impositions on Africa. Although improving the lives of humans and conserving nature can be difficult, there is adequate evidence that these goals are attainable. Nor is it always necessary to favor human centered development over the conservation of nature. Some conservation projects, even if they do not focus on improving the welfare of humans, can still be justified. Hains, who spent two years in the Peace Corps in Lesotho (South Africa), is now in a Ph.D. program in African history, University of Minnesota. (v.12,#3)

Hairston, Nelson G., Sr., Ecological Experiments: Purpose, Design, and Execution (New York: Cambridge University Press, 1989. 370 pages. \$ 52.50 cloth, \$ 24.95 paper. A review of the status of ecology as an experimental science. At best generalizations can be made at the level of specific environments (forests, successional communities, deserts, freshwater, or marine systems), but there is nowhere in view a grand unified field theory for ecological systems. Mathematically derived theory is relegated to "giving the appearance of scientific rigor to what in principle is a more sophisticated version of the same process of explaining what has been observed" (p. 11). (v2,#2)

Hairston-Strang, Anne B., Adams, Paul W. "Oregon's Streamside Rules: Achieving Public Goals on Private Land," Journal of Forestry 95(no.7, 1997):14. (v8,#3)

Hajer, Maartem A. The Politics of Environmental Discourse: Ecological Modernization and the Policy Process. New York: Oxford University Press, 1996. 344 pp. \$55. A new perspective, "ecological modernization," which stresses the opportunities of environmental policy for modernizing the economy and stimulating technological innovation, has come to replace the antagonistic debates of the 1970's. (v7,#4)

Hajer, Maarten A., The Politics of Environmental Discourse. Reviewed by Maurie J. Cohen. Environmental Values 6(1997):111-113. (EV)

Hakansson, N, "The Human Ecology of World Systems in East Africa: The Impact of the Ivory Trade", Human Ecology 32(no.5, October 2004):561-591(31).

Hakim, Danny, "Catching Up to the Cost of Global Warming," New York Times, July 25, 2004, p. 5. As regulators around the world move to curb global-warming emissions, General Motors and Ford stand most to lose, because Japanese and other automakers (but now BMW) have already been at work on lowering emissions. (v. 15, # 3)

Halberg, N., Kristensen, E. Steen, Kristensen, I. Sillebak. "Nitrogen Turnover on Organic and Conventional Mixed Farms." Journal of Agricultural and Environmental Ethics 8(1995):30-51. Separate focus on crop fertilization or feeding practices inadequately describes nitrogen (N) loss from mixed dairy farms because of (1) interaction between animal and crop production and between the production system and the manager, and (2) uncertainties of herd N production and crop N utilization. Therefore a systems approach was used to study N turnover and N efficiency on 16 conventional and 14 organic private

Danish farms with mixed animal (dairy) and crop production. There were significant differences in N surplus at the farm level (242 kg. N/ha. vs. 124 kg. N/ha. on conventional and organic dairy farms respectively) with a correlation between stocking rate and N surplus. N efficiency was calculated as the output of N in animal products divided by the net N import in fodder, manure and fertilizer. N turnover in herd and individual crops calculated on selected farms showed differences in organic and conventional crop N utilization. This is explained via a discussion of the rationality behind the current way of planning the "optimum fertilizer application" in conventional agriculture. The concept of marginal N efficiency is insufficient for correcting problems of N loss from dairy farms. Substantial reductions in N loss from conventional mixed dairy farms is probably unlikely without lower production intensity. The concept of mean farm unit N efficiency might be a way to describe the relation between production and N loss to facilitate regulation. This concept is linked to differing goals of agricultural development - i.e. intensification and separation vs. extensification and integration. It is discussed how studies in private farms - using organic farms as selected critical cases - can demonstrate possibilities for balancing production and environmental concern. (JAEE)

Haldane, John, "Admiring the High Mountains: the Aesthetics of Environment". Environmental Values 3(1994):97-106. In recent years there has been a dramatic expansion of the range of studies, policy directives and initiatives concerned with the environment. For the most part these are unphilosophical, pragmatic responses to perceived threats of pollution and other forms of environmental degradation. However, they invariably presuppose certain conceptual and normative commitments, and the examination and evaluation of these has been a major concern of environmental philosophy. To date the primary focus of interest has been on ethical and political values, but there is a developing sense of the need to consider issues relating to the aesthetics of environment. After outlining a general philosophical structure for understanding the nature of aesthetic experience, its objects and values, a little known theory - that of Aquinas - is explained and defended. KEYWORDS: Aesthetic experience, aesthetic values, environmental aesthetics. Haldane is in moral philosophy at the University of St. Andrews, Scotland. (EV)

Haldane, John, Review of Bourassa, S., The Aesthetics of Landscape. Environmental Values 3(1994):173-182. (EV)

Haldane, John, Review of Berleant, A., The Aesthetics of Environment. Environmental Values 3(1994):173-182. (EV)

Hale, Benjamin, "The Moral Considerability of Invasive Transgenic Animals," Journal of Agricultural and Environmental Ethics 19(2006):337-366. The term moral considerability refers to the question of whether a being or set of beings is worthy of moral consideration. Moral considerability is most readily afforded to those beings that demonstrate the clearest relationship to rational humans, though many have also argued for and against the moral considerability of species, ecosystems, and "lesser" animals. Among these arguments there are at least two positions: "environmentalist" positions that tend to emphasize the systemic relations between species, and "liberationist" positions that tend to emphasize the attributes or welfare of a particular individual organism. Already, this classic conflict provides for some challenging theoretical clashes between environmentalists and animal liberationists. The question of moral considerability is complicated, however, by recent developments in genetic engineering. Some animals, like pigs and fish, have been genetically modified by humans to grow organs that can then be transplanted into humans. If environmental arguments for the moral consideration of species are correct, then we are released from our obligations to morally consider those animals that we have genetically modified, since they are by their nature always an "invader species." If, instead, the welfare of the animal is of penultimate importance, then there is a case for strengthening the moral considerability of GM animals over "naturally-occurring" animals, since they bear a closer relationship to humans. This would appear to be an intractable problem, a "bad marriage," as Mark Sagoff once proposed. This paper argues that the

case of invasive transgenic animals exposes weaknesses in this classic conflict, and particularly, in the framing of this conflict. To remedy this framing problem, this paper argues for a reconceptualization of the term "moral considerability," instead urging a strong distinction between moral considerability, moral relevance, and moral significance. Keywords: considerability - genetic engineering - invader species - moral status - transgenic animals. Hale is in the Philosophy Department, University of Colorado, Boulder. (JAEE)

Haley, David, "Species nova [to see anew]: Art as ecology," Ethics and the Environment 8(no. 1, 2003):143-150. A call for integrating art as a necessary contribution to ecological intervention. How artists engage uncertainty and how art may be used to develop new ways of seeing and 'drawing'. This is art for evolutionary survival. Haley is with Manchester Metropolitan University's Environmental Arts Practice Research Unit. (E&E)

Haley, Michael, and Clayton, Anthony, "The Role of NGOs in Environmental Policy Failures in a Developing Country: The Mismanagement of Jamaica's Coral Reefs," Environmental Values 12(2003): 29-54. Recent years have seen a proliferation of non-governmental organisations (NGOs) with a mission to help redress various social and environmental problems, but the effectiveness of these organisations in carrying out their stated goals is rarely assessed or critically examined. It has become increasingly clear, however, that these organisations vary greatly in their level of competence and professionalism. Many of them are ineffective, and in some cases they may even exacerbate the problems they set out to solve. These difficulties are based upon flawed assumptions about how civil society can correct social ills, and about how institutions that are intermediate between the individual and the state can carry out effective change.

To illustrate these points with an environmental example, we present the case of Jamaica's coral reefs, which have been under stress for decades. Both the causes of reef degradation and the solutions to these problems can be clearly outlined. Many well-intentioned organisations and individuals have been involved in the attempt to stem or reverse the damage, and significant funding has been channelled through these agencies. In spite of this, there has been no documented improvement in the condition of the reefs, apart from some natural regeneration that owed nothing whatever to any human activity. (EV)

Halfacree, Keith, "From dropping out to leading on? British counter-cultural back-to-the-land in a changing rurality," Progress in Human Geography 30 (no.3, June 2006): 309-336 (28).

Halfar, Jochen, and Rodney M. Fujita. "Dangers of Deep-Sea Mining." *Science* Vol. 316, no. 5827 (18 May 2007): 987. Plans for deep-sea mining could pose a serious threat to marine ecosystems.

Halfmann, Jost. "Community and Life-Chances: Risk Movements in the United States and Germany." Environmental Values 8(1999):177-197. ABSTRACT: The connotations attached to the concept of "risk" have changed over the last several decades. In particular, the image of risk, at least in the world's most economically advanced countries, has turned from predominantly positive to highly critical. A sociological look at this historic change reveals the emergence of a plurality of risk definitions that can be attributed to different risk cultures. We can distinguish risk cultures by their proximity to the dominant social practice of risk taking; namely risk cultures belong either to the centre or the periphery of society. Social movements that resist risky technologies are examples of a peripheral risk culture. Due to a certain concept of social community their perception of risk differs fundamentally from that of the centre. In addition, cultural variation across countries leads to different representations of risk-avoidance in social movements. This contribution illustrates these differences by comparing the American and German anti-nuclear movements. KEYWORDS: Community, life-chances, risk movements, risk cultures. Jost Halfmann Technische Universitaet Dresden Institut fuer Soziologie Mommsenstrasse 13 D-01062 Dresden, Germany E-mail: jost.halfmann@pop3.tu-dresden.de (EV)

Halfon, Mark S. Review of Living in Integrity: A Global Ethic to Restore a Fragmented Earth. By Laura Westra. Environmental Ethics 22(2000):101-103.

Halkes, Catharna J. M., New Creation: Christian Feminism and the Renewal of the Earth. Louisville: Westminster/John Knox, 1991. 177 pages. Examining the images that Western culture has formed of women and nature opens the door to reinterpreting the meaning of creation and our relation to it in terms of mutuality and connectedness. (v4,#3) The false and catastrophically damaging images at the root of the oppression of women and the rape of Earth's resources. The complex linkage between feminist theology and the environmental movement. (v3,#1)

Hall, Bob and Mary Lee Kerr, 1991-1992 Green Index: A State-by-State Guide to the Nation's Environmental Health (Corvelo, CA: Island Press, 1991). \$ 22.95 cloth, \$ 18.95 paper. (v2,#2)

Hall, David C., Simeon Ehui, and Christopher Delgado, "The Livestock Revolution, Food Safety, and Small-Scale Farmers: Why They Matter to Us All," Journal of Agricultural and Environmental Ethics 17(2004):424-444. Global consumption, production, and trade of livestock products have increased rapidly in the last two decades and are expected to continue. At the same time, safety concerns regarding human and animal disease associated with livestock products are increasing. Efforts to increase public health safety standards aimed at legitimately reducing the risks of human and animal disease have focused internationally on standards to regulate the movement of livestock products. There is concern, though, that measures to regulate these standards internationally, such as the WTO SPS measures that in part aim to open international markets, may marginalize small-scale poor producers. The cycle of poverty they are trying to escape through livestock production may, in fact, widen, leading to increased global poverty, malnutrition, and disease. Developing and developed nations alike should be concerned with public and private efforts to address appropriate food safety policies to reduce the likelihood of this effect. Analysis of the impact on small-scale livestock farmers is needed as well as solutions that consider joint public and private sector initiatives. Keywords: development, food policy, food safety, international trade, Livestock Revolution, poverty alleviation, SPS measures. The authors are with the Food and Agriculture Organization of the United Nations, Rome. (JAEE)

Hall, Douglas John. Imaging God: Dominion as Stewardship. Grand Rapids, MI: Wm. B. Eerdmans; New York, Friendship Press, 1986.

Hall, G. M. J. and McGlone, M. S., "Forest Reconstruction and Past Climatic Estimates for a Deforested Region of South-Eastern New Zealand," Landscape Ecology 16(no.6, 2001): 501-21. (v.13,#2)

Hall, Kim. "Sister Woman Chainsaw II: Reading Chris Cuomo's Feminism and Ecological Communities: An Ethic of Flourishing," Ethics and the Environment 4(1999):79-84.

Lugones, Maria. "Tenuous Connections in Impure Communities," Ethics and the Environment 4(1999):85-90. Comment on Chris Cuomo, Feminism and Ecological Communities. (E&E)

Hall, M., "Repairing Mountains: Restoration, Ecology, and Wilderness in Twentieth-Century Utah," Environmental History 6(no.4, 2001): 584-610. (v.13,#2)

Hall, Marcus. Earth Repair. Charlottesville: University of Virginia Press, 2005.

Hall, MHP; Fagre, DB, "Modeled Climate-Induced Glacier Change in Glacier National Park, 1850-2100", Bioscience 53(no.2, 2003):131-140.

Hall, RH, "Will fears of germs stymie a small farm revival in the US?," The Ecologist 31(no.5, 2001):12-15. (v.12,#4)

Hall, Ronald. L, "Moving places: a comment on the traveling Vietnam Memorial," Philosophy and Geography 4 (No. 2, 2001): 217-224. Special commentary. Hall is in the Department of Philosophy at Stetson University. (P&G)

Hall, W. David, "Does Creation Equal Nature? Confronting the Christian Confusion about Ecology and Cosmology," Journal of the American Academy of Religion 73(2005):781-812. Much of the recent interest in the idea of creation among Christian writers has suffered from a fundamental misconception that creation and nature are equivalent or nearly equivalent terms. While the two are not unrelated, they are nonetheless distinct. Two particular areas where this misconception appears are the movement that calls itself "creation science" and certain strains known as "theology of nature" or "ecological theology." One promising way to distinguish the ideas of creation and nature is by introducing Hans-Georg Gadamer's understanding of world (Welt) and environment (Unwelt) as a hermeneutical construct. This allows us initially to distinguish world as creation from world as nature. Environment is characterized by immediacy; world is a mediated reality. Once the lines of division have been laid out, Gadamer's ideas provide the groundwork for a more critical reintroduction of ideas of creation and nature that offers productive possibilities for an ecological ethic as well as a general ethic. Hall is in religion, Centre College, Danville, KY.

Hallen, Patsy, "The art of impurity," Ethics and the Environment 8(no. 1, 2003):57-60. I was taken aback when I received a request from the West Australian government to write a response to the question, "What Is The Ethical Foundation For Planning A More Sustainable Future?" My first reaction was: Does not every one want a future? And doesn't this necessarily mean a commitment to sustainability? Would not everyone earnestly want a more sustainable future? No sooner had I received this request than I became ill and in my fever-induced reveries I penned imaginary responses. I wrote: "The Ethical Foundation of Sustainability is 'Joy' or 'Life' or 'An Ethic of Flourishing'." Hallen is in philosophy, Murdoch University, Perth, Australia. (E&E)

Hallen, Patsy, Review of Carolyn Merchant, Earthcare: Women and the Environment, Ethics and the Environment 3(1998):197-200.

Hallen, Patsy, "Review of Val Plumwood, Environmental Culture: The Ecological Crisis of Reason," Ethics and the Environment 7(no. 2, 2002):181-184.

Haller, Stephen F., and James Gerrie, "The Role of Science in Public Policy: Higher Reason, or Reason for Hire?" Journal of Agricultural and Environmental Ethics 20(2007):139-165. The traditional vision of the role science should play in policy making is of a two stage process of scientists first finding out the facts, and then policy makers making a decision about what to do about them. We argue that this two stage process is a fiction and that a distinction must be drawn between pure science and science in the service of public policy. When science is transferred into the policy realm, its claims to truth get undermined because we must abandon the open-ended nature of scientific inquiry. When we move from the sphere of science to the sphere of policy, we pick an arbitrary point in the open-ended scientific process, and ask our experts to give us the answer. The choice of the endpoint, however, must always be arbitrary and determined by non-scientific factors. Thus, the two stages in the model of first finding the facts, and then making a decision about what to do, cannot be clearly separated. The second stage clearly affects the first. This conclusion will have implications about existing scientific policy institutions. For example, we advocate that the environmental assessment process be radically overhauled, or perhaps even let go. It will be our position that ultimately a better model for the involvement of scientists in public policy debates is that of being participants in particular interest groups ("hired guns"), rather than as supposedly unbiased consultants to decision-makers. Keywords: environment - environmental assessment - philosophy - public participation - public policy - science. Haller is at Contemporary

Studies and Philosophy, Wilfrid Laurier University, Brantford, ON, Canada.. Gerrie is at Department of Philosophy and Religious Studies, Cape Breton University, Sydney, NS, Canada.

Haller, Stephen. "A Prudential Argument for Precaution under Uncertainty and High Risk." Ethics and the Environment 5(2000):175-190. ABSTRACT: Some models of global systems predict catastrophe if certain human activities continue. Unfortunately, these models are less than certain. Despite this uncertainty, some argue for precaution on the grounds that we have an ethical obligation to avoid catastrophe, whatever the practical costs. There is much to say in favor of ethical arguments. Still, some people will remain unmoved by them. Using arguments parallel to those of Pascal and James, I will argue that there are prudential reasons for precaution that should convince those not already persuaded by ethical arguments. This argument for precaution does not presuppose that we are convinced by the uncertain models that predict catastrophe.

Hallman, David G. Caring for Creation: The Environmental Crisis, a Canadian Call to Action. Wood Lake Books, Box 700, Winfield, B.C. VOH 2CO, Canada. A primer on environmental problems for general reading and group study, showing ways in which theology has contributed to abuse of the Earth, and proposing changes in theology, lifestyle, and economics. (v1,#2)

Hallman, David G., ed., Ecotheology: Voices from South and North. Maryknoll, NY: Orbis Books, 1994. 312 pages. \$ 19.95. Co-published with the World Council of Churches. Two dozen essays by authors from around the world, in five sections: biblical witness, theological challenges, insights from eco-feminism, insights from indigenous peoples, ethical implications. Hallman is program officer for energy and environment for the United Church of Canada. (v5,#3)

Hallman, David G., ed. Ecotheology: Voices from South and North. Geneva: WCC Publications; Maryknoll, NY: Orbis Books, 1994.

Hallman, David G., Spiritual Values for Earth Community. Geneva: World Council of Churches (WCC) Publications, 2000. \$ 10. Seven spiritual values found in Christianity and other faith traditions--gratitude, humility, sufficiency, justice, peace, love, and faith and hope--could inspire greater justice, respect for the Earth's integrity and the building of sustainable communities. (EE v.12,#1)

Hallman, Max O. "Nietzsche's Environmental Ethics." Environmental Ethics 13(1991):99-125. I argue that Nietzsche's thinking, contrary to the interpretation of Martin Heidegger, is compatible with an ecologically oriented, environmentally concerned philosophizing. In support of this contention, I show that Nietzsche's critique of traditional Western thinking closely parallels the critique of this tradition by environmentalist writers such as Lynn White, Jr. I also show that one of the principal thrusts of Nietzsche's own philosophizing consists of the attempt to overcome the kind of thinking that has provided a theoretical foundation for the technological control and exploitation of the natural world. Finally, I show that Nietzsche's notion of the will to power, at least in several of its formulations, has certain affinities to the ecosystem approach of modern ecologists. Hallman is at the Humanities Division, Merced College, Merced, CA. (EE)

Hallowes, David, ed., Hidden faces: Environment, Development, Justice: South Africa and the Global Context. Scottsville, South Africa: Earthlife Africa, 1993. Proceedings of The Earthlife Conference, held in Pietermaritzburg, KwaZulu-Natal, 1993. Contact: Russel Friedman Books, P. O. Box 73, Halfway House, 1685, South Africa. 323 pages. ISBN 0-620-17450-1. Articles by over thirty authors. Sections: UNCED and after; Dominant and appropriate paradigms; labor; rural land use; urbanization and human settlements; consumption and population; growth and sustainable development. Sample articles: Dana Alston, "Environment and development: an issue of justice"; Barbara Klugman, "Putting people into perspective: women, environment and population policy"; Vandana Shiva, "Technology's mythic

productions."

Halme, Minna, "Environmental Issues in Product Development Process," Business Ethics Quarterly 5(1995):713-733. Studies a shift of a managerial paradigm in a business organization from "traditional management thinking" to "environment-related management."

Halper, John., ed. Gary Snyder: Dimensions of a Life. Reviewed in Environmental Ethics 14(1992):185-90.

Halpern, Daniel, ed. On Nature: Nature, Landscape, and Natural History. San Francisco: North Point Press, 1987. Sense of place. (v8,#1)

Halsey, Mark, "Environmental Visions: Deleuze and the Modalities of Nature," Ethics and the Environment 9(no. 2, 2004):33-64. This article examines the role of vision in the construction of Nature. How nature is 'seen' is inextricably tied to how such a space is named, traversed, and experienced at particular moments. A key contention is that the lens of modernity has for too long adversely impacted what it is possible to see, say, do, and feel with respect to Nature.

The force of this statement is borne out with reference to orthodox envisionings of forest conflict in Australia. The article concludes by calling for an environmental ethic(s) which puts into critical relief the discursive, trajectory, and affective dimensions of vision. Halsey is in law, Flinders University of South Australia. (E&E)

Halsey, Mark. *Deleuze and Environmental Damage: Violence of the Text*. Burlington, VT: Ashgate Publishing, 2006. Halsey uses a detailed analysis of forest conflict in Australia and Giles Deleuze's thought to present a post-structuralist critique of the problems associated with modernist accounts of environmental harm and regulation. He argues that the traditional variables of gender, race, and political economy need to be recast in light of four key modalities—vision, speed, lexicon, and effect—to develop a new ethics for categorizing and regulating nature and for challenging criminologists, cultural theorists, sociologists, and others to reconsider what it is possible to say and do about environmental problems.

Haluza-DeLay, Randolph. Review of *Grounding Knowledge: Environmental Philosophy, Epistemology, and Place*. By Christopher J. Preston. Environmental Ethics 28(2006):97-98. (EE)

Hambler, Clive, and Speight, Martin R. "Extinction Rates in British Nonmarine Invertebrates Since 1900." Conservation Biology 10, no.3 (1996): 892. (v7, #3)

Hamed, Safai El-Deen, "Seeing the Environment Through Islamic Eyes: Application of Shariah to Natural Resources Planning and Management", Journal of Agricultural and Environmental Ethics 6(1993):145-164. This paper suggests that Islam, as a religion and as a body of knowledge, is capable of providing its followers with a comprehensive and practical system of environmental ethics. The basic principles and guidelines of the faith represent the conceptual idea, while Islamic institutions and laws provide the operational components of an ethical system. Answers are provided in two key questions: (1) What are the Shariah (Islamic Law) values pertaining to natural resources and management? (2) Is it practically possible to derive from the Islamic jurisprudence and injunctions a set of planning and management criteria to guide the development process? Hamed is at the University of Maryland, College Park.

Hamilton, A., A. Cunningham, and F. Kayanja, "Conservation in a Region of Political Instability: Bwindi Impenetrable Forest, Uganda," Conservation Biology 14(no.6, 2000): 1722-. (v.12,#3)

Hamilton, AC, "Medicinal plants, conservation and livelihoods", Biodiversity and Conservation 13 (no.8,

2004): 1477-1517(41).

Hamilton, Clive, The Mystic Economist. Fyshwick, ACT, Australia: Willow Park Press (P. O. Box 496, Fyshwick, ACT 2609), 1994. Written "to assert the dire need for us to go beyond the obsessive rationality of economics. Economics characterises humans in such a partial and distorted way that most people feel profoundly uneasy about the influence of economics on the world. The environmental movement in particular knows that the economic way of seeing things poses a severe danger to the future of the planet" (Preface). With a detailed study of a dispute about mining at Coronation Hill, Kakadu National Park in Northern Australia, a sacred site to aboriginal people as well as a wildlife area, also degraded by domestic stock. "The environmental movement represents an opportunity for humankind, and especially Western civilization to recapture a mystical relationship with the natural world" (p. 167). "Mysticism" matter of transcending duality and becoming whole. Arne Naess says: "A beautiful little book. May there be a thousand more economists like Clive Hamilton." Hamilton is an Australian economist and social critic.

Hamilton, G, "Why we need germs. Is there such a thing as being too clean?," The Ecologist 31(no.5, 2001):46-54. (v.12,#4)

Hamilton, KG Andrew, "Bugs Reveal an Extensive, Long-Lost Northern Tallgrass Prairie", BioScience 55 (no.1, January 2005):49-59(11). Only tiny remnants of unplowed natural meadows remain in the eastern part of the state of North Dakota, and in Canada from eastern Saskatchewan to Manitoba. Those west of Lake Manitoba and the Red River Valley are characterized by their distinctive fauna of insects, principally leafhoppers and planthoppers (Homoptera: Auchenorrhyncha). These true bugs include hundreds of species invariably associated with North American grasslands. The distributions of those with the most limited dispersal abilities reflect long-term patterns of dominance and contiguity of native grass stands in prairies. These bug distributions indicate that bluestem-dominated grasslands in Canada, which usually are under 0.5 meter (20 inches) in height, are equivalent to tallgrass prairie from Illinois. This prairie once extended as much as 400 kilometers (250 miles) northwest of its previously known distribution. These bugs help differentiate tallgrass prairie from sites in southwestern Manitoba and adjacent North Dakota, which are more arid, and from sites east of Lake Manitoba and southward in the Red River Valley, which were formerly oak savanna.

Hamilton, Lawrence S. (editor), Review of Gosling, David, Ethics, Religion and Biodiversity. Environmental Values 3(1994):89-90. (EV)

Hamilton, Lawrence S., Ethics, Religion and Biodiversity: Relations between Conservation and Cultural Values. Cambridge, England: The White Horse Press, 1993. Paper, 218 pages. £14.95. Contains Denis Goulet, "Biological Diversity and Ethical Development"; Holmes Rolston, III, "God and Endangered Species"; Tu Weiming, "Toward the Possibility of a Global Community"; Leslie E. Sponsel and Poranee Natadecha-Sponsel, "The Potential Contribution of Buddhism in Developing an Environmental Ethic for the Conservation of Biodiversity"; Ranil Senanayake, "The Religious and Ethical Tradition of Ancient and Contemporary Australia: Its Role in the Setting of Modern Goals"; Pei Shengji, "Managing for Biological Diversity Conservation in Temple Yards and Holy Hills: The Traditional Practices of the Xishuangbanna Dai Community, Southwest China"; Herson Anson and William Raynor, "Traditional Resource Management and the Conservation of Biological Diversity on Pohnpei Island, Federated States of Micronesia"; Sonia P. Juvik, "Christian Denominational Influences on Attitudes Toward Resources Development: Marovo Lagoon, Solomon Islands"; Michael Kioni Dudley, "Traditional Native Hawaiian Environmental Philosophy"; and J. Ronald Engel, "Special Overview. The Role of Ethics, Culture, and Religion in Conserving Biodiversity: A Blueprint for Research and Action. Hamilton, a former professor of forestry at Cornell University, is a research associate of the East-West Center in Honolulu, particularly concerned with biological diversity conservation in mountains and islands in Asia and the Pacific. (v4,#4)

Hamilton, Martha, "Global Warming Gets a 2nd Look," Washington Post (3/3/98): C1; and Warrick, Joby, "White House Predicts Low Cost for Pact on Warming," Washington Post (3/4/98): A1. Oil industry executives begin to acknowledge global warming. A growing number of major oil company executives are admitting that fossil fuels may be changing the world's climate and they are suggesting their companies are beginning to focus on the problem of reducing greenhouse-gas emissions. A managing director of Royal Dutch Shell said: "I find myself increasingly persuaded that a climate effect may be occurring." A British Petroleum spokesperson said at Stanford University that oil industry executives are beginning to move beyond denial and acknowledge the role of fossil fuels in the buildup of greenhouse gases. Part of the motivation may be that this shift in attitude will make it easier for these companies to influence critical details about how to accomplish the reduction in greenhouse gases agreed to in the Kyoto climate treaty. The oil companies were part of the Global Climate Coalition which fought the Kyoto treaty by trying to debunk the science behind it and by warning of economic ruin. On a related note, the Clinton Administration has released its predictions of costs for American consumers of U.S. implementation of the Kyoto treaty. The projections are for a 4-cents to 6-cents per gallon increase in the price of gasoline and a 3 to 5 percent increase in the cost of electricity, fuel oil, and natural gas. (v9,#2)

Hamilton, P., "The Greening of Nationalism: Nationalising Nature in Europe," Environmental Politics 11(no.2, 2002): 27-48. (v.13,#4)

Hamm, M. Allison. "The Massachusetts Experience with Nonpoint Sources: Regulators Beware!" Natural Resources and Environment 10(no. 3, Winter 1996):47. (v7,#1)

Hammett, AL; Sun,X; Barany, M, "Industries in Transition: Forestry and Forest Products in China," Journal of Forestry 99(no. 7, 2001):4-13. (v.13,#1)

Hammit, William, and Cole, David, Wildland Recreation: Ecology and Management. New York: John Wiley, 1998. Management strategies to mitigate environmental impacts of recreation. Features management, more than science. For the science see Liddle, Michael, Recreation Ecology: The Ecological Impact of Outdoor Recreation and Ecotourism. (v.11,#4)

Hammit, William E., and William M. Rutlin, "Achieved Privacy in Wilderness," International Journal of Wilderness 3(no. 1, 1997):18-24. Opportunities for solitude and privacy are characteristics supposed to distinguish wilderness from other types of outdoor recreation. Whether this is so, in a study in Elliott Rock Wilderness in the southeastern U.S. Hammit teaches forest resources at Clemson University, Rutlin was a graduate research assistant in the study. (v8,#2)

Hammond, Allen, Which World? Scenarios for the 21st Century. Washington, DC: Island Press, 1998. There are three scenarios: (1) the market world: a new golden age of prosperity, (2) the fortress world of instability of violence, and (3) the transformed world: changing the human endeavor. Hammond favors the latter, where fundamental social and political changes give rise to enlightened policies and voluntary actions that direct and supplement market forces. This is already beginning as attested by the greening of global corporations, altered government policies, the rise of citizen groups, and a new age of philanthropy. This study is a joint venture of the Brookings Institution, the Santa Fe Institute, and the World Resources Institute. Hammond was formerly editor-in-chief of the annual World Resources. (v.9,#4)

Hammond, John L. "Wilderness and Heritage Values." Environmental Ethics 7(1985):165-70. Some proponents of the preservation of American wilderness--for example Aldo Leopold--have argued in terms of the role of wilderness in forming and maintaining a set of distinctive national character traits. I examine and defend the value judgment implicit in Leopold's argument. The value of one's cultural

heritage is, I contend, as important and valid as other familiar goods appealed to in defense of social policy. Hammond is in the department of philosophy, Portland State University, Portland, OR. (EE)

Hammond, Michael and Holland, Alan. "Ecosystem Health: Some Prognostications". Environmental Values 4(1995):283-286. The provenance of the contributors to this special issue fairly reflects the origins of the concept of ecosystem health. It was born and raised in the new world. It is too early to judge how it will be received in the old world where it has as yet barely established a foothold. (EV)

Hampicke, Ulrich, "Ethics and Economics of Conservation," Biological Conservation 67(1994):219-231. Nature can be valued in its own right or as an instrument for the benefit of humankind. The second valuation, although less fundamental from a philosophical point of view, is sufficient to substantiate conservation as a moral duty. The harm done to future generations in burdening them with an ecologically impoverished world cannot be justified by the moral standards of a civilized society when we consider the fact that conservation costs are not excessive. Even from a purely anthropocentric point of view it is logically impossible to assess the full monetary value of an irreversibly lost ecological asset. However, monetarization is possible within a limited scope. Many such studies in Germany show that conservation costs are low in terms of the benefits received. A good summary of the mix of philosophy, ethics, and economics, with applications to Germany. Hampicke is in the Department of Economics, Gesamthochschule/Universität Kassel, Germany. (v5,#4)

Hampshire, K; Bell, S; Wallace, G; Stepukonis, F, "'Real' Poachers and Predators: Shades of Meaning in Local Understandings of Threats to Fisheries", Society and Natural Resources 17 (no.4, 2004): 305-318(14).

Hampson, Fen Osler, and Reppy, Judith. Earthly Goods: Environmental Change and Social Justice. Ithaca, New York: Cornell University Press, 1996. 263pp. The book covers four major themes. The first series of authors lay out alternative frameworks for evaluating social justice from different philosophical perspectives:

--Henry Shue, "Environmental Change and the Varieties of Justice"

--Wendy Donner, "Inherent Value and Moral Standing in Environmental Change," see separate entry.

--Will Kymlicka, "Concepts of Community and Social Justice"

--Iain Wallace and David Knight, "Societies in Space and Place"

The second series of authors discuss the role of the state and of substate actors in the international policies of the environment:

--Christian Reus-Smit, "The Normative Structure of International Society"

--Joseph Camilleri, "Impoverishment and the National State"

--Smitu Kothari, "Social Movements, Ecology and Justice"

Third, two authors take up the question of the role of science in framing the debate on global environmental change and the use of science as a resource by various actors in actual negotiations:

--Sheila Jasanoff, "Science and Norms in Global Environmental Regimes"

--Steven Yearley, "Campaigning and Critique: Public-Interest Groups and Environmental Change"

Finally:

--Peter Timmerman, "Breathing Room: Negotiations on Climate Change" The last article provides an account of international negotiations in which the themes of the previous chapters are developed and used to argue for the centrality of social justice in reaching desirable outcomes. Hampson teaches politics at Carleton University; Reppy is in science and technology studies at Cornell University. (v8,#1)

Hampson, Fen Osler, Reppy, Judith, eds. Earthly Goods: Environmental Change and Social Justice. Ithaca, New York: Cornell University Press, 1996. 272pp. \$16.95 paper. The role of science and global change. Western science does not provide morally disinterested solutions to environmental problems. The authors discuss the role of state and substate actors in the international politics of the environment,

and then use accounts of actual negotiations to argue for the centrality of social justice in reaching desirable and equitable agreements. (v7,#4)

Hampson, Fen Osler, Reppy, Judith, eds., Earthly Goods, Environmental Change, and Social Justice. Review by Annie Booth, Environmental Ethics 20(1998):335-36.

Han Dongpin, "Questioning the intrinsic value theory of nonanthropocentrism environmental ethics", Ethic and Civilization 2003(3)

Han Dongpin, "Is nonanthropocentrism practical ?", Zhejiang Social Sciences, 2001(1)

Han, Ke-Tang, and Sinha, Amita. "An Empirical Study of Feng-Shui in Landscape." Environments 23, no.3 (1996): 36. (v7, #3)

Han Lixin. "On the Holism of Environmental Ethics." *Study and Exploration* No. 3 (2006):38-41.

Han Lixin. "On the Ethical Foundation of Duties Concerning Nature." *Journal of Shanghai Normal University* No. 3 (2005): 19-25.

Han Lixin. *Environmental Ethics: A Serious Moral Revolution*. Kunming: Yunnan People's Press, 2005.

Han Lixin. "Liberalism and the Finiteness of Earth." *Journal of Tsinghua University* No. 2 (2004): 36-41.

Han Yuehong, "Can Sustainable Ethics Replace Environmental Ethics", Ziran Bianzhefa Yanjiu (Studies in Dialectics of Nature) 10(2000): 58-62. In Chinese. (EE v.12,#1)

Hancock, J., "A Framework for Assessing the Risk of Transgenic Crops," Bioscience 53(no. 5, 2003): 512-519. (v 14, #3)

Hancock, Jan. *Environmental Human Rights: Power, Ethics and Law*. Translator: Li Shun. (Chongqing: Chongqing Publishing House, 2007). (in Chinese)

Hancock, Trevor. "Three Canadian Efforts to Link 'Healthy' and 'Sustainable.'" Alternatives 22, no.2 (1996): 21. (v7, #3)

Hancock, Trevor. "Healthy, Sustainable Communities: Concept, Fledging Practice, and Implications for Governance." Alternatives 22, no.2 (1996): 18. The well-being of the planet in the coming century will be decided to a significant degree by cities and their citizens. (v7, #3)

Hancocks, David, A Different Nature: The Paradoxical World of Zoos and their Uncertain Future. Berkeley, CA: University of California Press, 2001. (v.12,#2)

Hancocks, David, A Different Nature: The Paradoxical World of Zoos and their Uncertain Nature. Berkeley: University of California Press, 2001. Hancocks, with his eye sharpened by biophilia, sees the good, the bad, and the downright ugly. "We should not accept zoos as they are." Hancocks wants to reinvent the zoo. Zoos evolved from pure spectacle, to lip-service dedication to science, and finally, in the best cases, to research and conservation. But, with a few exceptions, "zoos can immediately stop degrading the word 'conservation' by employing it so irresponsibly." Hancocks is the director of Australia's Open Range Zoo at Werribee. (v.12,#2)

Hand, Carl M., and VanLiere (Van Liere), Kent D., "Religion, Mastery-Over-Nature and Environmental Concern," Social Forces 63(1984):555-570. (v8,#3)

Hangeveld, Henry G., "The Science," Alternatives 26 (No. 2, Sprg 2000): 15- . Global temperatures is on the rise and the dangers are real and significant. (v.11,#2)

Hanks, Sharon LaBonde. Ecology and the Biosphere: Principles and Problems. Delray Beach, FL: St. Lucie Press, 1996. This is a one-semester course text for non-science majors. Three main divisions of the text are: 1. What science is and what students need to know about it; 2. The biosphere, how it works, and its current problems, 3. What students can do about the problems. Hanks is at William Paterson College, New Jersey. (v7,#1)

Hanks, Sharon La Bonde. Ecology and the Biosphere: Principles and Problems. Boca Raton, FL: St. Lucie Press, 1997. 240 pp. \$29.95. A one-semester course text for non-science majors covering 1. what science is and what students need to know about it; 2. the biosphere, how it works, and its current problems; 3. what students can do about the problems. (v8,#3)

Hanley, N., Spash, C.L., Cost Benefit Analysis and the Environment. Reviewed by Richard Cowell. Environmental Values 5(1996):182-183. (EV)

Hanley, N; AlvarezFarizo, B; Shaw, WD, "Rationing an open-access resource: mountaineering in Scotland," Land Use Policy 19(no.2, 2002):167-176. (v.13, #3)

Hanley, Nick, Shogren, Jason F., White, Ben. Environmental Economics: In Theory and Practice. New York: Oxford University Press, 1996. 480pp. \$35 paper, \$65 cloth. A guide to the most important areas of natural resource and environmental economics, including the economics of non-renewable and renewable resource extraction, the economics of pollution control, the application of cost-benefit analysis to the environment, and the economics of sustainable development. Key elements of economic theory, and how they can be applied to real-world problems. (v8,#1)

Hanley, Nick, Martin Whitby, and Simpson, Ian, "Assessing the Success of Agri-environmental Policy in the UK." Land Use Policy 16(No. 2, April 1999):67- . (v.11,#1)

Hanlon, Joseph. Peace Without Profit: How the IMF Blocks Rebuilding in Mozambique. Reviewed by W.M. Adams. Environmental Values 8(1999):113. (EV)

Hanna, K. S., "Review of Politics of the Wild: Canada and Endangered Species by Karen Beazley and Robert Boardman," Environments 29(no.2, 2001): 107-08. (v.13,#2)

Hanna, KS, "Review of: Guide to Sustainable Development and Environmental Policy Natalia Mirovitskaya and William L. Ascher, editors," Environments 30(no.2, 2002): 79-80.

Hanna, Susan, "Property Rights and Biodiversity," Encyclopedia of Biodiversity 4: 891-899. Property rights to natural resources define privileges and responsibilities in the use of environmental goods and services. They specify the way people are to behave toward one another as they use environmental resources. This chapter describes the form and function of property rights in general and discusses the relation of property rights to biodiversity in particular. This discussion summarizes what is known about the potential and limitations of property rights to protect biodiversity. It also examines the considerable uncertainty that exists with respect to the design of property rights for biodiversity protection. (v.11,#4)

Hanna, Susan, Folke, Carl, Mäler, Karl-Göran, eds. Rights to Nature: Ecological, Economic, Cultural, and Political Principles of Institutions for the Environment. Washington, D.C.: Island Press, 1996. 298. A nontechnical, interdisciplinary introduction to the systems of rights, rules, and responsibilities that guide and control human use of the environment. A synthesis of information on how property rights develop, why they develop in certain ways, and the ways in which they function. Integrates natural and social science to address the full range of ecological, economic, cultural, and political factors that affect natural resource management and use. The role of property-rights regimes in establishing societies that are equitable, efficient, and sustainable. (v7,#4)

Hanna, Susan S.; Folke, Carl; and Maler, Karl-Goran. Rights to Nature: Cultural, Economic, Political, and Ecological Principles of Institutions for the Environment. Washington, D.C.: Island Press, 1996. 288 pages. \$29.95 paper. A nontechnical, interdisciplinary introduction to the systems of rights, rules, and responsibilities that guide and control human use of the environment. The role of property rights regimes in establishing societies that are equitable, efficient, and sustainable. (v7, #3)

Hannah, L; Midgley, GF; Lovejoy, T; Bond, WJ; Bush, M; Lovett, JC; Scott, D; Woodward, FI, "Conservation of Biodiversity in a Changing Climate," Conservation Biology 16(no.1, 2002):264-268. (v.13, #3)

Hannah, Lee, David Lohse, Charles Hutchinson, John L. Carr and Ali Lankerani, "A Preliminary Inventory of Human Disturbance of World Ecosystems," Ambio 23(1993):246-50. The authors use three categories and find the proportions of Earth's terrestrial surface as follows: 1. Little disturbed by humans, 51.9%. 2. Partially disturbed, 24.2%. 3. Human dominated, 23.9%. If one removes the ice, rock, and barren land, which supports little human or other life, the percentages become: 1. Little disturbed, 27.0%. 2. Partially disturbed 36.7%. 3. Human dominated 36.3%. (v6,#4)

Hannah, Lee; Midgley, Guy; Hughes, Greg; Bomhard, Bastian, "The View from the Cape: Extinction Risk, Protected Areas, and Climate Change," BioScience 55(no.3, March 2005):231-242(12). In the past decade, a growing number of studies have modeled the effects of climate change on large numbers of species across diverse focal regions. Many common points emerge from these studies, but it can be difficult to understand the consequences for conservation when data for large numbers of species are summarized. Here we use an in-depth example, the multispecies modeling effort that has been conducted for the proteas of the Cape Floristic Region of South Africa, to illustrate lessons learned in this and other multispecies modeling efforts.

Hannesson, Rögnvaldur, *The Privatization of the Oceans*. Reviewed by Douglas Clyde Wilson, *Environmental Values* 16(2007):138-141.

Hannigan, John A., Environmental Sociology: A Social Constructivist Perspective. London: Routledge, 1995. A society's willingness to recognize and solve environmental problems depends more upon the way these claims are presented by a limited number of interest groups than upon the severity of the threat they pose. The construction of environmental knowledge is placed in the context of wider debates within sociology on modernity and postmodernity. Examples from U.S., U.K., and Canada. Hannigan is in sociology at the University of Toronto. (v9,#1)

Hannum, Hildegard, ed. People, Land, and Community. New Haven: Yale University Press, 1997. 352 pp. \$35 cloth, \$17 paper. Contributors explore topics that range from agricultural reform to bioregional economics. They all, however, focus on the importance of sustainability, community, healthy and locally based economies of scale, education, the dignity of good work, and balance between human needs and the wellbeing of the natural world. Based on a lecture series sponsored by the E.F. Schumacher Society. (v8,#3)

Hannum, Hildegard, ed. People, Land, and Community. New Haven, CT: New Yale University Press, 1997. 336pp. \$35 cloth, \$17 paper. Contributors of the E.F. Schumacher Society Lectures explore topics that range from agricultural reform to bioregional economics. They all, however, focus on the importance of sustainability, community, healthy and locally based economics of scale, education, the dignity of good work, and balance between human needs and the well-being of the natural world. (v8,#1)

Hansen, A. J., Rasker, R., Maxwell, B., Rotella, J. J., Johnson, J. D., Parmenter, A. W., Langner, U., Cohen, W. B., Lawrence, R. L. and Kraska, M. P. V., "Ecological Causes and Consequences of Demographic Change in the New West," Bioscience 52(no.2, 2002): 151-62. (v.13,#2)

Hansen, AJ; Neilson, RP, Dale, VH; Flather, CH, Iverson, LR, Currie, DJ; Shafer, S; Cook R; Bartlein, PJ, "Global Change in Forests: Responses of Species, Communities, and Biomes," Bioscience 51(no, 9, 2001):765-779. (v.13,#1)

Hansen, Gunnar, Islands at the Edge of Time. Washington, DC: Island Press, Shearwater Books, 1993. 240 pages. Hardbound, \$ 22.50. Barrier islands run for 2700 miles from Texas to Maine, the longest stretch in the world. They are small islands, they are ephemeral, moving constantly with the sea's motion. But despite their fragility, barrier islands are monuments to the strength and beauty of nature, and to our precarious, yet lasting, ties to the land. Hansen is an environmental writer who lives in Maine. (v4,#2)

Hansen, Karen. "Minnesota's Landfill Cleanup Program: A New Superfund Paradigm." Natural Resources and Environment 10(no. 3, Winter 1996):32. (v7,#1)

Hansen, Kevin, Bobcat: Master of Survival. New York: Oxford University Press, 2006. The most adaptable and resilient feline in the world. Half the wild cat species worldwide are in trouble, but the bobcat is thriving, even expanding its range. Threats to the bobcat are mostly political and economic. Hansen is with the Southwest Wildlife Rehabilitation and Educational Foundation.

Hansen, Kirsten, "Does Autonomy Count in Favor of Labeling Genetically Modified Food?" Journal of Agricultural and Environmental Ethics 17(2004):67-76. I argue that consumer autonomy does not count in favor of the labeling of genetically modified foods (GM foods) more than for the labeling of non-GM foods. Further, reasonable considerations support the view that it is non-GM foods rather than GM foods that should be labeled. Keywords: consumer autonomy, ethics, foods, GMO, product labeling. Hansen is at the Centre for Bioethics and Risk Assessment, Department of Philosophy, University of Copenhagen, Denmark. (JAEE)

Hansen, Lene, Egon Noe and Katrine Hojring, "Nature and Nature Values in Organic Agriculture. An Analysis of Contested Concepts and Values Among Different Actors in Organic Farming," Journal of Agricultural and Environmental Ethics 19(2006):147-168. The relationship between agriculture and nature is a central issue in the current agricultural debate. Organic Farming has ambitions and a special potential in relation to nature. Consideration for nature is part of the guiding principals of organic farming and many organic farmers are committed to protecting natural qualities. However, the issue of nature, landscape, and land use is not straightforward. Nature is an ambiguous concept that involves multiple interests and actors reaching far beyond farmers. The Danish research project Nature Quality in Organic Farming has investigated the relationship between nature and organic farming. This article will focus on an expert workshop held in connection with the project that investigates the way different actors conceptualize nature. Farmers, scientists, and non-governmental organizations came together to discuss their experiences of nature and expectations of organic agriculture. From this interaction, it was clear that nature is a contested notion. Different understandings of nature exist within the three groups and there is disagreement as to whether emphasis should be given to biological qualities, production values, or

experiential and aesthetic perspectives. This complexity provides a challenge to organic farming as well as to the implementation of nature considerations in general. It illustrates an underlying battle for the right to define nature and nature quality and essentially decide what organic farmers should work towards. We argue that successful implementation requires organic farmers to carefully consider what expectations they wish to meet. Optimally it is dependent on a dialog between stakeholder interest groups that allows for multivocality and pluralism. Keywords: actors - discourse - implementation - multivocality - nature-nature quality - organic farming - values. The authors are in the Department of Agroecology, Danish Institute of Agricultural Sciences Research Centre Foulum, Tjele, Denmark.

Hansen, Robert, Emborg, Jens, Dalsgaard, Soren. "Denmark: The Public Nature of Private Forestry," Journal of Forestry 95(no.2, 1997):20. (v8,#1)

Hansis, Richard. "The Harvesting of Special Forest Products by Latinos and Southeast Asians in the Pacific Northwest: Preliminary Observations", Society & Natural Resources 9(no.6, 1996):611. (v7,#4)

Hanson, John N.; and Walke, John D. "Continuing Environmental Violations and the Federal Statute of Limitations." Journal of Environmental Law and Practice 3, no.2 (1995): 58. (v7, #3)

Hanson, Meira, "'Sustainability' Rendered Usable? The Idea of Environmental Space," Environmental Politics 8 (No. 4, 1999 Winter): 211- . (v.11,#4)

Hanson, Philip, ed., Environmental Ethics: Philosophical and Policy Perspectives. Burnaby, B.C.: Simon Fraser University Publications, 1986. Pp. xiv, 199; and Raymond Bradley and Stephen Duguid, Environmental Ethics, Volume II. Burnaby, B.C: Simon Fraser University Publications, 1989. Pp. 215. These two volumes, with titles sure to be confused with the journal of the same name, collect a wide variety of papers presented at several conferences on environmental ethics, the first in 1983. The papers in the first volume are presented with commentary, and this is an advantage, but overall they show a lack of appreciation for the literature of environmental philosophy available at that time. Tom Regan's discussion of non-anthropocentric ethical theories is discussed by Wayne Sumner and Jan Narveson. There are also essays by John Livingston, Philip Hanson, and William Leiss. The second volume is divided into a section on theory (with essays by Hanson, Mary Anne Warren, Alan Drengson, Holmes Rolston) and a section on policy (with essays by Livingston and Kai Nielsen, among others). (Katz, Bibl # 2)

Hanson, Philip P., ed. Environmental Ethics: Philosophy and Policy Perspectives. Reviewed in Environmental Ethics 10(1988):357-62.

Hansson, L. "Why ecology fails at application: Should we consider variability more than regularity?" Oikos 100 (3)(2003), 624-627. "There is a wide consensus even among ecologists that ecology as a science has not lived up to the expectations and that it is not able to either provide coercive basic theories nor good solutions to pressing environmental problems."

Haque, M. Shamsul. "Environmental Discourse and Sustainable Development: Linkages and Limitations." Ethics and the Environment 5(2000):3-22.

ABSTRACT: In the development field, one of the major shortcomings of mainstream development theories and models is their relative indifference toward environmental concerns. However, the worsening environmental catastrophes and the growing environmental consciousness led to the emergence of a new model of development known as 11 sustainable development. " The proponents of sustainable development tend to explore the environmental costs of development activities, prescribe environment-friendly policies, suggest institutional and legal measures for environmental protection, and publicize the principles of sustainability through international forums and publications. Despite this

recognition of environment-development relationship, the model of sustainable development suffers from certain serious shortcomings that need to be addressed. This article begins with a brief discussion on various forms of environmental challenges to development, followed by an analysis of how the model of sustainable development articulates the environment-development linkages in both practical and intellectual terms. The final section of the paper critically examines the major limitations of the model in dealing with the environmental question, and makes some suggestions in this regard. (E&E)

Haque, Nadeem, Review of Foltz, Richard C., *Animals in Islamic Tradition and Muslim Cultures* (Oxford, UK: Oneworld Publications, 2006). *Journal of Agricultural and Environmental Ethics* 20(2007):545-553.

Hara, Mariko, Review of: Duncan Brack et al., International Trade and Climate Change Policies, Environmental Values 11(2002):108-110.

Haraway, Donna J., Simians, Cyborgs, and Women: The Reinvention of Nature. New York: Routledge, 1991. A feminist argues that nature is constructed, not discovered, and traces the gendered roots of science in culture, looking at research on simians, cyborgs (cybernetic organisms), and women. Haraway is a historian of science at the University of California, Santa Cruz. (v3,#3)

Haraway, Donna J., *When Species Meet* (Minneapolis: University of Minnesota Press, 2008). Reviewed by Anna Peterson in *Journal of Agricultural and Environmental Ethics* 21(2008):609-611.

Haraway, Donna J. *When Species Meet*. Minneapolis: University of Minnesota Press, 2007. Haraway develops a treatise and rambling memoir of domesticated, companion species to discuss biological, cultural, and philosophical aspects of animal-human encounters.

Harcourt, A.H., "Coincidence And Mismatch Of Biodiversity Hotspots: A Global Survey for the Order, Primates," Biological Conservation 93 (No. 2, 2000): 163- . (v.11,#2)

Harcourt, AH; Parks, SA; Woodroffe, R, "Human density as an influence on species/area relationships: double jeopardy for small African reserves?" Biodiversity and Conservation 10(no. 6, 2001):1011-1026. (v.13,#1)

Hardaway, Robert M. "Environmental Malthusianism: Integrating Population and Environmental Policy," Environmental Law 27(no.4, 1997):1209- . (v9,#2)

Harden, Blaine, "U.S. Orders Maine Dam Destroyed," Washington Post (11/26/97): A1 and Goldberg, Carey, "Fish Are Victorious Over Dam as US Agency Orders Shutdown," New York Times (11/26/97): A12. Federal Government Orders Dam Removed. Malakoff, David A., "Agency Says Dam Should Come Down," Science 277(1997):762. For the first time in history, the federal government ordered the removal of a private hydroelectric dam that the owner wanted to continue to operate. The 160 year old Edwards Dam on the Kennebec River in Maine was ordered removed in order to restore the habitat of nine species of migrating fish. The dam was an easy target: The electricity it generates is 3 times more expensive than the going rate in Maine, it irrigates no fields and does not control floods, and it employs only four people. The owner claims the federal government is taking private property without just compensation and will appeal the removal order. A change of law in 1986 requires the federal agency which licenses dams to balance environmental and recreation costs against the benefits of dams. There is increasing pressure across the country for removal of dams, some of which are far bigger and provide far more power than the Edwards dam. Hydropower provides 14 percent of the nation's electricity supply. (v.8,#4)

Harden, Blaine, "Hatchery Salmon Plan Announced; Fish to Be Used in Stream Rebuilding," Washington

Post, May 29, 2004, p. A03. The Bush Administration plans to consider hatchery-bred salmon that join and survive among stream-bred populations in determining whether the species merits listing under the Endangered Species Act. In 2001 a U.S. District Court decision delisted Oregon coast coho salmon because genetically similar hatchery-bred fish had joined and increased the wild population. "Aelsea Valley Alliance v. Evans, 161 F. Supp.2d 1154 (D. Or. 2001).

Hardin, Garrett, "An Ecological View of Ethics." Pages 345-355 in Miller, James B. and McCall, Kenneth E., eds., The Church and Contemporary Cosmology. Pittsburgh: Carnegie Mellon Press, 1990.

Hardin, Garrett, Living with Limits. Chinese translation, translator: Dai Xingyi and Zhangzhen. Publisher: Shanghai Translation Publishing House, 2001.

Hardin, Garrett, Living Within Limits: Ecology, Economics, and Population Taboos. New York: Oxford University Press, 1993. 288 pages. \$ 25.00. The planet's ability to support life is finite, and the exponential growth of the human population is exceeding that capacity. For various reasons, the population crisis appears to have become a taboo subject. Compassion and altruism are dangerous. Competing survivors on a lifeboat should do whatever it takes to keep others from climbing aboard the lifeboat. Stop all philanthropy and immigration, which is "the promiscuous sharing of wealth." Demand that poor nations with growing populations sink or swim by themselves. Hardin demolishes the validity of unecological technological optimism, an uncritical faith in progress, mindless fixation on growth, and the appealing but finally destructive sentimentalism of Western philanthropic impulses. This is social Darwinism at its best and worst: hard-headed and hard-hearted. But Hardin does not address questions of distributive justice (except to group them with philanthropic charity) and his world of ecological limits might not have as much scarcity as he fears, if the productivity of the good earth were more justly distributed, and if the escalating desires of those living so luxuriously on the lifeboats could be curtailed. Hardin is professor emeritus of human ecology at the University of California, Santa Barbara, and the author of "The Tragedy of the Commons," an influential essay in Science in 1968. (v4,#4)

Hardin, Garrett. Promethean Ethics: Living With Death, Competition, and Triage. Reviewed in Environmental Ethics 3(1981):283-87.

Hardin, Garrett. "Holism or Reductionism?" Environmental Ethics 4(1982):191-92. (EE)

Hardin, Garrett. The Limits of Altruism. Reviewed in Environmental Ethics 1(1979):83-88.

Hardin, Garrett. The Ostrich Factor: Our Population Myopia. Reviewed by Richard A. Watson. Environmental Ethics 22(2000):327-328.

Hardin, Garrett. Naked Emperors. Reviewed in Environmental Ethics 7(1985):75-79.

Hardin, Garrett. Living within Limits: Ecology, Economics, and Population Taboos: (New York: Oxford University Press, 1993). Reviewed by Paul A. Trout in Environmental Ethics 17(1995):331-336. (EE)

Hardin, Garrett. The Social Contract Press has a Garrett Hardin Reprint Series, with a number of his books, previously otherwise out of print. 316 1/2 E. Mitchell St., Petoskey, MI 49770. 800/352-4843. <http://www.tscpress.com>

Harding, Elaine K., Elizabeth E. Crone, and Eric L. Walters, "The Scientific Foundations of Habitat Conservation Plans: A Quantitative Assessment," Conservation Biology 15(no.2, 2001): 488-. (v.12,#3)

Harding, L.E., McCullum. E., eds. Biodiversity in British Columbia. 1994. 426pp. \$25.95 paper. Examines biodiversity with the purpose of identifying large-scale changes and emerging threats. In

discussing ecosystem-centered approaches to conservation, methods of classifying rare species, taxonomy, and methods and effectiveness of protecting diversity, the authors cover forest, grassland, marine and urban environments.

Hardoy, Jorge, Mitlin, Diana, Scatterthwaite, David. The Poor Die Young: Housing and Health in the Third World. London: Earthscan Publications Ltd., 1993. 224pp. £12.95. This examines the scale of the problems affecting the urban poor and how in many cases cheap and effective solutions are available, the best hope being to enable local communities to build themselves healthier neighborhoods.

Hardwick, Charley D., Events of Grace: Naturalism, Existentialism, and Theology. New York: Cambridge University Press, 1996. 309 pages. \$ 54.95. Challenging the widely held view that one cannot speak religiously or theologically from the standpoint of naturalism, Hardwick asserts that there is no reason why a naturalistic view of the world cannot provide a practicable account of religion. Drawing on the work of H. N. Wieman, the recent philosophy of John Post, and the existentialism of Heidegger and Bultmann, Hardwick develops a physicalists' version of naturalism, and draws out its religious and theological implications. He argues for a concept of grace implicit in Wieman's notion of "Creative transformation."

Hardwick, Susan Wiley, Holtgrieve, Donald G. Valley for Dreams: Life and Landscape in the Sacramento Valley. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1996. 344 pp. \$24.95 paper, \$67.50 cloth. Structured around four key themes--the environment, people, economy, and landscape--the book analyzes how this region's natural environment changed as successive groups and individuals made it one of the fastest growing and ethnically diverse rural areas in North America. (v8,#2)

Hardy, Alexandra. "For a 'Green' Christmas, Reuse, Renew, and Recycle." The Christian Science Monitor, vol. 89, 17 Dec. 1996, p. 14.

Hardy, D. T., America's New Extremists: What You Need to Know About the Animal Rights Movement. Washington, DC: Washington Legal Foundation, 1990.

Hardy-Short, Dayle, and Short, Brant, "Fire, Death, and Rebirth: A Metaphoric Analysis of the 1988 Yellowstone Fire Debate," Western Journal of Communication 59(Spring 1995):103-125. Death metaphors were used primarily by those with an anthropocentric point of view and found in media reports of the fires. Birth metaphors were used primarily by those with a biocentric point of view and found in environmentalists' discussions of the fires. "Archetypal metaphors remain prominent in contemporary public discourse... such metaphors have an inventional quality ... and archetypal metaphors are especially powerful rhetorical devices in the context of a perceived crisis." (v.8,#4)

Hare, R.M., "Moral Reasoning about the Environment." Journal of Applied Philosophy 4 no. 1 (1987): 3-14. A strange article by one of the leading moral philosophers of our time. Hare tries to cover too much ground in ten pages: the purpose of applied philosophy, the basis of moral obligations to nature and the practical and political problems involved in environmental planning. His substantive position is that only beings that are sentient can have interests and hence, moral value. If we use a kind of Golden Rule when judging or evaluating entities, we find that it makes no sense to consider what happens to us if we are trees. This seems to show a surprising lack of imagination on the part of Hare. Nonetheless, he has advice that all environmental philosophers--particularly Deep Ecologists--should take to heart: "Philosophers are above all students of arguments" (p. 3). (Katz, Bibl # 1)

Hargrove, Eugene, "Problems and Prospects." Environmental Ethics 9(1987):195-96. (EE)

Hargrove, Eugene, "On Editing Environmental Ethics." Environmental Ethics 7(1985):291-92, 320. (EE)

Hargrove, Eugene C., ed. The Animal Rights/Environmental Ethics Debate: The Environmental Perspective. Reviewed in Environmental Ethics 15(1993):279-82.

Hargrove, Eugene, ed., Religion and Environmental Crisis. Athens, GA: University of Georgia, 1986. Pp. xxi, 222. This collection of essays is meant as a companion volume to William Blackstone's Philosophy and Environmental Crisis (University of Georgia, 1974), which was the first anthology in the field of environmental philosophy. The essays here herald a new era in the relationship between religious thought and environmental issues; they offer constructive proposals, and thus move beyond a mere discussion/refutation of Lynn White's attack on Christianity as the root cause of the environmental crisis. All major western religious perspectives are considered, as well as Islam and Taoism (these latter two essays were originally published in Environmental Ethics.) Of particular interest are the historical studies by J. Donald Hughes, "Pan: Environmental Ethics in Classical Polytheism" (pp. 7-24), and Gerard Reed, "A Native American Environmental Ethic: A Homily on Black Elk" (pp.25-37). Both essays show that pre-Christian "pagan" religions had a much closer relationship with Nature as a sacred place than does modern Christianity. Three essays consider the application of Christianity to the current environmental crisis. Robert H. Ayers, "Christian Realism and Environmental Ethics" (pp. 154-171), adopts the realistic position of Niebuhr that man's relationship to nature is dialectical: he is both part of nature and superior to it. John B. Cobb, Jr., "Christian Existence in a World of Limits" (pp. 171-187), finds this "Christian realism" inadequate as it stands; it needs to be supplemented by an "eschatological attitude," the hope for an ideal future in Christ. Jay McDaniel, "Christianity and the Need for New Vision" (pp. 188-212), argues for a radical restructuring of the metaphysical basis of Christian thought on the model of Whitehead's process philosophy. Essays by Jonathan Helfand, Susan Power Bratton, and Martin LaBar explore biblical sources for appropriate environmental attitudes. Good bibliography. (Katz, Bibl # 1)

Hargrove, Eugene C. "After Twenty Years." Environmental Ethics 20(1998):338-39.

Hargrove, Eugene, "After Fifteen Years." Environmental Ethics 15(1993):291-92. (EE)

Hargrove, Eugene C. Review of Nature's Economy: The Roots of Ecology. By David E. Worster. Environmental Ethics 1(1979):177-80.

Hargrove, Eugene, "The Quest for New Directions." Environmental Ethics 7(1985):195-96. (EE)

Hargrove, Eugene, "Overcoming Environmental Newspeak," Environmental Ethics 16(1994):115-116.

Hargrove, Eugene, "Beyond Spaceship Earth." Environmental Ethics 6(1984):3-4. (EE)

Hargrove, Eugene, "Editor's Response." Environmental Ethics 5(1983):96. (EE)

Hargrove, Eugene C. and J. Baird Callicott. "Leopold's `Means and Ends in Wild Life Management.'" Environmental Ethics 12(1990):333-37. Leopold's lecture at Beloit College provides an important glimpse into his conversion from a philosophy of prudent scientific resource management to a land ethic and aesthetic. Leopold here advocates natural regulation not simply because of his growing concern that invasive management principles are limited, but also because of aesthetic considerations that were independent of his instrumental or "utilitarian" training at the Yale Forest School and in the U. S. Forest Service. The lecture is helpful in correcting an unfortunate misreading of Leopold's famous essay, "The Land Ethic," according to which the land ethic is interpreted as being based primarily on human welfare and self-interest. Callicott is in the department of philosophy, University of Wisconsin-Stevens Point, Stevens-Point, WI. Hargrove is in the department of philosophy, University of North Texas, Denton, Texas. (EE)

Hargrove, Eugene, "The Shape of Things to Come." Environmental Ethics 10(1988):99-100. (EE)

Hargrove, Eugene, "Ecological Sabotage: Pranks or Terrorism?" Environmental Ethics 4(1982):291-92. (EE)

Hargrove, Eugene C. "What's Wrong? Who's to Blame?" Environmental Ethics 25(2003):3-4. (EE)

Hargrove, Eugene, "The State of the Journal." Environmental Ethics 1(1979):291-92. (EE)

Hargrove, Eugene, "On Teaching Environmental Ethics." Environmental Ethics 7(1985):3-4. (EE)

Hargrove, Eugene C, ed. Beyond Spaceship Earth. Reviewed in Environmental Ethics 10(1988):187-89.

Hargrove, Eugene C. Foundations of Environmental Ethics. Denton, TX: Environmental Ethics Books, 1996. 229 pages. Paper, \$ 14.95. A reprint of the 1989 edition by Prentice-Hall. Well known for its far-ranging investigation of the intellectual history of environmental attitudes, and for its aesthetic arguments as an foundation of environmental ethics. Hargrove is in philosophy at the University of North Texas and is the editor of the journal Environmental Ethics. (v7, #3)

Hargrove, Eugene, "Changing Times." Environmental Ethics 14(1992):99-100. (EE)

Hargrove, Eugene C, ed. Religion and Environmental Crisis. Reviewed in Environmental Ethics 9(1987):181-83.

Hargrove, Eugene, ed., Beyond Spaceship Earth: Environmental Ethics and the Solar System. San Francisco: Sierra Club Books, 1986. Pp. xv, 336. Most of the essays in this interdisciplinary collection were presented at a conference at the University of Georgia in June 1985. There are essays on the technical aspects of space exploration, the military and political use of space, and the ethical considerations of human activity in the solar system. Six essays are overtly philosophical. William K. Hartmann, "Space Exploration and Environmental Issues" (pp. 119-139), serves as a starting point for most of the discussions. This essay originally appeared in Environmental Ethics 6 (1984): 227-239. Hartmann's view is optimistic: he sees space exploration as providing utilitarian benefits: the development of natural resources, the possibility of alternative experimental cultures, an insurance against human self-destruction on earth. In "Wilderness and Space" (pp. 183-210), Paul F. Uhler and William P. Bishop suggest frameworks for the political and legal protection of wilderness in space, as well as for the management of earthly wilderness from extraterrestrial vantage points. Frank B. Golley, "Environmental Ethics and Extraterrestrial Ecosystems" (pp. 211-226), considers the possibility and the motivations for building extraterrestrial space colonies. Golley suggests that the building of space colonies is a "faustian" task, for man will be attempting to recreate nature for his own purposes in a hostile environment (p. 224). Of the greatest philosophical interest are three essays by Norman Daniels, Holmes Rolston, and J. Baird Callicott. Daniels, "Consent to Risk in Space" (pp. 277-290), considers the problems in structuring long term space missions so that the participants can maintain their autonomy in making significant mission decisions. Daniels concludes that this is a serious political question: the creation of adequate political structures for long term (multi-generational) missions. Rolston, in "The Preservation of Natural Value in the Solar System" (pp. 140-182), continues his development of a non-anthropocentric system of natural value. He considers Nature as "projective," i.e., as a source of creativity that produces projects of "formed integrity." He develops a list of normative rules based on the principle that "Humans ought to preserve projects of formed integrity, wherever found" (p. 170). Callicott, "Moral Considerability and Extraterrestrial Life" (pp. 227-259), argues that Leopold's land ethic is inadequate for the preservation of extraterrestrial life: such a life, if it exists, would lie outside earth ecosystems. But obligations to

extraterrestrial life could be justified on the basis of a Schweitzerian model of "reverence-for-all life." Callicott then suggests that we bring together these two diverse value systems under a theory of "weak anthropocentrism" popularized by Bryan Norton. Certain uses of natural entities "transform" and "ennoble" human life (p. 252). Callicott thinks it obvious that the discovery of extraterrestrial life would transform and ennoble the human vision of itself. (Katz, Bibl # 1)

Hargrove, Eugene, "How, When, Where, and Why." Environmental Ethics 1(1979):1. (EE)

Hargrove, Eugene, "Environmental Ethics and Asian and Comparative Philosophy." Environmental Ethics 8(1986):291-92. (EE)

Hargrove, Eugene, "Bats, Bacardi, and Environmental Education." Environmental Ethics 8(1986):3-4. (EE)

Hargrove, Eugene, "On Reading Environmental Ethics." Environmental Ethics 6(1984):291-92. (EE)

Hargrove, Eugene, "New Directions." Environmental Ethics 3(1981):291-92. (EE)

Hargrove, Eugene C. "The Historical Foundations of American Environmental Attitudes." Environmental Ethics 1(1979):209-40. John Passmore has claimed that American environmental attitudes are incompatible with Western traditions and Western civilization: they arose out of a Romantic transvaluation of values in the eighteenth and nineteenth centuries, and today are defensible only in terms of antiscientific nature mysticism and Oriental religions. I argue that these attitudes developed out of an intricate interplay between Western science and art over the last three centuries, and are, therefore, of Western, not Eastern, origin. Moreover, they are a part of scientific and aesthetic changes so broad and fundamental that, despite Passmore's prediction that they are unlikely to survive into the twenty-first century, they cannot be regarded lightly as a passing fad, and probably have already found a permanent place in Western thought and values. Hargrove is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)

Hargrove, Eugene, "Lucy Growing Old Chimpanzee." Environmental Ethics 3(1981):195-96. (EE)

Hargrove, Eugene C. "Should Environmentalism be Radical?" Environmental Ethics 17(1995):339-340. Hargrove is editor of Environmental Ethics. (EE)

Hargrove, Eugene, "The Future is Now." Environmental Ethics 11(1989):291-92. (EE)

Hargrove, Eugene C. "Anglo-American Land Use Attitudes." Environmental Ethics 2(1980):121-48. Environmentalists in the United States are often confronted by rural landowners who feel that they have the right to do whatever they want with their land regardless of the consequences for other human beings or of the damage to the environment. This attitude is traced from its origins in ancient German and Saxon land use practices into the political writings of Thomas Jefferson where it was fused together with John Locke's theory of property. This view of land and property rights was most influential in the late nineteenth century after the passage of the Homestead Act in 1862 when it was used in the arguments opposing national parks and nature preservation. Today it remains a formidable obstacle to planning and zoning in rural areas, despite unstated underlying assumptions which are either outdated or false. Hargrove is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)

Hargrove, Eugene C., ed., The Animal Rights/Environmental Ethics Debate: The Environmental Perspective. Albany: State University of New York Press, 1992. 273 pages. Paper. A collection of eleven essays documenting the history of the animal rights/environmental ethics debate. Papers by

Richard A. Watson, J. Baird Callicott, Bryan G. Norton, Paul W. Taylor, Mary Midgley, Eugene C. Hargrove, Mary Anne Warren, Mary Midgley, and John A. Fisher, all previously published but here gathered together for the first time. A wide variety of views is represented, which provides significant amounts of material for classroom discussion. (v3,#2)

Hargrove, Eugene, "Editor's Response." Environmental Ethics 7(1985):188-89. (EE)

Hargrove, Eugene C. "Environmental Ethics and the Earth Charter." Environmental Ethics 19(1997):3-4. (EE)

Hargrove, Eugene, "On Studying Environmental Ethics." Environmental Ethics 6(1984):99-100. (EE)

Hargrove, Eugene C., Foundations of Environmental Ethics. Englewood Cliffs, NJ: Prentice Hall, 1989. Pp. x, 229. Hargrove, as editor of the journal Environmental Ethics, is arguably the most influential philosopher in the field--yet this is the first book length statement of his position. The status of the author alone would be enough to make this an important contribution to the field of environmental philosophy, but this is also a powerful argument concerning the roots of environmental ideals in the Western tradition. In part, the book answers John Passmore's contention that a philosophy of nature preservation is alien or marginal to Western culture. The rebuttal of Passmore involves a far-ranging investigation of the intellectual history of environmental attitudes, both those that have inhibited environmental thought (notably, the Western philosophical tradition of idealism, and the Anglo-Saxon conception of property rights) and those that have supported preservationist intuitions (primarily, scientific and aesthetic ideals). Based on the demonstrated existence of Western aesthetic intuitions, Hargrove presents a detailed argument for the ethical foundations of preservationist policy. He argues against the justification of preservation based on "therapeutic nihilism:" since we cannot know precisely how nature operates, we should let it alone. This prevalent ideal is expressed as Barry Commoner's "third law" of ecology: "nature knows best," a platitude which Hargrove convincingly rejects. The central problem with the preservationist argument based on therapeutic nihilism is that its force is contingent upon developments in the science of ecology and technological power. If we do learn more about nature, so that we may re-create it, then the preservationist position loses its support. Much better, argues Hargrove, to ground environmentalist policy on the aesthetic values we discover in nature. Nature, even more than human-created art, is beautiful and good; and moral agents have an obligation to preserve and promote goodness in the world. Nature is beautiful (and hence good) by its mere existence; Hargrove thus terms his argument "an ontological argument" for environmental ethics. Central to this discussion is an excellent analysis of the attempted human domination of nature and how this destroys the beauty and autonomy of the natural world. "The authenticity of nature arises out of the fact that its existence precedes its essence" (p. 195). In sum, Hargrove attempts to create a middle position between an instrumental justification for environmental policy based on human interests and an intrinsic justification based on the direct consideration of non-human value. The aesthetic value for nature is an intrinsic value for humans; it thus is intrinsic and anthropocentric, with a secure place in Western traditions. The central problem for Hargrove's argument is the claim that aesthetic value is intrinsic and not instrumental. Although he is careful to distinguish higher level aesthetic experience from the mere "consumption" of natural beauty, the possibility remains that any human interest in aesthetic experience is primarily (and exclusively) an instrumental good. (Katz, Bibl # 2)

Hargrove, Eugene, "The Gospel of Chief Seattle is a Hoax." Environmental Ethics 11(1989):195-96. (EE)

Hargrove, Eugene C. Foundations of Environmental Ethics. Reviewed in Environmental Ethics 11(1989):169-77.

Hargrove, Eugene C. "Callicott and the Foundations of Environmental Ethics." Environmental Ethics 11(1989):286-88. (EE)

Hargrove, Eugene, "Beginning the Next Decade: Taking Stock." Environmental Ethics 11(1989):3-4. (EE)

Hargrove, Eugene C., "Foundations of Wildlife Protection Attitudes." Inquiry 30 (1987): 3-31. Interesting argument for wildlife preservation based on historical exegesis of attitudes toward species. Our wildlife preservation attitudes did not develop from the theory of evolution or the science of ecology but actually predate them. They are based on two earlier views uniformitarianism in geology, and the Linnaean standardization of species classification. Wildlife preservation attitudes are basically aesthetic, and rest on the instrumental value of species, not the intrinsic value of individual animals. This has important negative implications for the animal rights position or any kind of environmental individualism. (Katz, Bibl # 1)

Hargrove, Eugene, "Toward Teaching Environmental Ethics: Exploring Problems in the Language of Evolving Social Values," Canadian Journal of Environmental Education 5(2000):114-133. Problems created by the natural and social sciences approaches to values in higher education will over time render moral language unintelligible. Examples from the Yukon Wolf Conservation and Management Plan. Ways in which value education at the primary and secondary school levels could help prepare adults of the future for a kind of policy making that promotes the values stipulated in environmental law. (v.14, #4)

Hargrove, Eugene C. "From the Editor: After Twenty-five Years." Environmental Ethics 26(2004):3-4. (EE)

Hargrove, Eugene, "The Role of Socially Evolved Ideals in Environmental Ethics Education in Canada and the Yukon: A Historical Approach Involving the Humanities. Pages 20-31 in Jickling, Bob, ed., A Colloquium on Environment, Ethics, and Education. Whitehorse: Yukon: Yukon College, 1996. (v.14, #4)

Hargrove, Eugene, "Carlson and the Aesthetic Appreciation of Nature," Philosophy and Geography 5(2002):213-223.

Hargrove, Eugene C. "The Historical Foundations of American Environmental Attitudes." Environmental Ethics 1(1979):209-40. John Passmore has claimed that American environmental attitudes are incompatible with Western traditions and Western civilization: they arose out of a Romantic transvaluation of values in the eighteenth and nineteenth centuries, and today are defensible only in terms of antiscientific nature mysticism and Oriental religions. I argue that these attitudes developed out of an intricate interplay between Western science and art over the last three centuries, and are, therefore, of Western, not Eastern, origin. Moreover, they are a part of scientific and aesthetic changes so broad and fundamental that, despite Passmore's prediction that they are unlikely to survive into the twenty-first century, they cannot be regarded lightly as a passing fad, and probably have already found a permanent place in Western thought and values. Hargrove is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)

Hargrove, Eugene C., Review of Nature's Economy: The Roots of Ecology. By David E. Worster. Environmental Ethics 1(1979):177-80.

Hargrove, Eugene C. "*Environmental Ethics* and the Culture War." Environmental Ethics 30(2008):339-340.

Hargrove, Eugene C. "A Traditional and Multicultural Approach to *Environmental Ethics* at Primary and Secondary School Levels." *Environmental Ethics* 30(2008):263-271. Translating *Environmental Ethics* into something that can be taught at the primary and secondary school levels may never be feasible. In addition, what needs to be taught may vary in different cultures around the world. A good noncontroversial starting point may be to begin with the values that are often listed in the purpose statements of environmental laws. Teachers could teach the history of ideas behind those values and their relationship to environmental concern. This approach is needed as a counter to the value approach of modern economics which treats noneconomic values as meaningless expressions of personal emotion. Comparative value discussion can be used to clarify traditional values and in countries with indigenous populations with values originating in different histories of ideas, such as the values of the First Nation peoples in Canada and the Mapuche in Chile, which can be used to promote better understanding between major social groups.(EE)

Hargrove, Eugene C. *Foundations of Environmental Ethics*. Translators: Yang Tongjin, et al. (Chongqing: Chongqing Publishing House, 2007). (in Chinese)

Hargrove, Eugene. "Environmental or Ecological Citizenship through Culture-Specific Environmental Value Education." *Environmental Philosophy* (Official Journal of the Korean Society for the Study of Environmental Philosophy) 3 (2004): 111-27. In English.

Hargrove, Eugene. "The Next Century and Beyond." *Environmental Ethics* 22(2000):3-4. (EE)

Harker, D. and Bates, D., "A Review of: Speth, James Gustave. *Red Sky at Morning: America and the Crisis of the Global Environment*," *Society and Natural Resources* 18, 2005): 10.

Harlow, Elizabeth M. "The Human Face of Nature: Environmental Values and the Limits of Nonanthropocentrism." *Environmental Ethics* 14(1992):27-42. While some form of nonanthropocentrism is a defining feature of environmental ethics, there are at least four senses in which the value of nature might be said to be humanly independent, and these are often conflated. I argue that the strongest of these four (Rolston's "autonomous intrinsic value") may require classic ontological commitments which are no longer historically open to us. However, if we take seriously the language dependent view of nature suggested by post-Wittgensteinian epistemology, we find paradoxically that this kind of anthropocentrism can ground a genuine sense in which nature is valuable in its own right, yet as part of human good. In this context, Rolston's distinction between "autonomous intrinsic value" and "anthropogenic intrinsic value" becomes a distinction without a difference. Harlow is in the department of philosophy, Ryerson Polytechnic Institute, Toronto, Canada. (EE)

Harman, Jay R. "Notions of Self-Interest: Reflections on the Intersection between Contingency and Applied Environmental Ethics." *Environmental Ethics* 23(2001):377-389. If agents motivated only by self-interested reasons practice different degrees of ethical environmental behavior at least partly because they hold different notions of what is in their self-interest, then the nature of our self-interest conceptions is a central issue in environmental ethics. Unless set by biology, as seems unlikely from the evidence, the breadth of the individual self-interest conception we each develop must depend on the specific experiences we are each contingently exposed to in our lives. If nurturing a stronger environmental ethic within our society is a goal, if that ethic depends at least in part on how we individually conceive of our self-interest, and if the development of each of our self-interest conceptions responds contingently to input from others, then these reflections lead to normative considerations that reach beyond the standard ethical questions regarding how to act to others that concern, antecedently, whether to act at all. (EE)

Harmelin, Jean-Georges, "Mediterranean marine protected areas: some prominent traits and promising trends," *Environmental Conservation* 27(no.2, JUN 01 2000):104- . (EE v.12,#1)

Harmon, David, In Light of our Differences: How Diversity in Nature and Culture Makes Us Human. Washington: Smithsonian Institution Press, 2003. Why we ought to be concerned about the loss of diversity in both nature and culture. Insights from conservation biology, evolutionary theory, linguistics, geography, psychology, philosophy, and ethics. When more and more elemental differences are erased from the natural world and human societies, the field of possible experience becomes more constricted and our essential humanity becomes jeopardized. Harmon is Executive Director, The George Wright Society, Hancock, Michigan (a society dedicated to the protection, preservation, and management of cultural and national parks and reserves).

Harmon, David, Biodiversity and the Sacred: Some Insights for Preserving Cultural Diversity and Heritage," Museum International 55(no. 218, 2003):63-69. Nature has been sacred since the dawn of human consciousness, and there is today a broadening range of spirituality, often interfused with the secular, that cannot easily be characterized as "faith," but regards nature as sacred. The sacred is a bridge between nature and culture. Scientists are often offering responses to why save nature that make recourse to the idea of the sacred. Biologists call the creative process speciation, while theologians call it genesis, and they have very different explanations for it, but both have agreed that it is eminently valuable. Harmon is Executive Director, George Wright Society, an international professional association advancing the scientific and cultural values of protected natural areas and cultural sites.

Harmon, David, and Putney, Allen D., eds., The Full Value of Parks: From Economics to the Intangible. Lanham. MD: Rowman and Littlefield, 2003. A volume prepared for the occasion of the Fifth World Parks Congress, Durban, South Africa, September 2003. 23 contributors. Sample articles:

-English Anthony J., and Lee, Ellen, "Managing the Intangible"

-Rolston, Holmes, III, "Life and the Nature of Life--in Parks"

-Ewert, Alan, et al, "Therapeutic Values of Parks and Protected Areas"

-Schaaf, Thomas, "Biosphere Reserves: Tangible and Intangible"

-Sarmiento, Fausto O., "Protected Landscapes in the Adean Context: Worshipping the Sacred in Nature and Culture"

-Tranel, Michael J., and Hall, Adrienne, "Parks as Battlegrounds: Managing Conflicting Values." And more.

Harmon is executive director of the George Wright Society, a research group advancing the scientific and heritage values of parks. Putney serves as a leader of the Task Force on Non-Material Values of the World Commission on Protected Areas. (v 14, #3)

Harmon, David. "Cultural Diversity, Human Subsistence, and the National Park Ideal." Environmental Ethics 9(1987):147-58. Out of all the possible categories of protected areas, the most widely used around the world has been the national park. The reasons behind this predominance have colored the entire international conservation movement. I look at the ethical implications of the national park ideal's phenomenal global success. Working from two assumptions that human cultural diversity is good and desirable, and that there is a definite relation between such diversity and protected area conservation--I suggest that what is needed most right now is a clarification and refocusing of the debate on this issue. Harmon resides at Hancock, MI. (EE)

Harmon, William J., McKinney, Matthew J., and Burchfield, James A., "Public Involvement and Dispute Resolution Courses in Natural Resources Schools," Journal of Forestry 97(no.9, Sept. 1999):17- . In recent years employers have consistently identified leadership in working with the public and the ability to resolve conflict over natural resources as skills they seek in new employees. Have our universities been listening?

Harnack, A., ed., Animal rights: Opposing viewpoints. San Diego, CA: Greenhaven Press, 1996.

Harper, Charles L. *Environment and Society: Human Perspectives on Environmental Issues*, 4th ed. Upper Saddle River, NJ: Prentice Hall, 2007. Harper examines human-environment relations from a perspective of environmental sociology.

Harper, Charles L. *Environment and Society: Human Perspectives on Environmental Issues*, 4th ed. Upper Saddle River, NJ: Prentice Hall, 2007. Harper examines human-environment relations from a perspective of environmental sociology.

Harper's Magazine, April 1990, contains a forum, "Only Man's Presence Can Save Nature," moderated by Michael Pollan, executive editor of Harper's, with participants Daniel B. Botkin, professor of biology and environmental studies, University of California, Santa Barbara; Dave Foreman of Earth First!; James Lovelock, who developed the Gaia theory; Frederick Turner, professor of arts and humanities, University of Texas at Dallas; and Robert D. Yaro, regional planner in the New York metropolitan region. (v1,#2)

Harrell, Martin, "Why Eight Plus Six Means Prison for Environmental Criminals," Tulane Environmental Law Journal 14(no.1, Wint 2000):197-. (v.12,#4)

Harremoes (Harremoës), Poul, The Precautionary Principle in the 20th Century: Late Lessons from Early Warnings. London: Earthscan, 2002. (v. 15, # 3)

Harries, Karsten. The Ethical Function of Architecture. Cambridge, MA: MIT Press, 1996. 450pp. \$45. Harries questions the premises on which architects and theorists have long relied--premises that have contributed to architecture's current identity crisis and marginalizations. He first criticizes the aesthetic approach, focusing on the problems of decoration and ornament. He then turns to the language of architecture. Harries also considers the relationship of building to the idea and meaning of dwelling. Architecture has a responsibility to community, but its ethical function is inevitably also political. (v8,#1)

Harrington, J., "Review of: Environmental Regulation in China: Institutions, Enforcement, and Compliance by Xiaoying Ma and Leonard Ortolano," Journal of Environment and Development 10(no.4, 2001): 396-98. (v.13,#2)

Harrington, Winston, Richard D. Morgenstein, and Thomas Stern, eds., Choosing Environmental Policy: Comparing Instruments in the United States and Europe. Washington, DC:RFF Press (Resources for the Future), 2004. Who has the best way to shape environmental policy? The United States, or Europe? The U.S. likes carrots on sticks, voluntary compliance, while Europeans lean toward more punitive governmental regulation. These contrasting strategies can lead to similar outcomes; both can have a place in the regulatory arsenal, depending on circumstances, and, depending on cultures in the U.S. and Europe. [Nevertheless, there is widespread judgment that the European Union has taken the lead in environmental responsibility, leaving the U.S. considerably behind, and even retrogressing under the Bush administration.]

Harrington, Winston, Richard D. Morgentern, and Nelson, Peter. "Predicting the Costs of Environmental Regulations." Environment 41(No. 7, September 1999):10- . Comparison of the estimates made before and after a regulation has been implemented help to quell the controversy over whether regulators routinely overestimate or underestimate costs. (v10,#4)

Harris, Errol E., One World or None: Prescription for Survival. Atlantic Highlands, NJ: Humanities Press International, 1993 (June). 176 pages. Paper \$ 15.00. Cloth, \$ 35.00. The one practicable solution is to establish a world authority democratically elected and empowered to enforce a world law. It is imperative that peoples and NGO's unite for the ratification of the Constitution for the Federation of Earth, already drafted by the World Constitution and Parliament Association. Harris is professor of

philosophy emeritus at Northwestern University. (v3,#4)

Harris, John. *Enhancing Evolution*. Princeton: Princeton University Press, 2007. Gene enhancement is not only allowable but should be morally obligatory for parents and society. For a counterpoint, see *The Case against Perfection* by Michael Sandel (Cambridge, MA: Harvard University Press, 2007).

Harris, Judith, Nelson, Gordon. "Living Heritage and Development: A Whole Economy Perspective", Environments 24(no. 1, 1996):135.

Harris, Larry D., The Fragmented Forest: Island Biogeography Theory and the Preservation of Biotic Diversity. Chicago: University of Chicago Press, 1984. 211 pages. Human settlement, especially the roads that accompany it, splits natural areas into small, isolated pieces, which leads to ecological impoverishment. Conservation strategy must establish corridors connecting the fragmented forest. Harris is a Florida ecologist.

Harris, M., Kuhn, B., Price, G., Smith, P., Xu, W., Stevens, J., and Addy, K., "Ecological Effects of Pine Plantation Management," Journal of Forestry 100(no.7, 2002): 58-59. (v.13,#4)

Harris, Michael Ray. "Promoting Corporate Self-Compliance: An Examination of the Debate Over Legal Protection for Environmental Audits", Ecology Law Quarterly 23 (no.4, 1996):663. (v7,#4)

Harris, Paul G. "Considerations of Equity and International Environmental Institutions", Environmental Politics 5(no.2, 1996):274. (v7,#4)

Harris, Paul G., "Affluence, Poverty and Ecology: International Relations, and Sustainable Development," Ethics and the Environment 2(1997):121-138. Effective efforts to protect the global environment will require the willing cooperation of the world's poor. Persuading them to join international environmental agreements and to choose environmentally sustainable development requires substantial concessions from the affluent industrialized countries, including additional financial assistance and technology transfers. The affluent countries ought to provide such assistance to the world's poor for ethical reasons. Doing so would promote transnational distributive justice, which is defined here as a fair and equitable distribution among countries of benefits, burdens and decision making authority, in this case associated with transnational environmental relations. Conceptions of distributive justice examined include utilitarianism, human rights, causality/responsibility, impartiality, and principles derived from Kantian and Rawlsian ethics. Harris is a visiting research fellow at the Oxford Centre for the Environment, Ethics, and Society. (E&E)

Harris, Paul G., "'Getting Rich Is Glorious': Environmental Values in the People's Republic of China," Environmental Values 13(2004):145-165. Pollution and overuse of resources in China have profound implications for the Chinese people and the world. Globalisation may be partly to blame for this situation, but it is hardly the only explanation. China has been overusing its resources for centuries. Traditional values appear to offer environmentally benign guidance for China's economic development, but they are largely impotent in the face of now-pervasive values manifested in Western-style consumption. Government policies go some way toward addressing this problem, but what may be required is a new set of values that brings self-interest and environmental protection into common cause. Keywords: China, environment, consumption, globalisation, values. Harris is in politics and sociology, Lingnan University, Hong Kong. (EV)

Harris, Paul G., Review of Elizabeth C. Economy, *The River Runs Black: The Environmental Challenge to China's Future*, Environmental Values 16(2007):135-138.

Harris, PG, "Sharing the Burdens of Environmental Change: Comparing EU and U.S. Policies," Journal of Environment and Development 11(no.4, 2002): 380-401.

Harris, Richard B., "Approaches to Conserving Vulnerable Wildlife in China: Does the Colour of Cat Matter--if it Catches Mice?," Environmental Values 5(1996):303-334. China's environmental problems are well known, but recently its record in the area of wildlife conservation, particularly with regard to endangered species, has come under scrutiny. Environmental values colour how we in the West view both China's past experience with wildlife and what strategies it should adopt to foster better conservation. Chinese have long taken a utilitarian view of wildlife, valuing species primarily as resources for man's use and only secondarily for other reasons. However, China has not developed institutions capable of sustaining the desired use of wildlife in the face of ever-growing demands. I suggest that Western criticisms of Chinese utilitarian attitudes are inappropriate, ineffective, and possibly counter-productive: deep-seated cultural mores change slowly. Instead, Westerners concerned with the fate of China's wildlife should assist the development of systems that act to channel demand for wildlife material benefits toward investment in conservation. Such systems will likely require devolution of considerable control to local levels, strengthening incentives to favour long- over short-term benefits, and--notwithstanding common Western attitudes--substantial consumptive use of wildlife. KEYWORDS: China, consumptive use, incentives, utilitarianism, wildlife conservation. (EV)

Harris, Tom, Death in the Marsh. Covelo, CA: Island Press, 1991. \$ 24.95 cloth, \$ 14.95 paper. 270 pages. The story of selenium poisoning, beginning in the Kesterson National Wildlife Refuge in California. Selenium poisoning in 43 sites in fifteen states in the U. S. West. Early research that could have avoided the tragedy. Political obstacles to solving the crisis. Clean up efforts and possibilities. (v2,#3)

Harrison, Carolyn and Jacquelin Burgess. "Valuing Nature in Context: The Contribution of Common-good Approaches," Biodiversity and Conservation 9(no. 8, 2000):1115-1130. Abstract. We draw on a number of empirical studies undertaken in the UK to show how residents and farmers come to contest scientific approaches to valuing nature as the basis for adjudicating conflicts over protected natural areas. The findings of these studies suggest that a widening of the knowledge base on which the goals and practices of nature conservation are founded, and a more deliberative process of decision making about what nature is important locally, is required if effective conservation partnerships are to be sustained. We offer a common good approach to valuing nature as a means of addressing this problem. A common good approach is based on ethical and moral concerns about nature and expresses these values through a social and political process of consensus building. We illustrate how this common good approach can be used to prioritise issues in a Local Environment Agency Plan. When linked with a method of Stakeholder Decision Analysis this common good approach is capable of building coalitions and a measure of consensus between different interests. It achieves this through a transparent and deliberate process of debate and systematic analysis of values that makes explicit the foundation of different knowledge claims about nature. Key words: common good approaches, local knowledge, stakeholder analysis, valuing nature.

Harrison, Carolyn, and Burgess, Jacquelin, "Valuing nature in context: The contribution of common-good approaches," Biology and Conservation 9(2000):1115-1130. Abstract. A number of empirical studies show how residents and farmers come to contest scientific approaches to valuing nature as the basis for adjudicating conflicts over protected natural areas. A widening of the knowledge base on which the goals and practices of nature conservation are founded is required if effective conservation partnerships are to be sustained. We offer a common good approach as a means of addressing this problem, based on ethical and moral concerns about nature. We illustrate how this common good approach can be used to prioritise issues in a Local Environment Agency Plan. When linked with a method of Stakeholder Decision Analysis this common good approach is capable of building coalitions and a measure of consensus between different interests. It achieves this through a transparent and deliberate process of debate and

systematic analysis of values that makes explicit the foundation of different knowledge claims about nature. The authors are with the Environment and Society Research Unit, Department of Geography, University College London. (v.13,#1)

Harrison, Frank R., III, "The Judeo-Christian Tradition and Crises in Contemporary Technology" in Frederick Ferré, ed., Technology and Religion, vol. 10 of Research in Philosophy and Technology (Greenwich, CT: JAI Press, 1990). Harrison gives yet another reply to Lynn White's claim that biblical religion disenchant nature and is largely responsible for the ecological crisis. Most environmental abuse has occurred in the post-Enlightenment era and against the background of many different readings of the Judeo-Christian tradition. Harrison is professor of philosophy at the University of Georgia. (v5,#1)

Harrison, Neil E. "Unexpected Events in Geneva: Progress Toward a Protocol on Climate Change," The Journal of Environment and Development 6(1997):85.

Harrison, Neil E., Constructing Sustainable Development. Albany, NY: State University of New York Press, 2000. Sustainable development proposals are at least incomplete or impractical and at worst dangerously misleading. The concept of sustainable development presents a problem for theorists and policy makers because it cannot be objectively defined and subjective understandings vary widely. For the capitalist, sustainable development is a problem of production efficiency and technological innovation; for the environmentalist, a more appropriate ethic is a necessity; and for the developing country policy maker, a more equitable distribution over resources is imperative. How sustainable development can be constructed from policy principles derived from ongoing adaptations to changes in values, beliefs, and scientific knowledge, and applied both in developed and developing countries. (v.13,#1)

Harrison, R. 1964. Animal machines. London: Vincent Stuart, 1964.

Harrison, RD, "Figs and the Diversity of Tropical Rainforests," BioScience 55 (no. 12, December 2005): 1053-1064. Ficus (Moraceae) is arguably one of the most important plant genera in lowland tropical rainforests. Pioneer attributes have endowed figs with tremendous evolutionary flexibility, while long range seed dispersal ensures that a high proportion of the regional species pool is represented in local assemblages. Large numbers of Ficus species are able to coexist because many are extremely rare as a result of limited recruitment opportunities, which limits competition. They are nevertheless able to breed at low densities because they possess an efficient, long range pollination system. These factors are likely to be important in the diversity of other plant groups in the tropics.

Harrison, Robert Pogue, Forests: The Shadow of Civilization. Chicago: University of Chicago Press, 1992. 288 pages. \$ 19.95. A study of how complicated with trees and woodlands the human outlooks and civil habits have been. A comprehensive, though selective, history of forests in the Western imagination. (v3,#2)

Harrison, Ruth, "Since Animal Machines", Journal of Agricultural and Environmental Ethics 6(1993): A brief overview of changes in the pattern of livestock farming since publication of Animal Machines in 1964 is presented. Some of the pressures leading to change - the Brambell Committee in Britain, parliamentary agriculture committee reports in Britain and the European Economic Community (EEC), the Council of Europe, the EEC - are mentioned, as are some of the actual legislative reforms achieved in Europe. Political, social and economic pressures on farmers to increase production through intensive systems of livestock farming are now being superceded in Europe by similar pressures on them to adopt "alternative" systems. A plea is made for governments everywhere to broaden their thinking on the future of livestock farming to bring into balance the demands of global food and feed, of the environment and of the welfare of the animals. Harrison is at 34 Holland Park Road, London W14 8LZ, England.

Jamieson, Dale, "Ethics and Animals: A Brief Review", Journal of Agricultural and Environmental Ethics 6(1993): This essay is a short exposition of the current state of the discussion regarding ethics and animals. The views of various proponents of animal rights and liberation are discussed, along with those of their critics. What emerges is that few moral philosophers today would defend the full extent of our current practices with regard to non-human animals. We have entered a new era in our concerns about animal welfare, and there will be no going back. Animals are now centrally located on the moral map. Ethology has played an important role in this shift, and animal welfare science is an important key to improving the lives of non-human animals and helping us to discharge our moral obligations to them. In these circumstances philosophy and animal welfare science must mutually inform each other. Jamieson is at the Center for Values and Social Policy, Department of Philosophy, University of Colorado, Boulder, CO 80309.

Harrison, Thomas F. "Environmental Lawyers: Do They Have a Future?" Journal of Environmental Law & Practice 3(no.3, Nov. 1995):48- . Will environmental lawyers still be needed in the new antiregulatory age?

Hart, D. D., and Poff, N. L., "A Special Section on Dam Removal and River Restoration," Bioscience 52(no.8, 2002): 653-55. (v.13,#4)

Hart, D. D., Johnson, T. E., BushawNewton, K. L., Horwitz, R. J., Bednarek, A. T., Charles, D. F., Kreeger, D. A., and Velinsky, D. J., "Dam Removal: Challenges and Opportunities for Ecological Research and River Restoration," Bioscience 52(no.8, 2002): 669-82. (v.13,#4)

Hart, G, "Geography and development: development/s beyond neoliberalism? Power, culture, political economy," Progress in Human Geography 26(no.6, 2002): 812-822.

Hart G., "Geography and development: critical ethnographies," Progress in Human Geography 28(no.1, 1 February 2004):91-100(10). (v. 15, # 3)

Hart, John, "Salmon and Social Ethics: Relational Consciousness in the Web of Life," Journal of the Society of Christian Ethics 22(2002):67-93. The extinction of salmon species provides bioregional stimuli for reflection on whether nonhuman species have intrinsic value or solely instrumental value, and the extent to which species preservation should have equitable status with, or take precedence over, human wants and needs. If societal needs and species conservation, and the common good of all creatures, are to be integrated for the good of the commons then a relational consciousness must replace "dominion" and "stewardship" attitudes toward creation. With discussion of whether this involves a concept of "rights" for salmon. Hart is in theology at Carroll College, Helena, Montana.

Hart, John Fraser, The Rural Landscape. Baltimore, MD: Johns Hopkins University Press, 1998. A guide to the rural landscape, not as an artifact but as an interaction between humans and nature, in Europe and America. All the way from relict features of the landscape to the effects of contemporary recreation on the look of the land. (v9,#1)

Hart, John, Saving Cities, Saving Money: Environmental Strategies that Work. Resource Renewal Institute, 1992. 116 pages. \$ 15.95. (v4,#1)

Hart, John, "A Jubilee for a New Millennium: Justice for Earth and Peoples of the Land," Catholic Rural Life, Spring 2001, pp. 23-31. Adapted from Hart's keynote address at the annual meeting of the National Catholic Rural Life Conference, November 2000. The Divine Spirit calls people to care for their niche in creation, to care for each other, and to care for all life. In the Christian tradition, creation and incarnation

are woven together in the biblical Jubilee Year, which serves as a periodic reminder for people to acknowledge and actively fulfill their responsibilities to God, to each other, and to all creation. Hart is in theology and environmental studies, Carroll College, Helena, MT. (v.12,#3)

Hart, John, The Spirit of the Earth--A Theology of the Land. Mahwah, NJ: Paulist Press, 1984. Hart teaches theology at Carroll College, Helena, MT 59625.

Hart, John, The Columbia River Watershed: Realities and Possibilities. On May 12, 1999, the Roman Catholic bishops of the Pacific Northwest and British Columbia released a 55-page "reflection" on the Columbia River watershed and how best to protect its resources, preparatory to release of a pastoral letter on the subject in 2000. The document, entitled The Columbia River Watershed: Realities and Possibilities, views salmon as a sign of the ecological health of the river and the "spiritual vitality" of the watershed. The full text can be obtained on the Web at: <http://www.columbiariver.org/index1.html>. John Hart, Theology, Carroll College, Helena, MT 59625. (v10,#4)

Hart, John, *Sacramental Commons: Christian Ecological Ethics* (Lanham, MD: Rowman and Littlefield, 2006). Reviewed by Sean Samuel O'Neil in *Journal of Agricultural and Environmental Ethics* 21(2008):491-494.

Hart, John. The Spirit of the Earth. Reviewed in Environmental Ethics 7(1985):283-85.

Hart, John. The Spirit of the Earth. New York/Ramsey NJ: Paulist Press, 1984.

Hart, John. *Sacramental Commons*. Lanham, MD: Rowman & Littlefield, 2006. Sacramental universe. Spirit of St. Francis. Native Spirits. Living Water. Species Survival. Nature's Natural Rights. Commons Good, Common Good and Common Goods. Job, Injustice and Dynamic Nature, Jubilee in the Commons, Commons Commitments: Ecological Ethics, Spirit, Commons and Community. An ecological systematic theology.

Hart, L., ed., Responsible conduct of research in animal behavior. New York: Oxford University Press, 1997.

Hart, P., and Nolan, K., "A Critical Analysis of Research in Environmental Education," Studies in Science Education 34(1999):1-69. There is a "change towards more positive environmental attitudes among people of all ages after exposure to some form, almost any form, of environmental education experience whether short or long term" (p. 7) But often there is a "rhetoric-reality gap" (p. 25); people come to espouse values but they do not enact them. The assumption that "appropriate information from a credible source and a legitimate opportunity to act will result in action" does not appear to be well founded (p. 19). (v.13,#1)

Hart, Richard E., ed., Ethics and the Environment. Lanham, MD: University Press of America, 1992. 158 pages. \$ 42.50 cloth. \$ 16.50 paper. Co-published with the Long Island Philosophical Society. Twelve contributions from philosophers, humanists, geologists, chemists, and physicists. Property rights, organisms and communities, environmental values, with concluding discussion of two environmental problems that affect Long Island: nuclear energy and a safe water supply. (v3,#3)

Hart, Rob and Uwe Latacz-Lohmann. "The Indifference Curve, Motivation, and Morality in Contingent Valuation," Environmental Values 10(2001):225--242. Contingent valuation surveys have tended to yield results that seem to go contrary to what is standardly seen as "rational choice". We argue that some of the inconsistencies arise because bids for public environmental goods in contingent valuation surveys are often (at least partly) motivated by moral considerations and ethical beliefs. We analyse the expected

results of CV surveys given the existence of such ethical motivations, including the valuation of actions as well as states. It is found that we cannot expect bids made on this basis to reveal preferences which obey the rules commonly assumed in the theory of consumer choice. The two standard reactions to these anomalies have been to attack the validity of the method, or to urge greater rigour in survey design and application. By contrast, we conclude that the usefulness of the method for evaluating options concerning environmental public goods depends critically on the problem definition. The method should be used for the direct evaluation of realistic policy packages, rather than to try to extract abstract values for invaluable goods. The conclusion accords with current trends, including the move towards the use of deliberative methodologies. Keywords: Non-market valuation, contingent valuation, rational choice, utilitarianism. Rob Hart is at the Department of Economics, The Swedish University of Agricultural Sciences, Uppsala, Sweden. Uwe Latacz-Lohmann is at the Department of Land Economy, University of Cambridge, Cambridge, UK and the Agricultural and Resource Economics, University of Western Australia Nedlands, Perth Australia. (EV)

Hart, Stuart L., "Beyond Greining: Strategies for a Sustainable World," Harvard Business Review 75(no. 1, Jan./Feb. 1997):66-76. In the 1960's and 1970's, corporations were in a state of denial about their impact on the environment. But today many companies have accepted their responsibility to prevent pollution. What they need to do now is help create a sustainable global economy. The drive toward sustainability is an absolute imperative for human survival. It also represents one of the biggest challenges--and opportunities--for individual companies in the history of commerce. Emerging economies cannot afford to repeat the mistakes of Western development. Hart teaches corporate strategy and directs the Corporate Environmental Management Program at the University of Michigan Business School. It is interesting to see an author like this taking his terminology from Vandana Shiva (p. 76). (v8,#1)

Harte, J, "Land Use, Biodiversity, and Ecosystem Integrity: The Challenge of Preserving Earth's Life Support System," Ecology Law Quarterly 27(no.4, 2000):929-966. (v.12,#4)

Harte, John, The Green Fuse: An Ecologist's Odyssey. Berkeley, University of California Press, 1993. 156 pages. Hardbound, \$ 15.00. An ecologist and activist draws on his research as well as on literature to demonstrate the intricate connections among disparate ecosystems. A bridge between the cultures of science and art. "The green fuse" symbolizes the basic unity behind natural diversity. Hart is professor of energy and resources at the University of California, Berkeley. (v4,#2)

Hartel, Peter G., Horace D. Skipper, Thomas A. Ruehr, eds., Agricultural Ethics: Issues for the 21st Century. Madison, WI: Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, 1994. ASA Special Publication No. 57. Six contributors: Frederick Ferré, "No Hiding Place: The Inescapability of Agricultural Ethics"; Stanley E. Curtis, "Farm Animal Welfare: Obligations, Realities, and Compromises"; Gary Comstock, "Some Virtues and Vices of Agricultural Technology"; Charles V. Blatz, "Coming Full Circle: Ethical Issues in Traditional and Industrialized Agriculture"; C. Dean Freudenberger, "What Is Good Agriculture?"; Thomas A. Ruehr, "Teaching Agricultural Ethics."

Hartig, T; Kaiser, FG; Bowler, PA, "Psychological Restoration in Nature as a Positive Motivation for Ecological Behavior," Environment and Behavior 33(no. 4, 2001):590-607. (v.13,#1)

Hartley, Stuart David, Mathesis Universalis or Taxinomia? A Reappraisal, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Hartley, Stuart David, Mathesis Universalis or Taxinomia? A Reappraisal, Master's Thesis, Department of Philosophy, Lancaster University, September 1993.

Hartley, Troy W. "Environmental Justice: An Environmental Civil Rights Value Acceptable to All World Views." Environmental Ethics 17(1995):277-289. In accordance with environmental injustice, sometimes called environmental racism, minority communities are disproportionately subjected to a higher level of environmental risk than other segments of society. Growing concern over unequal environmental risk and mounting evidence of both racial and economic injustices have led to a grassroots civil rights campaign called the environmental justice movement. The environmental ethics aspects of environmental injustice challenge narrow utilitarian views and promote Kantian rights and obligations. Nevertheless, an environmental justice value exists in all ethical world views, although it involves a concept of equitable distribution of environmental protection that has been lacking in environmental ethics discussion. Hartley is in natural resources and environment, University of Michigan. (EE)

Hartmann, William K. "Space Exploration and Environmental Issues." Environmental Ethics 6(1984):227-39. New discoveries about materials and solar energy raise the possibility of a long-term shift of mining, refining, and manufacturing from Earth's surface to locations outside Earth's ecosphere, allowing Earth to begin to relax back toward its natural state. A little-discussed ambivalence toward the potential of space exploration exists among environmentalists. One camp sees it as a human adventure that may allow a bold initiative to improve Earth; another camp shies away from "heavy technology" and thus distrusts efforts as massive as space exploration or utilization. Due to impending resource depletion on Earth, we may have only until the mid-twenty-first century to pursue the promising potential of space exploration to alleviate environmental problems of Earth. Subsequently, there may be too little industrial base to support vigorous exploration and exploitation of resources in space. Hartmann is at the Planetary Science Institute, Tucson, AZ. (EE)

Hartmann, William K., "Space Exploration and Environmental Issues," Environmental Ethics 6(1984):227-239. Can the exploration of outer space be discussed from the perspective of environmentalism? This essay surveys several relevant environmental arguments (e.g., obligations to future generations, survival) as they apply to space exploration and space wilderness preservation. (Katz, Bibl # 1)

Hartshorne, Charles. "The Rights of the Subhuman World." Environmental Ethics 1(1979):49-60. Religion, philosophy, and science are best interpreted as supporting the idea that nonhuman forms of existence have intrinsic as well as instrumental values that we are ethically obligated to try to safeguard as best we can. Hartshorne is in the department of philosophy, University of Texas, Austin, TX. (EE)

Harutunian, Peter H., "Maximal Environmental Effects under the De Minimis Doctrine: Controversial changes in Ozone Redesignation Policy", Tulane Environmental Law Journal, 9(No.1, 1995):89- .

Harvard Divinity Bulletin, The. for Fall 1989 contains a special section, "Theology for a Small Planet," with a number of short articles by divinity school faculty and others addressing environment and theology. Contact Thomas N. Gardner, Harvard Divinity Bulletin, 45 Francis Avenue, Cambridge, MA 02138. (v1,#1)

Harvey, David, "Spaces of Hope," Philosophy and Geography 5 (No. 1, 2002): 115-117. Book reviewed by Weinstock, Daniel. (P&G)

Harvey, David, Justice, Nature, and the Geography of Difference. Oxford: Blackwell, 1996.

Harvey, Graham, "Sacred Places in the Construction of Indigenous Environmentalism," Ecotheology Vol 7 (no. 1, July 2002):60-73. Indigenous people have often been linked with 'nature'. Recently this has been complimentary, based on the assessment that nature is good, but this has not always been the case. This paper is interested in the construction of indigeneity as environmentalist, and in the construction of

environmentalism with reference to indigeneity. It is particularly concerned with challenging various relevant Western notions from the perspective that indigenous religious traditions might offer quite different ontologies and engagements. It takes note of the wider context of a conflict between colonialism and sovereignty which entangle these issues in traumatic crises but also underpin significant possibilities for change.

Harvey, L.D. Danny. "Joint Implementation: An Effective Strategy for Combating Global Warming," Environment 39(no.8, 1997):14. A critical look at the underlying assumptions and practical difficulties associated with this hotly debated policy mechanism raises questions about its long-term effectiveness. (v8,#3)

Harvey, M, "Review of: Dan Flores, The Natural West: Environmental History in the Great Plains and Rocky Mountains," Environmental History 7(no.4, 2002): 696-697.

Harvey, Peter, "Buddhist Attitudes to and Treatment of Non-human Nature," Ecotheology No 4 (Jan 1998):35-50.

Harwell, Mark A. "Ecosystem Management of South Florida," Bioscience 47(no.8, 1997):499. Developing a shared vision of ecological and societal sustainability. (v8,#3)

Harwell, Mark A., Myers, Victoria, and Bartuska, Ann. "A Framework for an Ecosystem Integrity Report Card." Bioscience 49(no. 7, July 1999):543- . Examples from South Florida show how an ecosystem report card links societal values and scientific information. (v.11,#1)

Harwood, W. and Nally, R., "Geometry of Large Woodland Remnants and its Influence on Avifaunal Distributions," Landscape Ecology 20(no. 4, May 2005): 401-416.

Haslett, J. R., "Handbook of the Convention On Biological Diversity," Biological Conservation 114(no. 3, 2003): 467.

Hassanein, Neva. "Networking Knowledge in the Sustainable Agriculture Movement: Some Implications of the Gender Dimension," Society & Natural Resources 10(no.3, 1997):251. (v8,#2)

Hasselmann, K., et al (9 others), "The Challenge of Long-Term Climate Change," Science 302(12 December 2003):1923-1925. Climate policy needs to address problems on the scale of a century. This requires a considerably broader spectrum of policy measures than the primarily market-based accounts currently used. A theme in this issue of Science is "Tragedy of the Commons."

Hasselstrom, Linda, "The Land Circle: Lessons," The North American Review 275, no. 4 (December 1990):4-11. Learning lessons from the land. The North American Review is a long established literary review published by the University of Northern Iowa. (v2,#1)

Hassoun, Nicole, and David Schmitz. Review of Searching for Sustainability: Interdisciplinary Essays in the Philosophy of Conservation Biology. By Bryan G. Norton. Environmental Ethics 27 (2005):93-96.

Hastings Center, The has issued a special supplement to the Hastings Center Report, May/June 1990, entitled "Animals, Science, and Ethics," edited by Strachan Donnelley and Kathleen Nolan. The report is the outcome of two years of deliberation, a Hastings Center project, "The Ethics of Animal Experimentation and Research," of which Donnelley and Nolan were co-directors. The project involved nearly two dozen physicians, philosophers, veterinarians, lawyers, and scientists involved in animal research, representatives of whom have written sections of the report. The Hastings report identifies itself

as occupying the "troubled middle," seeking to avoid the extremes of animal rights and of anthropocentrism. Among other conclusions: "We now face issues that lie beyond the suffering of individual animals, and we must weight the benefits of gaining certain kinds of knowledge against the entire range of consequences of research efforts. Seemingly innocuous scientific procedures may have negative effects on the target species as well as the ecosystem. In short, field research forces us to face directly the fact that humans are but a part of a complex system that needs many flourishing organisms if any are to survive." The Hastings Center is considering a further initiative, a three-year project, "Humans, Animals, and the Environment: Ethical Responsibilities and Decisionmaking." This project will investigate more intensively the destruction of ecosystems, atmospheric degradation, toxic wastes, wildlife and wildlife habitats, genetic diversity, species preservation, animal research in the wild, and the experimental use of endangered species. The Hastings Center, 255 Elm Road, Briarcliff Manor, NY 10510. Phone 914/762-8500. (v1,#2)

Hastings, M, "Toward a Sustainable Whaling Regime by Robert L. Friedheim (ed.)," Journal of Environment and Development 11(no.1, 2002):112-115. (v.13, #3)

Hatch, Michael T. "The Politics of Global Warming in Germany," Environmental Politics 4(no.3, Fall 1995):415- . (v6,#4)

Hatcher, Tim, "Environmental Ethics as an Alternative for Evaluation Theory in For-Profit Business Contexts," Evaluation and Program Planning 27(2004):357-363. The predominant context for evaluation in for-profit organizations is economics coupled with a distinctly anthropocentric worldview. Environmental ethics is a more sustainable theoretical foundation for evaluation in for-profit firms. This would help evaluators better establish professional integrity and create a deeper sense of solidarity with community, a more comprehensive view of the stakeholders in ethical decision-making. Hatcher is in Adult and Community College Education, North Carolina State University, Raleigh.

Hatfield, Mark O. " Consensus in the Klamath." Environmental Law 26, no.1 (1996): 447. Senator Hatfield describes the success of a southern Oregon citizens' group in reaching solutions to natural resources issues in that region. (v7, #3)

Hatley, James, Review of Johnson, Lawrence E. A Morally Deep World. Environmental Ethics 18(1996):215-218. (EE)

Hatley, James, Review of David Abram, The Spell of the Sensuous: Perception and Language in a More than Human World. Environmental Ethics 19(1997):109-112. (EE)

Hatley, James. Review of John Llewelyn. The Middle Voice of Ecological Conscience: (New York: St. Martins Press, 1991).

Hattam, Jennifer, "Green Streets," Sierra 91 (no. 4, July/August 2006): 36-41. An account of green cities. Once cities bragged about the tallest buildings, now they brag about the green space. Salt Lake City, Minneapolis, Austin, Pittsburgh.

Hattingh, Johan, Willie van der Merwe, and Wilhelm Verwoerd, "Is Access to Electricity a Human Right?" Research paper prepared for Eskom (the South Africa electricity corporation) by the Unit for Environmental Ethics, University of Stellenbosch, Stellenbosch. February 1993. Is it possible to speak of access to electricity as a human right? If so, what are the practical implications for the generation, transmission, and distribution of electricity in South Africa. The authors provide preliminary background and a broad outline for further debate. (v6,#3)

Hattingh, Johan P., Ian Voges, Kobus Miller, Vilhelm Verwoerd, The Relationship between Ethics, Environment and Development: Guidelines for Policy Making in South Africa. A research report prepared for the Development Bank of South Africa by the Unit for Environmental Ethics, University of Stellenbosch, Stellenbosch. May 1994. 30 pages. At least the following values should inform policy making: Justice in the sense of fairness; development that expands people's functionings, capabilities, and freedoms; the environment has intrinsic value; an action is right if it preserves the beauty, integrity, and stability of the biotic community; it is right to exploit the environment for vital human purposes; it is wrong to over-exploit the environment because it has inherent worth and so doing will compromise the ability of future generations to meet their basic needs. Copies from Hattingh, address above. (v5,#2)

Hattingh, Johan, and Attfield, Robin, "Ecological Sustainability in a Developing Country such as South Africa? A Philosophical and Ethical Inquiry," International Journal of Human Rights 6 (no. 2, Summer 2002):65-92. "Although South Africa has adopted the notion of ecologically sustainable development not only as a human right entrenched in its Constitution, but also as one of its major policy objectives, there are major practical, conceptual, and ethical stumbling blocks impeding the achievement of this goal. In this article we investigate the conceptual and some of the ethical problems, including apparent conflicts with other pressing goals such as the alleviation of poverty. We conclude that the concept of ecologically sustainable development has a substantive core, and that radical reforms of human systems allow this right and goal to be reconciled with other human needs."

"Before we allow further destruction of nature, or what is left of nature, we should first reverse the unwise decisions of the past that made environmental destruction possible and 'inevitable' in the first place. We should not allow nature, or what is left of it, to pay the ultimate price for the unwise human decisions of the past. So we should rather focus on the human system to make it more efficient and effective, to make it more just and fair, to make it less exploitative of people and of nature. Nothing less is required by the path of development. Now, if this argument is sound, ... the conservation of nature and natural ecosystems need not be incompatible with human interests in survival" (p. 87). Hattingh is at the University of Stellenbosch, South Africa. Attfield is at the University of Wales, Cardiff. (v.13,#4)

Hattingh, Johan P., Willie L. van der Merwe, and Wilhelm J. Verwoerd, Is Access to Electricity a Human Right? A research paper compiled for Eskom (the leading South Africa Power Authority) by the Unit for Environmental Ethics, University of Stellenbosch. February 1993. Accepting that access to electricity is a human right in the sense of a basic need, there can be little disagreement about the importance of meeting this basic need within the context of a modern or modernizing society. The disagreement arises, however, over the feasibility of implementation, and here matters are more complex than appears. Four basic approaches are analyzed. Authors are philosophers at Stellenbosch. Copies from Johan P. Hattingh, Department of Philosophy, University of Stellenbosch, 7600 Stellenbosch, South Africa. (v5,#2)

Hattingh, Johan, ed., Genetic Engineering in Ethical Perspective. Stellenbosch: Unit for Bioethics, University of Stellenbosch, 1992. ISBN 0-7972-0401-5. Six papers from a conference on this topic. (v6,#3)

Haught, John F. "The Emergent Environment and the Problem of Cosmic Purpose." Environmental Ethics 8(1986):139-50. Our general vision of the world will undoubtedly affect our environmental ethics. Scientific materialism is the "general vision" that undergirds many scholarly and popular presentations of science today. It is questionable whether this materialist metaphysics can consistently sustain an environmental concern. If scientists influenced by the materialistic outlook, nonetheless, happen to be environmentalists, it is in spite of and not because of their materialist philosophies of nature. What we need, therefore, is a cosmological vision that is more consistently supportive of an environmental ethic. Religious visions are often ambiguous in their attitude toward the natural environment. Alfred North Whitehead and his followers weave modern science, philosophical sophistication and religious cosmology into a metaphysical vision fully and consistently supportive of a vigorous environmental ethic. Haught is

in the department of theology, Georgetown University, Washington, D.C. (EE)

Haught, John F., "Is Religion Responsible for the Ecological Crisis?" Pages 183-201 in Haught, Science and Religion: From Conflict to Conversation. Mahway, NJ: Paulist Press, 1995. (v.12,#3)

Haught, John F., The Promise of Nature: Ecology and Cosmic Purpose. Ramsey, NJ: Paulist Press, 1993. 150 pages. \$ 9.95. (v3,#4) Seeing nature simply as a revelation of God is a problematic notion, because the indifference of nature to human pain leads to the conclusion that the God present in nature can be cruel indeed. Instead, Haught proposes thinking of the evolutionary story of nature in ways that include its imperfection and mystery, as symbolic of the divine promise of further life to come, life beyond losses, even beyond death. In an ecological Christianity, life after death might be envisioned, not as a separation from the cosmos, but as entering into the life of God in ways that include deeper participation in a compassionate relationship to the world. In this vision, our own spiritual journeys are deeply enmeshed in appreciating and enhancing the beauty and meaning of the cosmos, not only during life on Earth, but in life after death. Haught is a theologian at Georgetown University.

Haught, Paul. "Hume's Projectivist Legacy for Environmental Ethics." Environmental Ethics 28(2006):77-96. Hume's projectivist theory of value suggests that (environmental) values are either individually or culturally relative and that intrinsic value ascriptions are incoherent. Previous attempts to avert these implications have typically relied on modified Humean accounts that either universalize human sensitivity to the value of the more-than-human world or that adapt the concept of intrinsic value to suit a world in which all values are projected. While there are merits to these approaches, there is another alternative. Hume's own moral theory promises to be an even richer source for environmental ethical discourse than previously thought, and this richness is owed in large part to the robustness of Hume's theory of virtue. (EE)

Haupt, Lyanda. "Feathers and Fossils." Wild Earth 6, no.1 (1996): 44. (v7, #3)

Hausauer, Brenda Kay, Philosophical and Literary Methodology: Holmes Rolston's Literary Philosophical Methods. Master's thesis at Colorado State University, spring 1993. Section One: The differences between nature writing and environmental philosophy, comparing writer Annie Dillard and philosopher Holmes Rolston. Different strategies and the postures reader adopt toward the text. One conclusion is that all philosophical texts should be partially evaluated as artistic works. Section II. Nine of Rolston's more "non-philosophical" and partially artistic (literary) texts are examined in detail for the blending of appeal to experience and to argument. Section III. The place of autobiographical references. All of Rolston's methods examined are uses of the personal in philosophical texts, here compared with Annie Dillard's and philosopher Erazim Kohak's uses of the personal. Some of Rolston's non-philosophical, literary methods raise questions which could help to bring about a reconceptualization of philosophy's traditional methodology. (v4,#1)

Hauser, Marc, "Our Chimpanzee Mind," Nature 437(1 Sept. 2005):60-63. Hauser argues that there is continuity between our human mind and the chimpanzee mind; he simultaneously concedes "we are virtually in the dark when it comes to understanding how genes build minds." He also thinks that there is language in the human mind but not in the chimp mind.

Hauser, Marc D., "Beyond the Chimpanzee Genome: The Threat of Extinction," Science 309(2 Sept. 2005):1498-1499. Hauser is in psychology and biology, Harvard University.

Hauskeller, Michael, Review of: Robert Gamer, Animals, Politics and Morality, 2nd ed., and Animal Ethics, Environmental Values 15(2006):539-542.

Hauskeller, Michael, *Biotechnology and the Integrity of Life: Taking Public Fears Seriously* (Aldershot: Ashgate, 2007). Reviewed by David Littlewood, *Environmental Values* 17(2008):543-546.

Havel, JE; Lee, CE; Vander Zanden, JM, "Do Reservoirs Facilitate Invasions into Landscapes?" *BioScience* 55 (no. 6, June 2005): 518-525.

The extensive construction of reservoirs over the past century has radically altered the environmental landscape on a global scale. Construction of dams on most large rivers has interrupted the connectivity of water flow and greatly increased the abundance of standing freshwater habitats. Reservoirs act as stepping-stones for the dispersal of exotic species across landscapes. A variety of passively dispersing species have invaded reservoirs, spread through interconnected waterways, and been transported to nearby disconnected habitats. We hypothesize that reservoirs are more readily invaded than natural lakes, because of their physiochemical properties, greater connectivity, and higher levels of disturbance. Here we summarize properties of reservoirs that would make them prone to invasions and discuss cases in which reservoirs have facilitated rapid range expansion. Our overview illustrates linkages between two important forms of global environmental change: the widespread manipulation of river flows and the accelerating spread of exotic species.

Havlick, David, No Place Distant: Roads and Motorized Recreation on America's Public Lands. Washington, DC: Island Press, 2002. The first comprehensive treatment of roads and motorized recreation on America's public lands. America's national forests, parks, wildlife refuges, and other public lands suffer from an abundance of roads in poor condition, exacerbated by growing motorized recreational use of snowmobiles and all-terrain vehicles. A realistic case for road removal and regulations for motorized use that recognizes the complexity of the debate, and the underlying questions of values that dictate many management decisions. (v.13,#4)

Hawbaker, T., Radeloff, V., Hammer, R. and Clayton, M., "Road Density and Landscape Pattern in Relation to Housing Density, and Ownership, Land Cover, and Soils," Landscape Ecology 20(no. 5, July 2005): 609-625.

Hawke, Neil. "Toxic Torts and Regulatory Standards in the Law of the United Kingdom and the European Union," Tulane Environmental Law Journal 10(no.2)279. (v8,#3)

Hawkins, Ronnie Zoe. Review of Darwin and Design: Does Evolution Have a Purpose? By Michael Ruse. Environmental Ethics 27 (2005):209-212.

Hawkins, Ronnie, "Beyond Nature/Culture Dualism: Let's Try Co-evolution instead of "Control," Ethics and the Environment 11(2006):1-11. Introduction to the theme issue. Our human "noosphere" is rapidly enlarging to place us firmly within the biosphere (which, of course, in the imagery of Venn diagrams, must make up the larger circle on the screen), illuminating "both casts in both dramas," or perhaps joining all actors on the stage in a many-act, multidimensional play. Hawkins is in philosophy, University of Central Florida, Orlando. (Eth&Env)

Hawkins, Ronnie Zoe, "Seeing ourselves as primates," Ethics and the Environment 7(no. 2, 2002):60-102. There has been a marked expansion in our human knowledge in recent decades, and much of this new information about ourselves and our world has yet to be integrated into our human self-image. I maintain that understanding how we fit within the spectrum of lifeforms as the primates that we are will enable us to take a more active role in choosing ecologically responsible behavior and will allow us to address more effectively our major problems of overpopulation, overconsumption, and militarism. (E&E)

Hawkins, Ronnie Z. "Intergroup Justice: Taking Responsibility for Intraspecific and Interspecific

Oppressions," Ethics and the Environment 3(1998):1-40. We are all members of a variety of different groupings: family groups, groupings by gender, "race," culture and class, by nation-state and hemisphere, and by species. Building on the work of Larry May and others, I work toward a notion of taking responsibility for one's membership in all such groups, one which entails reflecting on the actions of one's own group and taking steps to rectify situations whereby one's own group is found to be in the role of oppressor vis à vis other groups, at all such levels of grouping. Hawkins is in philosophy, University of Central Florida, Orlando. (E&E)

Hawkins, Ronnie. Review of Animal Ethics. By Robert Garner. *Environmental Ethics* 29(2007):219-222. (EE)

Hawkins, Ronnie. "Cultural Whaling, Commodification, and Culture Change." Environmental Ethics 23(2001):287-306. Whaling is back on the international stage as pro-whaling interests push to reopen commercial whaling by overturning the moratorium imposed in 1986. Proponents of ending the ban are using two strategies: (1) appealing to public sentiment that supports indigenous subsistence whaling by attempting to cloak commercial whaling in the same guise and (2) maintaining that reopening commercial whaling is the "scientific" option. I reject both ploys, and instead shift the focus for global debate to scrutinizing the industrial economic model that Western culture is currently imposing on the rest of the world, a model which ultimately reduces all life forms to mere commodities for the marketplace. (EE)

Hawksworth, David. "Introduction: Human exploitation of biodiversity and conservation: a question of balance?" *Biodiversity and Conservation* Vol. 15, no. 7 (2006): 2341-42.

Haworth, Larry, Brunk, Conrad, Jennex, Dave, and Arai, Sue. "A Dual-Perspective Model of Agroecosystem Health: System Functions and System Goals," Journal of Agricultural and Environmental Ethics 10(1997/1998):127-152. (JAEE)

Hay, P. R., "The Contemporary Environment Movement as Neo-Romanticism: A Re-Appraisal from Tasmania." Environmental Review 12 (1988): 39-59. There are elements of romanticism in environmentalism, but there are differences: ecocentrism vs. individualism, future orientation vs. idealization of the past, and science vs. aesthetics. (Katz, Bibl # 2)

Hay, Peter, Main Currents in Western Environmental Thought. Bloomington, IN: Indiana University Press, 2002. With a multi-disciplinary catalog of positions in environmental thought, whether in science, social science, geography, politics, philosophy, religion, or wherever, mainly in the last thirty years. Finds a shift from foundational issues in the 70's and 80's to pragmatic issues in the 90's. Environmentalism is complex and conflicted; we need to develop our abilities to form coalitions.

Hay, Peter and Robyn Eckersley, eds., Ecopolitical Theory. Hobart: Board of Environmental Studies, University of Tasmania, 1992. ISSN 1034-1412. Contains essays by, among others, Robyn Eckersley, Patsy Hallen, Warwick Fox, and Richard Sylvan on a wide range of issues in environmental philosophy and politics. (v3,#4)

Hay, Peter. Main Currents in Western Environmental Thought. Reviewed in Environmental Ethics 25(2003):421-422. (EE)

Hayden, Anders, "Good Work, Less Toil," Alternatives 27(no. 1, Winter 2001):12- . The job-spend treadmill exhausts us and the planet. It's time to jump off. (v.12,#2)

Hayden, Patrick, Review of Michel Serres, The Natural Contract, Environmental Ethics 20(1998):433-36.

Hayden, Patrick. "Gilles Deleuze and Naturalism: A Convergence with Ecological Theory and Politics." Environmental Ethics 19(1997):185-204. Some philosophers in recent discussions concerned with current ecological crises have attempted to address and sometimes to utilize poststructuralist thought. Yet few of their studies have delineated the ecological orientation of a specific poststructuralist. In this paper, I provide a discussion of the naturalistic ontology embraced by the contemporary French philosopher Gilles Deleuze, one of the most significant voices in poststructuralism. I interpret Deleuze as holding an ecologically informed perspective that emphasizes the human place within nature while encouraging awareness of and respect for the differences of interconnected life on the planet. I also suggest that this view may be joined with Deleuze's innovative ethical-political approach, which he refers to as micropolitics, to create new ways of thinking and feeling that support social and political transformation with respect to the flourishing of ecological diversity. Finally, I briefly show how Deleuze's ecological orientation compares to several versions of ecological theory and politics. Hayden lives in Seattle, WA, and has taught at DePaul University. (EE)

Hayden, Tom, The Lost Gospel of the Earth. San Francisco: Sierra Club Books, 1996. The Bible, despite interpretations to the contrary, urges us to treat the Earth as sacred. Organized religion ought passionately to defend the environment, with as least as much energy as the clergy gave civil rights in the 1950's. Hayden is a California politician, in the California State Senate, and also teaches courses in ecotheology at Santa Monica City College and Cal State Sacramento. (v7,#4)

Hayek, Lee-Ann C., Buzas, Martin A. Surveying Natural Populations. New York: Columbia University Press, 1996. 448pp. \$60 cloth, \$24 paper. A guide to quantitative field ecology, including paleoecology, this book makes statistical techniques accessible to a wide range of students and scientists.

Hayes, Denis, "Environmental Law and Millennial Politics", Environmental Law, 25(No.4, 1995):953- . Hayes served as National Coordinator of the first Earth Day in 1970 and International Chairman of the twentieth anniversary of Earth Day in 1990. Reflecting on the decline of the environmental movement during the past few years, Hayes challenges movement leaders to acknowledge their weaknesses and offers a strategy for rebuilding public support for environmental protection.

Hayes, G, "Politics, Policy-Making, Philosophy: French Greens in Perspective," Environmental Politics 12(no.3, 2003):160-164. (v.14, #4)

Hayes, John P., Chan, Samuel S., Bailey, John D. "Wildlife Response to Thinning Young Forests in the Pacific Northwest," Journal of Forestry 95(no.8, 1997):28. (v8,#3)

Hayes, John P. et al., "Environmental Consequences of Intensively Managed Forest Plantations in the Pacific Northwest," Journal of Forestry 103(no.2, March 2005):83-87(5).

Hayes, Shelley, and Egli, Daniel, Directory of Protected Areas in East Asia. Covelo, CA: Island Press, 2002.

Hayes, Tyrone B. "Welcome to the Revolution: Integrative Biology and Assessing the Impact of Endocrine Disruptors on Environmental and Public Health." Integrated Comparative Biology Vol. 45, no. 2 (2005): 321-29. Endocrine disruptors disrupt the bodily hormone (or endocrine) systems, are widely used in agriculture to kill pests, and appear incidentally in many other products. Atrazine is applied to cornfields to inhibit weed growth. DDT, no longer used in the United States, is another example. These substances have undesirable spillover effects on wildlife (such as amphibians) and may also get into human bodies. Often the ramifications involve reproductive organs, with details unknown or suspected but undocumented, with considerable lag time before the adverse results show up, and with debates about safe levels, if any.

Hayes, Tyrone. "From Silent Spring to Silent Night: Endocrine Disruption, Amphibian Declines, and Environmental Justice" (Rachel Carson Memorial Lecture). *Pesticides News* Vol. 70 (December 2005).

Haynes, R. W., and Skog, K. E., "The Fifth Resources Planning Act Timber Assessment: A Critical Tool for Sound Stewardship," *Journal of Forestry* 100(no.2, 2002): 8-13. (v.13,#4)

Haynes, R. W., "Forest Management in the 21st Century: Changing Numbers, Changing Context," *Journal of Forestry* 100(no.2, 2002): 38-44. (v.13,#4)

Haynes, Richard P. "Do Regulators of Animal Welfare Need to Develop a Theory of Psychological Well-being?" *Journal of Agricultural and Environmental Ethics* 10(2001):231-240. The quest for a "theory of nonhuman minds" to assess claims about the moral status of animals is misguided. Misframed questions about animal minds facilitate the appropriation of animal welfare by the animal user industry. When misframed, these questions shift the burden of proof unreasonably to animal welfare regulators. An illustrative instance of misframing can be found in the US National Research Council's 1998 publication that reports professional efforts to define the psychological well-being of non-human primates, a condition that the US 1985 animal welfare act requires users of primates to promote. The report claims that "psychological well-being" is a hypothetical construct whose validity can only be determined by a theory that defines its properties and links it to observed data. This conception is used to contest common knowledge about animal welfare by treating psychological well-being as a mental condition whose properties are difficult to discover. This framework limits regulatory efforts to treat animal subjects less oppressively and serves the interests of the user industry.

A more liberatory framework can be constructed by recognizing the contested nature of welfare norms, where competing conceptions of animal welfare have implications about norm-setting authority, as it does in other regulatory contexts, e.g., food safety. Properly conceptualized welfare should include both the avoidance of distressful circumstances and the relationship between an animal's capacities to engage in enjoyable activities and its opportunities to exercise these capacities. This conception of animal welfare avoids appropriation by scientific experts.

The development of the psychological well-being regulation is a good illustration of how social norms are contested and then appropriated, and a critique of this appropriation shows how it can be challenged. Keywords: animal welfare, primates, psychological well-being, regulation. Haynes is in the Department of Philosophy, University of Florida, Gainesville, FL. (JAEE)

Haynes, Richard W., and Quigley, Thomas M., "Broad-scale Consequences of Land Management: Columbia Basin Example," *Forest Ecology and Management* 153(2001):179-188. The Interior Columbia Basin Ecosystem Management Project in the northwestern U.S. provides a useful example where scientists, managers, and the public have explored presumed or real conflict between broad ecological and socioeconomic goals. A successful strategy for broad-scale land management will need to: maintain long-term sustainability of resources and ecosystems; maintain socioeconomic resiliency; continually assess results of management activities; manage risks and opportunities through consistent approaches at multiple scales; expand our knowledge base; and adaptively manage for new knowledge and assessments of resource conditions/capabilities. Haynes is with the Pacific Northwest Research Station, USDA Forest Service, Portland, OR. Quigley is with the Pacific Northwest Research Station, LaGrande, OR. (v.13, #3)

Haynes, Richard P., Review of Three Recent Books: Cass R. Sunstein and Martha C. Nussbaum, eds., *Animal Rights: Current Debate and New Directions* (New York: Oxford University Press, 2004); Joan Dunayer, *Animal Equality: Language and Liberation* (Derwood, MD: Ryce Publishing Co., 2001); Joan Dunayer, *Speciesism* (Derwood, MD: Ryce Publishing Co., 2004). In *Journal of Agricultural and Environmental Ethics* 20(2007):533-542.

Haynes, Richard P., Review of Richard J. Lazarus: *The Making of Environmental Law* (Chicago: University of Chicago Press, 2004). *Journal of Agricultural and Environmental Ethics* 21(2008):613-616.

Haynes, Richard P., Review of Steve Sapontzis, *Food for Thought: The Debate over Eating Meat*. Amherst, NY: Prometheus Books, 2004. *Journal of Agricultural and Environmental Ethics* 21(2008):99-105.

Haynes, Richard P., Review of L. Nordenfelt, *Animal and Human Health and Welfare: A Comparative Philosophical Analysis*. Oxfordshire, UK:CABI, 2006. *Journal of Agricultural and Environmental Ethics* 21(2008):91-97.

Haynes, Richard P., Review of Marti Kheel, *Nature Ethics. An Ecofeminist Perspective* (Rowman & Littlefield Publishers, 2008). *Journal of Agricultural and Environmental Ethics* 21(2008):469-475.

Haynes, Richard P., Review of Ridgeway James, *It 's All for Sale. The Control of Global Resources* (Durham, NC. Duke University Press, 2005), *Journal of Agricultural and Environmental Ethics* 21(2008):409-416.

Haynes, Richard P., Review of Morton Satin, *Death in the Pot: The Impact of Food Poisoning on History* (Amherst, NY: Prometheus Books, 2007), *Journal of Agricultural and Environmental Ethics* 21(2008):395-400.

Haynes, Richard P., Review of Sheldon Krimsky and Peter Shorett, eds., *Rights and Liberties in the Biotech Age. Why We Need a Genetic Bill of Rights* (New York: Rowman and Littlefield, 2005). *Journal of Agricultural and Environmental Ethics* 21(2008):401-407.

Haynes, Robert H., "Ecce Ecopoiesis: Playing God on Mars,"
Christopher P. McKay, "Does Mars Have Rights: An Approach to the Environmental Ethics of Planetary Engineering."

Both in Don MacNiven, ed., Moral Expertise: Studies in Practical and Professional Ethics (London: Routledge, 1990) Haynes ask whether we ought to create new biospheres and ecosystems on planets like Mars and answers, tentatively, yes. But he thinks that the answer must be tentative because the ethical theories currently available cannot adequately deal with the moral problem here. McKay argues that current ethical systems are essentially earthbound, whether anthropocentric or biocentric. Only a cosmocentric ethics, currently unavailable, can provide us with the answers, and in such an ethic we might assign intrinsic value and rights to lifeless planets. (v2,#1)

Häyry, Heta, Helena Tengvall, and Leena Vilkkä, eds., Eläin ihmisten maailmassa (An Animal in the Human World). Helsinki: Gaudemus, 1989. 193 pages. An anthology of ten articles, pro and con. All by Finnish authors, mostly philosophers and some biologists. (v5,#2)

Hays, Samuel P., "Environmental Philosophies," review of Bryan G. Norton, Toward Unity Among Environmentalists and Max Oelschläger, ed., After Earth Day: Continuing the Conservation Effort, Science, December 11, 1992. Science chooses these two books as representative of recent environmental philosophy, recognizing also that Environmental Ethics is the main journal in the field. Hays notes appreciatively the operational pragmatism in Norton and finds the most useful essays in Oelschläger's anthology to make similar claims. Hays is professor of history at the University of Pittsburgh. (v3,#4)

Hayward, Bronwyn M. "The Greening of Participatory Democracy: Reconsideration of Theory."

Environmental Politics 4(Winter 1995):215. (v7,#2)

Hayward, John A., "Environmental Management--Science or Ethics?" A distinguished lecture at the University of Otago, New Zealand. Environmental management in New Zealand has been highly professionalized in a relatively brief period of time and operated within a development ethic. "The result is that whereas science has enabled us to consider and debate the environmental implications of alternative courses of action, the moral or ethical decision as to our choice of option have been prescribed for us and not open to debate. Thus, although decisions relating to the use of our environment should be based on both ethical and scientific considerations, the ethical issues have been consistently subservient to the scientific. However, the recent New Zealand legal and Parliamentary decisions indicate clearly that ethical issues are, in future, to be considered in the allocation of use of our environments." John A. Hayward is with the Centre for Resource Management, University of Canterbury and Lincoln College. Address: University of Canterbury, Private Bag, Christ Church, New Zealand. (v1,#4)

Hayward, Tim, "Anthropocentrism: A Misunderstood Problem," Environmental Values 6(1997):49-63. ABSTRACT: Anthropocentrism can intelligibly be criticised as an ontological error, but attempts to conceive of it as an ethical error are liable to conceptual and practical confusion. After noting the paradox that the clearest instances of overcoming anthropocentrism involve precisely the sort of objectivating knowledge which many ecological critics see as itself archetypically anthropocentric, the article presents the following arguments: there are some ways in which anthropocentrism is not objectionable. The defects associated with anthropocentrism in ethics are better understood as instances of speciesism and human chauvinism; it is unhelpful to call these defects anthropocentrism because there is an ineliminable element of anthropocentrism in any ethic at all; moreover, because the defects do not typically involve a concern with human interests as such, the rhetoric of anti-anthropocentrism is counterproductive in practice. Dept. of Politics, University of Edinburgh, 31 Buccleuch Place, Edinburgh EH8 9JT. (EV)

Hayward, Tim, and O'Neill, John, eds., Justice, Property and the Environment: Social and Legal Perspectives. Aldershot, Hampshire, UK and Brookfield, VT, US: Avebury Series in Philosophy, in conjunction with the UK Association for Legal and Social Philosophy, Ashgate Publishing Co., 1997. Sample contributions: Soper, Kate, "Human Needs and Natural Relations: The Dilemmas of Ecology"; Cooper, David E., "Justice, Consistency and Non-Human Ethics"; Himsforth, C.M.G., "Unsustainable Developments in Lawmaking for Environmental Liability?"; Alier, Joan Martinez, "The Merchandising of Biodiversity." And many more. (v9,#2)

Hayward, Tim and John O'Neill, eds. Justice, Property and the Environment: Social and Legal Perspectives. Review by William Huges, Journal of Agricultural and Environmental Ethics 11(1999):249-252. (JAEE)

Hayward, Tim, Ecological Thought: An Introduction Polity Press, Oxford, 1995, in association with Blackwells, Cambridge, 1995. \$ 45 cloth, \$ 22.95 paper. 272 pages. This is a sustained and comprehensive examination of the question whether the newly emerging ecological movement is compatible, theoretically and practically, with the Enlightenment project of Western Europe, as this has played out in the modern, now largely Westernized, world. The general answer is that, after a sort of dialectic between ecology and enlightenment, it is. This is spelled out in five chapters. Chapter 1 is philosophical; it compares ecological and Enlightenment accounts of nature and human nature. Chapter 2 asks whether humanism, the Enlightenment ideal, can be ecological, showing appropriate respect for nonhuman nature. Chapter 3 is on economics, especially on the industrial capitalism that has somehow been one of the main outcomes of Enlightenment. Chapter 4 asks whether rights and justice (the Enlightenment ethical ideas) can be retained in an ecological era. Chapter 5 is on politics, and asks whether ecological ideas can be made compatible with democracy, which is another main outcome of the Enlightenment ideal.

Hayward is good at going back into Enlightenment ideals and finding new resources in them, or old resources forgotten or obscured. But he is never naive or simplistic about this. He fully recognizes that much of what the Enlightenment stood for will have to be considerably chastened. The world is not so much a compromise as a kind of dialogue, with Enlightenment as the thesis, environmentalism as antithesis, and Hayward's new position a synthesis in which both are significantly transformed. Hayward teaches politics at the University of Edinburgh. (v7,#1)

Hayward, Tim, "Ecology and Human Emancipation," Radical Philosophy (Canterbury, Kent, UK) 62(1992):3-13. Traditional socialist conceptions of emancipation as a move from a sphere of necessity to one of freedom are radically problematic from an ecological perspective. There is no problem with removing coercive and exploitative human relations, but the ecological perspective casts doubt on the possibility or desirability of emancipation from nature-imposed necessity. There are three different meanings of emancipation from nature, not all equally objectionable. One is the aim of subsistence, transforming nature to meet human needs for food, shelter, and good health. Another is the Promethean aim of transcending natural limits, to which Marx has some tendencies. A third is the emancipation of human creativity, the humanist aim of self-realization, which does see humans as autonomous of the order of natural causality, though not necessarily as pitted against nature, and Marx can be interpreted from this perspective. Hayward is lecturer in philosophy at the University of Glamorgan, Wales. (v5,#3)

Hayward, Tim, "Universal Consideration as a Deontological Principle: A Critique of Birch," Environmental Ethics 18(1996):55-63. A major problem that skeptical critics have identified with the project of environmental ethics as it is often conceived is that it involves the search for a criterion of moral considerability, and some claim that this search has not only been unsuccessful, but it is in principle mistaken. Thomas H. Birch has recently argued that this whole problem can be avoided through his proposal of universal consideration in a 'root sense,' which applies to all beings, with no exceptions marked by any of the criteria proposed by others. I argue that the strengths of this proposal are its openness to new value discoveries and its focus on agents' practices. Its flaw is its failure to account convincingly for how values are ever formulated or obligations generated. Hence, it does not represent a viable alternative to the approach he rejects. However, rather than return to that approach, I suggest that Birch's own line of argument could be developed more consistently if, from his starting point of 'deontic experience,' one were to develop an explicitly deontological ethic that focuses more decisively on moral consideration as opposed to moral considerability. Hayward is in politics, University of Edinburgh. (EE)

Hayward, Tim, Review of: Andrew Dobson (ed.), Fairness and Futurity: Essays on Environmental Sustainability and Social Justice, Environmental Values 11(2002):511-513.

Hayward, Tim, Political Theory and Ecological Values. Cambridge: Polity Press, 1998. 196 pages. Hayward continues to press his case for ecological issues to be made more central to the enterprise of political theory. He now challenges the conventionally established opposition between a more radical ecologism (caring for nature for nature's sake) and a more reformist environmentalism (caring for nature for our sake); there is no clear distinction to be made between ecological values, on the one hand, and human interests, on the other. The more manageable inquiry is how far our existing values can be maintained in the face of ecological realities. What aspects of being human must be accommodated if a political theory is to avoid being unecological? There are essentially two such aspects: Human beings are a part of nature, and they are not generally motivated to do what is other than in their own interests. Eventually, this means that ecological values must be found consistent with the pursuit of human interests. The most fundamental interest of humans is in integrity, understood as wholeness, unity, and health in one's physical, mental, and spiritual being, and enlightened self-interest can and should include an interest that includes whole-hearted respect for the good of non-human beings. Hayward is in politics at the University of Edinburgh. (EE v.12,#1)

Hayward, Tim, Ecological Thought: An Introduction (Cambridge: Polity Press, 1995). Reviewed by Jo Smith. Environmental Values 6(1997):239-241. (EV)

Hayward, Tim, Constitutional Environmental Rights. Oxford: Oxford University Press, 2005. Reviewed by Rafael Ziegler in Environmental Values 14(2005):530-532.

Hayward, Tim. Political Theory and Ecological Values. Cambridge: Polity Press, 1998. Review by Alan Carter, Environmental Values 10(2001):135. (EV)

Hazelrigg, Lawrence, Cultures of Nature. Gainesville: University of Florida Press, 1995. A fully constructionist view of nature. "Nature is a product of human making. Not merely 'the idea of nature' or 'nature as we think it is' or 'nature experienced' ... but the concrete practical materiality, the substance and support, the actual and potential plenitude of the reality of nature--in sum the whole of the given being and being-giveness of nature as it is--is a concrete production in/by human labor in the activity of making life" (p. 12).

McHarg, Ian L., and Steiner, Frederick R., eds. To Heal the Earth: Selected Writings of Ian L. McHarg. Washington, D.C.: Island Press, 1998. \$32. 310 pp. Selected writings of the famous landscape architect who pioneered design with nature. (v9,#2)

He Huaihong, "A Summary of Confucianism's Ecological Ethical Thoughts", Zhongguo Renmingdaxue Xuebao (Journal of People's University of China) 2 (2000): 32-39. In Chinese. (EE v.12,#1)

He Huaihong, Yang Tongjin et al., Ecological Ethic: Spiritual Resources and Philosophical Foundation, Hebei Uni. Press, 2002. Chapters: introduction; ecological ethical thoughts of ancient Chinese; ecological ethical spirits of the Orient religion and primitive faith; the spiritual pioneers of western ecological ethics; Christianity ecological ethics; ecological ethical spirits in western literature; ecofeminism; the evolution of the concept of nature; the philosophical construction of ecological ethics; anthropocentrism; animal liberation and rights theory; biocentrism, ecocentrism. Professor He is at the Department of Philosophy, Beijing Uni..

He Huaihong, ed. *Ecological Ethics: Spiritual Resources and Philosophical Foundations*. Baoding: Hebei University Press, 2002.

He Zhonghua, "Some Difficulties faced by Sustainable Development", Tianjing Shehuikexue (Tianjing Social Sciences) 1(2000): 4-11. In Chinese. (EE v.12,#1)

Heaf, David, and Wirz, Johannes, eds., Genetic Engineering and the Intrinsic Value and Integrity of Plants and Animals, Proceedings of a Workshop at the Royal Botanic Garden, Edinburgh, UK. Dornach, Switzerland: Ifgene, International Forum for Genetic Engineering, 2002. ISBN 0-9541035-1-3. Order from: Ifgene, Hafan, Llanystumdwy, LL52 OSG, UK. E-mail: 101622.2772@compuserve.com. web: <http://www.anth.org/ifgene/>

Contains, among a dozen others:

-Rolston, Holmes, III, "What Do We Mean by the Intrinsic Value and Integrity of Plants and Animals?", pages 5-10.

-Davies, Howard, "Does Genetic Engineering Impact the Intrinsic Value and Integrity of Plants?", pages 24-27.

-Brink, Timothy, "Why is it in the Farmer's Interest to Pay Attention to the Intrinsic Value and Integrity of Animals and Plants?", pages 45-47.

Heaf, David J., and Wirz, Johannes, eds., Intrinsic Value and Integrity of Plants in the Context of Genetic

Engineering, Proceedings of an Ifgene workshop on 9-11 May 2001 at the Goetheanum, Dornach, Switzerland. ISBN 0-9541035-0-5. Summary & downloadable order form at:

<http://www.anth.org/ifgene/papersMay2001.htm>

Ecological integrity as an appropriate technology in crop production, socioeconomic and cultural integrity: their relation to crop plant integrity and husbandry. Examples:

- * Christoph Rehmann-Sutter, "Dignity of plants and perception"
- * Klaus Peter Rippe, "Dignity of living beings and the possibility of a non-egalitarian biocentrism"
- * Edith Lammerts van Bueren, "Ethical plant breeding techniques from an organic point of view"
- * Michel Haring, "Does gene transfer violate the integrity of plants?"
- * Christian Hiss, "A practising horticulturist's view on the integrity of plants" (v.12,#3)

Heal, Geoffrey. Nature and the Marketplace: Capturing the Value of Ecosystem Services. Covelo, CA: Island Press, 2000. 184 pages. Cloth \$50. Paper \$25. The controversial proposition that markers should be designed to capture the value of services provided by functioning ecosystems. The concept of ecosystem services and the economics of the environment, eschewing "romantic" notions about ecosystem preservation in favor of "real-world" economic solutions. (v.11,#4)

Heal, Jeffrey, Valuing the Future: Economic theory and Sustainability. New York: Columbia University Press, 1998. (v.13,#4)

Healey, M, "Review of: Gibbs, D., Local economic development and the environment", Progress in Human Geography 27(no.1, 2003):129.

Heap, Jenny. Review of Robert Elliott, Faking Nature: The Ethics of Environmental Restoration. Environmental Values 8(1999):122. (EV)

Hearne, Vicki, "What's Wrong with Animal Rights," Harper's, September 1991. An animal trainer claims that many domestic animals gain their fullest satisfaction from the right kind of training. Animals benefit from demanding work that challenges their potential. "The logic of the animal-rights movement places suffering at the iconographic center of a skewed value system." "The problem with the animal-rights advocates is not that they take it too far; it's that they've got it all wrong." "Work is the foundation of the happiness a trainer and an animal discover together." Of her dog, Drummer, she says, "I have enfranchised him in a relationship to me by educating him, creating the conditions by which he can achieve a certain happiness specific to a dog." "Only Drummer's owner has the power to obey him--to obey who he is and what he is capable of--deeply enough to grant him his rights and open up the possibility of happiness." (v2,#4)

Heasley, Lynne, Delehanty, James, "The Politics of Manure: Resource Tenure and the Agropastoral Economy in Southwestern Niger", Society and Natural Resources, 9(No.1, 1996):31- .

Heather L. Beach, et al, "Transboundary Freshwater Dispute Resolution: Theory, Practice, and Annotated References," Natural Resources Journal 42(no.1, 2002): 223-25. (v.13,#4)

Hebard, Elaine Moore, "A Focus on a Binational Watershed with a View toward Fostering a Cross-Border Dialogue," Natural Resources Journal 40(no. 2, Spring 2000):281- . (v.12,#2)

Hebel, Sara, "On a Mountaintop, a Fight between Science and Religion," Chronicle of Higher Education, June 28, 2002, A21-A22. The Universities of Minnesota and Virginia are debating whether to participate and become the latest institutions in one of the world's largest and most powerful binocular telescopes, located on U.S. Forest Service land on Mt. Graham in the Pinaleno Mountains of southeastern Arizona. Two telescopes already exist on the site, but this larger telescope would be completed in 2004. The

project is underway by a consortium of universities, led by the University of Arizona. Astronomers at both institutions say using the telescope is crucial to the frontiers of research, but Apache Indians consider the telescope construction there to be on their sacred grounds. A further issue is what happens to the Mt. Graham red squirrel and to the mountaintop ecosystem. (v.13, #3)

Hecht, James L., "Good Intentions: The Mismanagement of Foreign Aid," Christian Century 113 (no. 32, November 6, 1996):1063-65. Good summary article on why U. S. foreign aid goes so wrong, failing of its humanitarian motives. Also, how misinformed most Americans are about it. When polled a large majority say that foreign aid is now too much, believing it to be about 15% of the federal budget, and that it ought to be no more than 5%, when in fact only 1% was spent. U.S. foreign aid is by far the least of any industrialized nation, in terms of percentage of GNP. Hecht teaches political science at Temple University. (v8,#1)

Heckel, G, "Workshop on Sustainable Tourism and Whale Watching in North America: A Baja-to-Bering Case Study," Journal of Environment and Development, 10(no. 3, 2001):290-295. (v.13,#1)

Heckenberger, Michael J., et al., "Amazonia 1492: Pristine Forest or Cultural Parkland?" Science (19 September 2003):1710-1713. Archaeology and indigenous history of Native Amazonian peoples in the Upper Xingu region of Brazil reveal unexpectedly complex regional settlement patterns and large-scale transformations of local landscapes over the past millennium, particularly 1200-1600 A.D. Excavations in one area show 19 pre-Columbian villages, typically 3-5 km. apart, each with perhaps 2,500 to 5,000 people. Heckenberger argues, "None of the area was natural." Merger is at the University of Florida. But a Smithsonian archaeologist who has studied the area for fifty years "doubts that prehistoric populations were large or exerted widespread impact on the environment." With related article, Stokstad, Erik, "'Pristine' Forest Teemed With People," pp. 1645f. (v.14, #4)

Hedin, Robert and Gary Holthaus, Alaska: Reflections on Land and Spirit. Tucson: University of Arizona Press, 1989. 322 pp. \$ 24.95 hardcover. Twenty-two writers, past and present, reflect on the mysterious intimacy "that comes when the old psychic links between humanity and the natural world are reestablished."

Hedleston, Jo Ann, The Origins of the Animal Husbandry Ethic, M.A. thesis, Colorado State University, summer 1998. A historical account of the ethical idea of kindness to animals that is part of the animal husbandry ethic as found in British and American culture. Deals in particular with the philosophy of Thomas Jefferson as the author of the American agrarian dream, with attention to the influence on the Christian tradition of the utilitarian ethic of Frances Hutcheson. The modern ideas of kindness to animals, or refraining from cruelty to animals, comes from the social humanitarian movement in Britain during the eighteenth and nineteenth centuries. The idea is transformed from the ethics that we ought not to be cruel to animals because it might lead in turn to cruel treatment of animals into a new ethics that claims that we ought to be kind to animals because they are sensitive creatures with a value of their own beyond that of human use. Includes some relatively unknown literature of the animal welfare movement in Britain. Comparisons with contemporary theological defenders of animal rights. (v9,#2)

Hedrick, Philip W., Lacy, Robert C., Soule, Michael E. "Directions in Conservation Biology: Comments on Caughley", (Caughley's claim that there are only two paradigms in conservation biology). Conservation Biology 10(no.5,1996):1312. (v7,#4)

Heeger, Robert and Frans W.A. Brom. "Intrinsic Value and Direct Duties: From Animal Ethics Towards Environmental Ethics?" Journal of Agricultural and Environmental Ethics 10(2001):241-252. Three types of concern for animal welfare are widely held: animals should feel well, they should function well, and

they should lead natural lives. The paper deals with a well-known answer to the question of why such concerns are morally appropriate. Human beings have direct duties towards animals, because animals are beings that can flourish, the flourishing of animals is intrinsically or inherently valuable, and that which is conducive to their flourishing is a legitimate object of moral concern. Looking for a tenable conception of direct duties towards animals, the following questions are discussed: what should we take it to mean that "animal flourishing is intrinsically or inherently valuable?" Under what conditions does a living being's ability to flourish create direct duties towards this being? Is awareness or sentience required for there to be direct duties towards a living being? Does such a requirement imply that moral concerns for animals would be limited to their feeling well, or does it also give way to having moral concerns for their functioning well and leading natural lives? Can one take into account considered judgements that claim that towards different animals we have moral duties that differ in kind and/or strength? If environmental ethics cannot be based on the conception of direct duties here discussed, should one draw a distinction between duties towards ourselves, our fellow human beings, or animals, and duties regarding plants, or collective entities such as populations, species, and ecosystems? Keywords: duties towards animals, Rollin, Taylor. Heegee and Brom are at the Centre for Bioethics and Health Law and Faculty of Theology, Utrecht University, Utrecht, The Netherlands. (JAEE)

Heffernan, James D. "The Land Ethic: A Critical Appraisal." Environmental Ethics 4(1982):235-47. Aldo Leopold's "Land Ethic" centers on the maxim: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." I contribute to the critical appraisal of this maxim by providing answers to the following questions: (1) what is referred to by the phrase "the integrity, stability, and beauty of the biotic community"? (2) What "things" tend to preserve or threaten the integrity, stability, and beauty of the biotic community? (3) Are the integrity, stability, and beauty of the biotic community goods such that preserving them is right and failing to do so wrong? Heffernan is in the department of philosophy, University of the Pacific, Stockton, CA. (EE)

Hefler, S, "Review of: Ecosystem Change and Public Health: A Global Perspective edited by Joan L. Aron and Jonathan A. Patz," Journal of Environment and Development 11(no.4, 2002): 443-445.

Hefner, Phil, "Nature, God's Great Project," Zygon 27(1992):327-341. Scientific understandings suggest very strongly that humans are related to the rest of nature in ways that are expressed by both metaphors of genetic kinship and by ecological interrelatedness. The image of genetic kinship is the more intense image, and also the most likely to cause discomfort for Western traditions. Both secular critical reason and Western religious traditions favor images that portray the relation of humans to nature in terms of separation, domination, and stewardship. At best they are ambivalent toward portrayals of a more intense relatedness. In order best to serve our self-understandings, we must recognize (1) our intrinsic kinship with the rest of nature; (2) that our purpose as humans is to serve nature; (3) that we are preparers for nature's future; (4) that our highest calling as humans is to discern the dimensions of ultimacy in nature and to conceptualize them. In this, we follow God's own pattern of investing in nature as the greatest project. Hefner is professor of systematic theology at Lutheran School of Theology at Chicago. (v4,#4)

Hefner, Philip, "Can Nature Truly Be Our Friend?" Zygon 29(1994):507-528. Western culture has not offered a concept of nature rich enough to allow for an understanding of it as a domain of graciousness. Christian theology has consistently spoken of nature in terms that defy the limitations of the authorized views proposed by the ambient Western cultures. Science today furnishes for the first time an authorized concept of nature that is large and dynamic enough to entertain the dimension of grace. Hefner is in theology at the Lutheran School of Theology, Chicago. (v5,#4)

Heggen, Bruce Allen, A Theology for Earth: Nature and Grace in the Thought of Joseph Sittler, 1995, McGill University (Canada), Ph.D. thesis in theology. 429 pages. A theology adequate for an

environmental ethic is found in the American Lutheran theologian, Joseph Sittler. This is not a "theology of nature," but an "incarnation theology applied to nature." The roots for Sittler's environmental concerns lie in the Christology and eucharistic theology of Martin Luther. Sittler also retrieves the theology of the second century theologian, Irenaeus of Lyons, in whom creation and redemption are acts of the same God. Sittler develops a "theology for earth," emphasizing the continuity of nature and grace and, using concepts drawn from literature, music, architecture, painting, and modern physics, articulates an "ontology of communion" in which human beings recognize the presence of God in their own participation in the raw materials and processes of the world. The advisor was D. J. Hall. (v.10,#1)

Heilbroner, Robert L., "The 'Disappearance' of Capitalism, World Policy Journal 15(no.2, 1998), p.1. (v.9,#4)

Heilman, GE; Strittholt, JR; Slosser, NC; DellaSala, DA, "Forest Fragmentation of the Conterminous United States: Assessing Forest Intactness through Road Density and Spatial Characteristics," Bioscience 52(no.5, 2002):411-422. (v.13, #3)

Heimert, Andrew Jackson. "Keeping Pigs Out of Parlors: Using Nuisance Law to Affect the Location of Pollution," Environmental Law 27(no.2, 1997):403.

Heimert discusses environmental regulations through nuisance law and compares this type of pollution regulation to the modern antipollution statutes, which he argues do not provide locational incentives. He then argues that nuisance law retains an advantage over existing statutory regimes in that it addresses harms created by pollution and can thereby provide incentives to locate so as to mend the harms polluters create. Because of this advantage, Heimert concludes that state nuisance law is not preempted by federal statutes and should be utilized to supplement current environmental laws. (v8,#3)

Heinegg, Peter. "Ecology and Social Justice: Ethical Dilemmas and Revolutionary Hopes." Environmental Ethics 1(1979):321-27. The destructive tension between human needs and environmental conservation arises from flaws in our political and economic structures. Oppression of people and devastation of nature go hand in hand, and the root of both these evils is the denial of otherness. The ecology movement is basically a movement of liberation, and is in league, de jure and de facto, with other liberation movements, since it seeks to promote the rights of the nonhuman world. In this context, subjugation of the Other is immoral in all forms and ultimately suicidal. Recognition of the value of nonhuman nature does not preclude a rational use of it, but requires something analogous to the primitive custom of apologizing to the spirits of prey, i.e., a mixture of religious respect and common sense. Awareness of the beauty and power of nature, like awareness of the injured rights of our fellow humans, creates a revolutionary moral imperative to change the life of our society. Heinegg is in the department of English, Union College, Schenectady, NY. (EE)

Heinen, Joel T., and Mehta, Jai N., "Emerging Issues in Legal and Procedural Aspects of Buffer Zone Management With Case Studies From Nepal," The Journal Of Environment And Development 9 (No. 1, Mar 01 2000): 45- . (v.11,#2)

Heinen, Joel T. "Status and Protection of Asian Wild Cattle and Buffalo." Conservation Biology 10, no.4 (1996): 931. (v7, #3)

Heinen, Joel T., "Thoughts and Theory on Incentive-Based Endangered Species Conservation in the United States," Wildlife Society Bulletin 23 (no. 3, 1995):338-345. There are broad national benefits to endangered species conservation but the costs of such programs are frequently localized and may fall more on some members of society than others. The judicious use of incentives can then be important. Economic incentives may be needed to promote most endangered species conservation programs because benefits of these programs are usually diffuse and national, while costs are localized. A main priority for recovery plans should be to provide people with social and economic incentives, at socially relevant

scales, to accept the proposed conservation program. Heinen is in environmental studies, Florida International University, Miami. (v.10,#1)

Heinrich, Bernd, Racing the Antelope: What Animals Can Teach Us About Running and Life. New York: Harper Collins, Cliff Street Books, 2001. Heinrich is a biologist and ultramarathon runner, researching exercise physiology, and especially exploring the evolutionary dimensions of intense effort. Antelope, birds, toads, dogs and cats, and what humans do or do not have in common with these animals regarding stamina, endurance, and focus. (v.13,#2)

Heinsohn, Robert and Craig Packer. "Complex Cooperative Strategies in Group-Territorial African Lions." Science 269 (1995):1260-1262. African lions are more diverse in co-operation and non-cooperation than current sociobiological theory can explain. When challenged by simulated intruders, some lionesses lead the charge while others lag behind. Although leaders recognize that their companions are lagging, they fail to punish them. Some brave lionesses take risks that are not offspring-optimizing, because they tolerate cowardly lionesses. Some cowardly lionesses come through in a pinch, when they are most needed; some do not. The variety of behavior styles is quite broad, puzzling to current theories of cooperation. With an accompanying report by Virginia Morrell, pp. 1216-17. Heinsohn is in zoology, Australian National University; Packer in animal behavior at the University of Minnesota. (v6,#3)

Heitzman, E, "'New Forestry' in Scotland," Journal of Forestry 101(no.1, 2003): 36-39.

Held, Martin, "Geschichte der Nachhaltigkeit" (in German: History of sustainable development), Natur und Kultur 1 (No. 1, 2000): 17-31. Understanding of the history of sustainable development is a prerequisite to develop this concept adequately and acting accordingly. This general thesis is demonstrated with various examples from different times and regions in the history of humankind. Some preliminary theses are derived to generalize findings of these examples and perspectives are demonstrated which may be learned from an explicit study of the history of sustainable development. (v.11,#2)

Heldke, Lisa, "Unnatural Selection," Ethics and the Environment 3(1998):41-54. The notion that "nature" comes equipped with its own set of categories, enabling us to divide up everything that exists without overlap or leftovers, has considerable explanatory and prescriptive power, I examine two apparently unrelated arenas in which this notion is at work; namely, in the alleged discovery and subsequent physical "improvement" of the headwaters of the Mississippi River, and in the surgical alteration of intersex infants. In both cases, reconstruction is undertaken as a means of eliminating an ambiguity regarded as "unnatural"--an "error" in nature that culture must correct. Eliminating ambiguity, in turn, enables accessibility. Fixing a person or a river firmly in a category allows us to have various kinds of access to them. For a river, the access is in part physical; it means being able to walk up to its headwaters without wearing hip waders. For a person, that access is both intellectual and social; only once I know what sex a person is, do I know how to treat them, and only then do I know whether they are an "appropriate" object of my erotic attention. Heldeke is in philosophy, Gustavus Adolphus College, St. Peter, MN. (E&E)

Hellberg, Tom. "Incineration by the Back Door: Cement Kilns as Waste Sinks." The Ecologist (1979) 25(no.6, Nov.1995):232. Since 1992, a number of UK cement manufacturers have been burning high toxic waste as a "fuel" for their cement kilns. Subject to less stringent emission standards than specialized incinerators, kilns offer a cheap but dirty disposal option which waste generators are exploiting to the full. Pollution and ill-health are the results. (v7,#1)

Helm, Carsten, and Simonis, Udo E. "Distributive Justice in International Environmental Policy: Axiomatic Foundation and Exemplary Formulation," Environmental Values 10(2001):5-18. Abstract: Proceeding on a limited number of general, widely accepted equity criteria, we develop a proposal for distributing common resources. In particular, the proposed fair division mechanism is individually

rational, envy-free, Pareto-efficient and satisfies the stand alone test, which follows as a minimum requirement from the resource and population monotonicity criteria. Applied to international climate policy, the thrust of this proposal is that the South should initially be fully compensated for the greenhouse gas abatement measures it is to undertake as a result of efficiency considerations. Keywords: Fair division, equity, common resources, climate change. Helm is at Otto-von-Guericke-University Magdeburg, Faculty of Economics and Management. Simonis is at the Science Centre Berlin, Environmental Policy Studies. (EV)

Helm, Dieter (ed.), Climate Change Policy, Reviewed by Jonathan Kohler, Environmental Values 15(2006):529-531.

Helmer, EH, "Forest conservation and land development in Puerto Rico", Landscape Ecology 19 (no.1, 2004): 29-40(12).

Helms J.A., "Old-Growth: What Is It?," Journal of Forestry 102(no.3, April/May 2004):8-12(5). (v. 15, # 3)

Helmy, Eric, "Teeth for a Paper Tiger: Redressing the Deficiencies of the Recovery Provisions of the Endangered Species Act," Environmental Law 30(no.4, 2000): 843-. The recovery planning provisions of the Endangered Species Act suffer from two notable defects: the Secretaries of the Interior and Commerce need not promulgate recovery plans within any specified time frames, and such plans are not enforceable. In this comment, Mr. Helmy illustrates the ecological consequences and legal inadequacies of these defects. He then suggests how legislatures, administrative agencies, and practitioners may rectify or circumvent these defects to effect species recovery. (v.12,#3)

Heloise. Hints for a Healthy Planet, New York: Perigree Books, 1990. \$ 7.95. (v1,#2)

Helvarg, David. The War Against the Greens: The Wise Use Movement, the New Right and Anti-Environmental Violence. San Francisco: Sierra Club Books, 1994. 502 pages. \$25. The growing effort to stifle environmental progress now includes, the author maintains, not only legitimate, if wrong-headed opposition, but, increasingly, the use of devious techniques that can include incrimination, threats against property and persons, vandals, and even violence against environmentalists. Helberg is a journalist and private investigator. (v6,#1)

Hemmingway, Roy. "Restructuring the Northwest Power System." Environmental Law 26, no.2 (1996): 669. (v7, #3)

Hempel, Lamont. Environmental Governance. Covelo, CA: Island Press, 1996. 260 pp. \$45 cloth, \$22.95 paper. The nature of global environmental change and the institutional responses needed to manage it. Though thoroughly grounded in political science, the book is multidisciplinary in design, drawing on concepts and tools from ecology, economics, law, business, sociology, philosophy, public health, and international relations theory. (v7,#4)

Henberg, Marvin, "Wilderness, Myth, and American Character," The Phi Beta Kappa Key Reporter 59, no. 3 (Spring 1994). Wilderness designation is a political hot potato. It is also a philosophical hot potato, replete with paradox. Thanks to its endless variability, the best way of capturing the particularity of wilderness lands is through narrative. If we will let nature abide wildly in some few remaining portions of the earth, we will be immeasurably richer for it. An excellent summary of wilderness issues from a philosophical perspective. Originally a lecture at Washington and Lee University, in March 1993. Henberg teaches philosophy at the University of Idaho. (v5,#2)

Henberg, Marvin, "Wilderness as Playground," Environmental Ethics 6(1984):251-263. An original

analysis of the value of wilderness as a play area, based on authentic wilderness experiences, not the manufactured recreation that takes place in wilderness. But Henberg is faced with the problem of "wilderness machines" that provide all the experiences of actual wilderness without being natural. (Katz, Bibl # 1)

Henberg, Marvin. Review of The Wilderness Condition. Edited by Max Oelschlaeger. Environmental Ethics 15(1993):355-58.

Henberg, Marvin. "Wilderness as Playground." Environmental Ethics 6(1984):251-63. Play requires security from sober concerns, and only recently have non-native North Americans felt secure enough in wilderness lands to view them as potential playgrounds. Employing a pretend quality of play illusion, many kinds of play are derivatives from normally sober activities. I argue that the most genuine sorts of wilderness play derive from the activities of the original geographical explorers. It is thus possible to distinguish types of play for which wilderness is especially suited from types that merely happen in the wilderness--i.e., for which wilderness is an accidental playground. Play values are important enough to receive serious consideration in the administration of wilderness lands, and I conclude that our public policy ought to favor wilderness activities that most closely imitate the activities of the original geographical explorers. Henberg is at the Philosophy Dept., University of Idaho, Moscow, ID. (EE)

Hendee, John C. and Chad P. Dawson, Wilderness Management: Stewardship and Protection of Resources and Values. 3rd ed. Fulcrum Publishing, 2002. Third edition of a long-standing text, first edition 1978, second edition 1990. (v. 15, # 3)

Hendee, John C., and Vance G. Martin, eds., International Wilderness Allocation, Management, and Research. From the 5th World Wilderness Congress, Tromso, Norway, September 1993. Published by the International Wilderness Leadership (WILD) Foundation, in cooperation with the University of Idaho Wilderness Research Center. Paper. 334 pages. \$ 19.50 + \$ 3 shipping. 52 papers, typically short, by 104 authors and coauthors. Some samples: Harold Eidsvik, "Wilderness Values and World Heritage Sites"; John Dennis, "The Role of Wilderness in Maintaining Biological Diversity"; Jonathan Miller, "Evolution of Wilderness Concepts in Australia", Wesley Henry, Robert Chandler, Richard Ernenwein, "Protecting Natural Quiet: A Case Study of Grand Canyon National Park"; Steve Hollenhorst, Ernest Frank, III, and Alan Watson, "The Capacity to be Alone: Wilderness Solitude and Growth of the Self"; John Heywood, "Wilderness Civility: Cooperation and Coordination in the Wilderness"; Norman McIntyre, Jackie Kiewa, Josephine Burden, "Women's Involvement in Adventure Activities"; and many more. Lots of papers specific to local wilderness areas. Lots of papers deal with incorporating indigenous wisdom into wilderness conservation. To place orders: The WILD Foundation, 211 West Magnolia Street, Fort Collins, CO 80521. Or: The Wilderness Research Center, University of Idaho, Moscow, ID 83843. Hendee is Dean of Forestry, Wildlife and Range Sciences at Idaho State University; Martin is president of the WILD Foundation. (v5,#2)

Hendee, John C., George H. Stankey, and Robert C. Lucas, Wilderness Management. 2nd ed., 1990. An extensively revised edition of a work first published by the U. S. Forest Service in 1978. Republished by the International Wilderness Leadership Foundation. Address: 211 West Magnolia, Fort Collins, CO. \$ 40.00. 500 pages. This second edition insures that this work will remain the standard in the field. Among the new materials is a chapter on "International Concepts of Wilderness Preservation and Management." Six nations now have specific wilderness protection in something similar to the American sense: The United States, Canada, Zimbabwe, South Africa, Australia, and New Zealand, though almost all nations have some parks and preserved areas. (v1,#3)

Henderson, Caspar, "Burning desire," The Ecologist 30(no.7, OCT 01 2000):51- . Caspar Henderson explains why it's time to halt Britain's waste incineration scandal. (EE v.12,#1)

Henderson, Caspar, "Coral Decline," The Ecologist 31(no.1, 2001 Feb 01): 58-. The stunning collapse of coral reef systems around the world. (v.12,#3)

Henderson, Hazel. The Politics of the Solar Age: Alternatives to Economics. Reviewed in Environmental Ethics 5(1983):71-82.

Henderson, Keith, "Ecologists Debate Merits of Rain-Forest Products," The Christian Science Monitor 86 (3 August 1994):1, 6. (v5,#3)

Henderson, Keith, "Breeders Aim to Hatch a Big Market for Emus," The Christian Science Monitor 86 (12 July 1994): 10-11. First cousin to the ostrich, the emu is being raised for meat, hide, feathers, and oil. (v5,#3)

Henderson, Martha A., "What Is Spiritual Geography?" The Geographical Review 83 (no. 4, October 1993):469-472. Following recent books and wide publicity given to the idea of spiritual geography, thought to be a mixed blessing by many geographers, Henderson defines it as a wrestling of one's story out of the circumstances of landscape and inheritance, finding a place that momentarily traps and illuminates the supernatural ability of humans to cherish, adapt, create, and re-create their surroundings. One comes to understand what is holy in the land and in one's relationship to it. This fulfills the human need and ability to legitimize the unknown through the construct of place. "Geographers should not be hesitant to recognize place as a medium to understand human spirituality." Henderson teaches geography at the University of Minnesota-Duluth. (v5,#4)

Hendricks, Brent. "Postmodern Possibility and the Convention on Biological Diversity." New York University Environmental Law Journal 5, no.1 (1996): 1. (v7, #3)

Hendrickson, DC, "Toward Universal Empire: The Dangerous Quest for Absolute Security," World Policy Journal 19(no.3, 2002): 1-10.

Hendrickson, Mary K., Harvey S. James and William D. Heffernan, "Does The World Need U.S. Farmers Even If Americans Don't?" Journal of Agricultural and Environmental Ethics 21(2008):311-328. We consider the implications of trends in the number of U.S. farmers and food imports on the question of what role U.S. farmers have in an increasingly global agrifood system. Our discussion stems from the argument some scholars have made that American consumers can import their food more cheaply from other countries than it can produce it. We consider the distinction between U.S. farmers and agriculture and the effect of the U.S. food footprint on developing nations to argue there might be an important role for U.S. farmers, even if it appears Americans don't need them. For instance, we may need to protect U.S. farmland and, by implication, U.S. farmers, for future food security needs both domestic and international. We also explore the role of U.S. farmers by considering the question of whether food is a privilege or a right. Although Americans seem to accept that food is a privilege, many scholars and commentators argue that, at least on a global scale, food is a right, particularly for the world's poor and hungry. If this is the case, then U.S. farmers might have a role in meeting the associated obligation to ensure that the poor of the world have enough food to eat. We look at the consequences of determining that food is a right versus a privilege and the implications of that decision for agricultural subsidies as well as U.S. agriculture and nutrition policies. The authors are in the Department of Rural Sociology Division of Applied Social sciences, University of Missouri, Columbia.

Hendrix, P. F., and Bohlen, P. J., "Exotic Earthworm Invasions in North America: Ecological and Policy Implications," Bioscience 52(no.9, 2002): 801-12. (v.13,#4)

Hengeveld, R. "Measuring Ecological Biodiversity," Biodiversity Letters 3(1996):58.

Henke, C., "Review of: Harper, Douglas. Changing Works: Visions of a Lost Agriculture," Society and Natural Resources 16(no. 5, 2003): 463-464. (v 14, #3)

Henneman, M. L., and Memmott, J., "Infiltration of a Hawaiian Community by Introduced Biological Control Agents," Science 293(17 August 2001):1314-1316. And related story: Stokstad, Erik, "Parasitic Wasps Invade Hawaiian Ecosystem," Science 293(17 August 2001):1241. Parasitic wasps are a favorite for biological control of invasive weeds and pests. But, unfortunately, many do not stop with their target organisms. In Hawaii, wasps introduced to fight pests on sugar cane have now upset swamp ecosystems, quite different environments from the sugar fields. (v.12,#4)

Henning, Brian G., *The Ethics of Creativity: Beauty, Morality, and Nature in a Processive Cosmos*. Pittsburgh: University of Pittsburgh Press, 2005. A central concern in environmental ethics is its desire to extend the scope of direct moral concern beyond human beings to plants, nonhuman animals, and the systems of which they are a part. Although nearly all environmental philosophies have long since rejected individuals as isolated and independent substances, few have replaced this worldview with an alternative that is adequate to the organic, processive world. Alfred North Whitehead has the potential to make a significant contribution to environmental ethics, as do William James, John Dewey, and Charles Sanders Pierce. Also using Aldo Leopold, Peter Singer, Albert Schweitzer, and Arne Naess, Henning develops an ethical theory of creativity. This emphasizes the well-being of wholes, while not losing sight of the importance of the unique centers of value that constitute these wholes. Enhancing intrinsic beauty everywhere is shown to be our deepest obligation and our highest joy.

Henning, Brian, *The Ethics of Creativity: Beauty, Morality, and Nature in a Processive Cosmos*. Pittsburgh: Univ of Pittsburgh Press, 2005.

Henning, Brian G., The Ethics of Creativity: Beauty, Morality, and Nature in a Processive Cosmos. Pittsburgh: University of Pittsburgh Press, 2005.

Henrich, Joseph. "Market Incorporation, Agricultural Change, and Sustainability Among the Machiguenga Indians of the Peruvian Amazon," Human Ecology 25(no.2 1997):319. (v8,#3)

Henrich, Karoly, "Gaia Infiltrata: The Anthroposphere as a Complex Autoparasitic System." Environmental Values 11(2002):489-507. This paper compares the heuristic potential of three metaphorical paired concepts used in the relevant literature to characterize global relationships between the anthroposphere and the ecosphere. Methodologically, the guiding question is whether and to what extent metaphorical theses can support an arrival at hypotheses which accurately reflect reality and possess explanatory force. The predator-prey model implies that the populations of two species in such a relationship in principle exhibit coupled oscillations, giving prey populations the possibility of periodic regeneration. For some time, however, the most important indicators of human destruction of nature have been showing a relentless upward trend which appears to render the tumour-host metaphor more appropriate. Another fact which favors this analogy is that a tumour develops within its host and from its host's normal cells, in a similar way to the emergence of the anthroposphere from within the biosphere. But the parasite-host analogy also allows the formulation of fruitful hypotheses, since ecological parasitology is equally familiar with varieties of autoaggressive interaction and provides a means of focusing particularly on the adelphoparasitic hierarchy within the anthroposphere. (EV)

Henrickson, Mary K., and Harvey S. James, "The Ethics of Constrained Choice: How the Industrialization of Agriculture Impacts Farming and Farmer Behavior," Journal of Agricultural and Environmental Ethics 18(2005):269-291. Constraints created by the economic environment of farming

limit what options a farmer has available. The fact that decisions are constrained creates new ethical challenges. Having fewer options when faced with severe economic pressures is a very different situation than having many options available. This increases the likelihood that farmers will consider unethical behavior. The authors are at the University of Missouri-Columbia. (JAEE)

Henry, Todd, "Yellowstone's Trophic Cascade: Evidence of an Ecosystem on the Mend?" Yellowstone Discovery 21 (no. 2, Summer 2006): 1-5. Since the wolf reintroduction to Yellowstone ten years ago, there is compelling evidence of quantifiable increase in biomass and biodiversity in the Greater Yellowstone Ecosystem as a whole, especially evident where wolves are most common, in the Lamar Valley and the Northern Range. The increase is in species ranging from willows to beavers to foxes and rodents. The only species to decrease in numbers is coyotes.

Hepburn, Ronald W., "Landscape and the Metaphysical Imagination," Environmental Values 5(1996):191-204. Aesthetic appreciation of landscape is by no means limited to the sensuous enjoyment of sights and sounds. It very often has a reflective, cognitive element as well. This sometimes incorporates scientific knowledge, e.g. geological or ecological, but it can also manifest what this article will call 'metaphysical imagination', which sees or seems to see in a landscape some indication, some disclosure of how the world ultimately is. The article explores and critically appraises this concept of metaphysical imagination, and some of the roles it can play in our aesthetic encounters. KEYWORDS: Landscape, aesthetics, imagination, metaphysics, sublime (EV)

Hepburn, Ronald W., The Reach of the Aesthetic: Collected Essays on Art and Nature. Aldershot and Burlington: Ashgate, 2001. Reviewed by Emily Brady, Environmental Values 12(2003):128-131. (EV)

Hepburn, Ronald, "The Concept of the Sublime: Has It Any Relevance for Philosophy Today?" Dialectics and Humanism: The Polish Philosophical Quarterly, vol. 15, no. 1-2 (1988):137-55. (v5,#3)

Hepburn, Ronald, "Values and Cosmic Imagination." Pages 35-51 in O'Hear, Anthony, ed., Philosophy, the Good, the True and the Beautiful. The Royal Institute of Philosophy Lectures, 1998-1999. Cambridge: Cambridge University Press, 2000. The role of human imagination in appreciating cosmic nature, nature-at-large. Example: Wordsworth, on a climb of Mt. Snowdon, believes that when a poet transforms the visible universe by the power of his imagination, he imitates the creative action of nature herself. Example: Don Cupitt, Solar Ethics, takes an ethic from the sun: Live by burning out. Be headlong, outpouring as the sun is. Neither seems satisfactory; imagination can overdo it. More disciplined imagination is required. Perhaps not even serious self-understanding and self-evaluation are feasible without attempts at wider connecting, whatever the risk of illusion.

But now nature seems ambiguous. Values are present there. Although we do not receive moral guidance from nature, nature may command our respect. Nature, at least sentient animals in nature, cannot be reduced to elements in our own life-world sensibility. Respect refuses to treat nature as unlimitedly exploitable, unchecked by any principle superior to human self interest. But such respect is checked by the inextricable tangle of the creative and the destructive in nature; sometimes respect is ill-matched to nature's operations.

By cosmic imagination, we are privileged to be able to add to nature as it would be without us, by causing it to burgeon forth in the light of our consciousness. Still it is on nature's provisions that we exercise our own perceptual-creative-imaginative efforts. Nature and ourselves are indissolubly co-authors. Hepburn is emeritus professor of philosophy, University of Edinburgh. (v.11,#3)

Hepburn, Ronald W., The Reach of the Aesthetic: Collected Essays on Art and Nature. Aldershot, Hampshire, UK: Ashgate, 2001. Ten essays, many of them already celebrated as seminal contributions to aesthetics, especially to the aesthetic appreciation of nature. Examples: "Trivial and serious in the aesthetic appreciation of nature", "Restoring the sacred as a concept of aesthetics"; "Values and cosmic

imagination." And more. Hepburn is emeritus in philosophy, University of Edinburgh. (v.12,#3)

Hepburn, Ronald W., "Trivial and Serious in Aesthetic Appreciation of Nature," in Salim Kemal and Ivan Gaskell, eds., Landscape, Natural Beauty and the Arts. Cambridge: Cambridge University Press, 1993. Hepburn continues his series of insightful articles on the aesthetic appreciation of nature. His earlier "Aesthetic Appreciation of Nature," (Harold Osborne, ed., Aesthetics in the Modern World, New York: Weybright and Talley, 1968) is a classic. The current volume, unfortunately, is available only in hardcover at \$ 59.95. (v4,#3)

Hepburn, Ronald, "Landscape and Metaphysical Imagination," a paper presented at the First International Conference on Environmental Aesthetics, in Koli, Finland, June 1994. Aesthetic appreciation of nature is many-leveled. Landscape appreciation has both perceptual and conceptual components; it can suffer from too much or too little metaphysical imagination. Metaphysics that is internal to the aesthetic experience is more likely to be enriching than metaphysics external to the experience. An example is the experience of the sublime. Hepburn is in philosophy at the University of Edinburgh. Copies: Ronald Hepburn, Department of Philosophy, University of Edinburgh, Davie Hume Tower, George Square, Edinburgh EH8 9JX. (v5,#3)

Hepburn, Ronald, "Nature Humanised: Nature Respected," Environmental Values 7(1998): 267-279. How far is it true that the aesthetic appreciation of nature obscures, rather than illuminates, its objects? Do we not humanise nature, read our own subjectivity into it, sentimentally distort it, in our aesthetic - as distinct from scientific - approaches? I argue that not all humanising falsifies, and that we can respect nature as well as annex its forms and expressive qualities in our aesthetic appreciation. Respecting/humanising are explored as two of the chief key concepts for an understanding of the complexity of aesthetic attitudes to nature. KEYWORDS: aesthetics, nature, anthropomorphic, truth, respect. Ronald Hepburn resides in Edinburgh, UK. (EV)

Hepworth, James R., McNamee, Gregory. Resist Much, Obey Little: Remembering Ed Abbey. San Francisco: Sierra Club Press, 1996. 272pp. \$14 paper. Thirty seven students, friends, acquaintances and colleagues pay tribute to the satirist, curmudgeon, gadfly, radical and American original who was Edward Abbey. (v7,#4)

Herath, G., "The Economics and Politics of Wilderness Conservation in Australia," Society and Natural Resources 15(no.2, 2002): 147-60. (v.13,#2)

Herbers, Joan M. "Watch Your Language! Racially Loaded Metaphors in Scientific Research." BioScience Vol. 57, no. 2 (2007): 104-5.

Herbert, Mary K., "Poem: Mid-May, Massachusetts," Ecotheology No 10 (Jan 2001):109.

Herbohn, K.F., Harrison, S.R. and Herbohn, J.L., "An Alternative Approach to Accounting for Natural Resources: The Case of Multipurpose Forestry in Australia," Society & Natural Resources 13(no.7, OCT 01 2000):663- . (EE v.12,#1)

Herhahn, Cynthia L., Hill, J. Brett, "Modeling Agricultural Production Strategies in the Northern Rio Grande Valley, New Mexico," Human Ecology 26(no.3, 1998), p. 469. (v.9,#4)

Herkert, J.R. "Bobolink Dolichonyx Oryzivorus Population Decline in Agricultural Landscapes in the Midwestern USA," Biological Conservation 80(1997):108.

Herman, Carol Casazza, "Globalization of Environmental Issues," Journal of Environmental Law &

Practice 7 (No. 3, 2000 Winter): 12- . (v.11,#4)

Hermann, Pauline. "Human Environmental Crisis and the Transnational Corporation: The Question of Culpability," Human Ecology 23, no. 2 (June 1995): 285- . (v6,#4)

Hermly, M., O. Honnay, and Lawesson, J.E. "An Ecological Comparison between Ancient and Other Forest Plant Species of Europe, and the Implications for Forest Conservation." Biological Conservation 91(No. 1, 1999):9- . (v10,#4)

Hernandez, Hector M., and Barcenas, Rolando T. "Endangered Cacti in the Chihuahuan Desert: II. Biogeography and Conservation." Conservation Biology 10, no.4 (1996): 1200. (v7, #3)

Herndl, C.G., Brown, S.C., (eds). Green Culture. Review by Tarla Rai Peterson, Environmental Values 7(1998):362.

Herndl, Carl J., and Stuart C. Brown, eds. Green Culture: Environmental Rhetoric in Contemporary America. Madison, WI: University of Wisconsin Press, 1996. (v7, #3)

Herrick, Charles N., and Jamieson, Dale, "Junk Science and Environmental Policy: Obscuring Public Debate with Misleading Discourse," Philosophy and Public Policy Quarterly 21(no. 2/3, Spring/Summer 2001):11-16. The National Science Board's Task Force on the Environment recently completed an exhaustive review of environmental science in the United States. Nothing in the report suggests an epidemic of junk science. But media accounts often allege that junk science is offered in support of environmental and health issues, charges that are unsupportable. Allegations of junk science are often politically motivated. Media also often fail to realize the complexity of good environmental science, and also that science requires sophisticated evaluation in forming policy. (v.13,#1)

Herrick, J. A., "Federal Project Financing Incentives for Green Industries: Renewable Energy and Beyond," Natural Resources Journal 43(no. 1, 2003): 77-110.

Herring, Christopher D., Anu Raghunathan, Christiane Honisch, Trina Patel, Kenyon M. Applebee, Andrew R. Joyce, Thomas J. Albert, Frederick R. Blattner, Dirk van den Boom, Charles R. Cantor, and Bernhard Ø. Palsson. "Comparative Genome Sequencing of *Escherichia coli* allows observation of bacterial evolution on a laboratory timescale." Nature Genetics Vol. 38, no. 12 (2006): 1406-12. The researchers grow bacteria in hostile environments and find that they are quite clever, even 80% predictably clever, in adaptations to their hostile environments, using what are otherwise called "errors" in DNA copying. Bacteria are more plastic and adaptable than previously thought. Herring is in bioinformatics, University of California, San Diego.

Herring, Horace, "The Quest for Arcadia: British Utopian Communities", Organization and Environment, 15, (No. 2, 2002): 202-8. A detailed book review essay of Dennis Hardy's Utopian England: Community Experiments 1900-1945 and Chris Coates' Utopia Britannica: British Utopian Experiments 1325-1925. Herring is a research fellow at the Energy and Environment Research Group at the Open University, England. (v.13, #3)

Herring, Horace, "The Search for a Utopian Energy Policy," Environmental Politics 9(no. 2, Summer 2000):168- . (v.12,#2)

Herring, Horace. Review of Philip Conford, The Origins of the Organic Movement, Organization and Environment, 16, (No. 1, 2003): 129-30. Herring is a research fellow at the Energy and Environment Research Group at the Open University, England.

Hoffman, Andrew J., "Linking Social Systems Analysis to the Industrial Ecology Framework", Organization and Environment, 16, (No. 1, 2003): 66-86. Theoretically, industrial ecology is meant to be a powerful analytical tool that challenges us to look beyond a mechanistic, fragmented view of environmental problems and solutions, thus helping to promote thinking about the holistic industrial system. At present, however, the field tends to focus primarily on technical processes and quantitative, material-orientated analysis, and so this article suggests expanding industrial ecology's models by considering social systems analysis, advocating that industrial ecologists should augment the existing strengths of the discipline by linking their perspectives with those from social science. Hoffman is assistant professor of organizational behavior at the Boston University School of Management.

Herring, Horace. Review of Mike Davis, "Late Victorian Holocausts: El Nino, Famines and the Making of the Third World", Organization and Environment 14 (No. 1, March 2002) pp.91-4. Herring is a research fellow at the Energy and Environment Research Group at the Open University, UK. (v.13,#2)

Herring, Horace. Review of Martin Holdgate, "The Green Web: A Union for World Conservation" Organization and Environment 14 (No. 3, September 2001) pp.375-77. Herring is a research fellow at the Energy and Environment Research Group at the Open University, UK. (v.13,#2)

Herring, Horace. "Environmental History", Environmental Politics 5(no.2, 1996):372. (v7,#4)

Herrington, Susan. *On Landscapes*. New York: Routledge, 2008. Landscapes can tell us much about the ethical and aesthetic values of the societies that produce them. Who designs landscapes? What can landscapes represent? Are landscapes natural? How are landscapes related to memory and emotion, instrumental imagination, and aesthetic experience? Herrington is at the University of British Columbia.

Herrmann, Thora, "Indigenous Knowledge and Management of Araucaria Araucana Forest in the Chilean Andes: Implications for Native Forest Conservation," Biodiversity and Conservation 15 (no.2, February 2006): 647-662 (16).

Herron, J., "Review of: Paul S. Sutter. Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement," Environmental History 8(no. 3, 2003): 494.

Hertsgaard, Mark, "Our Real China Problem," The Atlantic Monthly 280 (No. 5, November 1997):96-114. "The price of China's surging economy is a vast degradation of the environment, with planetary implications. Although the Chinese government knows the environment needs protecting, ... it fears that doing the right thing could be political suicide." (EE v.12,#1)

Hertsgaard, Mark, Earth Odyssey: Around the World in Search of our Environmental Future. Shelter Island, NY: Broadway Books. London: Abacus, 1999. (v10,#4)

Herzog, Harold, "Human Morality and Animal Research," American Scholar, Summer 1993. "When asked where I stand on the animal-research issue, I have taken to responding with 'the troubled-middle.' Granted, the troubled middle is not a comfortable place to be. But, for most of us, neither are the alternatives." Herzog is professor of psychology at Western Carolina University. (v4,#2)

Herzog, Thomas R., Herbert, Eugene J., and Crooks, C.L., "Cultural and Developmental Comparisons of Landscape Perceptions and Preferences," Environment And Behavior 32 (No. 3, 2000 May 01): 323- . (v.11,#4)

Herzog, TR; Kutzli, GE, "Preference and Perceived Danger in Field/Forest Settings," Environment and

Behavior 34(no.6, 2002): 819-835.

Hess Jr., Karl. "John Wesley Powell and the Unmaking of the West," Environmental History 2(1997):7.

Hess, Karl, Rocky Times in Rocky Mountain National Park. Niwot, CO: University Press of Colorado, 1993. 167 pages. \$ 22.50 cloth. The park is moving toward an ecological Armageddon after "three-quarters of a century of mismanagement." The biggest problem is too many elk, of which park visitors are fond, that eat willows and aspen and depress beaver populations, which disrupts the whole riparian system. Also fire suppression is a problem. There are too many elk and too few fires. Park ecologists know this, but park administrators fail to listen. Hess wants to take the park out of politics and all the political and career moves that go with it. He wants to put it in the hands of a conservation trust, whose board of directors would include faculty at the state's universities and park employees elected by their peers. Provocative, sometimes reminiscent of Alston Chase, although Hess is amply critical of Chase, and not mean-spirited. Hess is a writer with a Ph.D. in range ecology. (v5,#1)

Hess, Karl, Jr., Visions Upon the Land: Man and Nature on the Western Range. Washington, DC: Island Press, 1992. 279 pages. \$ 22.00. Written from the "wise use" perspective, Hess argues that the decline of public lands is due to fundamental failures in government policy, to ecological destabilization caused by government intrusion, and to the destructiveness of sweeping ideologies. More laws and regulations to control the conservation of natural resources are popular but ultimately futile. An application of the concept of laissez-faire politics to the management of western rangelands. Hess is an environmental writer with the Foundation for Research on Economics and the Environment, Seattle. (v3,#3)

Hess, Karl, Jr., Rocky Times in Rocky Mountain National Park: An Unnatural History. Niwot, CO: University Press of Colorado, 1993. 240 pages. \$ 22.50. Hess argues for drastic changes in how the sixth most visited park in the United States should be managed. Hess thinks the Park Service has faltered in its mission of preservation, due in part to "predatory politics" in the Park Service. Hess is described (by his friend Tom Wolf) as "a kinder, gentler Alston Chase." He is an ecologist and environmental consultant based in Las Cruces, New Mexico. (v4,#2)

Hess M., "Spatial relationships? Towards a reconceptualization of embeddedness," Progress in Human Geography 28(no.2, 1 April 2004):165-186(22). (v. 15, # 3)

Hessel, Dieter T., and Reuther, Rosemary Radford, eds., Christianity and Ecology: Seeing the Well-Being of Earth and Humans. Religions of the World and Ecology 3. Cambridge, MA: Harvard University Press, 2000. (v10,#4)

Hessel, Dieter T. "Where Were/Are the Churches in the Environmental Movement?." Theology and Public Policy 7, no. 1 (Summer 1995): 20-31.

Hessel, Dieter T., ed. Energy Ethics: A Christian Response. New York: Friendship Press, 1979.

Hessel, Dieter T., ed. Energy Ethics: A Christian Response. Reviewed in Environmental Ethics 3(1981):189-91.

Hessel, Dieter T., ed., After Nature's Revolt: Eco-Justice and Theology. Minneapolis: Fortress Press, 1992. Includes John B. Cobb, Jr., "Postmodern Christianity in Quest of Eco-Justice"; Larry Rasmussen, "Returning to Our Senses: The Theology of the Cross as a Theology for Eco-Justice"; H. Paul Santmire, "Healing the Protestant Mind: Beyond the Theology of Human Dominion"; Heidi Hadsell, "Eco-Justice and Liberation Theology: The Priority of Human Well-Being"; George H. Kehm, "The New Story: Redemption as Fulfillment of Creation"; William E. Gibson, "Global Warming as a Theological Ethical

Concern"; Holmes Rolston, III, "Wildlife and Wildlands: A Christian Perspective"; George E. Tinker, "Creation as Kin: An American Indian View"; Carol Johnston, "Economics, Eco-Justice, and the Doctrine of God"; Philip Hefner, "Nature's History as Our History: A Proposal for Spirituality." (v3,#1)

Hessel, Dieter T., and Ruether, Rosemary Radford, eds., Christianity and Ecology: Seeing the Well-Being of Earth and Humans. Religions of the World and Ecology 3. Cambridge, MA: Harvard University Press, 2000. (v.11,#1)

Hessel, Dieter T., ed., Theology for Earth Community: A Field Guide Maryknoll, NY: Orbis Books, 1996. ISBN 1-57075-052-1 298 pp. \$20. Twenty original essays examining state-of-the-art scholarship and pedagogy in ecologically-alert theology. What needs to be done, these authors ask, to bring biblical studies, systematics, social ethics, practical theology, spiritual formation, and liturgy up to speed with eco-justice thought and action? A key study for those in religious and environmental studies who wish to comprehend the range and depth of Christian theological writing, plus some aspects of interreligious reflection, on this increasingly important subject.

An analysis of four major figures--Thomas Berry, Larry Rasmussen, Rosemary Ruether, and James Nash--on what needs to happen in theological studies to meet the environmental challenge. Other contributions: Mary Evelyn Tucker on the role of religions in forming an environmental ethic; Theodore Hiebert on rethinking traditional scriptural approaches to nature; Diane Jacobson on biblical bases for caring about ecology and justice; George Tinker on an American Indian perspective; Catherine Keller on nature, feminism, and community; Manning Marable on the power of connections in environmental justice; Thomas L. Hoyt, Jr. on environmental justice and black theology; Kosuke Koyama on cosmology and justice in ecumenical perspective; and Dieter Hessel on where the churches were/are in the U.S. environmental movement. A chapter on "The Praxis of Institutional Greening" by Richard Clugston incorporates the thought of John B. Cobb, Jr. on a theology of institutional life that will support just and sustainable community. This book can be obtained at half price (\$10) from the Center for Respect of Life & Environment, 2700 L St., NW, Washington, DC 20037 (202-778-6133)

Hessel, Dieter T. "Now That Animals Can Be Genetically Engineered: Biotechnology in Theological-Ethical Perspective," Theology and Public Policy 5(no. 1, 1993).

Hessel, Dieter T., ed. Theology for Earth Community: A Field Guide. Reviewed by Rita Lester, Environmental Ethics 20(1998):195-198.

Hessel, Dieter H., and Rasmussen, Larry, eds., Earth Habitat: Eco-Injustice and the Church's Response. Minneapolis, MN: Fortress Press, 2001. The churches have not institutionalized much care for creation or eco-justice ministries, but there is evidence of such care nonetheless in Asia, Africa, and America. Part I. Theology for Habitat Earth. Part II. Overcoming Eco-Injustice in the Earth Community. Part III. Environmentally Engaged Church and Community. The "heart and soul of the book" presses the question: "Who belongs to 'us,' with whom are we willing to share, and for whom are we ready to sacrifice?" This volume results from a conference at Union Theological Seminary in New York. Hessel is known for his pressing for including eco-justice and environmental concerns in theological education. Rasmussen is Reinhold Niebuhr Professor of Social Ethics at Union Theological Seminary and the author of Earth Community, Earth Ethics. (v.13,#2)

Hessel, Dieter T., ed., After Nature's Revolt: Eco-Justice and Theology. Minneapolis, MN: Augsburg Fortress, 1991. 240 pages. \$ 14.95 paper. John B. Cobb, Jr., Paul Santmire, Larry Rasmussen, Heidi Hadsell, George Kehm, Holmes Rolston, III, George Tinker, Carol Johnston, and Phil Hefner rethink aspects of doctrine, spirituality, and lifestyle in ways that are critical of anthropocentrism in Christianity. Rolston's article is "A Christian Understanding of Wildlife and Wildlands." (v2,#4)

Translated into Chinese in Dieter T. Hessel, ed., Shengtai gongyi: Dui dadi fanpuide xinyang

fanxing (Taiwan: Diquiri Chubanshe, 1997). Translated by Text Committee of the Taiwan Ecological Theology Center. ISBN 0-8006-2532-3.

Hessl, A, "Aspen, Elk, and Fire: The Effects of Human Institutions on Ecosystem Processes," Bioscience 52(no.11, 2002): 1011-1021.

Hessley, Rita K. "Should Government Regulate Procreation? A Third View." Environmental Ethics 3(1981):49-53. Donald Lee has claimed that of three ethical values, freedom, justice, and security-survival, involved in the effects of population growth on the future and the survival of all human beings, security-survival is the most fundamental. As such, it should have priority over freedom and justice. Based on this hierarchy, Lee draws the conclusion that one does not have the right to unlimited procreation, and that ultimately it is the duty of government to impose limits on population growth. I accept Lee's argument that personal rights must be balanced by personal responsibility, but I argue that justice is the fundamental ethical principle in this discussion. This is not a trivial distinction, for it leads to two significant conclusions. First, by focusing proper attention on justice, the threat to survival of the race from overpopulation is reduced to reasonable and realistic proportions. Second, and particularly important with regard to Lee's position, the recognition of the need for justice brings to light the fact that the primary responsibility of government is to address itself to redressing injustice in society, injustice which does pose a very real threat to the survival of mankind. In this context, I argue that under no circumstances should government have the right or the responsibility to enforce limits on procreation. Hessley is at the Oak Ridge National Laboratory, Oak Ridge, TN. (EE)

Hester, Lee, Dennis McPherson, Annie Booth, and Jim Cheney. "Indigenous Worlds and Callicott's Land Ethic." Environmental Ethics 22(2000):273-290. We assess J. Baird Callicott's attempt in Earth's Insights to reconcile his land ethic with the "environmental ethics" of indigenous peoples. We critique the rejection of ethical pluralism that informs this attempted rapprochement. We also assess Callicott's strategy of grounding his land ethic in a postmodern scientific world view by contrasting it with the roles of "respect" and narrative in indigenous "ethics." (EE)

Hetherington, John, Terry C. Daniel, and Thomas C. Brown, "Anything Goes Means Everything Stays: The Perils of Uncritical Pluralism in Understanding Environmental Values," Society and Natural Resources 7 (no. 6, 1994):535-546. (v7,#1)

Hetherington, John, Daniel, Terry C., and Brown, Thomas C., "Anything Goes Means Everything Stays: The Perils of Uncritical Pluralism in Understanding Environmental Values," Society and Natural Resources 6(1994):535-546.

Hettinger, Ned, and Bill Throop. "Refocusing Ecocentrism: De-emphasizing Stability and Defending Wildness." Environmental Ethics 21(1999):3-21. Traditional ecocentric ethics relies on an ecology that emphasizes the stability and integrity of ecosystems. Numerous ecologists now focus on natural systems that are less clearly characterized by these properties. We use the elimination and restoration of wolves in Yellowstone to illustrate troubles for traditional ecocentric ethics caused by ecological models emphasizing instability in natural systems. We identify several other problems for a stability-integrity based ecocentrism as well. We show how an ecocentric ethic can avoid these difficulties by emphasizing the value of the wildness of natural systems and we defend wildness value from a rising tide of criticisms. (EE)

Hettinger, Ned, "Enhancing Natural Value?" Human Ecology Review 3(no. 1, 1996):8-11. There is a widespread skepticism among those with deep environmental commitments to the natural world about the idea that humans can improve upon nature. While it seem obvious that humans that humans can alter nature to better serve human uses, it is far from clear that humans can improve nature in non-utilitarian

ways. An analysis of whether and how human participation in nature might be seen as enhancing, rather than degrading, intrinsically-valuable natural systems. Wildness will be lost with human intervention, though, in some circumstances, biodiversity might be gained. One would have to weigh tradeoffs. Hettinger is in philosophy, College of Charleston, SC. (v.13,#1)

Hettinger, Ned, "Enhancing Natural Value?" Human Ecology Review 3 (no. 1, Autumn, 1996):8-11. There is widespread skepticism about the idea that humans can improve upon nature. While it seems obvious that humans can alter nature better to serve human purposes, it is far from clear that human can improve nature in non-utilitarian ways. Can humans enhance intrinsic natural value? The strongest reason for skepticism about this possibility is the value that many see in the "wildness" of nature. Alleged human improvements degrade nature in terms of its wilderness value. Such valuing of pristine nature has been severely criticized for instituting a false human/nature apartheid that provides no positive role for humans in the natural world. Can human participation in nature be seen as enhancing rather than degrading intrinsically valuable natural systems. Hettinger is in philosophy, College of Charleston, SC. (v.9,#3)

Hettinger, Ned, Review of Callicott, J. Baird, Smith, Smith, eds. 'The Intrinsic Value of Nature,' The Monist. Environmental Ethics 18(1996):99-104. (EE)

Hettinger, Ned, book review of Peter Wenz, Environmental Ethics Today, Conservation Biology 18 (no. 2, 2004): 587-8.

Hettinger, Ned, "Review of: P. S. Wenz, Environmental Ethics Today," Conservation Biology 18(2004):587-588. (v. 15, # 3)

Hettinger, Ned, "Defining and Evaluating Exotic Species," Western North American Naturalist 61(no. 3, 2001):257-260. Exotics are species that are foreign to an ecological assemblage in the sense that they have not significantly adapted to resident biota or to local abiotic conditions, and resident species have not significantly adapted to them. Although they need not be human introduced nor damaging, when they are, a negative appraisal of such exotic species can be justified. Human introduction of exotics into natural systems typically increases human influence over those systems, thus diminishing their wildness. Valuing nature for its wildness is a rationale for the national parks' policy of letting nature take its course. Thus, Yellowstone Park has a strong reason for removing human-introduced exotics and for welcoming naturally migrating exotics. Disvaluing exotics that are neither human introduced nor damaging simply because they are foreign smacks of xenophobia. But given that wanton human mixing of species threatens to homogenize the earth's biological communities, biological nativism is justified as a way to preserve the diversity between such communities. Hettinger is in philosophy at the College of Charleston, Charleston, SC. (v.12,#3)

Hettinger, Ned. "Valuing Predation in Rolston's Environmental Ethics: Bambi Lovers versus Tree Huggers." Environmental Ethics 16(1994):3-20. Without modification, Rolston's environmental ethics is biased in favor of plants, since he gives them stronger protection than animals. Rolston can avoid this bias by extending his principle protecting plants (the principle of the nonloss of goods) to human interactions with animals. Were he to do so, however, he would risk undermining his acceptance of meat eating and certain types of hunting. I argue, nevertheless, that meat eating and hunting, properly conceived, are compatible with this extended ethics. As the quintessential natural process, carnivorous predation is rightfully valued and respected by such environmentalists as Rolston. Because the condemnation of human participation in predation by animal activists suggests a hatred of nature, the challenge for Rolston's animal activist critics is to show that one can properly appreciate natural predation while consistently and plausibly objecting to human participation in it. Hettinger, is in the department of philosophy, College of Charleston, Charleston, SC. (EE)

Hettinger, Ned. Review of Eric Katz, Nature as Subject: Human Obligation and Natural Community. Environmental Ethics 20(1998):109-12.

Hettinger, Ned. "Enhancing Natural Value?" Human Ecology Review 3, 1 (Autumn 1996): 8-11. There is widespread skepticism among those with deep commitments to the natural world about the idea that humans can improve upon nature. While it seems obvious that humans can alter nature to better serve human uses, it is far from clear that humans can improve nature in non-utilitarian ways. Can human beings enhance intrinsic natural value? Perhaps the strongest reason for skepticism about this possibility is the value that many see in the "wildness" of nature, understood as the extent to which a natural system has not been humanized. Alleged human improvements of nature humanize nature and thus degrade it in terms of wildness value. This idea of valuing and preserving relatively pristine nature for its wildness value has been severely criticized for instituting a false and harmful human/nature apartheid that provides no positive role for humans in the natural world. Critics suggest that we must move beyond preservationism and learn to integrate humans into nature, celebrating humanity's creative potential with respect to nature. This paper explores if and how human participation and involvement in nature might be seen as enhancing, rather than degrading, intrinsically-valuable natural systems. Hettinger teaches philosophy at the College of Charleston. (v8,#1)

Hettinger, Ned. Review of The Natural and the Artefactual: The Implications of Deep Science and Deep Technology for Environmental Philosophy. By Keekok Lee. Environmental Ethics 23(2001):437-441. (EE)

Hettinger, Ned. "Patenting Life: Biotechnology, Intellectual Property, and Environmental Ethics." Boston College Environmental Affairs Law Review 22 (1995): 267-305. Argues that our social policy of issuing patents in organisms and genes is not easily justified by traditional arguments for intellectual property under the utility patent system, and that these types of patents should be abolished because they manifest disrespect for life. Biotechnology does offer promise and hope for bettering human life and perhaps other life as well. Opposing biopatents does not entail opposing biotechnology. Organism and gene patents should be resisted not because biotechnology should be resisted, but rather because these biopatents are a morally dangerous and inappropriate way of thinking about and encouraging biotechnology. Without these two types of patents, biotechnical innovation would probably proceed substantially unhindered. Hettinger is at the College of Charleston, South Carolina. (v6,#1)

Hettinger, Ned. "Exotic Species, Naturalisation, and Biological Nativism," Environmental Values 10(2001):193--224. Contrary to frequent characterisations, exotic species should not be identified as damaging species, species introduced by humans, or species originating from some other geographical location. Exotics are best characterised ecologically as species that are foreign to an ecological assemblage in the sense that they have not significantly adapted with the biota constituting that assemblage or to the local abiotic conditions. Exotic species become natives when they have ecologically naturalised and when human influence over their presence in an assemblage (if any) has washed away. Although the damaging nature and anthropogenic origin of many exotic species provide good reasons for a negative evaluation of such exotics, even naturally-dispersing, nondamaging exotics warrant opposition. Biological nativists' antagonism toward exotics need not be xenophobic and can be justified as a way of preserving the diversity of ecological assemblages from the homogenising forces of globalisation. Implications for Yellowstone National Park policy are explored. Keywords: Exotics, native, nativism, naturalisation, Yellowstone National Park. Ned Hettinger is in the Philosophy Department, College of Charleston, South Carolina. (EV)

Hettinger, Ned. "Allen Carlson's Environmental Aesthetics and the Protection of the Environment." Environmental Ethics 27 (2005):57-76. Evaluation of the contribution that Allen Carlson's environmental

aesthetics can make to environmental protection shows that Carlson's positive aesthetics, his focus on the functionality of human environments for their proper aesthetic appreciation, and his integration of ethical concern with aesthetic appreciation all provide fruitful, though not unproblematic, avenues for an aesthetic defense of the environment. (EE)

Hewett, Jonathon, 'Green' Claims in Advertising: Caveat Emptor, Caveat Lector?, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Hewett, Jonathon, 'Green' Claims in Advertising: Caveat Emptor, Caveat Lector?, Master's Thesis, Department of Philosophy, Lancaster University, September 1994.

Hey, Jody, Genes, Categories, and Species: The Evolutionary and Cognitive Causes of the Species Problem. New York: Oxford University Press, 2001. The heart of the species problem is our human incorrigible drive to categorize any phenomenon that recurs repeatedly. We apply the mental tool of categorization to repeated instances of organisms that are similar, and call these species. Our conception of species is a basic by-product of the way we think. We devise and erect categories, but we mistake these for representations. The named species often do not, and probably will never, accurately match "real evolutionary groups," because, alas, the real evolutionary groups defy the kind of categorization our penchant demands. They have, for instance, fuzzy boundaries and not the neat boundaries our penchant favors. We need a bin structure, pigeon holes, but nature generates organisms with overlap and intergrading, revealed now at the molecular level. But it is not too clear what or whether any replacement of the species concept will enable us to respect or conserve biodiversity (which, we have also recently been told, is a social construct; see David Takacs, The Idea of Biodiversity). Hey is a geneticist at Rutgers University. (v.13,#1)

Hey, Jody, Genes, Categories, and Species: The Evolutionary and Cognitive Causes of the Species Problem. Oxford: Oxford University Press, 2001. "If there is a species of tree in the forest, and no systematist is around to diagnose it, is it still a species" (p. 153). Only halfway, argues Hey, because we humans make up species as much or more than we discover them; and, worse, our language is not at all adept for mapping species. The species problem is a consequence of linguistic confusion. "A large part of a species taxon is the human recognition apparatus" (p. 186). "What we have missed is an appreciation of our own role in devising categories, and of our own desires to have those categories be the entities in our theories. Evolutionary groups are just one major cause of our species taxa, and we are the other." (p. 157). So now we have the human (semi-) construction of species, trailing on the social construction of nature. With implications for the conservation of biodiversity that trouble Hey. Hey is in genetics at Rutgers University. (v.13,#2)

Heyd, Thom. Review of Crazy Mountains: Learning from Wilderness to Weigh Technology. By David Strong. Environmental Ethics 21(1999):321-324.

Heyd, Thom. Book Review of The Intemperate Rainforest: Nature, Culture, and Power on Canada's West Coast. By Bruce Braun. Environmental Ethics 26(2004):205-208. (EE)

Heyd, Thomas, Review of J. Baird Callicott and Fernando J.R. da Rocha, eds., Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Environmental Ethics 19(1997):437-440. (EE)

Heyd, Thomas, "Nature Appreciation Through Rock Art," North American Environmental Education Conference Proceedings (1998). (v.11,#1)

Heyd, Thomas, "Aesthetic Appreciation and the Many Stories about Nature," British Journal of

Aesthetics 41(no. 2, April 2001):125-137. There are important problems with Allen Carlson's claim that natural science (and its predecessors and analogues) does or should provide the primary account or story informing about our aesthetic appreciation of nature. I propose that there are good reasons for believing that aesthetic appreciation does and should benefit from a great many diverse stories, as gathered by people from a great variety of walks and cultures. I here adopt the term "story" as a neutral way of making reference to the diverse accounts that might guide our aesthetic appreciation. Heyd is in philosophy, University of Victoria, Victoria, British Columbia. (v.13,#1)

Heyd, Thomas, Schluchter, Wolf, Dahm, Guido, Elger, Ursula, and Holzer, Erwin, "Analyse der Bedingungen fuer die Transformation von Umweltbewusstsein in Umweltschonendes Verhalten (Environmental Consciousness and Action (in German) Federal Ministry of the Environment of Germany, 1996). (v.11,#1)

Heyd, Thomas, "Reclamation Art: Immolated Nature on View," Alternatives: Perspectives on Science, Technology and Environment 25 (No. 2, 1999), p.11. Heyd is in philosophy, University of Victoria, Victoria, British Columbia. (v.11,#1)

Heyd, Thomas, "Rock Art Aesthetics: Trace on Rock, Mark of Spirit, Window on Land," Journal of Aesthetics and Art Criticism 57 (No. 4, 1999):451-58. (v.11,#1)

Heyd, Thomas, "Themes in Latin American Environmental Ethics: Community, Resistance and Autonomy." Environmental Values 13(2004):223-242. This paper seeks to answer the question how environmental ethics is approached in Latin America. I begin by discussing a suitable method for interpreting the question of whether there is a culturally based ethics, given that one may focus either on theory or on actually existing moral practices. Next, I consider some of the possible sources of Latin America's distinctiveness, namely its professional, cultural, and economic-historical particularities, followed by a discussion of the practice and theory of environmental ethics extant in the area. I claim that there is a concrete environmental ethics in Latin America, which can be described by the notions of community, resistance and autonomy, and suggest that this concrete ethic may be assessed both from a culture-internal and from a culture-external point of view. I close by proposing that Latin American environmental ethics may provide illuminating models for appropriate ways of acting in hybrid communities made up of human beings and nature. Keywords: ethics, environment, Latin America. Heyd is in philosophy, University of Victoria, British Columbia. (EV)

Heyd, Thomas, "Bashô and Wandering Aesthetics," Philosophy East and West (September 2003), 291-307.

Heyd, Thomas, "Aesthetic Appreciation and the Many Stories About Nature," British Journal of Aesthetics, 41 (April 2001). 205-7. 4 pp.

Heyd, Thomas, "Aesthetic Appreciation and the Many Stories About Nature" in Allen Carlson and Arnold Berleant (eds.), The Aesthetics of Natural Environments (Broadview, 2004), 269-82.

Heyd, Thomas, "Nature Restoration Without Dissimulation: Learning from Japanese Gardens and Earthworks," Essays in Philosophy (January 2002).

Heyd, Thomas, "Nature Appreciation Through Rock Art," North American Environmental Education Conference Proceedings (1998).

Heyd, Thomas, "Reviewing Culture, Nature and Conservation," Studia Bioetica, 1 (Dec. 2003), 75-80, <http://utopia.duth.gr/~xirot/BIOETHICS/>. 80. 6 pp.

Heyd, Thomas, "Ética, Medio Ambiente y Trabajo," ("Ethics, Environment and Work") in Joaquín Nieto y Jorge Riechmann (eds.), Ecología y Globalización (in Spanish, Madrid: ed'1 Germanía, 2003).

Heyd, Thomas, "Environmental Ethics: Responsibilities and Critical Perspectives" in Charles Susanne (ed.), Societal Responsibilities in the Life Sciences (Delhi: Kamla-Raj Enterprises, special issue of Journal of Human Ecology, 2004), 123-30.

Heyd, Thomas, ed., Recognizing the Autonomy of Nature. A collection in environmental philosophy with contributions from Val Plumwood, Keekok Lee, Eric Katz, Ned Hettinger, William Throop, Andrew Light, Mark Woods, and William Jordan among others. Available from Columbia University Press in December 2005

<http://www.columbia.edu/cu/cup/catalog/data/023113/0231136064.HTM>.

Heyd, Thomas, "El sendero al Japón profundo de Bashô y la estética del caminar," Páginas de Filosofía 9 (11), (August 2004), 7-28.

Heyd, Thomas, "Querying Allen Carlson's Aesthetics and the Environment," AE: Journal of the Canadian Society for Aesthetics (September 2001).

Heyd, Thomas, "La restauración de la naturaleza con relación a las obras de la tierra (earthworks) y el arte de los jardines japoneses," Estudios Filosóficos 3/152 (Universidad de Valladolid, Spring 2004), 77-85.

Heyd, Thomas, "Gardens and Nature Restoration," AE: Journal of the Canadian Society for Aesthetics (Special issue on Garden Aesthetics, ed. by Manon Régimbald, September 2001).

Heyd, Thomas, "Bashô y la estética del caminar: Por la recuperación del espacio, el reconocimiento de los lugares y el seguimiento de los caminos del universo" in Luis Puelles (ed.), Estéticas: Occidente y otras culturas (special issue of Contrastes, Universidad de Málaga, 2004).

Heyd, Thomas, "Indigenous Knowledge, Land Ethic and Sustainability," Electronic Journal of Australian and New Zealand History (2000). <http://www.jcu.edu.au/aff/history/>

Heyd, Thomas, "Northern Plains Boulder Structures: Art and Foucauldian Heterotopias," in Éric Darier (ed.), Foucault and the Environment (Routledge, 1998), 152-162.

Heyd, Thomas, "Does Nature Restoration Make Sense? Some Philosophical Reflections," Helping the Land Heal: Ecological Restoration in British Columbia, Conference Proceedings, edited by Brian Egan (BC Environmental Network Educational Foundation, 1999), 53-56.

Heyd, Thomas, "Natural Heritage: Culture in Nature" in Sieglinde Gauer-Lietz (ed.), Nature and Culture – Ambivalent Dimensions of our Heritage (Paris: UNESCO, 2002), 85-97.

Heyd, Thomas, "L'estetica del wandering," Eco: l'educazione sostenibile 15/107 (September 2003), 18-21. 4 pp.

Heyd, Thomas, "Indigenous Knowledge, Land Ethic and Sustainability," Electronic Journal of Australian and New Zealand History (2000). <http://www.jcu.edu.au/aff/history/>

Heyd, Thomas, "Environmental Ethics in the Workplace" in Robert Larmer (ed.), Ethics in the Workplace: Selected Readings in Business Ethics, 2nd ed. (Belmont, Ca.: Wadsworth, 2001).

Heyd, Thomas, ed., Recognizing the Autonomy of Nature. New York: Columbia University Press, 2005. Articles on the autonomy (and/or/versus management, restoration) of nature by Val Plumwood, Keekok Lee, Eric Katz, Ned Hettinger, William Throop and Beth Vickers, Dean Bavington, John Sandlos, Andrew Light, Mark Woods, William A. Jordan, III. Heyd is in philosophy, University of Victoria, Canada.

Heyd, Thomas, "Thinking through Botanic Gardens," Environmental Values 15(2006): 197-212.

This essay discusses ways of thinking about botanic gardens that pay close attention to their particularity as designed spaces, dependent on technique, that nonetheless purport to present (and preserve) natural entities (plants). I introduce an account of what gardens are, how botanic gardens differ from other gardens, and how this particular form of garden arose in history. After this I contrast three ways of understanding the function of botanic gardens in the present time: as sites of recreation, of conservation or of encounter with nature. Finally I develop the idea that these gardens may serve as archetypes of collaboration with nature. I conclude that, in principle, botanic gardens can model alternative, creative new ways for human beings to relate to the natural environment. (EV)

Heyd, Thomas. "Nature, Culture, and Natural Heritage: Toward a Culture of Nature." Environmental Ethics 27 (2005):339-354. Nature and culture are usually treated as opposites. Nature, on this conception, is on the wane as a result of culture. A fresh analysis of the relation between these two terms in the light of the notion of "cultural landscapes" is needed. This account allows for nature to be understood as an important, distinctive category, even while granting the constitutive role of the culturally structured gaze. Culture and nature need not be conceived in opposition to each other, for it makes sense to speak of, and pursue, a culture of nature. These considerations have important consequences for natural heritage conservation. (EE)

Heyd, Thomas. "Agenda 21 Provides Shaky Foundation for Fight Against Global Poverty," Alternatives 21(no.4 Oct. 1995):33- . (v6,#4)

Heyd, Thomas. Review of Biodiversity and Democracy: Rethinking Society and Nature. By Paul M. Wood. Environmental Ethics 24(2002):217-218. (EE)

Heyd, Thomas. "The Case for Environmental Morality." Environmental Ethics 25(2003):5-24. Present environmental degradation has led some to argue that only an appeal to selfishness will "save the environment," allegedly because appeals to "morality" necessarily are ineffective, while others have suggested that we need a "new, environmental ethic." If we are interested in countering the degradation of the natural environment, we need to reconsider actual morality, how it is developed, and how it may take into account human activities affecting the natural world. Ultimately, we need to develop ways of knowing that recognize the autonomy of nature. (EE)

Heyd, Thomas. Review of Sacred Ecology: Traditional Knowledge and Resource Management. By Fikret Berkes. Environmental Ethics 22(2000):419-422.

Heyd, Thomas. *Encountering Nature: Toward an Environmental Culture*. Williston, VT: Ashgate Publishing, 2007. Heyd claims that an attentive encounter with nature is of key importance for the development of an environmentally appropriate culture. He argues that environmental degradation should be conceived as the consequence of a cultural mismatchour cultures don't seem to be appropriate to the natural environment in which we move and on which we depend in thoroughgoing ways. To address this, Heyd weaves together a tapestry of perspectives on human interactions with the natural world that includes chapters on topics such as environmental ethics in the workplace, environment and culture in Latin America, Basho and wandering aesthetics, rock art, mining reclamation, northern plains boulder

structures, and Japanese gardens.

Heyd, Thomas. "Rapid Landscape Change, Vulnerability, and Social Responsibility." *The Northern Review*, Number 28 (Winter 2008): 95-110. From the article: "I explore the relation between vulnerability to rapid landscape change, on the one hand, and conceptions of land and responsibility for landscape, on the other. I begin by briefly discussing the notion of vulnerability to natural phenomena, and possible ways of addressing it. Next, I introduce some of the ways in which natural phenomena and processes have been perceived, and take note of the sense of responsibility toward landscape often expressed among peoples who are deeply rooted in the land. I continue with a discussion of the basis of the respect that underlies this sense of responsibility and with an account of what respect amounts to in this context. After this I point out how respect for natural phenomena may lead to a lowering of vulnerability. I conclude that it is imperative to develop those ways of conceiving of natural phenomena that will lead to a deep sense of respect and responsibility for the natural world that surrounds us." Heyd teaches philosophy at the University of Victoria. This paper is published in a special collection of proceedings from the conference "Rapid Landscape Change and Human Response in the Arctic and Subarctic," Whitehorse, Yukon (2005).

Heyd, Thomas. *Encountering Nature: Toward an Environmental Culture*. Williston, VT: Ashgate Publishing, 2007. Heyd claims that an attentive encounter with nature is of key importance for the development of an environmentally appropriate culture. He argues that environmental degradation should be conceived as the consequence of a cultural mismatch our cultures don't seem to be appropriate to the natural environment in which we move and on which we depend in thoroughgoing ways. To address this, Heyd weaves together a tapestry of perspectives on human interactions with the natural world that includes chapters on topics such as environmental ethics in the workplace, environment and culture in Latin America, Basho and wandering aesthetics, rock art, mining reclamation, northern plains boulder structures, and Japanese gardens.

Heyes, A., "A Theory of Filtered Enforcement," Journal of Environmental Economics and Management 43(no.1, 2002): 34-46. (v.13,#2)

Heyns, JA 1990. Die natuur het óók regte. Die Kerkbode 146 (14 Sept). Bylaag. (Africa)

Heyns, LM 1991. Kies reg (Amos 4:6-13). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 184-197. (Africa)

Heywood, JL; Gorecki, R; Luczynski, M, "The Environment, Natural Resources, and Higher Education in Poland," Society and Natural Resources 16(no.1, 2003): 77-80.

Heywood, V.H. (Vernon Hilton), ed. Global Biodiversity Assessment. New York: Cambridge University Press, 1997. 1,152 pp. \$100. Published for the United Nations Environment Programme. Over 1,000 leading scientists from around the world have contributed to this major assessment, providing a source of information for decision-makers, officials, scientists and others interested in the future of the planet. Sample articles: V. H. Heywood and I. Baste, "Characterization of Biodiversity"; F. A. Bisby, "Magnitude and Distribution of Biodiversity"; D. L. Hawksworth and M. T. Kalin-Arroyo, "Generation, Maintenance, and Loss of Biodiversity"; and much more. Sample information: The IUCN predicts the loss of 20,000 flowering plant species within the next few decades. Worldwide, nearly 200 species of wild vertebrates may be on the verge of extinction. There is a summary, 54pp. at \$12, which presents the main conclusion drawn by the "Assessment" with an emphasis on those aspects that will be of interest to policymakers. (v8,#3)

Hibbard, CM; Kilgore, MA; Ellefson, PV, "Property Taxation of Private Forests in the United States: A National Review", Journal of Forestry 101(no.3, 2003):44-49.

Hibbard, M; Madsen, J, "Environmental Resistance to Place-Based Collaboration in the U.S. West," Society and Natural Resources 16(no.8, 2003):703-718. (v.14, #4)

Hickman, Larry A., Pragmatic Paths to Environmental Sustainability," *Journal of Agricultural and Environmental Ethics* 20(2007):365-373. After summarizing what I take to be the main contribution of Norton's book - proposal for a new vocabulary for public discourse as it pertains to environmental stability - I attempt to locate his work among some of the current debates regarding sustainability and public policy. I detail some of the ways in which this work constitutes a further development of themes he presented in 1991 in *Toward unity Among Environmentalists*. I discuss his prescriptions for defusing confrontations regarding environmental policy by functionalizing issues in ways that cut across historically entrenched interest groups. From the standpoint of method, I argue that Norton has stacked a Habermas-type proceduralism on top of a pragmatic experimentalist platform (and I add that if he had constructed his method the other way around it would not have worked.) In all this I find Norton's proposals both imaginative and full of promise. Hickman is at the Center for Dewey Studies, Southern Illinois University Carbondale.

Hickory, Shagbark, "Everyday environmental ethics as comedy & story: A collage," Ethics and the Environment 8(no. 2, 2003):80-105. In Section I, I provide a brief historical sketch of tragedy and its relationship to Socratic philosophy-and comedy. II focuses on one aspect of tragedy, namely, its view that morality transcends natural limitations. This understanding of morality is with us still. III presents the central concerns of the world religions as evidence of a widespread feeling of alienation from the sacred and the wild, and contrasts world religions with indigenous spirituality. IV moves us away from the understanding of philosophy as argument and counterargument and toward an ecosystemic, or wild, conception of philosophy as story in the mode of comedy. V offers a Buddhist understanding of tragic alienation that sees it as expressive of something deeply problematic about humans. This something is actualized throughout Western culture but seems to exist only as a potentiality in indigenous cultures. This is reason enough to take indigenous cultures and comedy seriously. VI brings us back to earth with a sketch of comedy in the lives of dear friends. VII sketches some of the attributes of functional communities that give support to comedy. I also point out a number of features of indigenous so-called worldviews that would greatly enhance the ability of comedy to displace tragedy in the West. VIII portrays picaresque comedy as exemplifying the lessons of comedy taught by wilderness. Examples from indigenous cultures of Africa and Gary Snyder's The Practice of the Wild underscore the importance of picaresque strategies and understandings of comedy. A look at Tom Birch's enigmatic statement, "wilderness treats us like human beings," setting it alongside some lines from Thoreau's Walden, rounds out my discussion of comedy. IX poses a challenge: Can we survive "The News" that pours in upon us from tragic seats of power? The author is native American and teaches at the University of Wisconsin-Waukesha. (E&E)

Hicks, Lorin L., Henning C. Stabins, and Herter, Dale R. "Designing Spotted Owl Habitat in a Managed Forest." Journal of Forestry 97(no.7, July 1999):20- . Telemetry research indicates that certain young forest stands may meet some of the spotted owl's biological needs. Computer-generated stand visualization techniques help illustrate the types of forest structure used by owls in a managed landscape. (v.11,#1)

Hicks, Robert L., Bradley C. Parks, J. Timmons Roberts, and Michael J. Tierney. *Greening Aid? Understanding the Environmental Impact of Development Assistance*. Oxford: Oxford University Press, 2008. Using the most comprehensive dataset ever assembled of foreign aid, the authors evaluate the likely environmental impacts of over 400,000 development projects by more than fifty donors to over 170 recipient nations between 1970 and 2001 in order to explain the major trends and shifts of foreign aid, rank donors according to their performance, and compare and contrast donors and types of environmental

aid.

Hiebert, Theodore, The Yahwist's Landscape: Nature and Religion in Early Israel. New York: Oxford University Press, 1996. Early Hebrew faith and nature, and what it can teach us today. (v. 15, # 3)

Hiebert, Theodore, The Yahwist's Landscape: Nature and Religion in Early Israel. New York: Oxford University Press, 1996. Adam is made from "the earth," which means "arable soil." The story of Israel is a story of farmers. "The claim that the Israelite religion valued history while it devalued nature can no longer be derived from a formative desert experience." The religion of Israel, at least the Yahwist tradition, included larger dimensions, but it was also a religion of nature.

Hiebert, Theodore, The Yahwist's Landscape: Nature and Religion in Early Israel. Oxford: Oxford University Press, 1996. 210 pages. \$ 45. The Yahwist is the so-called J strand of the Pentateuch in the Hebrew Bible, favoring the divine name Yahweh. A study of nature in early Hebrew religion. Hiebert claims that previous scholars have illegitimately rent asunder what the Bible presents as a seamless whole: nature and history as a single reality. The Hebrew patriarchs were farmers rather than wandering nomads as usually portrayed, and the arable land of the Palestinian hills country stands at the center of J's theology, a religion of the earth. The garden of Eden is not so much a mythic paradise as a cultivated valley oasis. Agriculture is the archetypal human vocation, not some romanticized pastoral nomadism. Humans are to care for and cultivate the garden Earth. (v8,#2)

Hiebert, Theodore "Re-Imaging Nature: Shifts in Biblical Interpretation" Interpretation: A Journal of Bible and Theology, 50 (no. 1, January 1996): 36-46. Nature, and the place of humans within it, has again become a topic of much discussion. The tendency of biblical scholars has been to describe the human being in terms that set it apart from nature. More recently, ecological concerns have impelled biblical scholars to rethink their position. This has caused them reevaluate the nature of humanity and to construe the human being not as standing above or at the center of nature, but as being part of nature. (v6,#4)

Hiedanpaa (Hiedanpää), Juha, "An Institutional Approach to Environmental Valuation: The Regional Forest Programme of Southwest Finland as an Example," Environmental Values 13(2004):243-260. This paper discusses the impacts of different formal and informal institutions upon the Regional Forest Programme of Southwest Finland (1997-2001). The divide between formal and informal institutions is a binary distinction: it is used as a discursive tool for identifying social structures and processes and for articulating their significance in development and environmental planning, valuation and decision-making. In the end part of the paper, there is a brief discussion of how normative and moral issues can be explicitly and more creatively integrated into the practice of environmental policy. The author is at the University of Turku, Finland. (EV)

Hiers, Richard H., "Ecology, Biblical Theology, and Methodology: Biblical Perspectives on the Environment." Zygon 19, no. 1 (March 1984):43-59. Another criticism of Lynn White, Jr.'s criticism of Christianity as the basis of the ecological crisis. (Katz, Bibl # 1)

Higgins, Paul A.T.; Harte, John, "Biophysical and Biogeochemical Responses to Climate Change Depend on Dispersal and Migration," BioScience 56 (no.5, May 2006): 407-417 (11). Different species, populations, and individuals disperse and migrate at different rates. The rate of movement that occurs in response to changes in climate, whether fast or slow, will shape the distribution of natural ecosystems in the decades to come. Moreover, land-use patterns associated with urban, suburban, rural, and agricultural development will complicate ecosystem adaptation to climate change by hindering migration. Here we examine how vegetation's capacity to disperse and migrate may affect the biophysical and biogeochemical characteristics of the land surface under anthropogenic climate change. We demonstrate

that the effectiveness of plant migration strongly influences carbon storage, evapotranspiration, and the absorption of solar radiation by the land surface. As a result, plant migration affects the magnitude, and in some cases the sign, of feedbacks from the land surface to the climate system. We conclude that future climate projections depend on much better understanding of and accounting for dispersal and migration.

Higgins, Robert R., "Race, Pollution, and the Mastery of Nature". Environmental Ethics 16(1994):281-300. Racial environmental inequities, documented in research over the past ten years, have deep cultural sources in the connections between the concept of social pollution as it has operated in U.S. race relations and the pollution of minority communities, both of which are, in part, the expression of our dominant cultural ethic and project of mastering nature. The project of mastering nature requires the disciplining of "human nature" in a context of social power in order to dominate "outward" or "external" nature for the purposes of production and consumption. In disciplining human nature, our ethics and practices of work and gender have fostered the repression and projection of sensuality, widely construed, onto African-Americans in particular. This racial "other" has been historically segregated in our society through social pollution taboos. Social pollution practices, in turn, facilitate the disproportionate environmental pollution of minority communities by rendering such pollution, like the communities themselves, less visible and therefore less of a threat to white centers of power. This fit between social and environmental pollution is expressed in the notion of "appropriately polluted space." Attempts to understand and correct racial environmental inequities will founder unless these deeper cultural connections are recognized and challenged. Moreover, attempts to redefine an environmentally benign "self" in the American context require that the historical "other" of race be confronted and transcended. Higgins is with the Dept. of Human Ecology, Cook College, Rutgers University. (EE)

Higgs, Eric S. Review of Earthbound. Edited by Tom Regan. Environmental Ethics 7(1985):373-75.

Higgs, Eric, Light, Andrew, and Strong, David, eds., Technology and the Good Life? Reviewed by Frederick Ferré, Ethics and the Environment 6(no. 2, 2001):106-113. (E&E)

Higgs, Eric, Light, Andrew, and Strong, David., eds., Technology and the Good Life? Chicago: University of Chicago Press, 2000. 18 essays on the philosophy of technology of Albert Borgmann. Of particular interest to environmental philosophers:

Higgs, Eric, "Nature by Design," and Thompson, Paul B., "Farming as Focal Practice."

Higgs is at the University of Alberta, Light at New York University, and Strong at Rocky Mountain College, Billings, Montana. (v.11,#4)

Higgs, Eric S. "A Space between Planning and Technology," Man-Environment Systems, vols. 5 and 6 (Summer 1989). Technology shapes regional planning, intended to enrich community autonomy, but too often inhibits it instead. The thesis is illustrated with the Landscape Evolution Model applied in Bruce County, Ontario, with proposals for reforming technology to achieve a community autonomy that maintains the integrity of the natural environment. Higgs is interim director of environmental studies, Oberlin College, and moves this fall to a position in technology and environment at the University of Alberta, Edmonton. David Orr, currently Director of the Meadowcreek Center, Fox, Arkansas, will become director of Oberlin's environmental studies program this fall. (v1,#1)

Higgs, Eric , Andrew Light, and David Strong, eds. Technology and the Good Life? Reviewed in Environmental Ethics 25(2003):325-328. (EE)

Higgs, Eric, Nature by Design: People, Natural Processes, and Ecological Restoration. Cambridge, MA: MIT Press, 2003. Argues that people who participate in ecological restoration enjoy a sense of harmonious belonging in nature.

High Country News: Grappling with Growth, special issue, September 5, 1994. vol. 26, no. 16. Useful survey of growth issues in the American West and what can--and is--being done in various communities to grapple with growth. (v5,#3)

Hilborn, Ray and Mangel, Marc, The Ecological Detective: Confronting Models with Data. Princeton, NJ: Princeton University Press, 1997. 334 pages. How well are environmental models tested against data? Assessment of a variety of types of testing and evaluation of testing. The authors emphasize comparing multiple alternative models. Hilborn is at the University of Washington School of Fisheries. Mangel is at the University of California Santa Cruz Department of Environmental Studies.

Hilborn, Ray, et al., "Effective Enforcement in a Conservation Area," Science 314 (24 November 2006):1266. There are two primary approaches to wildlife conservation. (1) Generating economic benefits so that local communities desire to keep the wildlife. (2) Enforcement of protected areas. Within protected areas, there is debate as to whether enforcement can maintain wildlife and even whether protected areas as wildlife reserves are realistic or morally justified. These authors review illegal taking of wildlife in Serengeti National Park, Tanzania. They conclude that antipoaching enforcement is effective for the protection of species, if there are sufficient resources for a professional national park service. Hilborn is in Aquatic and Fishery Sciences, University of Washington, Seattle.

Hildreth, Richard G., "Water Law at the Crossroads," Journal of environmental law and litigation 14 (No. 1, 1999): 1 - . (v.11,#4)

Hildyard, Nicholas, Hines, Colin, Lang, Tim. "Who Competes? Changing Landscapes of Corporate Control", The Ecologist 26(no. 4,1996):125. In the drive to become "competitive", companies are restructuring their operations on a global scale. It is not companies which are competing, however, but workers and communities. New technologies, new management techniques and a new freedom of capital to move across borders have drastically undermined the bargaining power of labor, while strengthening that of corporations. Workers are being pitted against workers and communities against communities as companies relocate from one country to another in search of new markets, the weakest unions, the most flexible rules on working conditions and the largest subsidies. The time has come to press for an economy that protects people, not corporations. (v7,#4)

Hildyard, Nicholas, and Sexton, Sarah. "Too Many for What? The Social Generation of Food `Scarcity' and `Overpopulation,'" The Ecologist 26(no.6, 1996):282. Provisions of population and food supply which leave out the power relationships between different groups of people will always mask the true nature of food scarcity--who gets to eat and who doesn't--and lead to "solutions" that are simplistic, frequently oppressive and which, ultimately, reinforce the very structures creating ecological damage and hunger. Moreover, by degrading the environment, often irreversibly, the forces which are generating organized scarcity--the chief characteristic of "overpopulation" in the modern era--are inexorably undermining the capacity of the land to produce food. In doing so, they threaten to bring about conditions of absolute scarcity where even equitable economic and social arrangements may prove insufficient to prevent widespread human impoverishment. (v8,#2)

Hildyard, Nicholas. "Public Risk, Private Profit: The World Bank and the Private Sector", The Ecologist (1979) 26(no. 4,1996):176. The private sector has long benefited indirectly from aid flows. However, the World Bank and other agencies are not bypassing the state in order to channel development funds direct to private companies. The companies make the profits while the public carries the risks.

Hildyard, Nicholas. "Migrant Labour in the Global Economy", The Ecologist (1979) 26(no. 4,1996):133.

Hill, Barry E., and Nicholas Targ, "The Link between Protecting Natural Resources and the Issue of

Environmental Justice," Boston College Environmental Affairs Law Review 28(no.1, 2000 Fall): 1- (v.12,#3)

Hill, Barry. *Environmental Justice: Legal Theory and Practice*. Washington, DC: Environmental Law Institute, 2008. Hill provides an overview of the environmental justice movement in the United States from a legal perspective of environmental laws, environmental justice litigation, and civil rights legal theories.

Hill, Brennan R., Christian Faith and the Environment: Making Vital Connections. Maryknoll, NY: Orbis Books, 1999. How twentieth century theologians such as Karl Rahner, Bernard Lonergan, Pierre Teilhard de Chardin have connected Christian faith, nature, and the creation. Examines sacramental rites, Catholic church documents, and feminist theological insights on ecology. A Christian environmental spirituality, the ethical challenges posed by our new awareness of the environment. (v10,#4)

Hill, Brennan R., Christian Faith and the Environment: Making Vital Connections. Maryknoll, NY: Orbis Books, 1999. How twentieth century theologians such as Karl Rahner, Bernard Lonergan, Pierre Teilhard de Chardin have connected Christian faith, nature, and the creation. Examines sacramental rites, Catholic church documents, and feminist theological insights on ecology. A Christian environmental spirituality, the ethical challenges posed by our new awareness of the environment. (v.11,#1)

Hill, Donald, "On Reasoning Morally about the Environment." Journal of Applied Philosophy 5 (1988): 101-105. A comment on a article by R.M. Hare ("Moral Reasoning about the Environment, Journal of Applied Philosophy 4 (1987): 3-14). Rather than criticize Hare's theoretical basis for environmental ethics (a concern with "interests") Hill shows how Hare's analysis of interests in the practical case of road-building is inadequate. Another example that the practical implementation of utilitarian procedures fail to meet standards of reality. (Katz, Bibl # 2)

Hill, Jim. Review of Is There a Moral Obligation to Save the Family Farm? Edited by Gary Comstock. Environmental Ethics 14(1992):275-78.

Hill, John Lawrence, The Case for Vegetarianism: Philosophy for a Small Planet (Lanham. Md: Rowman and Littlefield, 1996). Reviewed by William O. Stephens. Environmental Ethics 19(1997):221-224. (EE)

Hill, John Lawrence. The Case for Vegetarianism: Philosophy for a Small Planet. Rowman and Littlefield, 1995. Various philosophical perspectives and the many reasons for adopting a vegetarian diet, from animal interests and rights, to health benefits, global ecology, and world hunger. With a chapter responding to common objections to becoming vegetarian and an examination of why, if the evidence in its favor is so strong, vegetarianism has not caught on. Hill is at St. Thomas University School of Law. (v7,#1)

Hill, M, "Review of: Ecocide: A Short History of the Mass Extinction of Species by Franz J. Broszmitter," Journal of Environment and Development 12(no.3, 2003):342-344. (v.14, #4)

Hill, Marquita K., Understanding Environmental Pollution, 2nd ed. New York: Cambridge University Press, 2004. With particular attention to persistent and bioaccumulative pesticides and herbicides, also with emphasis on global pollution. Hill is a biologist (emeritus) at the University of Maine.

Hill, Richard C. and Paul A. Bowen, "Current Issues in Sustainable Construction," in Managing the Environment in Mining and Construction, July 1995, a supplement to EPM, SA Mining World, and SA Construction World. Seven principles for achieving sustainable construction. Minimize resource consumption, maximize resource use; use renewable or recyclable resources, protect the natural environment and restore degraded environments, create a healthy, non-toxic environment, pursue quality

in creating the built environment, and promote labor intensive methods, skills training, and capacity building of local people. With applications to South Africa. Hill is in environmental evaluation, Bowen in construction economics and management at the University of Cape Town. (v6,#3)

Hill, Thomas E., Jr., "Ideals of Human Excellence and Preserving Natural Environments," Environmental Ethics 5(1983):211-224. A truly different and original essay in the field. Rather than focus on the justification of environmental protection through ethical notions such as rights or sentience, Hill focuses on the virtues (and lack thereof) of people who seek to destroy the environment. The essential ethical question is what kind of person do we wish to become, what kind of virtues do we wish to promote? But, Hill must deal with the problem of personal subjectivity: what of people who do not feel that nature is beautiful or awe-inspiring, and thus that nature is unconnected to the virtuous life?

Hill, Thomas E., Jr. Review of Environmental Philosophy. Edited by Robert Elliott and Arran Gare. Environmental Ethics 6(1984):367-71.

Hill, Thomas Jr., "Comments on Frasz and Cafaro on Environmental Virtue Ethics," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 59-62. Professor Hill delivered these comments as part of the International Society for Environmental Ethics panels on Environmental Virtue Ethics, held at the annual meeting of the Pacific Division of the American Philosophical Association, April 2000, in Albuquerque, New Mexico. (v.13,#2)

Hill, Thomas E., Jr. "Ideals of Human Excellence and Preserving Natural Environments." Environmental Ethics 5(1983):211-24. The moral significance of preserving natural environments is not entirely an issue of rights and social utility, for a person's attitude toward nature may be importantly connected with virtues or human excellences. The question is, "What sort of person would destroy the natural environment--or even see its value solely in cost/benefit terms?" The answer I suggest is that willingness to do so may well reveal the absence of traits which are a natural basis for a proper humility, self-acceptance, gratitude, and appreciation of the good in others. Hill is at the University of California, Los Angeles, CA. (EE)

Hill, Thomas Jr. "Ideals of Human Excellence and Preserving Natural Environments" Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Hillel, Daniel. *The Natural History of the Bible: An Environmental Exploration of the Hebrew Scriptures*. New York: Columbia University Press, 2006. Hillel is a soil scientist who appreciates the Hebrew care for the Promised Land, with much wisdom (and some mistakes).

Hiller J.G., "Book Review: The Struggle for Water in Peru: Comedy and Tragedy in the Andean Commons. By Paul B. Trawick. Stanford University Press, Stanford, 368 pp. US 24.95 paper 2003," Human Ecology 32(no.3, June 2004):391-392(2). (v. 15, # 3)

Hillier, Jean, "Representation, Identity, and the Communicative Shaping of Place," Philosophy and Geography 2 (1998): 207-232. Hillier is an associate professor in the Department of Urban and Regional Planning at Curtin University of Technology. (P&G)

Hilson, G., "An Overview of Land Use Conflicts in Mining Communities," Land Use Policy 19(no.ER1, 2002): 65-73. (v.13,#2)

Hilton, Michael J., and Manning, Sarah S. "Conversion of Coastal Habitats in Singapore: Indications of Unsustainable Development." Environmental Conservation 22, no.4 (1995): 307. (v7, #3)

Hilts, Stewart. "Landscapes and Stewardship in Ontario," Environments 24(no.3, 1997):11. (v8,#3)

Hilty, J; Merenlender, AM, "Studying Biodiversity on Private Lands", Conservation Biology 17(no.1, 2003):132-137.

Hilty, Jodi A., William Z. Lidicker Jr., and Adina M. Merenlender. *Corridor Ecology: The Science and Practice of Linking Landscapes for Biodiversity Conservation*. Washington, DC: Island Press. 2006. The authors discuss the concept, design, and management of corridor ecology, including topics such as population regulation, habitat restoration, and genetics.

Himanpää, Juha, Review of: Paul M. Wood, Biodiversity and Democracy: Rethinking Society and Nature, Environmental Values 11(2002):521-524.

Himes Michael J., and Kenneth R. Himes, "The Sacrament of Creation: Toward an Environmental Theology," Commonweal, January 26, 1990. Michael Mimes is professor of theology at the University of Notre Dame and Kenneth Himes is professor of moral theology at Washington Theological Union in Silver Spring, Maryland. (v1,#1)

Hinchcliffe, Steve and Woodward, Kath, The Natural and the Social: Uncertainty, Risk, Change. London: Routledge, 2000. "Nature and society are indeed two sides of the same coin" (p. 3) "We have moved from thinking of nature and society as distinct realms or regions to thinking of them as interlaced or entangled" (p. 155). (v.13,#2)

Hinchliffe, S., "Review of Bennett and Teague, eds.. The Nature of Cities: Ecocriticism and Urban Environments," Progress in Human Geography 25(2001): 665-66. (v.13,#2)

Hinchman Lewis P. , and Sandra K. Hinchman, "What We Owe the Romantics," *Environmental Values* 16(2007): 333-354. Romanticism is recognized as a wellspring of modern-day environmental thought and enthusiasm for nature-preservation, but the character of the affinities between the two is less well understood. Essentially, the Romantics realised that nature only becomes a matter for ethical concern, inspiration and love when the mind and sensibility of the human observer/agent are properly attuned and receptive to its meaning. That attunement involves several factors: a more appropriate scientific paradigm, a subtler appreciation of the impact that the setting of human dwelling, especially landscape, may have on character; the discovery of 'life' and spontaneity as a motif in science and art; a deeper and more complex sense of time; and a feel for place drawn from the life-world rather than physics or economics. Romanticism invented a new language and set of descriptions to illuminate all of these things, one we neglect or forget at our peril. Lewis Hinchman is in political science, Clarkson University, Potsdam, NY. Sandra Hinchman is in the Department of Government, St. Lawrence University, Canton, NY.

Hinchman, Lewis P., "Is Environmentalism a Humanism?" Environmental Values 13(2004):3-29 Environmental theorists, seeking the origin of Western exploitative attitudes toward nature, have directed their attacks against 'humanism'. This essay argues that such criticisms are misplaced. Humanism has much closer affinities to environmentalism than the latter's advocates believe. As early as the Renaissance, and certainly by the late eighteenth century, humanists were developing historically-conscious, hermeneutically-grounded modes of understanding, rather than the abstract, mathematical models of nature often associated with them. In its twentieth-century versions humanism also shares much of the mistrust of consumerism, instrumental reason, and 'worldlessness' that marks environmentalist literature. Nevertheless, humanism is indeed committed to the principle that human beings are and ought to be free, and opposes theoretical approaches that suppress freedom. Reconciling humanism and environmentalism thus involves two steps: resisting the former's tendency to treat nature and freedom as metaphysical polarities, and drawing environmental theory away from flirtation with

deterministic, biologicistic worldviews. The essay concludes by suggesting Aldo Leopold's A Sand County Almanac as the paradigm case of environmental thought with roots in humanist approaches. Hinchman is at Clarkson University, Potsdam, NY. (EV)

Hines, C., "Blurred Vision: Despite the Protests and Rafts of Scientific Evidence to the Contrary, Large Swathes of the Indian Countryside Could Soon Become Guinea Pigs for a Vast Experiment in GM Agriculture," Ecologist 31(no.8, 2001): 34-37. (v.13,#2)

Hines, Colin, "'Protectionism' should not be a dirty word. In fact, it is the way forward," The Ecologist 31(no.2, MAR 01 2001):44-. (v.12,#4)

Hines, R, "Review of: Scheberle, D., 'Federalism and Environmental Policy: Trust and the Politics of Implementation'" Society and Natural Resources 19 (no. 1, January 2006): 89-91.

Hinman, Lawrence M., Contemporary Moral Issues: Diversity and Consensus. Upper Saddle River, NJ: Prentice-Hall, 1996. 568 pages. A division on "Expanding the Circle," contains a section on "World Hunger and Poverty," and on "Living Together with Animals." The closing section is "Environmental Ethics" and includes: N. Scott Momaday, "Native American Attitudes toward the Environment"; Carolyn Merchant, "Environmental Ethics and Political Conflict: A View from California"; Lynn Scarlett, "Clear Thinking about the Earth": and Thomas E. Hill, Jr., "Ideals of Human Excellence and Preserving the Natural Environment." Hinman is at San Diego State University. (v6,#4)

Hinrichs, C. Clare, and Patricia Allen, "Selective Patronage and Social Justice: Local Food Consumer Campaigns in Historical Context," *Journal of Agricultural and Environmental Ethics* 21(2008):329-352. In the early 2000s, the development of local food systems in advanced industrial countries has expanded beyond creation and support of farmers' markets and community supported agriculture farms and projects to include targeted Buy Local Food campaigns. Non-governmental groups in many U.S. places and regions have launched such campaigns with the intent of motivating and directing consumers toward more local food purchasing in general. This article examines the current manifestations and possibilities for social justice concerns in Buy Local Food campaigns, by considering them within the more general category of "selective patronage" campaigns. Historical campaign examples, such as Buy Union, Buy American, and Buy Black campaigns, offer instructive comparisons to contemporary consumer campaigns promoting local food. Through examining the construction of threats, intended beneficiaries, products to be avoided, and those to be preferentially selected, the paper demonstrates how selective patronage campaigns have emphasized social justice needs and concerns for designated groups in ways that have been potentially exclusionary of other disadvantaged groups and thus undermining of social justice more broadly. As a contemporary instance of "selective patronage," Buy Local Food campaigns exhibit similar contradictory impulses, which are intensified by the conceptual and practical pitfalls in designating "local." The article concludes by considering how the challenges and prospects for commitments to social justice in local food consumer campaigns reinforce the importance of emerging initiatives centered on domestic fair trade. The authors are in the Department of Agricultural Economics and Rural Sociology, The Pennsylvania State University, University Park, PA.

Hinshaw, Robert, *Living within Nature's Extremes: The Life of Gilbert F. White* (Boulder, CO: Johnson Books, 2006). Reviewed by Udo E. Simonis in *Environmental Values* 17(2008):117-118.

Hinz, Shawn, and Bratton, Susan Power, "Religious Responses to Fisheries Decline in Irish Coastal Communities with a Comparison to the Pacific Northwestern Region, USA," Ecotheology No 8 (Jan 2000):111-128.

Hirsch, Eric and Michael O'Hanlon (O'Hanlon), eds. The Anthropology of Landscape: Perspectives on

Place and Space. Oxford, UK: Clarendon Press, 1995. Sense of place. (v8,#1)

Hirsch, Robert M., Miller, Timothy L., and Hamilton, Pixie A., "Using Today's Science to Plan for Tomorrow's Water Policies," Environment 43(no. 1, Jan. 1, 2001):8- . Population growth and increasing demand for water are adding stress to water quality and availability. How can the United States develop effective water management policies for the future? (v.12,#2)

Hirsh, Richard F. and Serchuk, Adam H. "Power Switch: Will the Restructured Electric Utility System Help the Environment." Environment 41(No. 7, September 1999):4- . Under the right circumstances, the deregulation of electricity generation and transmission can lead to improvements in the environment. (v10,#4)

Hirt, Paul W., A Conspiracy of Optimism: Management of the National Forests Since World War Two. Lincoln: University of Nebraska Press, 1994 (available end of summer). A historical study of how public values, scientific ideology, and political economy have influenced U.S. national forest management, focusing especially on the changing concepts of sustained yield and multiple use. The author critically analyzes various social, political, and economic factors that have blocked the achievement of "sustainable" resource extraction and protection of non-market environmental values in the national forests. A post-World War Two natural resource instrumentalism, combined with an economic prosperity ethics, and state-sponsored corporate welfare economics provides the foundation for what the author calls a "conspiracy of optimism" that cloaked forest depletion and ecological degradation behind a facade of "can do" technological optimism. Hirt is an environmental historian at Washington State University. (v4,#4)

Hiskes, Richard P., Democracy, Risk, and Community. Oxford: Oxford University Press, 1998. Opposed to most theories of risk that focus on individual decision makers and models of rational choice, Hiskes argues that risks must be seen as emergent and political phenomena. Risks resist reduction to single actors. To make policy for risks, environmental risks, included, one needs to connect persons socially and politically. Hiskes is at the University of Connecticut. (v.11,#3)

Hiss, Tony, The Experience of Place. New York: Knopf, 1990. Environmental psychology of place, and regional planning. (v8,#3)

Hitchcock, Robert K. "Centralization, Resource Depletion, and Coercive Conservation Among the Tyua of the Northeastern Kalahari," Human Ecology 23, no. 2 (June 1995): 169- . (Africa)

Hjelmar, Ulf. The Political Practice of Environmental Organizations. Brookfield, Vt.: Ashgate, 1996. 160 pp. \$63.95. This concise (and overpriced) book investigates why and how environmental organizations have had a considerable impact on the environmental policies which seem to dominate life today. (v8,#2)
Hlodan, Oksana, "Exploring Issues in Evolutionary Science and Society," BioScience 55(no.3, March 2005):198-200(3).

Ho, Mae-Wan, Genetic Engineering: Dream or Nightmare? Bath, UK: Gateway Books, 1998. Distributed in US by Access Publishers Network. ISBN 1858600510. 277 pages.

Ho, Mun S., and Chris P. Nielsen, eds. *Clearing the Air: The Health and Economic Damages of Air Pollution in China*. Cambridge, MA: The MIT Press, 2006. Contents include: (1) "Air Pollution and Health Damages in China: An Introduction and Review" by Chris P. Nielsen and Mun S. Ho, (2) "Summary for Policy" by Chris P. Nielsen and Mun S. Ho, (3) "Summary for Research" by Chris P. Nielsen and Mun S. Ho, (4) "Estimating Health Effects of Air Pollution in China: An Introduction to Intake Fraction and the Epidemiology" by Jonathan I. Levy and Susan L. Greco, (5) "Local Population

Exposure to Pollutants from Major Industrial Sectors and Transportation” by Shuxiao Wang, Jiming Hao, Yongqi Lu, and Ju Li, (6) “Local Population Exposure to Pollutants from the Electric Power Sector” by Bingjiang Liu and Jiming Hao, (7) “Population Exposure to Power Plant Emissions Using CALPUFF” by Ying Zhou, Jonathan I. Levy, James K. Hammitt, and John S. Evans, (8) “The Economic Value of Air-Pollution-Related Health Risks in China: A Contingent Valuation Study” by Ying Zhou and James K. Hammitt, (9) “Sector Allocation of Emissions and Damage” by Mun S. Ho and Dale W. Jorgenson, and (10) “Policies to Control Air Pollution Damages” by Mun S. Ho and Dale W. Jorgenson.

Hoad, D., "GATs, Sustainable Tourism and the International Year of Ecotourism (IYE 2002)," Environmental Politics 11(no.2, 2002): 159-64. (v.13,#4)

Hoagland, Sarah Lucia. "Engaged Moral Agency," Ethics and the Environment 4(1999):91-100. Comment on Chris Cuomo, Feminism and Ecological Communities. (E&E)

Hoare, Richard, "African Elephants and Humans in Conflict: The Outlook for Co-existence," Oryx 34 (no. 1, 2000):34-36. (v.12,#3)

Hoare, Richard E. and Du Toit, Johan T., "Coexistence Between People and Elephants in African Savannas." Conservation Biology: The Journal of the Society for Conservation Biology 13(no. 3, June 1999):633- . (v10,#4)

Hobbie, JE; Carpenter, SR; Grimm, NB; Gosz, JR; Seastedt, TR, "The US Long Term Ecological Research Program", Bioscience 53(no.1, 2003):21-32.

Hobbs, R. J., and J. A. Harris, "Restoration Ecology: Repairing the Earth's Ecosystems in the New Millennium," Restoration Ecology 9 (no. 2, 2001): 239-246.

Hobbs, R. J., "Restoration Ecology: The Challenge of Social Values and Expectations," Frontiers in Ecology 2 (2004): 43-44.

Hobbs, R. J., and S. R. Morton. "Moving from Descriptive to Prescriptive Ecology." Agriforestry Systems 45(1999):43-55.

Hobohm, C, "Characterization and ranking of biodiversity hotspots: centres of species richness and endemism," Biodiversity and Conservation 12(no.2, 2003): 279-287.

Hobson, K., "Competing Discourses of Sustainable Consumption: Does the 'Rationalisation of Lifestyles' Make Sense?," Environmental Politics 11(no.2, 2002): 95-120. (v.13,#4)

Hobson, Sarah, and Jane Lubchenco, eds. Revelation and the Environment: AD 95-1995. Singapore; River Edge, NJ: World Scientific, 1997. 223 pages. Patmos Symposium I, 1995, Patmos, Greece. An unusual book, connecting the Biblical book of Revelation, written by Saint John on the island of Patmos, with contemporary environmental concerns, or, more broadly, religion and environment. The conference on Patmos was sponsored by the Eastern Orthodox Church and the Worldwide Fund for Nature, attended by 2000 scientists and religious leaders from diverse religions, including Prince Philip Duke of Edinburgh, who provides a forward. Several dozen, mostly short, papers. Examples:

--Lubchenco, Jane, "The Living Resources," pp. 42-46.

--Shiva, Vandana, "Which Value for Nature?" pp. 93-97.

--Daly, Herman E., "Science, Religion, and Sustainable Development," pp. 62-66.

--Metropolitan John of Pergamon, "The Book of Revelation and the Natural Environment," pp. 17-21.

Hobson is a writer and filmmaker, concerned for Third World peoples, and lives in Oundle, UK; Lubchenco is in biology at Oregon State University and former president of AAAS. (v.11,#1)

Hoch, David, Review of: Gene Baur, *Farm Sanctuary: Changing Hearts and Minds about Animals and Food* (New York: Touchstone, Simon and Schuster, 2008). *Journal of Agricultural and Environmental Ethics* 21(2008):485-490.

Hochberg, Michael, Clobert, Jean, Barbault, eds. Aspects of the Genesis and Maintenance of Biological Diversity. New York: Oxford University Press, 1996. 336pp. \$84. A collection of evolutionary and ecological perspectives in the study of biodiversity. (v8,#2)

Hocking, Martin B., "Paper Versus Polystyrene: A Complex Choice," *Science* 251(February 1, 1991):504-505. By some ways of reckoning, foam cups damage the environment less than paper cups. The chemicals and energy used in making paper for cups as well as the emissions from incinerating or burying paper cups, exceeds the impact of making and disposing of cups made of plastic foam. Hocking is a chemistry professor at the University of Victoria, British Columbia. (v2,#1)

Hockings, M., "Systems for Assessing the Effectiveness of Management in Protected Areas," *Bioscience* 53(no.9, 2003):823-832. (v.14, #4)

Hodas, David, "The Climate Change Convention and Evolving Legal Models of Sustainable Development," *Pace Environmental Law Review* 13 (no. 1, 1995):75-96. The Climate Change Convention is intimately and necessarily linked to UNCED goals of sustainable development because it provides the specific parameters around which the concept of sustainable development can have meaning and be concretely implemented. Hodas is at the Widener University School of Law. (v8,#2)

Hodge, Ian, Review of Anthony Clayton and Nicholas Radcliffe, Sustainability: A Systems Approach. *Environmental Values* 7(1998):245.

Hodges J. and I. K. Han, eds. Livestock, Ethics and Quality of Life. Review by Jules Pretty, *Journal of Agricultural and Environmental Ethics* 14(2001):85-87. (JAEE)

Hodgson, Peter E., Energy and the Environment. London: Bowerdean, 1997. (v9,#2)

Hoegh-Guldberg, O., L. Hughes, S. McIntyre, D.B. Lindenmayer, C. Parmesan, H.P. Possingham, and C.D. Thomas. "Assisted Colonization and Rapid Climate Change." *Science* Vol. 321, no. 5887 (18 July 2008): 345-46. In view of global warming, moving species outside their historic ranges may mitigate loss of biodiversity. Endangered species need "assisted colonization," humans who move them to new locations. The lead author is at the University of Queensland, Australia.

Hoff, Christina. "Kant's Invidious Humanism." *Environmental Ethics* 5(1983):63-70. In Kant's philosophy nonrational beings are denied moral standing. I argue that Kant's rational humanism is arbitrary and morally impoverished. In particular I show that Kant moves illegitimately from the first formulation of the categorical imperative (which makes no mention of a moral domain) to the second (which limits moral recognition to rational beings). The move to the second formulation relies on a new and unsupported principle introduced by Kant: rational nature and only rational nature exists as an end in itself. Hoff is at the Philosophy Dept., Clark University, Worcester, MA. (EE)

Hoffert, Martin I. et al (two dozen others). "Advanced Technology Paths to Global Climate Stability: Energy for a Greenhouse Planet," *Science* 298(1 Nov. 2002):981-987. A survey of possible future energy sources that are carbon dioxide free: terrestrial solar and wind energy, solar power satellites, biomass, nuclear fission, nuclear fusion, and fossil fuels from which carbon has been sequestered. All of these approaches currently have severe deficiencies. A broad range of intensive research and development is

urgently needed to produce technological options that can allow both climate stabilization and economic development. A technofix article, with doubts. (v.13,#4)

Hoffert, Robert W. "The Scarcity of Politics: Ophuls and Western Political Thought." Environmental Ethics 8(1986):5-32. William Ophuls has argued that the sources of and solutions for present scarcity conditions are to be found in Western political philosophy. I clarify various theoretical issues raised by Ophuls' work and offer conceptual alternatives regarding some of the more basic issues. Specifically, I critique the Lockean and Hobbesian elements in Ophuls' treatment of the role of liberal democracy, with special attention to abundance assumptions and Lockean individualism. I also argue that he fails to deal adequately with resource distribution in his treatment of resource scarcity, that he improperly removes man from nature, that he misunderstands the relationship of technology and politics, and that he encounters other difficulties in terms of the public/private distinction and in integrating micro and macro issues. Ironically, Ophuls' admirable attempt to shed light on the critical relationship between scarcity conditions and political philosophy may have created a new and disorienting set of shadows. Hoffert is Associate Dean of the College of Arts, Humanities, and Social Sciences, Colorado State University, Fort Collins, CO. (EE)

Hoffman, Andrew J., "Trends in Corporate Environmentalism: The Chemical and Petroleum Industries, 1960-1993", Society and Natural Resources, 9(No.1, 1996):47- .

Hoffman, Andrew J., "Integrating Environmental and Social Issues into Corporate Practice," Environment 42 (No. 5, 2000 Jun 01): 22- . Can corporations develop strategies that simultaneously allow them to achieve economic prosperity, environmental quality, and social equity? (v.11,#4)

Hoffman, Andrew J., Sandelands, Lloyd E., "Getting Right With Nature: Anthropocentrism, Ecocentrism and Theocentrism," Organization and Environment 18 (no. 2, June 2005).

Hoffman, Doug. "Soils, Agriculture and Sustainable Development: Nationally, Provincially, Locally", Environments 24(no. 1, 1996):123. (v7,#4)

Hoffman, Joan, "Economic Stratification and Environmental Management: A Case Study of the New York City Catskill/Delaware Watershed," Environmental Values 14(2005): 447-470. Long run success in watershed management requires understanding of how economic stratification and social values affect water quality protection. Feedback effects on water quality are produced by three aspects of economic well-being: income levels, quality of life and inequality, including the effects of gender based inequality. In the US emphasis on individualistic values leads to reliance on local and private policy solutions to social problems. Analysis of the context of New York City's internationally famous watershed agreement with communities 120 miles distant provides a case study of these relationships. The nature of economic stratification in these upstate communities and the insufficient response of social policies were an impediment to achieving New York City's water quality goals. As a consequence the City's watershed agreement contains direct economic aid to Watershed communities. The Agreement does not address all stratification issues. Some call for solutions beyond the local level and an approach that benefits from the European emphasis on community. It is in the interest of watershed managers to broaden the scope of their concerns to understand and support state and national programs which address problems created by economic stratification. The expansion of the European Union increases the relevance of these lessons for Europe. Hoffman is in economics, John Jay College of Criminal Justice, New York, New York. (EV)

Hoffman, R. E., "Rebecca Solnit, As Eve Said to the Serpent: On Landscape, Gender and Art," Environmental History 7(no.3, 2002): 512-13. (v.13,#4)

Hoffman, W. Michael, "Business and Environmental Ethics," Business Ethics Quarterly 1(no. 2,

1991):169-184. Argues for biocentrism in environmental ethics. Business has obligations to protect the environment over and above what is required by law. There is danger in "good ethics is good business" as a basis for environmental ethics in business, and both business and environmentalists need to be wary of this. Business and environmental ethicists ought to promote deeper moral perspectives than ones based on mere self-interest or human interest. The environmental movement must find ways by which business can incorporate and protect the intrinsic value of animal and plant life and other natural objects that are integral parts of ecosystems. This article was originally the president address to the Society for Business Ethics, August 1990. (v2,#4)

Hoffman, W. Michael, Robert Frederick, and Edward S. Petry, Jr., eds., Business, Ethics, and the Environment (New York: Quorum Books, 1990). (v2,#1)

Hoffman, W. Michael, (Philosophy, Bentley College, Waltham, MA) in a presidential address to the Society for Business Ethics, meeting in San Francisco, August 10, linked business ethics and environmental ethics. The paper was titled, "Business and Environmental Ethics" and argued for the responsibility of business to a much larger group than its own stakeholders. He proposed that "naturalistic ethical guidelines such as those suggested by Holmes Rolston should be set forth for business to follow when its activities impact upon ecosystems." These guidelines are in Rolston's "Just Environmental Business," Chapter 11, in Tom Regan, ed., Just Business (Random House, 1984), a college text in business ethics. (v1,#3)

Hoffman, W. Michael, Robert Frederick, and Edward S. Petry, Jr., eds. Business, Ethics, and the Environment: The Public Policy Debate and The Corporation, Ethics, and the Environment. New York: Quorum Books, 1990. Both of these volumes collect papers from the Eighth National Conference on Business Ethics sponsored by the Center for Business Ethics at Bentley College. The papers are a mix of scholarly papers from several disciplines (public policy, law, business administration, business ethics, and environmental ethics) and more informal "after dinner" speeches by chief executives in industry and environmental organizations. In the first volume, the chief papers on environmental ethics are by Mark Sagoff, David Hanson, Thomas Slaughter, Jack Weir, Eric Katz, and Thomas White. The second volume contains articles by Edwin Hettinger, Laura Westra, Peter French, Kenneth Goodpaster, Norman Bowie, and Lisa Newton. Hettinger's chapter on the subject of "eco-sabotage" is one of the few rigorous treatments of the subject. (Katz, Bibl # 2)

Hoffmann, Stanley. The Ethics and Politics of Humanitarian Intervention. Notre Dame: University of Notre Dame Press, 1996. 168pp. \$25 cloth \$14.95 paper. The problems of humanitarian intervention in international relations. Includes responses by Robert C. Johansen and James Sterba, an introductory essay by Raimo Vayrynen. (v7,#4)

Hofrichter, Richard. Toxic Struggles: The Theory and Practice of Environmental Justice. Philadelphia: New Society, 1993. (v7, #3)

Hogan, Tim, Review of J. Baird Callicott and Michael P. Nelson, The Great New Wilderness Debate. The Bloomsbury Review, July/August 1999, p. 19. "Read these essays, go for a long walk, and think deeply about what the presence of wild nature in these times might mean."

Hoge, Warren, "The Fox Hunt Is Hounded, But Won't Turn Tail," New York Times (4/10/97): A4. Hunting in England to Be Outlawed? By a vote of 411-151, the British House of Commons passed the second reading of a bill that would ban hunting of foxes and other wildlife (e.g., deer, hare, and mink). However, Prime Minister Tony Blair, who says he supports the ban, has not provided time on the parliamentary agenda for it to clear the hurdles necessary for passage. (v.8, #4)

Hoge, Warren, "Norway's Awesome Nature, Awesomely Overcome," New York Times (8/28/98): A4. Norway fights flight to cities with rural highway projects. In an effort to keep people living in its rugged rural areas, Norway is building tunnels to some of the world's most remote locations. Recent additions to Norway's nearly 3,000 miles of tunnels include the deepest tunnel in the world (870 feet below sea level), which connects an island of 4,000 people to the mainland, and the longest tunnel in the world (15.2 miles), which links two towns with populations of 2,000 each. Many Norwegians see themselves as "pastoral dwellers" and "self-sufficient rustics," and desire to preserve their traditional settlement patterns. In addition to building rural infrastructure, the country provides incentives for rural living in the forms of unconditional per-inhabitant grants to local governments, tax exemptions for local businesses, increased child benefits payments, and funds to assist start-up enterprises. (v.9,#3)

Hogg, Ian D. "Water Quality: Defining the Indefinable?" Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Hoggart, Keith. "All Washed Up and Nowhere to Go? Public Policy and Geographical Research." Progress in Human Geography 20, no.1 (1996): 110. (v7, #3)

Hogue, Cheryl, "A Smaller Right to Know," Chemical and Engineering News 83(no. 44, 2005):22-25. The U.S. Environmental Protection Agency plans to reduce required emissions reports to every other year and to allow more facilities to submit less information. Every year at present, as required by the Emergency Planning and Community Right-to-Know Act, EPA amasses a Toxics Release Inventory (TRI) and makes it public. The proposed change is to do this every other year and also to provide smaller amounts of information particularly for facilities that handle or release smaller amounts of toxics. The change is advocated as a paperwork burden reduction. The two major chemical manufacturing trade groups are backing the change. DuPont meanwhile says they will continue to compile and release data annually, whatever the EPA requirement, because they are committed to transparency. TRI reports have been required since 1989 and during that period chemical producers have cut their releases 65%. One reason environmentalists are concerned is that it makes tracking trends more difficult. Trends typically require three or more sets of data, and this would double the time required to document a trend. Currently a facility can use a short form of reporting if they release less than 500 pounds a year of chemicals, with the exception of PBT substances (lead, mercury, dioxins, and polychlorinated biphenyls). EPA is proposing to raise that threshold to less than 5,000 pounds a year.

Hoiore, Celine, "Polynesian Perspectives on Birth, Marriage, Death and Hospitality," Ecotheology No 4 (Jan 1998):51-57.

Holbrook, Daniel, "Utilitarianism on Environmental Issues Reexamined," The International Journal of Applied Philosophy 7 (no. 1, 1992):41-46. There are two very different versions of utilitarianism. Qualitative utilitarianism gives strong support to environmental preservation, while preference utilitarianism does not. Qualitative utilitarians claim that the environment may be compromised only when it is clearly in the long-term interests of raising the quality of life for humans--where quality of life is given as true and objective standard as possible. A theory that tell us, "Never compromise the environment!" must be inadequate. Holbrook teaches philosophy at Washington State University.

Holbrook, Daniel, "The Consequentialistic Side of Environmental Ethics," Environmental Values 6(1997):87-96. ABSTRACT: There are two principles often found in environmental ethics self-realisation and environmental preservation. I argue that these are two logically independent principles. An analysis of its essential features shows that the preservation principle should be based on actual consequentialism, for it is only the actual effects of our actions and policies that are important to the main issues of environmental preservation. Aldo Leopold's land ethic is found to be an example of a consequentialistic theory of environmental preservation. Department of Philosophy

Washington State University, Pullman, WA 99164, USA. (EV)

Holbrook, Daniel, "Deep Ecology: Fact, Value, or Ideology?" Methodology and Science (Netherlands) 23(no. 3, 1990):130-141. Deep ecology rests on a confusion of (1) facts made apparent by advances in environmental science, (2) values based on the aesthetic appreciation of nature, and (3) a desire to preserve the healthfulness of the world we live in. Deep ecology is an ideology. Environmentalists ought to see the effects of human civilization in a different light, not with the self-righteous disgust many of them express, but as the logical outcome of desires that come naturally to humans. An important part of deep ecology is cultivating ecological consciousness, which can be better achieved through the mutual development of values than through the deception of ideology. Holbrook teaches philosophy at Washington State University.

Holden, Constance, "Kenyan Edict Threatens Famed Park," Science 310(14 October 2005):215. Kenya's President Mwai Kibaki has announced that Amboseli National Park, one of the nation's prime wildlife reserves, will be turned over to local Maasai control, removing it from the Kenyan Wildlife Service, which has run the park since 1974. Conservation groups, along with David Western, former Kenyan Wildlife Service director, say the move is political, to curry favor with the Maasai people, but that it will result in destruction of the park. Amboseli's elephants number about 1,400, and already the Maasai have moved 15,000 cattle to graze in the park. The Park has been the most remunerative in Kenya, bringing in \$ 3.4 million from tourism last year. But recent tourists are already saying that they didn't come to Kenya to see cattle.

Holden, Constance, "Researchers Pained by Effort to Define Distress Precisely," Science 290 (24 November 2000):1474-1475. Animal researchers pained by effort to define animal stress. The Animal Welfare Act requires the U.S. Department of Agriculture "to minimize pain and distress" in animals used in research, and USDA officials, wondering whether they have focused too much on pain and not enough on distress, have a study in progress. Their working definition of "distress" is "a state in which an animal cannot escape from or adapt to the internal or external stressors it experiences, resulting in negative effects on its well-being." Animal welfare advocates favor further regulation concerning stress. Some scientists oppose it, others favor it. But deciding between stress and distress is difficult. (EE v.12,#1)

Holden, Constance, "Life Without Numbers in the Amazon," Science 305(20 August 2004):1093. The Piraha, a hunter-gatherer tribe of about 200 people, live in small villages on a tributary of the Amazon. They have one of the world's most phonemically limited languages, with just ten consonants and vowels. They have no words for numbers beyond two, and (so anthropologists claim) the ability to conceptualize numbers is no better than it is among pigeons, chimps, or human infants. (v. 15, # 3)

Holden, Meg. "Phenomenology versus Pragmatism: Seeking a Restoration Environmental Ethic." Environmental Ethics 23(2001):37-56. In this paper, I challenge the work of David Abram, who makes a case for phenomenology as the only philosophical tradition amenable to restoring balanced human-nature relationships. While phenomenology provides a useful conceptual framework for understanding the environmental ethics of oral cultures, this paper considers the tradition of American pragmatism to be more applicable to the environmental task at hand: devising an environmental ethic of reform for modern, capitalist, Western culture. The application of phenomenology and pragmatism to environmental ethics is compared according to four main philosophical questions: the essential uncertainty of life, the existence of a human/nature divide, the necessary conditions for claiming truth, and the relative role of metaphysics or imagination and that of science in relating to the world. (EE)

Holden, Meg. "A Reply to David Abram." Environmental Ethics 24(2002):111-112. (EE)

Holder, Jane, Environmental Assessment: The Regulation of Decision Making, Reviewed by Maria Lee,

Environmental Values 15(2006):129-132.

Holdgate, Martin W. "Pathways to Sustainability: The Evolving Role of Transnational Institutions", Environment 37(no. 9, Nov. 1995):16- . Transnational institutions at all levels will play an increasingly large role in safeguarding the global environment. (v6,#4)

Holdgate, Martin and David A. Munro, "Limits to Caring: A Response," Conservation Biology 7 (1993):938-940. Caring for the Earth was written for a political purpose, to a wide audience, and emphasizes the arguments likely to be politically compelling. It rightfully takes as a principal goal improving the condition of the world's peoples. Holdgate is Director General of IUCN, Munro has been active in IUCN. With a concluding response, John G. Robinson, "'Believing What You Know Isn't So': Response to Holdgate and Munro," Conservation Biology 7(1993):941-942. There is really nothing in Caring for the Earth to give a CEO pause for thought, beyond a little greening up. Rather than seeking to make growth sustainable, we should aspire to a sustainable landscape, a landscape made up of a mosaic of different land uses, not all of which would be either productive or sustainable, but which taken as a whole would be able to preserve biodiversity and allow sustainable living. (v4,#4)

Holdrege, Craig, A Question of Genes: Understanding Life in Context. Edinburgh: Floris Books, 1996. 190 pages.

Holdsworth, Andrew, John Talberth, and Bird, Bryan. "State of the Ecosystem Reports: A Tool for Wildlands Advocacy." Wild Earth 9(No. 2, Summer 1999):64- . (v10,#4)

Holdsworth, D. W., "Historical Geography: The Octopus In The Garden And In The Fields," Progress in Human Geography 28(no. 4, 2004): 528-535(8). (v.14, #4)

Holdsworth, Deryck W, "Historical geography: the octopus in the garden and in the fields", Progress in Human Geography 28(no.4, 1 August 2004):528-535(8).

Holdt, Jennifer, "The Challenge of Cruelty Prosecutions," The Animals' Agenda 15 no. 2 (March 1995): 30- . Justice is blind and judges are hard seeing when animals are the victims of cruelty. The public outreach coordinator of the Animal Legal Defense Fund, explains why and suggests what activists can do to help secure justice for animals. (v6,#2)

Holeck, K. T., Mills, E. L., MacIsaac, H. J., Dochoda, M. R., Colautti, R. I. and Ricciardi, A., "Bridging Troubled Waters: Biological Invasions, Transoceanic Shipping, and the Laurentian Great Lakes," BioScience 54(no. 10, 2004): 919-929(11). Release of contaminated ballast water by transoceanic ships has been implicated in more than 70 of faunal nonindigenous species (NIS) introductions to the Great Lakes since the opening of the St. Lawrence Seaway in 1959. Contrary to expectation, the apparent invasion rate increased after the initiation of voluntary guidelines in 1989 and mandatory regulations in 1993 for open ocean ballast water exchange by ships declaring ballast on board (BOB). However, more than 90 of vessels that entered during the 1990s declared no ballast on board (NOBOB) and were not required to exchange ballast, although their tanks contained residual sediments and water that would be discharged in the Great Lakes. Lake Superior receives a disproportionate number of discharges by both BOB and NOBOB ships, yet it has sustained surprisingly few initial invasions. Conversely, the waters connecting Lakes Huron and Erie are an invasion hotspot despite receiving disproportionately few ballast discharges. Other vectors, including canals and accidental release, have contributed NIS to the Great Lakes and may increase in relative importance in the future. Based on our knowledge of NIS previously established in the basin, we have developed a vector assignment protocol to systematically ascertain vectors by which invaders enter the Great Lakes. (v.14, #4)

Holeck, Kristen T et al., "Bridging Troubled Waters: Biological Invasions, Transoceanic Shipping and the Laurentian Great Lakes", BioScience 54(no.10, 1 October 2004):919-9129(11). Release of contaminated ballast water by transoceanic ships has been implicated in more than 70 of faunal nonindigenous species (NIS) introductions to the Great Lakes since the opening of the St. Lawrence Seaway in 1959. Contrary to expectation, the apparent invasion rate increased after the initiation of voluntary guidelines in 1989 and mandatory regulations in 1993 for open-ocean ballast water exchange by ships declaring ballast on board (BOB). However, more than 90 of vessels that entered during the 1990s declared no ballast on board (NOBOB) and were not required to exchange ballast, although their tanks contained residual sediments and water that would be discharged in the Great Lakes. Lake Superior receives a disproportionate number of discharges by both BOB and NOBOB ships, yet it has sustained surprisingly few initial invasions. Conversely, the waters connecting Lakes Huron and Erie are an invasion hotspot despite receiving disproportionately few ballast discharges. Other vectors, including canals and accidental release, have contributed NIS to the Great Lakes and may increase in relative importance in the future. Based on our knowledge of NIS previously established in the basin, we have developed a vector assignment protocol to systematically ascertain vectors by which invaders enter the Great Lakes.

Holl, K., E. Crone and C. Schultz, "Landscape Restoration: Moving from Generalities to Methodologies," Bioscience 53(no. 5, 2003): 491-502.

Holland, Leigh. Review of Maurice J. Cohen and Joseph Murphy (eds.), Exploring Sustainable Consumption: Environmental Policy and the Social Sciences, Organization and Environment, 16, (No. 1, 2003): 122-25. Holland is principal lecturer in the faculty of business and law at De Montfort University, UK.

Höll, Otmar, eds., Environmental Cooperation in Europe: The Political Dimension. Boulder, CO: Westview Press, 1994. 160 pages. \$ 34.95. An effective European environmental policy must provide room for variation in the burden borne by various countries, commensurate with their economic, technical, and institutional resources. Höll is at the Austrian Institute for International Affairs, Vienna. (v5,#3)

Holland, Alan, and Rawles, Kate, The Ethics of Conservation. Report presented to the Countryside Council for Wales. Thingmont Series, No. 1. Lancaster, UK: Lancaster University, Department of Philosophy, 1994. "Conservation is ... about preserving the future as a realisation of the potential of the past. ... [it] is about negotiating the transition from the past to future in such a way as to secure the transfer of maximum significance" (p. 37).

Holland, Alan, and Johnson, Andrew, eds., Animal Biotechnology and Ethics. London: Chapman and Hall, 1997. Sample essays: Seidel, George E., Jr., "Biotechnology in Animal Agriculture"; Broom, D. M., "The Effects of Biotechnology on Animal Welfare"; D'Silva, J., "Campaigning against Transgenic Technology"; Holland, Alan, "Species Are Dead: Long Live Genes!"; Thompson, Paul, "Biotechnology Policy: Four Ethical Problems and Three Political Solutions. And more. Holland is in philosophy at Lancaster University, UK. Johnson is an environmental consultant and editor of The White Horse Press. (v9,#2)

Holland, Alan. "The Use and Abuse of Ecological Concepts in Environmental Ethics," Biodiversity and Conservation 4(no.8, Nov. 1995):812- . (v6,#4)

Holland, Heinrich, D., and Ulrich Petersen, Living Dangerously: The Earth, its Resources, and the Environment. Princeton, NJ: Princeton University Press, 1995. 490 pages. The fate of humanity and our store of natural resources in the next century. The often conflicting needs of natural resources extraction

and environmental protection. Holland is in geochemistry, Petersen in economic geology at Harvard University. (v7,#1)

Holland, S., and M. Moore, "Cadillac Desert Revisited: Property Rights, Public Policy, and Water-Resource Depletion," Journal of Environmental Economics and Management 46(no. 1, 2003): 131-155. (v 14, #3)

Hollands, Clive, "The Animal Kingdom and the Kingdom of God," Pages 16-24 in The Animal Kingdom and the Kingdom of God, Occasional Paper No. 26, Centre for Theology and Public Issues, New College, University of Edinburgh, 1991. Co-published by the Church and National Committee of the Church of Scotland. ISBN 1 870126 17 3.

Holly, Marilyn, Book Review: The Bible According to Noah: Theology As If Animals Mattered by Gary Kowalski (New York, USA. Lantern Books, 2001). Journal of Agricultural and Environmental Ethics 19(2006):203-204. Holly is in the Department of Philosophy, University of Florida, 118545, Gainesville, FL. (JAEE)

Holly, Marilyn, "Environmental Virtue Ethics A Review of some Current Work: Newton, Lisa (2002). Ethics and Sustainability: Sustainable Development and the Moral Life. Upper Saddle River, NJ: Prentice Hall. Cafaro, Philip (2004). Thoreau's Living Ethics: Walden and the Pursuit of Virtue. Athens, GA: The University of Georgia Press. Sadler, Ronald and Philip Cafaro, eds. (2005). Environmental Virtue Ethics. Lanham, MD: Rowman & Littlefield, Inc. Journal of Agricultural and Environmental Ethics 19(2006):391-424. Holly is in the Department of Philosophy, University of Florida, Gainesville. (JAEE)

Holly, Marilyn, "A Review of Bryan G. Norton's *Sustainability: A Philosophy of Ecosystem Management*. Journal of Agricultural and Environmental Ethics 20(2007):335-352.

Holmstrom, David, "Ecologists Question Cost-Benefit Scrutiny," The Christian Science Monitor 86 (2 August 1994): 3. (v5,#3)

Holmstrom, David, Survival of the Galapagos, a four part series on the difficulties in ecotourism in the Galapagos, in The Christian Science Monitor, August 19-22, 1991. "Invasion of the Ecotourist," "Balancing Nature, Man, and Money," "Wildlife in Transition," and "Can We Both Visit and Protect?" Excellent case study in ecotourism. (v2,#3)

Holmstrom, David. "Video Helps Torpedo Trash Dumping at Sea." The Christian Science Monitor, vol. 89, 23 Jan. 1997, p. 10-11.

Holt, Flora, "The Catch-22 of Conservation: Indigenous Peoples, Biologists, and Cultural Change," Human Ecology 33(no.2, April 2005):199-215(17).

Holt, S, "To whale or not to whale - Iceland's motives for rejoining the International Whaling Commission," Ecologist 32(no.1, 2002):64- . (v.13, #3)

Holt, Sidney J., Review of Peter J. Stoett, The International Politics of Whaling, Environmental Values 7:(1998):372.

Holt-Biddle, David, "The Heat is on: The Reality of Global Climate Change," Africa - Environment and Wildlife 2(no. 3, May/June 1994):31-40. In an Africa beset by environmental and social problems, concern about a minute shift in climate patterns may seem irrelevant. But climate change is as relevant to Africa as to any part of the world. Indeed, the effects could well be even more harshly felt in a continent where limited resources, particularly food and water, are already stretched by rapidly growing

populations. Holt-Biddle is an environmental journalist in Johannesburg. (v6,#3)

Holthaus, Gary, Patricia Nelson Limerick, and Charles F. Wilkinson, eds., *A Society to Match the Scenery: Personal Visions of the Future of the American West*. University Press of Colorado, 1991. \$ 24.95. 256 pages. An anthology claiming that the American West is at a critical crossroads where westerners must come to terms with the limitations of the region soon, or ruin it forever. The authors hold that this is not closing the doors of western enterprise, but a reckoning that opens new doors for a new and better western experience. (v2,#3)

Holthaus, Gary. *Learning Native Wisdom: What Traditional Cultures Teach Us about Subsistence, Sustainability, and Spirituality*. Lexington: University Press of Kentucky, 2008. Using Eskimo and Native American peoples of Alaska, Holthaus argues that sustainability is achievable as the result of a healthy worldview. Alaskan native peoples show that sustainability allied with subsistence and spirituality is possible in societies that value the longevity of culture, the environment, and people.

Holthaus, Gary. *Learning Native Wisdom: What Traditional Cultures Teach Us about Subsistence, Sustainability, and Spirituality*. Lexington: University Press of Kentucky, 2008. Using Eskimo and Native American peoples of Alaska, Holthaus argues that sustainability is achievable as the result of a healthy worldview. Alaskan native peoples show that sustainability—allied with subsistence and spirituality—is possible in societies that value the longevity of culture, the environment, and people.

Holtug, Nils. "The Harm Principle and Genetically Modified Food." *Journal of Agricultural and Environmental Ethics* 14(2001):169-178. It is suggested that the Harm Principle can be viewed as the moral basis on which genetically modified (GM) food is currently regulated. It is then argued (a) that the concept of harm cannot be specified in such a manner as to render the Harm Principle a plausible political principle, so this principle cannot be used to justify existing regulation; and (b) that even if the Harm Principle were a plausible political principle, it could not be used alone in the regulation of GM food, since it does not express a concern for the expected benefits of such food. Keywords: ethics, food, genes, harm. Holtug is at the Centre for Bioethics and Risk Assessment, Department of Philosophy, University of Copenhagen, Copenhagen S. Denmark. (JAEE)

Holzinger, Katharina, Christoph Knill, and Bas Arts, eds. *Environmental Policy Convergence in Europe: The Impact of International Institutions and Trade*. Cambridge: Cambridge University Press, 2008. Contents include: (1) "Introduction" by Katharina Holzinger, Christoph Knill, and Bas Arts, (2) "State of the Art – Conceptualising Environmental Policy Convergence" by Katharina Holzinger, Helge Jörgens, and Christoph Knill, (3) "Theoretical Framework: Causal Factors and Convergence Expectations" by Katharina Holzinger and Christoph Knill, (4) "Research Design, Variables and Data" by Stephan Heichel, Katharina Holzinger, Thomas Sommerer, Duncan Liefferink, Jessica Pape, and Sietske Veenman, (5) "Degree and Direction of Environmental Policy Convergence: Analysis of Aggregate Data" by Thomas Sommerer, Christoph Knill, and Katharina Holzinger, (6) "The Pair Approach: What Causes Convergence of Environmental Policies?" by Thomas Sommerer, Katharina Holzinger, and Christoph Knill, (7) "The Gap Approach: What Affects the Direction of Environmental Policy Convergence?" by Bas Arts, Duncan Liefferink, Jelmer Kamstra, and Jeroen Ooijevaar, and (8) "Conclusion" by Christoph Knill, Katharina Holzinger, and Bas Arts.

Holzinger, Katharina, Christoph Knill, and Bas Arts, eds. *Environmental Policy Convergence in Europe: The Impact of International Institutions and Trade*. Cambridge: Cambridge University Press, 2008. Contents include: (1) "Introduction" by Katharina Holzinger, Christoph Knill, and Bas Arts, (2) "State of the Art Conceptualising Environmental Policy Convergence" by Katharina Holzinger, Helge Jörgens, and Christoph Knill, (3) "Theoretical Framework: Causal Factors and Convergence Expectations" by Katharina Holzinger and Christoph Knill, (4) "Research Design, Variables and Data" by Stephan Heichel,

Katharina Holzinger, Thomas Sommerer, Duncan Liefferink, Jessica Pape, and Sietske Veenman, (5) "Degree and Direction of Environmental Policy Convergence: Analysis of Aggregate Data" by Thomas Sommerer, Christoph Knill, and Katharina Holzinger, (6) "The Pair Approach: What Causes Convergence of Environmental Policies?" by Thomas Sommerer, Katharina Holzinger, and Christoph Knill, (7) "The Gap Approach: What Affects the Direction of Environmental Policy Convergence?" by Bas Arts, Duncan Liefferink, Jelmer Kamstra, and Jeroen Ooijevaar, and (8) "Conclusion" by Christoph Knill, Katharina Holzinger, and Bas Arts.

Homer-Dixon, Thomas F., Environment, Scarcity, and Violence. Princeton, NJ: Princeton University Press, 1999. 280 pages. \$ 29. The Earth's human population is expected to pass eight billion by the year 2025, while rapid growth in the global economy will spur ever increasing demands for natural resources. The world will consequently face growing scarcities of such vital renewable resources as cropland, fresh water, and forests. These environmental scarcities will have profound social consequences--contributing to insurrections, ethnic clashes, urban unrest, and other forms of civil violence, especially in the developing world. A sobering analysis. Homer-Dixon is in political science at the University of Toronto. (v.11,#1)

Homer-Dixon, Thomas F., Environment, Scarcity, and Violence. Princeton, NJ: Princeton University Press, 1999. 280 pages. \$ 29. The Earth's human population is expected to pass eight billion by the year 2025, while rapid growth in the global economy will spur ever increasing demands for natural resources. The world will consequently face growing scarcities of such vital renewable resources as cropland, fresh water, and forests. These environmental scarcities will have profound social consequences--contributing to insurrections, ethnic clashes, urban unrest, and other forms of civil violence, especially in the developing world. A sobering analysis. Homer-Dixon is in political science at the University of Toronto. (v10,#4)

Honey, M., "Protecting Eden: Setting Green Standards for the Tourism Industry," Environment 45(no. 6, 2003): 8-21.

Honey, Martha. Ecotourism and Sustainable Development: Who Owns Paradise? Covelo, CA: Island Press, 1999. 350 pp. \$50 cloth, \$25 paper. The evolution and principles of ecotourism, where profits go, and the mechanics and politics of the tourist industry as a whole. The case studies highlight the economic and cultural impacts of tourism development on indigenous populations as well as ecosystems. Current thinking and policies of environmental groups and how political situations, human rights records, and natural resource management influence travel decisions. (v.10,#1)

Honneland, Geir and Nilssen, Frode, "Co-management in Northwest Russian Fisheries," Society & Natural Resources 13(no.7, OCT 01 2000):635- . (EE v.12,#1)

Hood, Christopher B., "Metaphors of Shareholder Liability Under CERCLA", Journal of Environmental Law and Litigation, 10(No.1, 1995):85- . (v7,#1)

Hood, Robert, "Queer Spaces: Sexual Minorities and Geographies," Philosophy and Geography 4 (No. 2, 2001): 251-252. Book review of Gordon Brent Ingram and Anne-Marie Bouthillette and Yolanda Retter (Eds) "Queers in Space: Communities, Public Space, Sites of Resistance," San Francisco: Bay Press, 1997. (P&G)

Hood, Robert. "Rorty and Postmodern Environmental Ethics: Recontextualizing Narrative, Reason, and Representation." Environmental Ethics 20(1998):183-93. Richard Rorty's pragmatic abandonment of epistemological representationalism has important implications for environmental ethics, particularly postmodern environmental ethics. I discuss Rorty's position and show that Mark Sagoff's version of it allows for both rational negotiation of public environmental issues and for the creation of solidarity

among people regarding the environment. I then discuss Eugene Hargrove's view that representation, rather than being implicated in the destruction of nature, is a key element in preserving (the intrinsic value of) nature. I conclude that Hargrove's position is compatible with Rorty's and Sagoff's positions and I argue that aesthetic representation may still be needed in a postmodern world that has abandoned epistemological representationalism. Hood is in philosophy at Middle Tennessee State University, Murfreesboro, TN. (EE)

Hooghe, Marc. "The Greens in the Belgian Elections of 21 May 1995: Growing Doubts." Environmental Politics 4(Winter 1995):247. (v7,#2)

Hook, Bill. "Intrinsic Value: Under the Scrutiny of Information and Evolutionary Theory." Environmental Ethics 25(2003):359-373. We do not yet have a sound ontology for intrinsic value. Albert Borgmann's work on information technology and Daniel Dennett's thoughts on evolutionary theory can provide the basis for an account of intrinsic value in terms of what it is, how it comes into existence, where it is found, and whether it can be quantified or compared. Borgmann's information and realization relations are cornerstones for understanding value. According to Borgmann, things are valuable when they are meaningful and things become meaningful as information and realizations. It is in these relations that intrinsic and extrinsic values find their common roots. Dennett's musing on the relationship between DNA instructions, DNA readers, and phenotypes invites a commingling of information technology and evolutionary theory. His notion of design space provides a basis for the claim the biotic community has on intrinsic and extrinsic values. (EE)

Hook, M. Julia. "Approving Communitization Agreements Covering Native American Lands," Natural Resources & Environment 11(1997):14.

Hook, Walter, Replogle, Michael. "Motorization and Non-motorized Transport in Asia: Transport System Evolution in China, Japan and Indonesia," Land Use Policy 13, no.1 (January1996): 69- . (v6,#4)

Hoover, A., "A Review of: Westley, Frances R., and Philip S. Miller. Experiments in Consilience: Integrating Social and Scientific Responses to Save Endangered Species," Society and Natural Resources 18(no. 9, October 2005): 851-853.

Hope, Marjorie, and Young, James, Voices of Hope in the Struggle to Save the Planet. Croton-on-Hudson, NY: Apex Press, 2000. \$ 25. 377 pages. Chronicles the lives and works of a wide range of religiously based groups. Leaders and activists drawn from Judaism, Western and Eastern Christianity (such as Thomas Berry), Islam, Buddhism, Taoism, Shinto and the faiths of indigenous peoples (such as Oren Lyons). (v.13,#1)

Hopkins, Patrick D., "Value, 'Nature', and Copies of 'Nature'", Center for Values and Social Policy Newsletter (Center for Values and Social Policy, University of Colorado), vol 16, no. 2, fall 1997. (Campus Box 232, Boulder, CO 80309). "While I simply have to accede to the fact that some people value things because they have not been shaped by human hands, and thus will always perceive the 'artificial' as less valuable, this psychological and moral reaction means nothing for the 'artificial' object in and of itself. It only points to the existence of anthropocentric cultural forces that attach metaphysical and moral taint to human-made objects. ... The analysis at least suggests that there is nothing inherently misguided or anti-environmentalist in high-tech restoration ecology projects. And, that there is nothing anti-environmentalist about thinking that an 'artifact' can be as good as 'nature'." Thinking that the artifacted forest is of less value than the natural is "seriously flawed." Hopkins is a visiting faculty member in philosophy at the University of Colorado. (v.8,#4)

Hopkins, Patrick D., and Austin Dacey, "Vegetarian Meat: Could Technology Save Animals and Satisfy

Meat Eaters?" *Journal of Agricultural and Environmental Ethics* 21(2008):579-596. Between people who unabashedly support eating meat and those who adopt moral vegetarianism, lie a number of people who are uncomfortably carnivorous and vaguely wish they could be vegetarians. Opposing animal suffering in principle, they can ignore it in practice, relying on the visual disconnect between supermarket meat and slaughterhouse practices not to trigger their moral emotions. But what if we could have the best of both worlds in reality—eat meat and not harm animals? The nascent biotechnology of tissue culture, originally researched for medical applications, holds out just such a promise. Meat could be grown in vitro without killing animals. In fact, this technology may not just be an intriguing option, but might be our moral obligation to develop. Hopkins is in the Department of Philosophy, Millsaps College, Jackson, MS. Dacey is at the Center for Inquiry, New York, NY.

Hopkins, Thomas D. "Clean Air's High Cost." *The Christian Science Monitor* 89 (10 1997): 15. (v8,#2)

Horan, Jack, *Where Nature Reigns: The Wilderness Areas of the Southern Appalachians*. Asheville, NC: Down Home Press, 1997. Over fifty wilderness areas in eight states. Horan, a reporter for the *Charlotte Observer* has won awards for outstanding environmental writing. (v.13,#2)

Horgan, John, "From Complexity to Perplexity," *Scientific American* 272(no. 6, 1995):104-109. Many scientists are beginning to doubt whether there can be a unified theory of complex systems, and even whether there can be a science of complex systems. At least natural complex systems may be too contingent, or open, or complex, either for there to be a science of them, or, if they are more regular, for our minds to grasp that science. About computer models of natural systems, such as evolutionary natural history or ecosystems, there is considerable doubt. With particular focus on the Santa Fe Institute and studies there. Horgan is a senior writer for *Scientific American*. (v.8,#4)

Horn, Eric B. "On Callicott's Second-Order Principles." *Environmental Ethics* 27 (2005):411-428. J. Baird Callicott has proposed two second-order principles which he believes can be used to settle conflicts between his land ethic and traditional human morality. The first of these proposes that ethical obligations arising from "more venerable and intimate" communities should take precedence over those arising from "more recently emerged and impersonal" communities, while the second proposes that "stronger" interests should take precedence over "weaker" ones. Callicott's first second-order principle fails to specify unambiguously which communities' obligations should take precedence because he has failed to provide a clear description of how we are to identify and compare communities. In order for his second second-order principle to be useful, a good deal more work needs to be done to spell out what is meant by describing certain interests as "stronger" than others, particularly with respect to holistic entities. While the project of fleshing out a description of the strengths of interests for holistic entities may present an interesting and fruitful challenge, the prospects for providing a description of community identification of the sort that Callicott requires are much dimmer. (EE)

Horn, Patricia. "Tightwad Ways Gain Acceptance as Americans Adjust to Frugal 90s." *The Christian Science Monitor*, 31 May 1994, p. 8. Frugality is one of the top ten trends in the US in 1994. (v5,#2)

Hornberg, Alf and Pálsson, Gísli, eds., *Culture, Power, and Environmental Argument*. Lund, Sweden: Lund University Press, 2000. Cultural aspects of Swedish, Norwegian, and Icelandic environmental policy, covering issues from reindeer pastoralism, fishery management, to tourism. (v.13,#4)

Hornborg, Alf, J.R. McNeill, and Joan Martinez-Alier, eds. *Rethinking Environmental History: World-System History and Global Environmental Change*. Walnut Creek, CA: AltiMira Press, 2007. This new anthology in environmental history provides a framework for understanding the relations between ecosystems and world-systems over time. The editors bring together a group of social scientists, historians, and geographical scientists to provide a historical overview of the ecological dimension of

global economic processes. The editors challenge readers to integrate studies of the Earth-system with studies of the world-system, and to reconceptualize the relations between human beings and their environment, as well as the challenges of global sustainability.

Hornig, James F. "Training the Next Generation." Environment 38(Jun. 1996):28. Interdisciplinary environmental studies programs may be most valuable as part of a liberal arts education, according to this review of a study by the Environmental Careers Organization. (v7,#2)

Hornocker, Maurice, "Siberian Tigers," National Geographic 191 (no. 2, February 1997):100-109. Time is running out for the world's largest cat. Reeling from the double punch of poachers and habitat loss, only a few hundred survive. While zoos work to maintain the tiger's genetic diversity, Russian and American scientists are pooling their efforts to save this magnificent creature from extinction. (v8,#1)

Horowitz, JK; McConnell, KE, "A Review of WTA/WTP Studies," Journal of Environmental Economics and Management 44(no.3, 2002): 426-447.

Horowitz, Leah Sophie, "Integrating Indigenous Resource Management with Wildlife Conservation: A Case Study of Batang Ai National Park, Sarawak, Malaysia." Human Ecology, 26(no.3, 1998), p.371. (v.9,#4)

Horschelmann, K., "Review of: Dodds, K. Geopolitics in a Changing World," Progress in Human Geography 26(no.2, 2002): 268. (v.13,#2)

Horta, Korinna. "Why I Was Banned From a Congo Rain Forest." The Christian Science Monitor, vol. 89. 26 Nov. 1996, p. 18.

Horta, Korinna. "Environmental Policies of the World Bank." Journal of Environmental Law & Practice 3(May 1996):36. The role of the environment in the activities of the World Bank. (v7,#2)

Horton, Curtis M., "Protecting Biodiversity and Cultural Diversity Under Intellectual Property Law: Toward a New International System", Journal of Environmental Law and Litigation, 10(No.1, 1995):1- . (v7,#1)

Horton, Tim and William M. Eichbaum, Turning the Tide: Saving the Chesapeake Bay (Corvelo, CA: Island Press, 1991). 250 pages. \$ 22.95 cloth, \$ 14.95 paper. (v2,#2)

Horton, Tom, Bay Country. Baltimore: Johns Hopkins Press, 1987. (v5,#4)

Horton, Tom. Water's Way: Life Along the Chesapeake. Elliot and Clark, 1993. (v5,#4)

Hösle, Vittorio, Philosophie der ökologischen Krise (Philosophy of the Ecological Crisis). München: Moskau Vorträge. Beck'sche Reihe. 1991. 151 pages. DM 16,80. ISBN 3 406 34024 5. Five lectures, introductory in character: I. Ecology as a New Paradigm for Politics. II. The Historical Roots of the Ecological Crisis. III. Ethical Consequences of the Ecological Crisis. IV. Economics and Ecology. V. Political Consequences of the Ecological Crisis. Like Hans Jonas, to whom Hösle dedicates his book, Hösle believes that a fundamental shift in values is called for, a shift toward the recognizing the absolute, non-relational value of nature. This consists in nature's teleology. At the same time, human teleology is, on account of its subjectivity, morally superior to the more simple forms of teleology found in the rest of nature, and humanity has an absolute duty to ensure its own further existence. These lectures were first presented at the Institute for Philosophy of the USSR Academy of Science in Moscow in 1990. Born in Milan in 1960, Hösle holds a full professorship in Essen, and is one of the youngest such philosophers in

Germany. (Thanks to Angelika Krebs, Johann Wolfgang Goethe-Universität, Frankfurt/Main.)

Hospers, John, Human Conduct: Problems of Ethics, 3rd edition. Fort Worth, TX: Harcourt Brace, 1996. In this new edition of a longstanding ethics text, Hospers has added a chapter (Chapter 8) on "Animal Rights," which is a five-way dialogue among proponents of animal rights, animal liberation, environmentalists, and others. Maybe the fourth edition will see fit to separate out environmental ethics from animal rights. Hospers teaches philosophy at the University of Southern California. (v7,#1)

Hospers, John. "Humanity vs. Nature: Two Views of People and Animals," Liberty, March 1990, pp. 26-36. Hospers contrasts the animal rights ethic with the land ethic. (v1,#1)

Hou, Wenhui, "Reflections on Chinese Traditional Ideas of Nature," Environmental History 2(Oct. 1997):482-. (v.8,#4)

Houck, Oliver A., "Are Humans a Part of Ecosystems," Environmental Law 28(1998):12 - . With a "Nothing in Environmental Law is More Than Fifty Percent" rule. A wide array of human values and concerns creeps into every equation under environmental law, however absolute and exclusive of those concerns the statute appears.

Houck, Oliver A. "Reflections on the Endangered Species Act," Environmental Law 25(no.3, 1995)689- . Houck reflects on the purposes and effects of the Endangered Species Act by focusing on what he believes to be the premise of the Act-habitat protection. He then searches for answers to why the Act and its approach to habitat protection has become one of the most controversial provisions in environmental law. (v6,#4)

Houck, Oliver A. "Reflections on the Endangered Species Act," Natural Resources & Environment 10(no.1, Summer 1995):9- . (v6,#4)

Houde, Lincoln J., Connie Bullis. "Ecofeminist Pedagogy: An Exploratory Case," Ethics and the Environment 4(1999):143-174. For ecofeminists within academic contexts, the class room is another "contested terrain" where transformative eco-cultural work should be integrated. In our case, we are a part of communication studies and try to adopt ecofeminist insight as a position for questioning dominant discourses and practices. To do this we "incorporate popular culture as a serious object of politics and analysis" (Giroux 1997, 148). It is our hope that popular culture can be used as an ecofeminist tool for interrupting hegemonic power relations and encouraging critical-relational consciousness. This paper reports an exploratory, effort aimed at combining ecofeminist critiques with popular culture to employ, an ecofeminist pedagogy. It begins with an ecofeminist critique of the "animal-industrial-complex" (Noske 1989). In this critique, discursive moral agents are situated within the anthropocentric and androcentric culture (Payne 1994). It then articulates an ecofeminist teaching philosophy and describes how that philosophy was applied in one case using an episode from a prime time television cartoon. Finally, it draws conclusions about what is accomplished through this exploratory case. The authors are in the Department of Communication, University of Utah, Salt Lake City. (E&E)

Hough, Adrian, God is Not "Green": A Re-Examination of Eco-Theology. Leominster, UK: Gracewing, 1997. (v9,#2)

Houghton, John T.; Filho, L.G. Meiro; Callender, B.A.; Harris, N.; Kattenburg, A.; and Maskell, K. Climate Change 1995--The Science of Climate Change. New York: Cambridge University Press, 1996. 584 pages. \$90 cloth, \$34.95 paper. This is the contribution of Working Group I to the Second Assessment Report of the Intergovernmental Panel on Climate Change. A comprehensive assessment of

the detection, observation, and physical causes of climate change. (v7, #3)

Houghton, John, "Global Warming is Now a Weapon of Mass Destruction," The Guardian, 28 July 2003.

Houghton, John, "Stewards in God's World," Chapter 11 in Does God Play Dice? (Grand Rapids, MI: Cantilever Books, Zondervan Publishing House, 1989; in UK: Inter-Varsity Press), pages 131-144.

Houghton, John. Global Warming: The Complete Briefing. Cambridge: Cambridge University Press, 1997. Review by Clive Spash Environmental Values 10(2001):131. (EV)

Houlahan, Jeff E; Findlay, C. Scott, "Estimating the 'critical' distance at which adjacent land-use degrades wetland water and sediment quality", Landscape Ecology 19(no.6, August 2004):677-690(14).

Houle, K. L. F. "Spinoza and Ecology Revisited." Environmental Ethics 19(1997):417-431. Spinoza has been appropriated as a philosophical forefather of deep ecology. I identify what I take to be the relevant components of Spinoza's metaphysics, which, at face value, appear to be harmonious with deep ecology's commitments. However, there are central aspects of his moral philosophy which do not appear to be "environmentally friendly," in particular the sentiments expressed in the Ethics IV35C1 and IV37S1. I describe environmental ethics' treatment of these passages and then indicate what I take to be a more satisfactory route toward "ecologizing Spinoza." Houle is in philosophy, University of Guelph, Canada. (EE)

Houle, K. Review of Wes Jackson, Berry Wendell, and Bruce Coleman, eds. Meeting the Expectations of the Land: Essays in Sustainable Agriculture and Stewardship. In Journal of Agricultural and Environmental Ethics 8(1995):85-92. (JAEE)

Houle, Marcy, The Prairie Keepers: Secrets of the Grasslands. Addison-Wesley, 1995. \$20. A wildlife biologist gives a portrait of a grassland ecosystem. (v6,#2)

Houlgate, Stephen, ed., Hegel and the Philosophy of Nature. Albany, NY: State University of New York Press, 1998. 354 pages. The contributors claim that, far from being surpassed by nineteenth and twentieth century scientific developments, Hegel's philosophy of nature continues to have great significance for our understanding of the natural world. Houlgate is in philosophy at the University of Warwick. (v.9,#4)

Hourdequin, Marion. "Doing, Allowing, and Precaution." *Environmental Ethics* 29(2007):339-358. Many environmental policies seem to rest on an implicit distinction between doing and allowing. For example, it is generally thought worse to drive a species to extinction than to fail to save a species that is declining through no fault of our own, and worse to pollute the air with chemicals that trigger asthma attacks than to fail to remove naturally occurring allergens such as pollen and mold. The distinction between doing and allowing seems to underlie certain versions of the precautionary principle, and insofar as the precautionary principle rests on this distinction, it diverges from direct consequentialist approaches to risk management. There are two ways in which such reliance on the doing/allowing distinction may be defended: by appeal to indirect consequentialist considerations, and by appeal to deontological considerations. Neither approach is unproblematic; however, retention of a distinction between doing and allowing in environmental policy is consistent with the widespread intuition that there is something *prima facie* valuable about the world as we find it. (EE)

House, Adrian. The Great Safari: The Lives of George and Joy Adamson. New York: William Morrow Co., 1993. Studying lions in Kenya, Joy Adamson wrote *Born Free*, the story of a lioness that the couple raised and then set free, which became a celebrated film in the 1960's. Both Adamson's were later

murdered. Their life was hectic, their marriage included. She treated her staff with contempt, and was killed by a former employee in January 1980. He was shot in August 1989 trying to recover his Land-Rover, hijacked by Somali bandits, his effort saving the lives of people in the hijacked vehicle. They had become old Europeans, no longer welcome and reminded too many of the old colonial days. But they loved lions, brought international attention to Africa's wildlife problems and made significant contributions to East African conservation programs. House was a longtime friend of both Adamsons. (v8,#1)

Housman, Robert, Reconciling Trade and the Environment: Lessons from the North American Free Trade Agreement. Geneva: United Nations Environment Programme, 1994. Paper no. 3 in the Environment and Trade series. 65 pages. Paper. Contact: UNEP, Trade and Environment Unit, Palais de Nations, CH-1211, Geneva, Switzerland. "The NAFTA process shows that a trade agreement can integrate trade and environmental issues, however late in the process." Follows the environmentalist debate and tries to draw lessons for the future. (v5,#2)

Houston, Douglas B., Schreiner, Edward G., and Moorhead, Bruce B., Mountain Goats in Olympic National Park: Biology and Management of an Introduced Species. United States Department of Interior, Scientific Monograph NPS/NROLYM/NRSM-94/25. 1994.

Houston, Pam, "Wide Awake in Bear Country: Why the Wilderness Needs a Predator," Wilderness, 2000, p. 41, p. 59. "You might argue that a wilderness that supports a predator as huge and powerful as a grizzly bear is wilderness raised to the second power. I'd argue that a wilderness that contains nothing that might eat you isn't worthy of the name." Houston is a guide who lives in Colorado. (v.11,#4)

Houston, Pam, ed., Women on Hunting. Hopewell, NJ: Ecco Press, 1995. Among the contributors: Terry Tempest Williams, Tess Gallagher, Jane Hirshfield, Susan Griffin, Annie Dillard, Carol Frost, Joy Williams, and others. (v.11,#3)

Hovardas, T and Stamou, G, "Structural and Narrative Reconstruction of Representations of Environment, Nature, and Ecotourism," Society and Natural Resources 19 (no. 3, March 2006): 225-237.

Hovden, Eivind, "As if Nature Doesn't Matter: Ecology, Regime Theory and International Relations," Environmental Politics 8(no. 2, Summer 1999):50- . (v10,#4)

Howard, A. E. Dick, "State Constitutions and the Environment," Virginia Law Review 58 (1972): 193- . "A theme Thomas Jefferson often developed, and one which he explicitly applied to the revision of constitutions, was: 'The earth belongs always to the living generation.' He meant, of course, that while the present generation of men may venerate the wisdom of their forebears they must adapt that heritage to the needs of their time. Had Jefferson lived in this time of environmental concern, he might have amended his adage to say, 'The earth belongs always to the living generation--and to generations unborn.' This would recognize the fiduciary obligation which those who today inhabit the earth owe to those who will come after" (228-29). An older article, but worth reading. Howard is an authority in constitutional law at the University of Virginia. (v6,#2)

Howard, Albert, *The Soil and Health: A Study of Organic Agriculture* (Lexington, KY: The University Press of Kentucky) and Julie Guthman, *Agrarian Dreams: The Paradox of Organic Farming in California* (Berkeley, CA: The University of California Press, 2004). Reviewed by Paul B. Thompson, in *Journal of Agricultural and Environmental Ethics* 21(2008):297-301.

Howard, Don. "Commoner on Reductionism." Environmental Ethics 1(1979):159-76. Barry Commoner has argued that the environmental failure of modern technology is due in large part to the reductionistic

character of modern science, especially its biological component where the reductionist approach has triumphed in molecular biology. I claim, first, that Commoner has confused reduction in the sense of the reduction of one theory to another with what is better called analysis, or the strategy of breaking a whole into its parts in order to understand the properties of the whole, this latter being the actual target of his attack. I then argue that his criticisms of molecular biology fail since each of the properties of the cell which he claims cannot be understood in an analytic fashion, such as reproduction, development and inheritance, can be so understood, and that, in fact, each of his putatively nonanalytic accounts of these properties is the result of analysis. Similarly, Commoner's claim that ecosystems possess properties that cannot be understood analytically is refuted by comparing ecosystems with automobiles, which Commoner acknowledges are susceptible to analysis, and by showing that there are no essential differences between the two. Finally, I observe that while it is false that ecosystems cannot be understood in analytic terms, it is true that they are not usually thus understood, and that the explanation for this is not that scientists subscribe to a mistaken philosophy, but that our social institutions for the teaching and application of science do not adequately stress the importance of exploring the connections between the parts of such complex wholes. Howard is in the department of philosophy, University of Kentucky, Lexington, KY. (EE)

Howard, George S., How Should I Live My Life? Psychology, Environmental Science, and Moral Traditions. Lanham, MD: Rowman and Littlefield, 2002. Ties between personal values, moral traditions, and the looming environmental crisis.

Howard, I. A review of Souza Filho and Hildo M. de, The Adoption of Sustainable Agricultural Technologies. Journal of Agricultural and Environmental Ethics 11(1999):155-158. (JAEE)

Howard, Ian, Review of Factory Farming by Andrew Johnson, Journal of Agricultural and Environmental Ethics 6(1993):214-215.

Howard, Ian, "From the Inside out: The Farm as Place," Philosophy and Geography 3 (1998): 147-167. Howard received his doctorate in philosophy from the University of Guelph. (P&G)

Howard, Ian. Review of Keith Turner and Alexandra Crepeau. "From the Ground Up: Green and Growing." Video, 1994. (JAEE)

Howard, John A. and Kirby C. Donnelly, "A Quantitative Safety Assessment Model for Transgenic Protein Products Produced in Agricultural Crops," Journal of Agricultural and Environmental Ethics 17(2004):545-558. Transgenic plants are now being used to develop pharmaceutical and industrial products in addition to their use in crop improvement. Using confinement requirements, these transgenic plants are grown and processed under conditions that prevent intermixing with commodity crops. Regulatory agencies in the United States have provided guidance of zero tolerance of these new industrial crops with commodity crops. While this is a worthy goal, it is theoretically unattainable. In spite of the best containment practices, there is a potential risk using any system of production due to unforeseen incidences including natural disasters or exposure to workers. The precautionary principle has been used for numerous regulated articles in addressing the potential risks of new products and technology based on a risk assessment in similar situations. We present here a risk assessment model that could be used as a start to develop an accepted model for the industry. The model is based on current risk models used for other regulated articles, but adapted for these types of products. This could be used to determine action levels in the event of an unintended exposure or to ensure that detection or confinement methods are adequate to avoid risks. As an example, aprotinin, a therapeutic protein now being produced in maize, was evaluated for potential risk to humans using this model. Keywords: aprotinin industrial enzymes, maize, pharmaceuticals, plants, risk, transgenic. The authors are at College Station, Texas. (JAEE)

Howard, Malcolm. "Technology Helps Farmers Target and Reduce Chemicals." The Christian Science Monitor, vol. 88, 19 Nov. 1996, p. 10.

Howard, Malcolm. "Back-To-Nature Farming Finds a Place." The Christian Science Monitor, vol. 88, 10 Nov. 1996, p. 11.

Howard, Philip H., Review of Laura T. Reynolds, Douglas Murray, and John Wilkinson, eds., *Fair Trade: The Challenges of Transforming Globalization* (London: Routledge, 2007), *Journal of Agricultural and Environmental Ethics* 21(2008):495-497.

Howard, Walter E., "Animal Research is Defensible," Journal of Mammalogy 74(no.1, 1993):234-35. Howard argues that using animals for research, teaching, as food, and so forth is morally permissible since we treat animals less badly than does nature. Animal rights positions, he claims, are based on ignorance concerning nature's brutality. (v5,#1)

Howard, Walter E., "Nature's Death Ethic," BioScience 42(1992):739. "Nature, though beautiful, is a tough arena, with a cruel and brutal death ethic of the survival of the fittest." "Responsible use of animals is biologically sound and fits well into the natural scheme of life." "Our ethics should not be against killing per se, for nature's death ethic incorporates necessary killing by practically all animals, but our ethics should be against inflicting unnecessary pain and distress to animals." "There is still a need for a gentler, kinder existence for both domestic and wild animals in habitats people have modified. Proper management of population densities and preserving habitats are constructive ways to help minimize the suffering wild animals continually face in modified environments when exposed to the law of fang and claw." A useful editorial for discussion in environmental ethics classes and in discussions of animal welfare. Howard is in wildlife and fisheries biology at the University of California, Davis. (v4,#4)

Howard, Walter E., "Animal Research Is Defensible," Journal of Mammalogy 74(1993):234-235. A death ethic is essential to nature and animal rights advocates fail to appreciate this. The most important purpose in life for animals, except for trying to breed, is to serve as food to another, usually of a different species. People are an unusually efficient predator and much more humane than nature. They create the lives they destroy, treat them humanely, and replace them with other such lives. There is an ethical right for humans to use animals responsibly in research, for food, as game, and for recreation, as long as unnecessary pain is not inflicted. The killing of wild and laboratory animals can be justified morally and considered a sacred act. Howard is in wildlife at the University of California, Davis. (v5,#4)

Howarth, J. M. "The Crisis of Ecology: A Phenomenological Perspective." Environmental Values 4(1995):17-30. If we are to act properly with regard to the natural world, to protect, preserve, conserve, manage or leave it alone, we need both appropriate knowledge of that world, and a sound foundation for values to guide our actions. The thesis of this paper is that scientific ecology, though some of its interpreters claim it as a 'post-modern' eco-friendly science, in fact, while perhaps not as guilty as other of its post-modern interpreters might claim of the worst excesses of 'modernism', nonetheless does retain the underlying assumptions of modernism. (The 'jargon' will be further explained.) The thesis will be supported by methods drawn from phenomenology. Phenomenological enquiry can reveal and criticise the modernist assumptions, while traditional phenomenological notions, in particular Heidegger's notion of Dwelling and Merleau-Ponty's notion of the body subject, I shall suggest, might form a more eco-friendly framework for enquiring into the character of interactions within the natural world and the basis of values in those interactions. KEYWORDS: Phenomenology, ecology, modernism, symbiosis, niche Howarth is in the philosophy department, University of Lancaster. (EV)

Howarth, Jane, Review of Kate Soper, What is Nature?, Environmental Values 7(1998):360.

Howarth, Richard B., "Intergenerational Justice and the Chain of Obligation." Environmental Values Vol.1 No.2(1992):133-140. ABSTRACT: The actions and decisions taken by the present generation will affect not only the welfare but also the composition of future generations. A number of authors have used this fact to bolster the conclusion that the present is only weakly obligated to provide for future welfare since in choosing between futures of poverty and abundance, we are not deciding the welfare of a well-defined group of future persons but instead deciding which set of potential persons--the poor or the rich--will become actual. Provided that future generations have lives that are worth living, they will be grateful to us for bringing them into existence--or so the argument goes. In this paper, I argue that this position overlooks an important aspect of the intergenerational problem. We are obligated to provide for the actual children of today, who will in turn be obligated to provide for their children, and so forth from generation to generation. A chain of obligation is thus defined that stretches from the present into the indefinite future, and unless we ensure conditions favourable to the welfare of future generations, we wrong our existing children in the sense that they will be unable to fulfill their obligation to their children while enjoying a favourable way of life themselves. KEYWORDS: Intergenerational justice, obligations to future generations. Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA 94720, USA.

Howarth, Richard B., Review of Stefan Baumgartner, Malte Faber and Johannes Schiller, *Joint Production and Responsibilities in Ecological Economics* (Cheltenham: Edward Elgar, 2006), Environmental Values 17(2008):111-113.

Howe, Daniel C., and Kahn, Jr., Peter H., "Along the Rio Negro: Brazilian Children's Environmental Views and Values," Developmental Psychology 32(No. 6, 1996):979-987. The authors are in Education and Development, Colby College, Maine.

Howe, Daniel C., and Kahn, Jr., Peter H., "Along the Rio Negro: Brazilian Children's Environmental Views and Values," Developmental Psychology 32(No. 6, 1996):979-987. The authors are in Education and Development, Colby College, Maine.

Howe, Glenn T. et al., "Public Influences on Plantation Forestry," Journal of Forestry 103(no.2, March 2005):90-94(5).

Howe, Jim, McMahon, Ed, Propst, Luther. Balancing Nature and Commerce in Gateway Communities. Covelo, CA: Island Press, 1997. 165pp. \$21.95 paper. Practical and proven lessons on how residents of "gateway communities"--the small towns and open spaces that surround national and state parks, and other public lands--can protect their community's identity while stimulating a healthy economy and safeguarding nearby natural and historic resources. (v8,#2)

Howell, John, ed. Environment and Ethics--a New Zealand Contribution. Reviewed in Environmental Ethics 10(1988):357-62.

Howell, Nancy R., "Ecofeminism: What One Needs to Know," Zygon 32(no. 3, 1997):231-241. One in a series, "The Teacher's File," summarizing the introductory features of ecofeminism, for use in the classroom. Howell is in religion, Pacific Lutheran University, Tacoma.

Howell, Nancy R., "Ecofeminism: What One Needs to Know," Zygon 32(no. 3, 1997):231-241. One in a series, "The Teacher's File," summarizing the introductory features of ecofeminism, for use in the classroom. Howell is in religion, Pacific Lutheran University, Tacoma.

Howes, Rupert, Skea, Jim, and Whelan, Bob, Clean and Competitive? Motivating Environmental

Performance in Industry. London: Earthscan Publications, 1998. Draws on work at the Sussex University, UK, Science Policy Research Institute, with which the authors have been affiliated. (v9,#1)

Hrdy, Sara Blaffer, Mother Nature: A History of Mothers, Infants, and Natural Selection. New York: Pantheon, 1999. Babies are naturally selected to be adorable, and every trait--plumpness, cuteness--that increases adorability increases the infant's chances of survival, inducing the mother to give up bodily resources, subordinating her own aspirations to the interest of the infant. Mothers have a head start in this seduction by the infant, but fathers come soon after. Hrdy, known for her work on primate behavior, taught anthropology at the University of California, Davis. (v10,#4)

Hrdy, Sara Blaffer, Mother Nature: A History of Mothers, Infants, and Natural Selection. New York: Pantheon, 1999. Also Ballantine Books. Another subtitle is: Maternal Instincts and How They Shape the Human Species. What human mothering has in common with (other) primate mothering (and other animals). Women are biologically programmed for mothering. Babies are naturally selected to be adorable, and every trait--plumpness, cuteness--that increases adorability increases the infant's chances of survival, inducing the mother to give up bodily resources, subordinating her own aspirations to the interest of the infant. Mothers have a head start in this seduction by the infant, but fathers come soon after.

Critics, feminist among them, worry that the parallels, however important, fail to recognize the relevant moral differences, and that this may be another case of expecting too much from primates as models for human behavior. Hrdy, known for her work on primate behavior, taught anthropology at the University of California, Davis. (v.11,#1,#2) Reviewed by A. Madgalena Hurtado in Science 287(2000):433-434. Hrdy follows a currently fashionable feminist interpretation, and gives too much credit to grandmothers and too little to fathers as caretakers of infants.

Hricko, Andrea, "Environmental Problems behind the Great Wall," Environmental Health Perspectives 102 (no. 2, February, 1994):154-159. China's two most serious problems are air pollution and water pollution; it is difficult for most Chinese to escape the adverse effects of pollution, judged for better or worse to be an acceptable cost of progress. An official report says, "As a developing country, China must unswervingly give first priority to her national economic development. ... Environmental protection ... must serve the purpose of promoting economic progress and improving the quality of life."

Hsu, Minna J., Agoramorthy, Govin. "Wildlife Conservation in Taiwan," Conservation Biology 11(no.4, 1997):834. (v8,#3)

Huan Aibao, "Environmental ethic: scientific rationality challenging value rationality", Journal of Nanjing Industry University 2002(1)

Huan Aibao, "Natural value and environmental ethics", Studies in Dialectics of Nature, 2002(8)

Huan Ming, "Christianity and environmental ethics", Academic Journal of Xhejiang, 2003(1)

Huan Yuanping, "The theoretical foundation of deep eco-ethics", Academic Journal of Zhongzhou, 2002(5)

Huang, H., et al., "Conserving Native Plants in China," Science 297 (9 August 2002):935. Too many people means most of the emphasis will need to be on conserving plants ex situ, in botanical gardens. Some 500 endangered species may survive only in gardens. The proposal is to increase the number of species preserved in gardens from about 13,000 species to about 21,000 species. (v.13, #3)

Huanjing yu Shehui (Environment and Society), published by the Chinese Society for Environmental

Ethics: Volume 2, no. 2, June 1999, contains: (all in Chinese)

--Yang Tongjin, "Anthropocentrism and Non-anthropocentrism: Differences, Consensus, and a Synthesis"

--Liu Er, "The Theoretical Difficulties of Non-anthropocentric Ecological Ethics and Some Possible Solutions"

--Zhang Yunfei, "Ecologically Sound Directions for Technological Revolution"

--Ju Xi, "Some Reflections on Rolston's Axiology." Ju Xi is an independent Taoist scholar, a hermit, Luishihe, Fusong county, Jilin Province, China.

--Zhang Baiyan & Wang Youren, "The Theoretical Foundations of Policies and Laws for Forest Tourism"

Yi Baoli, "Sadness and Joy for Halahai: A Report from the Songhua-Nen River Plain"

--Guo Zhenwei & Gou Chunlei, "Experts Call for the Establishment of a Nature Reserve at the Halahai Wetland"

--Rolston, Holmes, III, "Environmental Protection and an Equitable International Order: Ethics after the Earth Summit" (trans. by Li Shili)

--Melle, Ullrich, "How Deep Is Deep Enough?: Ecological Modernization or Farewell to the World-City? (Part 2)" (trans. by Huang Yingna). (v10,#4)

Huanjing yu Shehui (Environment and Society), published by the Chinese Society for Environmental Ethics: Volume 2, no. 4, December 1999, contains: (all in Chinese)

Special Topic: Greening Higher Education (continued):

--Wang Dazhong, "Carrying Out the "Green University" Project and Meeting the Challenges of the 21st Century"

--Hu Xianzhang & Wang Fengnian, "Environmental Education for Sustainable Development"

Zhou Shaoqi, "Emphasizing the Ecological Conscience in Greening Higher Education"

--Xu Qixian & Li Yin, "Ethical Considerations in Developing Scenic Sites for Tourism"

--Tang Kuiyu & Fu Qianqian, "Dietary Life-Styles and Ecological Ethics"

--Hong Rongxi, "Humanization of Science and Technology and the Establishment of Environmental Ethics"

--Li Changsheng, Han Jing & Ding Xi, "Trends in Ecological Economics in the 21st Century"

--Center for the Study of Environment and Society Investigation Team, "The General Report from an Investigation Tour to the Halahai Wetland"

--Rolston, Holmes, III, "Lake Solitude: The Individual in Wilderness" (translated by Liu Er) (v10,#4)

Huanjing yu Shehui (Environment and Society) is a journal recently launched by the Harbin Institute Center for Environment and Development and the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. The first issue was out just in time for the conference, vol. 1, no. 1, October 1998. Sample articles: Yu Mouchang, "Trends in the Global Environment Calls for an Environmental Ethic"; Liu Guocheng, "Ecological Ethics Views in Ancient China"; Ye Ping, "Knowledge Economy and Sustainable Development"; and several articles responding to recent floods on the Nen and Songhua Rivers, August 1998. Also a translation of Holmes Rolston, "Ziran zhong de jiashi shi zhuguande haishi keguande? (Are Values in Nature Subjective or Objective?)" and of John S. Dryzek, "Industrial Society and Beyond: Ecological Modernization" (from The Politics of the Earth). Another recent translation is Rolston, "Zun xun da zi ran (Following Nature)" in Zhexue Yicong (Philosophy Translation Series), no. 4, 1998, pp. 36-42 (Chinese Academy of Social Sciences, Institute of Philosophy, Beijing), a translation of "Can and Ought We to Follow Nature?" (v.9,#4)

Huanjing yu Shehui (Environment and Society), published by the Chinese Society for Environmental Ethics: Volume 2, no. 3, September 1999, contains: (all in Chinese)

--Special Topic: Greening Higher Education

--Preparatory Committee of the Chinese Society for Green Higher Education, "Comments on the 'International Conference on Greening Higher Education,'" (1)

--A Summary of the "International Conference on Greening Higher Education"

--The Great Wall Declaration--An Agenda for the "Greening Higher Education in China" Project

--Wu Minsheng, "Green Education at Qinghua University"

--Yang Tao, "Turn Engineering Universities 'Green'"

--Jin Chaohui, "Make Green Education an Important Part of the College Experience"

--Jia Jinping & Wu Dan, "From Environmental Protection to Sustainable Development"

--Chen Jun & Bai Jie-hong, "Strengthen Green Education and Train High Quality Talents"

--Ma Guangyi, "Environmental Education: The Groundwork for Environmental Protection"

--Zhang Cong, "Envisioning the Greening of Agricultural Colleges and Universities"

--Ma Huidi & Cheng Sumei, "Free Time and Freedom"

--Turner, Frederick, "The Invented Landscape," (trans. by Xie Baojun) (v10,#4)

Huanjing yu Shehui (Environment and Society), published by the Chinese Society for Environmental Ethics: Volume 2, no. 1, February, 1999, contains: (all in Chinese)

--Ye Ping, "A History of Environmental Theories"

--Yu Mouchang, "Environmental Morality in the Relation between Man and Nature"

--Dai Maotang, "The Blending of Idealism and Illusion: A Critique of Western Ecological Ethics"

--Liu Guocheng, "Ecological Ethical Views in Ancient China (Part 2)"

--Zhang Baiyan & Zhang Pengcheng, "U.S. Legislation in Forestry and Tourism: History and the Current Situation"

--Piao Xiwan & Wang Zhiguo, "On Policy Options of Heilongjiang Province in Developing Green Food Industry"

--Zhang Ye & Yi Baoli, "A Jewel of the City that Urgently Needs Our Protection: A Report on Northeast Forestry University's Forest for Experimental Use in the City of Harbin"

--Melle, Ullrich, "How Deep Is Deep Enough?: Ecological Modernization or Farewell to the World-City? (Part 1)", (trans. by Huang Yingna)

--Rolston, Holmes, III, "Are Values in Nature Subjective or Objective? (Part 2), (trans. by Ye Ping & Liu Er). (v10,#4)

Hubbell, John G. "Animal Rights War on Medicine," Readers Digest, June 1990. The article claims that extremists are crippling vital medical research that promises to save millions of lives. One of the "extremists" cited is Tom Regan, for his endorsing of civil disobedience on behalf of animal rights. The same issue contains an article, "Simple Ways You Can Help Save the Earth," adapted from 50 Simple Things You Can Do To Save the Earth. Reader's Digest claims to be the world's most widely read magazine, selling 28 million copies in 15 languages monthly. (v1,#2)

Huber, Peter, Hard Green, Chinese translation, translator: Dai Xingyi and Xu Liqing. Publisher: Shanghai Translation Publishing House, 2002.

Huber, W 1988. Justice, peace and the integrity of creation. A challenge for ecumenical theology. Scriptura 24, 1-16. (Africa)

Huber, Wolfgang, "Rights of Nature or Dignity of Nature?" The Annual of the Society of Christian Ethics, 1991, pp. 43-60. The dignity of nature is a better category for the valuation and protection of nature than is the rights of nature; it is also a better category than that of intrinsic value. Huber is profes-

sor of theology at the University of Heidelberg (v3,#4)

Hudson, R., "Region and place: devolved regional government and regional economic success?" Progress in Human Geography 29(no. 5, 2005): 618-625.

Hudson, Ray, "Conceptualizing economies and their geographies: spaces, flows and circuits", Progress in Human Geography 28(no.4, 1 August 2004):447-471(25).

Hudson, SJ, "Challenges for Environmental Education: Issues and Ideas for the 21st Century," Bioscience 51(no.4, 2001):283-288. (v.12,#4)

Hudson, Wendy E., ed., Landscape Linkages and Biodiversity. Covelo, CA: Island Press, 1991. \$ 34.95 cloth, \$ 19.95 paper. The need for protecting large areas and connecting these with corridors. The interaction of ecology at the landscape level and the conservation of biodiversity. (v2,#3)

Hudspeth, Jr., Joe Mac. In the Southern Wild. University, MS: University of Mississippi Press, 2003. The incredible beauty and the plight of ecosystems within wetlands in the U.S. South.

Huemer, Ariana, "Scapegoats and Underdogs: The Pit Bull Dilemma." The Animals' Agenda 20(no. 4, Jul. 1, 2000):30- . Examines whether efforts to restrict certain dogs are based on fact or fear. (v.12,#2)

Huff, Alyson Elizabeth, An Ethical Defense of Vegetarianism. M.A. thesis, Colorado State University, 2005. The vegetarian lifestyle characterized in three different ways: a pseudo vegetarian, a practical vegetarian, and an ethically motivated vegetarian, with particularly analysis of the ethically motivated vegetarian. Major philosophical theories that support, and reject, vegetarianism are examined for their credibility and relevance. Real life implications of vegetarian actions, intentions of the actors, potential consequences. Actual social sentiment is appraised and compared to the ethically motivated vegetarians' ultimate goals. A possible solution to reducing animal suffering, as our moral obligation, is proposed. The advisor was Bernard Rollin.

Huffman, James L., "Land Ownership and Environmental Regulation," Ecology Law Quarterly 25(No.4, 1999):591-. (v.10,#2)

Huffman, MA, "Self-Medicative Behavior in the African Great Apes: An Evolutionary Perspective into the Origins of Human Traditional Medicine," Bioscience 51(no. 8, 2001):651-662. (v.13,#1)

Huges, Willaim. Review of Time Hayward and John O'Neill, eds. Justice, Property and the Environment: Social and Legal Perspectives, Journal of Agricultural and Environmental Ethics 11(1999):249-252. (JAEE)

Huggett, Richard. Environmental Change. A review by Lorne Bennett, Journal of Agricultural and Environmental Ethics 11(1999):151-154. (JAEE)

Hughes, Charles J., "Gaia: A Natural Scientist's Ethic for the Future." The Ecologist Vol. 15, no. 3 (1985):92-95. An earth scientist examines some of the implications of Jim Lovelock's "Gaia Hypothesis," that the entire earth is one living organism. Hughes cautions against an overly optimistic reading of the hypothesis, in particular, the implied teleological assumptions about the activities of the component parts of the Gaia organism. (Katz, Bibl # 1)

Hughes, Harry R. "The Cleanup of the Chesapeake Bay: A Test of Political Will", Natural Resources & Environment 11(no.2, 1996):30. (v7,#4)

Hughes, J. Donald. Review of Mountains without Handrails: Reflections on the National Parks. By Joseph L. Sax. Environmental Ethics 4(1982):369-71.

Hughes, J. Donald, "Francis of Assisi and the Diversity of Creation," Environmental Ethics 18(1996):311-320. Francis' s view of nature has been seen as positive in an ecological sense even by those who are for the most part critical of Christianity's attitude to nature, such as Lynn White, Jr. I argue that one element of Francis's uniqueness was that he saw the diversity of life as an expression of God's creativity and benevolence and attempted to carry out that vision in ethical behavior. Much of what has been written about him has precedents in traditional hagiography, but there remains an unmistakable impression of originality. It has been noted that Francis insisted on the goodness of creation, used terms of family relationship to refer to creatures other than human, and preached to them. However, another element has escaped notice: his emphasis on the presence of God in the diversity of created entities and his desire that humans should rejoice in this diversity and glorify God for it and with it. His devotion did not immediately dissolve multiplicity into oneness, but glorified God in each created being and delighted in their individuality. He advocated that praise be expressed by acting in ways consistent with respect for created diversity, not only by observing a strict rule of abstaining from harm to living beings, but also in positive treatment of all creatures. Nature took its meaning not from its serviceability to mankind, but from its expression of the multiple forms of God's benevolent presence. Hughes is in history, University of Denver, Colorado. (EE)

Hughes, J. Donald. "The Environmental Ethics of the Pythagoreans." Environmental Ethics 2(1980):195-213. Two conflicting tendencies may be discerned in Pythagorean ethics as applied to the environment: on the one hand, a sense of reverence for nature and kinship with all life that opposed killing and other forms of interference in the natural world, and on the other hand, a doctrine of the separability of soul and body which denigrates the body and the external world of which it is a part. The prescriptive content of Pythagorean ethics includes prohibitions against taking life, even in sacrifices to the gods, and against eating anything that has been killed. Pollution of certain kinds is forbidden. These strictures were based on an organic, cyclical view of the world, emphasizing its harmony and balance. The Pythagoreans investigated some questions that would today be called ecological. Perhaps most importantly, they evinced a genuine respect for living things, deriving in part from the belief that animals and plants contain the reborn souls of human beings. These doctrines may have been derived from the attitudes and practices of ancestral hunters and gatherers in southeast Europe, with traditional Greek religion serving as the means of transmission from tribal cultures to classical philosophy. The followers of Pythagoras split into two schools: a "scientific" school that neglected biology and therefore ecology, and a "religious" school that emphasized purity of soul and rejected any concern with physical nature. The more "environmentalist" teachings were gradually abandoned as the Pythagoreans accommodated themselves to the general attitudes of Greco-Roman culture. For instance, the objections to animal sacrifice, and to most plants as food, were dropped. The divorce of body and soul in later Pythagorean thought, wherever its influence was strong, brought with it indifference not only to the body, but to all the rest of the natural environment. Hughes is in the department of history, University of Denver, Denver, CO. (EE)

Hughes, J. Donald, Pan's Travail: Environmental Problems of the Ancient Greeks and Romans. Baltimore: The Johns Hopkins University Press, 1994. \$ 39.95 hardcover. Many think an environmental crisis is a modern crisis. But an examination of the evidence shows that the Greeks and Romans not only suffered from some of the same predicaments that plague us, but in many cases they were aware of them and commented on them. Deforestation, overgrazing, erosion, depletion of wildlife and natural resources, pollution, urban problems such as water supply and sewage disposal. Hughes teaches environmental history at the University of Denver. (v5,#2)

Hughes, J. Donald, "Ecology and Development as Narrative Themes of World History," Environmental History Review 19 (1995): 1-16. The story line, or organizing principle, of virtually everything that aspires to be world history in recent times is "development," as revealed by a survey of textbooks, but this is an inadequate principle. The new narrative of world history must have ecological process as its major theme. It must keep human events within the context where they really happen, and that is the ecosystem of the Earth. Hughes teaches history at the University of Denver. (v6,#2)

Hughes, J. Donald. *What is Environmental History?* Cambridge: Polity Press, 2006.

Hughes, JD, "Review of: John F. Richards. The Unending Frontier: An Environmental History of the Early Modern World" Environmental History 9 (no.1, 2004): 132-135.

Hughes, Jennifer B., Gretchen C. Daily, and Paul R. Ehrlich, "Conservation of Insect Diversity: A Habitat Approach," Conservation Biology 14(no.6, 2000 Dec 01): 1788-. (v.12,#3)

Hughes, Joanna, Wood, Christopher. "Formal and Informal Environmental Assessment Reports: Their Role in UK Planning Decisions." Land Use Policy 13(Apr.1996):101. (v7,#2)

Hughes, Jonathan. Ecology and Historical Materialism. Reviewed in Environmental Ethics 25(2003):109-110. (EE)

Hughes, Michael, and Angus Morrison-Saunders, "Visitor Attitudes Toward a Modified Natural Attraction," Society and Natural Resources 16(2003):191-303. A survey of visitors to the "Top Tree Walk," a developed Forest attraction in giant trees in Western Australia. Does the constructed tree walk interfere with the natural experience? Yes and no, often depending on how regular visitors are. Hughes is in the College of Business, University of Notre Dame, Fremantle, Australia. Morrison-Saunders is in the Division of Science and Engineering, Murdoch University, Murdoch, Western Australia.

Hughes, Thomas P., Human-Built World: How to Think about Technology and Culture. Chicago: University of Chicago Press, 2004. Technology as a means for transforming a wilderness into a human-built world and as a machine for the production of goods. Agriculture, industry, and, explosively, the information age for more managerial power. But not without much wondering whether there are losses in sensitivity to the natural world that offset gains in material prosperity. The concluding chapter is "Creating an Ecotechnological Environment." "Technologically empowered, we have reason to doubt our values and competence as creators of the human-built world and as stewards of the remaining natural world. ... More ecologically sensitive and technologically empowered today, we should ask engineers, architects, and environmental scientists to negotiate with one another as they design and construct the ecotechnological environment" (p. 153). Hughes is emeritus in history and sociology of science, University of Pennsylvania and is currently at Massachusetts Institute of Technology. (v.14, #4)

Hughes, William, Review of Elizabeth Teifer, Food for Thought: Philosophy and Food. London and New York: Routledge, 1996. Journal of Agricultural and Environmental Ethics 11(1998):55-58.

Hughes, William. Review of Elizabeth Telfer, Food for Thought: Philosophy and Food, Journal of Agricultural and Environmental Ethics 11(1999):55-58. (JAEE)

Hughey, KFD; Cullen, R, Moran, E, "Integrating Economics into Priority Setting and Evaluation in Conservation Management", Conservation Biology 17(no.1, 2003):93-103.

Hukkinen, Janne, Review of Elinor Ostrom, *Understanding Institutional Diversity*, Environmental Values 16(2007):129-132.

Hull, Carrie L. "When Something is to be Done: Proof of Environmental Harm and the Philosophical Tradition." Environmental Values 8(1999):3-25. ABSTRACT: This paper is centred around a debate taking place among environmental scientists. One camp argues that proof of a causal connection between a chemical and a biological anomaly must be demonstrated in the laboratory. The other contends that actual damage is underestimated in the lab, and that it is therefore necessary to conduct supplemental ecoepidemiological research in order to determine the full impact of toxic chemicals. Members of the former contingent - claiming to be defending scientific rigour - sometimes accuse their peers of practising an inferior science. This paper argues that this contention is supported by a philosophical tradition tending to favour abstract and formal analysis over the close examination of material detail. To the extent that this preference has been adopted by the media, industry, policy analysts, and regulatory bodies, more is at stake than an intellectual squabble. The paper provides a brief overview of the history of the formalist tendency in philosophy, followed by an illustration of the ways in which advocates of a strict laboratory methodology implicitly rely on this foundation. The work and ideas of contemporary ecoepidemiologists are then compared to this imposing edifice of traditional science. KEYWORDS: Philosophy of science, epidemiology, environment, pollution, mathematics. Carrie L. Hull is at Department of Political Science University of Toronto 100 St. George Street, Toronto, Ontario M5S 3G3, Canada e-mail: carrhull@chass.utoronto.ca (EV)

Hull, David L. Review of On Human Nature. By Edward O. Wilson. Environmental Ethics 2(1980):81-88.

Hull, Fritz, ed, Earth and Spirit: The Spiritual Dimension of the Environmental Crisis. New York: Cassell/Continuum, 1993. 228 pages. (v.9,#4)

Hull, R., and G. Revell. "Cross-Cultural Comparison of Landscape Scenic Beauty Evaluations: A Case Study in Bali," Journal of Environmental Psychology 9(1989):177-191. (v.8,#4)

Hull, R. Bruce, Robertson, David P., and Kendra, Angelina, "What Are We Hiding Behind the Visual Buffer Strip? Forest Aesthetics Reconsidered," Journal of Forestry 98 (No. 7, 2000 July 01): 34- . Current aesthetic policies hide the practice of forestry, suggesting that these practices are bad for the land. We need to take a leadership role in shaping public tastes. (v.11,#4)

Hull, R. Bruce, Gobster, Paul H., "Restoring Forest Ecosystems: The Human Dimension," Journal of Forestry 98(no. 8, Aug. 1, 2000):32- . Lessons from the social sciences and humanities can help successfully plan and implement restoration projects. (v.12,#2)

Hull, R., and W. Stewart. "Validity of Photo-Based Scenic Beauty Judgments," Journal of Environmental Psychology 12(1992):101-114. (v.8,#4)

Hull, R. Bruce Robertson, David P. Kendra, Angelina, "Public Understandings of Nature: A Case Study of Local Knowledge About 'Natural' Forest Conditions," Society & Natural Resources 14(no.4, APR 01 2001):325-. (v.12,#4)

Hull, R. Bruce, David Richert, Erin Seekamp, David Robertson, and Gregory J. Buhoff. "Understandings of Environmental Quality: Ambiguities and Values Held by Environmental Professionals," Environmental Management 31(no. 1, 2003):1-13. Analysis of the values held by environmental professionals, revealing many kinds of values, and some ambiguity about them. Definition and management of environmental quality, biocentric, ecocentric, utilitarian, aesthetic, and spiritual values. The authors are quite familiar with and often cite environmental philosophers. This was a research project of the USDA Forest Service North Central Experiment Station. Well worth reading for

philosophers. The authors are in the College of Natural Resources, Virginia Polytechnic Institute and State University, Blacksburg.

Hull, R.B. *Infinite Nature*. Chicago: University of Chicago Press, 2006. Much of the failure to make significant progress in environmental protection in recent years can be attributed to the fundamentalism of environmental activists who each see nature from one particular perspective and deny the validity of all other points of view. But there is no single nature. Rather, there is a multiplicity of natures, an infinite number of them depending on how each of us views the world (Thoreau, Jefferson, Muir, Pinchot, Leopold, Native Americans, Jared Diamond, and on and on). We ought to embrace this plurality of ways in which nature can be “constructed.” A pragmatic pluralism will dissolve the polarization between the different factions of fundamentalist environmentalists. Within this pluralism a general theme is that humans should not be seen as separate from nature. We part of nature even when we attempt to dominate it.

Hull, Robert, "All about Eve: A Report on Environmental Virtue Ethics," Ethics and the Environment 10(no. 1, 2005):89-110. I examine and assess an important developing trend in environmental ethics, environmental virtue ethics. I begin by providing a thorough survey of influential and representative contributions to environmental virtue ethics. Along with explaining these contributions to environmental virtue ethics I discuss their various strengths and weaknesses. In the second section I explain what I believe an environmental virtue ethic needs to do to complement other perspectives in environmental ethics. Then, using the best aspects of previously published work along with some additional argument and analysis, I provide a concise portrait of an environmental virtue ethic that combines the advantages of Aristotelian virtue theory with the insights of contemporary environmental ethics. The environmental virtue ethic that emerges from this analysis and discussion is primarily a philosophical praxis. It provides a model of living well in which an understanding of and a concern for the environment human is constitutive of human flourishing. As a praxis this environmental virtue ethic articulates an account of human flourishing with a view to suggesting how a person can improve her own life by working to preserve wild nature. Hull is in philosophy, West Virginia Wesleyan College. (Eth&Env)

Hulley, LD 1991. Justice, peace and the integrity of creation. Some ethical comments. *Missionalia* 19:2, 131-143. (Africa)

Hulme, Mike. “The Conquering of Climate: Discourses of Fear and Their Dissolution.” *The Geographical Journal* Vol. 174, no. 1 (2008): 5-16. Much of the public discourse of global climate change includes fear-like words such as “catastrophe” and “collapse.” To help make sense of this language, Hulme discusses several earlier European discourses of fear associated with climate to glean ways in which these discourses form and dissolve within a specific cultural matrix. Today’s cultural matrix includes conventional, utopian, and brash attempts to conquer climate change by relying upon ideas of mastering, controlling, and engineering future climate.

Hulse, David, and Ribe, Robert, "Land Conversion and the Production of Wealth," Ecological Applications 10(no. 3, 2000):679-682. Values associated with land conservation and development are typically couched in seemingly scientific terms, often those of ecology, but such value judgments are more normative than appears in the quasi-scientific vocabulary. Providing the theoretical and empirical basis for appropriate marginal evaluations of ecological worth may require considerable advances in ecological science and in environmental philosophy. The authors are in landscape architecture and sustainable development, University of Oregon, Eugene.

Human Dimensions of Wildlife has published its first issue, Spring 1996. Vol. 1, no. 1, contains articles such as: Alan D. Bright and Michael J. Manfredro, "A Conceptual Model of Attitudes toward Natural Resource Issues: A Case Study of Wolf Reintroduction"; Bonita L. MacFarlane, "Socialization Influences

of Specialization Among Birdwatchers"; Daniel J. Decker et al., "From Clients to Stakeholders: A Philosophical Shift for Fish and Wildlife Management"; Thomas A. Heberlein and Elizabeth Thomson, "Changes in U.S. Hunting Participation, 1980-1990." Papers and subscriptions are invited. The editors are Michael J. Manfredi and Jerry J. Vaske, both of Colorado State University. Address: Human Dimensions in Natural Resources Unit, Department of Natural Resource Recreation and Tourism, Colorado State University, Fort Collins, CO 80523. Phone 970/491-2077. Fax 970/491-3394. (v7,#2)

Human Dimensions in Wildlife Newsletter is a brief (6-page) newsletter, now in its thirteenth year, compiled by the Human Dimensions in Wildlife Study Group. \$ 10.00 per year. Subscriptions to: Dr. David H. Thorne, Missouri Department of Conservation, P. O. Box 180, 2901 W. Truman Blvd., Jefferson City, MO 65109. Submissions to: Dr. James B. Armstrong, Editor, 331 Funchess Hall, Department of Zoology and Wildlife Science, Auburn University, Auburn, AL 36849. Phone 205/844-9233. (v5,#1)

Human Dimensions in Wildlife Newsletter. The quarterly publication of the Human Dimensions in Wildlife Study Group. Short articles, news, notes, events, issues, positions available in the humanistic dimensions of encountering, appreciating, managing wildlife. Contact Dr. Ted Cable, editor, Department of Forestry, Kansas State University, Manhattan, KS 66506. Membership is \$ 10 per year, \$ 5 for students; membership dues to Dr. Perry Brown, College of Forestry, Oregon State University, Corvallis, Oregon 97331-5703. (v1,#2)

Human Genetics Advisory Commission and Human Fertilisation and Embryology Authority (of the United Kingdom), Cloning Issues in Reproduction, Science and Medicine. London: Human Genetics Advisory Commission and Human Fertilisation and Embryology Authority, January 1998. An official UK government document. The Commission consists of scientists and one philosopher (Onora O'Neill). Sets out the issues quite well. The document may be found at the HGAC webpage: <http://www.dti.gov.uk/hgac>. Hard copies may be obtained from the Office of Science and Technology (Department of Trade and Industry), Albury House, 94-98 Petty France, London SW1H 9ST or via: chris.hepworth@osct.dti.gov.uk. There is also a mail list on human cloning: clone@mailbase.ac.uk

Humanity Must Protect Nature, booklet on what Islam, Taoism, Hinduism, and Christianity have to say about environmental protection. Third World Science Movement, Consumers Association of Penang, 87 Cantonment Road, 10250 Penang, Malaysia. (v1,#2)

Humbach, John A., "Law and a New Land Ethic," Minnesota Law Review 74(1989):339- . (v7,#2)
Hume, Bill, "Water in the U.S.-Mexico Border Area," Natural Resources Journal 40(no. 2, Spring 2000):189- . (v.12,#2)

Hume, Bill. "Big River, Big Issues." Natural Resources Journal 39(No. 1, Winter 1999):17- . The Rio Grande/Rio Bravo. (v10,#4)

Humphrey, C., "A Review of: Smil, Vaclav. Energy at the Crossroads: Global Perspectives and Uncertainties," Society and Natural Resources 18(no. 8, September 2005): 769-772.

Humphrey, C. R., "Review of: Machlis, Gary E. and Donald R. Field. National Parks and Rural Development: Practice and Policy in the United States," Society and Natural Resources 15(no.1, 2002): 95-97. (v.13,#2)

Humphrey, Caroline, and David Sneath, eds., Culture and Environment in Inner Asia. vol. 1: The Pastoral Economy and the Environment. 200 pages. £ 16.95. vol. 2: Society and Culture. 200 pages. £ 14.95. Cambridge, U.K.: White Horse Press, 1996. Vol. 1: Pastoralism has shaped the steppe

environment for two thousand years; the effects of Russian, Mongolian, and Chinese governance, by scholars from different sides of the international borders. Vol. 2: The enormous social changes which the region has experienced in recent years due to the advent of democracy in Russia and economic reforms in China. The steppe environment is not pristine nature, but natural processes are intermeshed with the distinctive, often religious, attitudes of the pastoral people. The authors are in social anthropology at Cambridge University. (v6,#4)

Humphrey, Caroline, and Sneath, David, eds. Culture and Environment in Inner Asia. Cambridge, UK: White Horse Press, 1996. In two volumes. Vol.1: The Pastoral Economy and the Environment. Vol.2: Society and Culture. Inner Asia is divided between Russian, Mongolian, and Chinese administration. Vast areas of steppeland are now subject to pasture degradation. Pastoralism has shaped the steppe environment and been the basis of the indigenous economy for more than two thousand years. Enormous social changes in recent years due to the advent of democracy in Russia and economic reforms in China. Humphrey has done anthropological research in Mongolia, Buryatia, Tuva, and Inner Mongolia and is Reader in Asian Anthropology at the University of Cambridge. Sneath is a British Academy Postdoctoral Fellow at the department of Social Anthropology, University of Cambridge. (v9,#1)

Humphrey, Caroline and Sneath, David, eds., Culture and Environment in Inner Asia. Vol. 1. The Pastoral Economy and the Environment. Vol. 2. Society and Culture. Cambridge, UK: Whitehorse Press, 1996. (v.10,#1)

Humphrey, Caroline and Sneath, David, The End of Nomadism: Society, State and the Environment in Inner Asia. Cambridge, UK: Whitehorse Press, 1999. The vast steppe regions of Inner Asia, although divided by political boundaries, is historically dominated by Mongol culture, Buddhist shamanist religion and an economy phased on mobile pastoralism. Now, as its constituent states--China, Russia and Mongolia--adapt to market conditions, this long-standing cultural-economic zone faces more radical change than at any age in its past. In most areas, the result has been a steep decline in herd mobility, often accompanied by degradation of pasture land. Humphrey is a social anthropologist at Cambridge University. Sneath is a lecturer at Oxford University. (v.10,#1)

Humphrey, CR, "Review of: Dubash, Navroz K., ed. Power Politics: Equity and Environment in Electricity Reform," Society and Natural Resources 16(no.9, 2003):847-849. (v.14, #4)

Humphrey, Mathew I. "Deep Ecology and the Irrelevance of Morality: A Response." Environmental Ethics 21(1999):75-79. In his article "Deep Ecology and the Irrelevance of Morality," Eric H. Reitan contends that, contrary to the disavowals of Fox and Naess, the "ecosophy T" concept of "Self-realization" constitutes a precondition of morality according to a "robust" Kantian moral framework. I suggest that there is a significant problem involved in rendering Self-realization compatible with a Kantian moral framework. This problem of ontological priority demonstrates that Naess and Fox are in fact correct in their assertion that Self-realization is a nonmoral phenomenon. (EE)

Humphrey, Mathew, Preservation Versus the People. Oxford: Oxford University Press, 2002. Why should any society decide to devote scarce resources, as a matter of public policy, to preserving natural objects? "Much of the work in contemporary ecological political philosophy 'frames' the problem of preservation in such a way that leads ecological political philosophers to become divisive and conflictual. I will suggest that ecological political philosophers need to move away from framing the problems they address in terms of ecocentrism and anthropocentrism ... and should instead accept the ineliminable contingency of political argument" (pp. 1-2).

Thinking in environmental ethics has been dominated by the "ecocentric / anthropocentric" distinction. Answers focus on either "intrinsic values in nature" or on the human welfare benefits that will accrue from preservationist policies. These two answers are generally taken to be mutually

exclusive. Ecocentrists think to transcend anthropocentrism. The ecological humanists think the ecocentrists are guilty of misanthropy. Humphrey proposes a "conceptual morphology" of "ecocentrism, social ecology, and eco-Marxism" and "this opens the way for a new substantive position with respect to the ecocentric/humanist axis in environmental ethics" (p. 8). "What I have tried to show is that there are a rich array of arguments from human interest embedded in ecocentric discourse, and also to show that arguments independent of human interest can be made from the humanist side of the ontological divide" (pp. 194-195). Humphrey is in philosophy, University of Nottingham, UK.

Humphrey, Matthew, Preservation versus the People? Nature, Humanity, and Political Philosophy. Oxford: Oxford University Press, 2002. Humphrey sets forth the best human-interest position he can find to support preservation. Humphrey questions the dichotomy between ecocentric and anthropocentric positions. Just about all ecocentric claims do in fact require including some human interests, if only the long term human interests in a healthy and congenial biosphere, or some deep ecology self-realisation, or simply the realisation that humans alone are in a position to appreciate intrinsic value. He puts forth a core principle of the "strong irreplaceability" for environmental ethics to be concerned with nature preservation. This principle emphasises the value of the authenticity of particular natural environments to specific groups of humans, so it is "clearly an argument based on human interests" (p.191. Human interests are deeply embedded in ecological integrity. Reviewed by John S. Dryzek, Environmental Values 13(2004):125-126. (EV)

Humphrey, Matthew, Review of deShalit (de-Shalit), Avner, The Environment between Theory and Practice. Oxford: Oxford University Press, 2000. Environmental Values 12(2003):134-136. (EV)

Humphrey, Matthew, "Nature in Deep Ecology and Social Ecology: Contesting the Core," Journal of Political Ideologies 5(no. 2, 2000):247-268. Humphrey is in philosophy, University of Nottingham, UK.

Humphrey, Matthew, *Ecological Politics and Democratic Theory.* Reviewed by Bob Pepperman Taylor, Environmental Values 16(2007):399-401.

Humphrey, Peter, "The Ethics of Earthworks," Environmental Ethics 7(1985):5-21. Humphrey criticizes the creation of artistic "earthworks" such as "Running Fence" by Christo from the perspective of environmental ethics. If nature has intrinsic value, the earthwork cannot improve this value; it creates a new object with a different value. If, on the other hand, earthworks are instrumentally valuable, it is doubtful that their benefits outweigh the costs. (Katz, Bibl # 1)

Humphrey, Peter. "The Ethics of Earthworks." Environmental Ethics 7(1985):5-21. Use of the environment for industrial purposes has long been the object of moral criticism. What about use of the environment for the purpose of making art? Is this, too, subject to ethical questioning? I show that earthworks, even though they are artworks, are not free from such criticism. I then examine defenses of them which either have been offered by earthworks artists or are plausible claims. Problems with these defenses show that earthworks are at least not obviously ethical. Humphrey is an undergraduate student at the University of Colorado, Boulder, CO. (EE)

Humphreys, Brian. "California Island Quagmire: Shape Up and Sheep Out." The Christian Science Monitor, vol. 89, 3 Dec. 1996, p. 14.

Humphreys, David. "The Global Politics of Forest Conservation Since the UNCED", Environmental Politics 5(no.2, 1996):231. (v7,#4)

Humphreys, David. "The Report of the Intergovernmental Panel on Forests." Environmental Politics 7(no.1, Spring 1998):214- . (v10,#4)

Humphries, CJ, "Captivating Life: A Naturalist in the Age of Genetics", Biological Conservation 111(no.2, 2003):275-276.

Humphries, George, North Carolina: Images of Wildness Englewood, Colorado: Westcliffe Publishers, 1993. Photographs and some interpretive texts of North Carolina in the wild. Humphries is an Asheville, NC, photographer. (v.9,#3)

Humphries Jr., William C., "Mixing Ethics and Management: A Crisis in Our Profession," Journal of Forestry 98 (No. 7, 2000 July 01): 31- . Including the "land ethic" in the SAF Code of Ethics creates confusion and weakens the integrity of the code. (v.11,#4)

Hunold, C, "Nuclear Waste in Germany: Environmentalists Between State and Society," Environmental Politics 10(no, 3, 2001):127-133. (v.13,#1)

Hunold, Christian. Review of Frank Fischer, "Citizens, Experts and the Environment: The Politics of Local Knowledge", Organization and Environment 14 (No. 1, March 2002) pp.97-99. Hunold is in political science at Drexel University, specializing in environmental politics and democratic theory. (v.13,#2)

Hunold, Christian. Review of Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War. By John H. Perkins. Environmental Ethics 22(2000):195-197.

Hunt, L. and Haider, W., "Fair and Effective Decision Making in Forest Management Planning," Society and Natural Resources 14(no.10, 2001): 873-88. (v.13,#2)

Hunt Mary E., "Eco-News: A Shared Garden (11): Cross-Cultural Challenges to Ecofeminist Work in Religion," Ecotheology No 5/6 (Jul 98 / Jan 99):219-225.

Hunt, Nicholas, Being and Everythingness? Aspects of Freedom and Identity in the Thought of Sartre and Others, With Reference to 'Environmental Ethics', Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Hunt, Nicholas, Being and Everythingness? Aspects of Freedom and Identity in the Thought of Sartre and Others, With Reference to 'Environmental Ethics', Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Hunt, Nick, Review of Peter Dickens, Reconstructing Nature: Alienation, Emancipation and the Division of Labour. Environmental Values 7(1998):247.

Hunt, Steven. "Wildlife's Best Neighbor," Alternatives 22(no.1, Jan.1996):8- . (v6,#4)

Hunt, W. Murray. "Are Mere Things Morally Considerable?" Environmental Ethics 2(1980):59-65. Kenneth Goodpaster has criticized ethicists like Feinberg and Frankena for too narrowly circumscribing the range of moral considerability, urging instead that "nothing short of the condition of being alive" is a satisfactory criterion. Goodpaster overlooks at least one crucial objection: that his own "condition of being alive" may also be too narrow a criterion of moral considerability, since "being in existence" is at least as plausible and nonarbitrary a criterion as is Goodpaster's. I show that each of the arguments that Goodpaster musters in support of his criterion can be used equally well to bolster "being in existence" as a test of moral considerability. Moreover, I argue that "being in existence" appears to be a stronger criterion overall, since it is broader. Until or unless a fuller justification is forthcoming of "being alive" as a satisfactory criterion of moral considerability--a justification which must demonstrate that "mere

things," included under the condition of "being in existence," do not deserve moral consideration-- Goodpaster's thesis is confronted with a serious problem. Hunt is in the department of Philosophy and Religion, Susquehanna University, Selinsgrove, PA. (EE)

Hunter, David, Julia Sommer, and Scott Vaughan, Concepts and Principles of International Environmental Law: An Introduction. Geneva: United Nations Environment Programme, 1994. Paper no. 2 in the Environment and Trade series. 51 pages. Paper. The international law of sustainable development; the duty to cooperate; the duty to avoid environmental harm; the duty to compensate for harm; legal status of natural resources and common areas. Contact: UNEP, Trade and Environment Unit, Palais de Nations, CH-1211, Geneva, Switzerland. (v5,#3)

Hunter, James, On the Other Side of Sorrow: Nature and People in the Scottish Highlands. Edinburgh: Mainstream Publishing Co., 1995. £ 17.50. U.S. Distributor: Trafalgar Square Publishers, Howe Hill Road, North Pomfret, VT 05053. 802/457 1911. The Scottish Highlands were, in earlier centuries, depopulated in heartbreak with the enforced removal of its peoples. Today conserving the Highlands environment is, quite rightly, a matter of high public priority, but environmentalists must take account of the sensibilities of those who see a deserted Highland glen not so much as a piece of wilderness as a place where everyone who ever mattered is dead and gone. Environmentalists need to be aware of Highland attitudes to the Highlands, all the more so in view of the fact that the Gaelic-speaking people who inhabited the area for 1500 years held so positive a view of nature.

The Highlands suffer from deforestation and forms of land use that prevent the regeneration of the land. The task of preserving the Highlands is not one of preserving what is presently there, but of putting right the many thing which, over several centuries, have gone so desperately wrong. Further, the area now has one of Europe's fastest growing rural populations. The rehabilitation of the Highlands needs simultaneously to bring about the restoration of people to some at least of the many localities where human communities, and the Gaelic culture association with those communities, were so long ago destroyed. Hunter is a freelance historian, writer, and broadcaster who lives in the Skye crofting township of Borve. (v7,#1)

Hunter, Jr., Malcolm, Robert K. Hitchcock, and Barbara Wyckoff-Baird, "Women and Wildlife in Southern Africa," Conservation Biology 4(1990):448-451. A long tradition of local hunting of game animals was broken when centralized governments usurped control over hunting as a source of international tourist revenue. Local communities no longer have a vested interest in sustainable utilization and make little effort to control the deprivations of poachers. Even where efforts have been made to restore the local benefits of hunting--village-based use of large mammals for meat, skins, and other products, marketed for cash income--these are undertaken by village men. Women are ignored, continuing the traditional division of labor. But it is crucial that women be included in such project designs, if there is to be both improved human welfare and conservation of a sustainable wildlife resource. Hunter is in wildlife, University of Maine; Hitchcock is an anthropologist at the University of Nebraska; Wyckoff-Baird is with Development Alternatives, Washington, DC.

Hunter, Jr., Malcolm L. Fundamentals of Conservation Biology. Cambridge, MA: Blackwell Science, 1995. 488 pages. \$ 42.95. Chapters on biodiversity, species diversity, ecosystem diversity, genetic diversity; extinctions and global change, habitat degradation and loss, overexploitation, exotic species, managing ecosystems, managing populations, zoos and gardens, social factors, economics, politics and action. Hunter is in wildlife ecology, University of Maine, Orono, and a Pew Conservation Scholar. (v6,#3)

Hunter Jr., Malcolm L., "Refining Normative Concepts in Conservation," Conservation Biology 14 (No. 2, 2000 Apr 01): 573- . (v.11,#4)

Hunter, L. M., "Review of: Dobkowski, Michael N., and Isidor Wallimann, Eds. On the Edge of Scarcity: Environment, Resources, Population, Sustainability, and Conflict," Society and Natural Resources 16(no. 6, 2003): 562-564.

Hunter L.M.; Rinner L., "The Association Between Environmental Perspective and Knowledge and Concern With Species Diversity," Society and Natural Resources 17(no.6, July 2004):517-532(16). (v. 15, # 3)

Hunter, M. L., "Refining Normative Concepts in Conservation," Conservation Biology 14(2000):573-574.

Hunter, Malcolm, Jr. "Benchmarks for Managing Ecosystems: Are Human Activities Natural?" Conservation Biology 10, no.3 (1996): 695. (v7, #3)

Hunter, Malcom L., Jr., "Natural Fire Regimes as Spatial Models for Managing Boreal Forests," Biological Conservation 65(1993):115-120. Conservationists often think that humans, in harvesting a resource, ought to mimic natural regimes, and therefore imitate nature as much as possible. But in boreal forest ecosystems in Canada, which were shaped by crown fires that destroyed and replaced large areas, this would mean timber harvesting, mimicking fires, in quite large clearcuts that environmentalists are reluctant to advocate. Perhaps moderate sized clearcuts clustered into portions of land areas bounded by water bodies is a solution. Hunter is in forest resources, University of Maine. (v5,#4)

Hunter, Susan, Waterman, Richard W. Enforcing the Law: The Case of the Clean Water Acts. Armonk, NY: M.E. Sharpe, 1996. 262pp. \$23.95 paper. Uses extensive EPA data to examine enforcement from the perspective of the enforcement personnel. It illuminates a process of pragmatic enforcement--that is, the way bureaucrats actually do their jobs. (v8,#1)

Huntley, Brian, Roy Siegfried, and Clem Sunter, South African Environments into the 21st Century. Cape Town: Human and Rousseau Tafelberg, 1989. 127 pages. An effort to integrate environmental, political, and social issues as these loom in South Africa's uncertain future. Excellent descriptions of degrading conditions, joined with conservative political philosophy. Laissez faire economics is the key to the redistribution of wealth. "Too much state intervention" is the chief trouble (p. 58). They document that whites earn nearly ten times the per capita income of blacks (p. 50). They document that 70% percent of farmland is owned by 50,000 white farmers and only 13% by 700,000 black farmers (17% other) (p. 55). From these premises they conclude, "What is needed is a much larger cake, not a sudden change in the way it is cut" (p. 85). Black land ownership of land has long been severely restricted by law. Brian Huntley was until recently Manager of Ecosystem Programmes, Council for Scientific Research, but has become Director of Kirstenbosch Botanical Gardens, Cape Town, a primary institution for botanical conservation in South Africa. Roy Siegfried is an ecologist at the University of Cape Town and director of an the FitzPatrick Ornithological Institute there, involved in bird and marine conservation. Clem Sunter, trained in philosophy, politics and economics, is a chief officer for environmental affairs with Anglo American Corporation in South Africa, the largest corporation in the nation. (v1,#4)

Huntley, Brian, Roy Siegfried, and Clem Sunter. South Africa into the 21st Century. Reviewed in Environmental Ethics 14(1992):87-91.

Huntzinger, M, "Effects of fire management practices on butterfly diversity in the forested western United States", Biological Conservation 113(no.1, 2003)1-12.

Hunziker, M., Kienast, F., "Potential Impacts of Changing Agricultural Activities on Scenic Beauty--A Prototypical Technique for Automated Rapid Assessment," Landscape Ecology 14(No.2,1999):161-. (v.10,#2)

Huppenbauer, Von Markus, "Der liebe Gott, die Moral und das zweite Pelikanküken: Schöpfungsethische Reflexionen vor perspektivitätstheoretischem Hintergrund [The Compassionate God, Morality, and the Second Pelican Chick - Creation-ethical reflections against a perspectivist-theoretical background - The compatibility of creation theology with environmental ethics], *Zeitschrift für Evangelische Ethik* 46(no. 1, 2002):52-55). [In German] Is a theology of creation compatible with environmental ethics? Nature as God's creation is neither anthropocentric or biocentric. A theology of creation is basically a claim about God and God's creation, not directly an environmental ethic. Biblical texts do not perceive living beings as having intrinsic value. God is compassionate and take suffering on Earth seriously. (The second pelican chick is taken from Holmes Rolston's discussion of evolution in his *Science and Religion*, chapter 3, where pelicans have a "backup chick," in case the first and dominant chick dies.) Theories that evil and suffering are the will of God have to be rejected. Discussion of the metaphor of playing God. There are no reasonable theological arguments against improving humans genetically. Huppenbauer is in Theology, University of Zurich.

Hurlbut, William, "From Biology to Biography," *The New Atlantis*, No. 3, Fall 2003, pages 47-66. The Darwinian view of humans has moved into "the deeper pessimism of evolutionary psychology. This new vision of human origins, advanced within academic circles and promulgated as scientific truth through the popular press, is rapidly reshaping our human self-concept. Yet a more careful consideration of the evolutionary record may lead to far different conclusions concerning the foundation of human nature and the possibilities and prospects of the human person." Hurlbut is a physician in biology at Stanford University. (v. 15, # 3)

Hurley, JM; Ginger, C; Capen, DE, "Property Concepts, Ecological Thought, and Ecosystem Management: A Case of Conservation Policymaking in Vermont," *Society and Natural Resources* 15(no.4, 2002):295-312. (v.13, #3)

Hurley, Susan, and Matthew Nudds, eds. *Rational Animals?* Oxford: Oxford University Press, 2006. Contents include: (1) "The Questions of Animal Rationality: Theory and Evidence" by Susan Hurley and Matthew Nudds, (2) "Meanings of Rationality" by Alex Kacelnik, (3) "Minimal Rationality" by Fred I. Dretske, (4) "Styles of Rationality" by Ruth Garrett Millikan, (5) "Animal Reasoning and Proto-Logic" by Jose Luis Bermudez, (6) "Making Sense of Animals" by Susan Hurley, (7) "Transitive Inference in Animals: Reasoning or Conditioned Associations?" by Colin Allen, (8) "Rational or Associative: Imitation in Japanese Quail" by David Papineau and Cecilia Heyes, (9) "The Rationality of Animal Memory: Complex Caching Strategies of Western Scrub Jays" by Nicky Clayton, Nathan Emery, and Anthony Dickinson, (10) "Descartes' Two Errors: Reason and Reflection in the Great Apes" by Josep Call, (11) "Do Animals Know What They Know?" by Sara J. Shettleworth and Jennifer E. Sutton, (12) "Metacognition and Animal Rationality" by Joelle Proust, (13) "Rationality, Decentring, and the Evidence for Pretence in Nonhuman Animals" by Gregory Currie, (14) "Folk Logic and Animal Rationality" by Kim Sterelny, (15) "Rationality in Capuchin Monkeys' Feeding Behavior?" by Elsa Addessi and Elisabetta Visalberghi, (16) "Social Cognition in the Wild: Machiavellian Dolphins" by Richard Connor and Janet Mann, (17) "Do Chimpanzees Know What Others See – or Only What They Are Looking At?" by Michael Tomasello and Josep Call, (18) "We Don't Need a Microscope to Explore the Chimpanzee's Mind" by Daniel Povinelli and Jennifer Vonk, (19) "Belief Attribution Tasks with Dolphins: What Social Minds Can Reveal About Animal Rationality" by Alain J-P.C. Tschudin, (20) "Intelligence and Rational Behavior in the Bottle-Nosed Dolphin" by Louis M. Herman, (21) "Intelligence and Rationality in Parrots" by Irene M. Pepperberg, (22) "Effects of Symbols on Chimpanzee Cognition" by Sarah T. Boysen, and (23) "Language as a Window on Rationality" by E. Sue Savage-Rumbaugh, Duane M. Rumbaugh, and William M. Fields.

Hurley, Susan, and Matthew Nudds, eds. *Rational Animals?* Oxford: Oxford University Press, 2006.

Contents include: (1) "The Questions of Animal Rationality: Theory and Evidence" by Susan Hurley and Matthew Nudds, (2) "Meanings of Rationality" by Alex Kacelnik, (3) "Minimal Rationality" by Fred I. Dretske, (4) "Styles of Rationality" by Ruth Garrett Millikan, (5) "Animal Reasoning and Proto-Logic" by Jose Luis Bermudez, (6) "Making Sense of Animals" by Susan Hurley, (7) "Transitive Inference in Animals: Reasoning or Conditioned Associations?" by Colin Allen, (8) "Rational or Associative: Imitation in Japanese Quail" by David Papineau and Cecilia Heyes, (9) "The Rationality of Animal Memory: Complex Caching Strategies of Western Scrub Jays" by Nicky Clayton, Nathan Emery, and Anthony Dickinson, (10) "Descartes' Two Errors: Reason and Reflection in the Great Apes" by Josep Call, (11) "Do Animals Know What They Know?" by Sara J. Shettleworth and Jennifer E. Sutton, (12) "Metacognition and Animal Rationality" by Joelle Proust, (13) "Rationality, Decentring, and the Evidence for Pretence in Nonhuman Animals" by Gregory Currie, (14) "Folk Logic and Animal Rationality" by Kim Sterelny, (15) "Rationality in Capuchin Monkeys' Feeding Behavior?" by Elsa Addessi and Elisabetta Visalberghi, (16) "Social Cognition in the Wild: Machiavellian Dolphins" by Richard Connor and Janet Mann, (17) "Do Chimpanzees Know What Others See or Only What They Are Looking At?" by Michael Tomasello and Josep Call, (18) "We Don't Need a Microscope to Explore the Chimpanzee's Mind" by Daniel Povinelli and Jennifer Vonk, (19) "Belief Attribution Tasks with Dolphins: What Social Minds Can Reveal About Animal Rationality" by Alain J-P.C. Tschudin, (20) "Intelligence and Rational Behavior in the Bottle-Nosed Dolphin" by Louis M. Herman, (21) "Intelligence and Rationality in Parrots" by Irene M. Pepperberg, (22) "Effects of Symbols on Chimpanzee Cognition" by Sarah T. Boysen, and (23) "Language as a Window on Rationality" by E. Sue Savage-Rumbaugh, Duane M. Rumbaugh, and William M. Fields.

Hurnik, J.F., "Ethics and Animal Agriculture", Journal of Agricultural and Environmental Ethics 6(1993). In the past, value judgments regarding animal agriculture, its techniques and goals, focused predominantly on production efficiency. At the present time, the concept of maximized production is gradually losing ground to a broader concept of optimal production. Decreasing consumer trust in some animal products, the impact of modern agriculture on the environment, increasing disparities in food production around the globe, loss of family farms, declining self-respect of farmers due to increasing dependence on subsidies, and the decreasing social reputation of farmers due to economic pressures to intensify even at the cost of animal quality of life, should be incorporated in any ethically relevant assessment of modern animal production systems. In its main section, the paper focuses on the quality of life of animals used for food production. It proposes an instrumental definition of animal well-being by emphasizing harmony between the organism and its surroundings; harmony based on an acceptance of basic moral principal that every sentient, living organism subjected to full, direct human control, should have an opportunity to experience an environment for which its own genotype is predisposed, in order to develop into a physically and psychologically healthy organism. In the context of the search for welfare-positive environments and management systems for food animals, the paper discusses the important distinction between animal needs and desires and proposes that it is safer to consider that animal quality of life is regarded rather as a function of satisfaction of animal needs than satisfaction of animal desires. In its final part, the paper proposes longevity studies to indirectly assess the quality of life in various production systems. Hurnik is in the Department of Animal and Poultry Science, University of Guelph, Guelph, ONT, Canada N1G 2W1.

Hurnik, J.F. & Lehman, Hugh, "Ethics and Farm Animal Welfare", Journal of Agricultural Ethics 1(1988):305-318. The authors argue that ethical considerations are relevant for evaluating animal production systems and that in consequence agrologists should seriously consider the arguments of animal welfare supporters. Furthermore, the authors point out the ethical basis for some (though not all) of the conclusions proposed by supporters of animal welfare. Hurnik is in animal and poultry science and Lehman is in philosophy at the University of Guelph, Ontario.

Hurrell, Andrew and Benedict Kingsbury, eds., The International Politics of the Environment. New

York: Oxford University Press, 1992. 512 pages. \$ 19.95 paper. \$ 72.00 cloth. All the problems, with particular attention to the roles of the United Nations, the World Bank, and the European Community. Case studies in Brazil, Japan, and the United States. (v3,#3)

Hursthouse, Rosalind, ed., Ethics, Humans and Other Animals: An Introduction with Readings. London: Routledge, 2000. Three standard approaches to ethics: utilitarianism, rights, and virtue ethics, and how each approach encourages us to think about our treatment of animals. Hursthouse is at the Open University, UK. (v.11,#4)

Hursthouse, Rosalind, On Virtue Ethics. Oxford: Oxford University Press, 1999. With a section on "Evaluating Plants and Animals" (pp. 197-204). We evaluate plants and animals on how well they do what they are capable of doing in their forms of life, with more advanced capacities in animals than in plants, and more advanced capacities in some animals than others. "The truth of such evaluations of living things does not depend on any way on my wants, interests, or values, nor indeed on 'ours'. They are, in the most straightforward sense of the term, 'objective'; indeed, given that botany, zoology, ethology, etc., are sciences, they are scientific." When we evaluate such organisms, it is a mistake "to think that they necessarily have something to do with approval or praise" (pp. 202-203).

"The overall summing up evaluation--that this x is a good specimen of its kind--identifies it as an x that is as ordinarily well fitted or endowed as an x can be to do or live well, to thrive or flourish (in a characteristically x way). What living things do is live; quite generally, a good living thing lives well--unless prevented by something outside itself" (p. 205). Hursthouse is in philosophy at the Open University, UK.

Hurtado, L. W., "Enchanted, Created, or Cosmic Accident? 'Nature' and Being Human in the 20th Century," Crux 19(June 1993):18-27. Crux is a journal published by Regent College, Vancouver, BC. An enchanted world, a created world, or a random world--any of these views can be seen as demanding or justifying a positive ecological ethic. Ill-informed accounts by each of the others is not helpful. The biblical view of the world and the role of the human species in it has received a disproportionate share of such vilification in the recent environmental debate. Hurtado argues for corrections to widely circulated but misleading understandings of the monotheist position. Hurtado teaches New Testament at New College, University of Edinburgh. (v.8,#4)

Hussain, S. Salman, Review of: Ans Kolk, Economics of Environmental Management, Environmental Values 11(2002):114.

Huston, Michael A., Biological Diversity: The Coexistence of Species on Changing Landscapes. New York: Cambridge University Press, 1994. 681 pages. A state of the art survey of what is known in the field. Huston is an ecologist at Oak Ridge, Tennessee. (v5,#4)

Hutanuwatr, Pracha, "Wilderness Experience for Personal Growth in Siam," International Journal of Wilderness 5(no. 1, 1999):34-37. Draws on the tradition of monks and nuns living in a forest monastery, with an art of searching for deeper meanings in nature and respect for life. Hutanuwatr is a former Buddhist monk. (v.10,#2)

Hutchings, JA; Reynolds, JD, "Marine Fish Population Collapses: Consequences for Recovery and Extinction Risk", BioScience 54 (no.4, 2004): 297-309(13). Rapid declines threaten the persistence of many marine fish. Data from more than 230 populations reveal a median reduction of 83 in breeding population size from known historic levels. Few populations recover rapidly; most exhibit little or no change in abundance up to 15 years after a collapse. Reductions in fishing pressure, although clearly necessary for population recovery, are often insufficient. Persistence and recovery are also influenced by life history, habitat alteration, changes to species assemblages, genetic responses to exploitation, and

reductions in population growth attributable to the Allee effect, also known as depensation. Heightened extinction risks were highlighted recently when a Canadian population of Atlantic cod (Gadus morhua) was listed as endangered, on the basis of declines as high as 99.9 over 30 years. Unprecedented reductions in abundance and surprisingly low rates of recovery draw attention to scientists limited understanding of how fish behavior, habitat, ecology, and evolution affect population growth at low abundance. Failure to prevent population collapses, and to take the conservation biology of marine fishes seriously, will ensure that many severely depleted species remain ecological and numerical shadows in the ecosystems that they once dominated.

Hutchins, Michael, Wiese, Robert J., Willis, Kevin. "Captive Breeding and Conservation," Conservation Biology 11 (no.1, 1997):3. (v8,#2)

Hutchins, Michael, Wiese, Robert, Willis, Kevin. "Priority-Setting for Ex Situ Conservation," Conservation Biology 11(no.3, 1997):593. (v8,#2)

Hutchinson, Roger, Prophets, Pastors and Public Choices: Canadian Churches and the Mackenzie Valley Pipeline Debate. Waterloo, Ontario: Wilfrid Laurier University Press, 1993. Canadian \$ 22.50. Paper. The role of the mainline Canadian Christian churches supporting native peoples and opposing the building of a northern pipeline. For Wilfrid Laurier Press books in the United States, contact Humanities Press International, Atlantic Highlands, NJ. (v4,#4)

Huttermann (Hüttermann), Aloys, The Ecological Message of the Torah: Knowledge, Concepts, and Laws which Made Survival in a Land of "Milk and Honey" Possible. Atlanta, GA: Scholars Press, 1999. 272 pages. The Hebrew Bible was written by authors who had a very modern idea of basic biology and a deep insight into the functioning of fragile ecosystems. To relate the Hebrews to their landscape, they did not rely on general feelings of benevolence but developed a cogent system of laws that precisely governing their handling of natural resources. The Israelites established a highly productive sustained agriculture under the rather adverse conditions of a "land of milk and honey." Hüttermann is Director of the Institut für Forstbotanik of the University of Göttingen. (v.10,#3)

Hutton, D. and Connors, L., A History of the Australian Environmental Movement. Melbourne: Cambridge University Press, 1999. (v.13,#1)

Huxham, Mark and David Sumner. "Emotion, Science and Rationality: The Case of the Brent Spar." Environmental Values 8(1999):349-368. ABSTRACT: In June 1995, a campaign by Greenpeace forced the multinational oil company Shell to cancel its planned disposal of a redundant oil installation in the Atlantic. The Brent Spar incident attracted massive publicity and was influential in changing government policy on marine disposal of waste. During and following their campaign, Greenpeace were criticised as emotive and irrational by Shell and academic scientists. This paper looks at the arguments used during the debate, using literature, interviews and questionnaires. We investigate the use of key environmental words and phrases and ask what is meant by rationality in this context. We discuss some of the lessons that should be learnt from the incident by policy makers and scientists. KEYWORDS: Brent Spar, rationality, science, precaution, sustainability. Mark Huxham, Department of Biological Sciences Napier University 10 Colinton Road, Edinburgh EH10 5DT, UK and David Sumner Moss Park Ravenstone Whithorn, Dumfries DG8 8DR, UK. (EV)

Hyman, Jeffrey B. and Kris Wernstedt, "The Role of Biological and Economic Analyses in the Listing of Endangered Species," Resources (Resources for the Future), Summer 1991, no. 104. (v2,#3)

Hypatia, January 1991, is a special issue on ecofeminism, edited by Karen Warren. (v1,#4)

Iannone, A. Pablo, Philosophical Ecologies: Essays in Philosophy, Ecology, and Human Life. Amherst, NY: Humanity Books, 1999. 274 pages. \$54.95 cloth. Contemporary social fragmentation, applying an ecological model to a wide range of philosophical problems. (v10,#4)

Iannone, A. Pablo, Philosophical Ecologies: Essays in Philosophy, Ecology, and Human Life. Amherst, NY: Humanity Books, 1999. 274 pages. \$54.95 cloth. Contemporary social fragmentation, applying an ecological model to a wide range of philosophical problems. (v.11,#1)

Ice, George G., Stuart, Gordon W., Ellefson, Paul V. "Twenty-Five Years of the Clean Water Act: How Clean Are Forest Practices?" Journal of Forestry 95(no.7, 1997):9. (v8,#3)

Ice, George G; Neary, Daniel G; Adams, Paul W, "Effects of Wildfire on Soils and Watershed Processes", Journal of Forestry 102(no.6, September 2004):16-20(5).

Iftekhar, Md. Sayed, "Forestry in Bangladesh: An Overview," Journal of Forestry 104 (no.3, March 2006): 148-153 (6).

Igler, D, "Review of: Kathleen A. Brosnan. Uniting Mountain & Plain: Cities, Law, and Environmental Change Along the Front Range", Environmental History 9 (no.1, 2004): 141.

Idhe, Don, Technology and the Lifeworld: From Garden to Earth. Bloomington: Indiana University Press, 1990. The closing chapter is "The Earth Inherited: Stewardship Recommendations for the Inherited Earth." "My first recommendation must be a worldwide conservation ethic" (p. 197). Idhe is a dean and philosopher at the State University of New York, Stony Brook. (v1,#4)

Iles, Alastair, "Learning in Sustainable Agriculture: Food Miles and Missing Objects," Environmental Values 14(2005):163-183. Industrial production imposes geographical, economic and cultural distances between producers and consumers. The concept of constituting 'missing objects' can help shrink these distances by enabling actors to engage in discourses and practices about contexts beyond what is materially present. Since the mid-1990s, food miles have emerged as an example of missing objects, representing the distance that agricultural products travel from the farm to the dining table, and the environmental effects of transportation. I analyse how consumers, farmers, activists, industry and policy-makers in the United States and Europe are building agency in making and using food miles. Iles is in the Energy and Resources Group, University of California at Berkeley, Berkeley, CA. (EV)

Imhoff, Marc L., et al., "Global Patterns in Human Consumption of Net Primary Production," Nature 429, No. 6994, 2004, pp. 870-873. The uneven footprint of human consumption. "Many regions are already consuming far beyond what their local area could possibly produce. These areas are being subsidized by imports from other parts of the world; they are literally on life support." (Taylor Ricketts). Humans represent about half of one percent of biomass on Earth and appropriate about 20% of this biomass annually. Western Europe and South Central Asia consume more than 70 percent of what their regions produce, while in South America just 6 percent is consumed. (v. 15, # 3)

Imhoff, Thomas. Review of Christopher Lind. Something's Wrong Somewhere: Globalization, Community and the Moral Economy of the Farm Crisis. (Halifax, N.S.: Fernwood Publishing, 1995). In Journal of Agricultural and Environmental Ethics 8(1995):199. (JAEE)

Imperial, MT; Kauneckis, D, "Moving from Conflict to Collaboration: Watershed Governance in Lake Tahoe," Natural Resources Journal 43(no.4, 2003):1009-1056. (v. 15, # 3)

Ims, Rolf A.; Fuglei, Eva, "Trophic Interaction Cycles in Tundra Ecosystems and the Impact of Climate Change," BioScience 55(no.4, April 2005):311-322(12). While population cycles are geographically widespread, it is on arctic tundra that such cycles appear to be most influential for the functioning of the whole ecosystem. We give an overview of tundra species that exhibit population cycles and describe what are currently believed to be the causal mechanisms. Population cycles most likely originate from trophic interactions within the plant-based tundra food web, where lemmings, either as prey for carnivores or as consumers of plants, play the key role. The predominance of trophic interaction cycles at northern latitudes is ultimately related to climate, and such cycles should therefore be vulnerable to climate change. Recent evidence indicates that changes have already taken place in the dynamics of some key herbivores and their predators, consistent with the expected impacts of climate change. There is a strong need for large-scale integrated monitoring and research efforts to further document such changes and their ecosystem consequences.

Inamdar, Amar, et al., "Capitalizing on Nature: Protected Area Management," Science 283(19 March 1999):1856-1860. The financial difficulties of government agencies responsibly for biodiversity in the developing world. They hold large land assets, perhaps 5% of the total area of a country, expensive to maintain, generating most of their revenue through tourism. But they are "socially exclusive," since locals cannot exploit these resources, and this is receiving growing criticism from an increasingly democratized populace (and an increasing population) at home. Responses often involve community based conservation. But these activities are also expensive, their conservation benefits are ambiguous, and they have little prospect of generating income to cover their costs.

Kenya has 10% of its land in protected areas, generating about \$ 42 million in tourist revenues. This same land, converted to agriculture and livestock, could support 4.2 million people, generating \$ 203 million. Protected areas are almost universally unpopular with local peoples, and international observers tend to sympathize. Protected areas are suffering from a public relations crisis. On the one hand, simply fencing in protected areas is an untenable strategy. On the other hand, difficult tradeoffs between conservation and development will have to be made. The four authors are in the Environment and Development Group, Oxford, UK. (v.10,#1)

Independent Commission on Population and Quality of Life. Caring for the Future: Making the Next Decades Provide a Life Worth Living. New York: Oxford University Press, 1996. 384 pp. \$14.95 paper. Examines the challenges that face all countries, both rich and poor, in the last years of the century. Goals to confront these crises. The report places women at the center of development, and caring at the center of public policy, arguing that there must be a new focus on sustainable quality of life in order to slow population growth and reduce human impact on the environment. (v.7,#4)

Ingalsbee, Timothy. "Learn from the Burn: Research Natural Areas for Habitat and Science." Wild Earth 9(No. 2, Summer 1999):57- . (v10,#4)

Ingham, Deidre S., Samways, Michael J. "Application of Fragmentation and Variegation Models to Epigaeic Invertebrates in South Africa", Conservation Biology 10(no.5,1996):1353. Epigaeic insects live on or near the ground.

Ingman, Stanley R., Pei, Xiaomei, Ekstrom, Carl D., Friedsam, Hiram J., and Bartlett, Kristy R., eds., An Aging Population, An Aging Planet, and a Sustainable Future. Denton, TX: Texas Institute for Research and Education on Aging, University of North Texas, P. O. Box 13438, Denton, TX 76203-6438. \$ 25. Issues surrounding population aging and global sustainability. Ways in which older people can help societies meet the ecological and social challenges facing our world. (EE)

Ingman, Stanley et al., eds., An Aging Population, An Aging Planet, and a Sustainable Future. Denton, TX: Center for Texas Studies, University of North Texas, 1995. ISBN 1885196075. (v.9,#3)

Ingold, Tim, The Perception of the Environment. London: Routledge, 2000. "The more [we aim] to furnish a precise and comprehensive representation of reality, the less true to life this representation appears." (p. 242) The search for objectivity strips out the fullness of perception.

Ingold, Tim, "Hunting and Gathering as Ways of Perceiving the Environment." Pages 117-155 in Ellen, Roy, and Fukui, Katsuyoshi, eds., Redefining Nature: Ecology, Culture and Domestication. Oxford, UK: Berg, 1996. "What I wish to suggest is that we reverse this order of [Western] primacy and follow the lead of hunter-gatherers in taking the human condition to be that of a being immersed from the start, like other creatures, in an active, practical and perceptual engagement with constituents of the dwelt-in world. This ontology of dwelling, I content provides us with a better way of coming to grips with the nature of human existence than the alternative, Western ontology whose point of departure is that of a mind detached from the world and which has literally to formulate it--to build an intentional world in consciousness--prior to engagement. The contrast, I repeat, is not between alternative views of the world; it is rather between two ways of apprehending it, only one of which (the Western) may be characterized as the construction of a view, that is, as a process of mental representation. As for the other, apprehending the world is not a matter of construction but of engagement, not of building but of dwelling, not of making a view of the world but of taking a view in it" (pp. 120-121). (v.13,#1)

Ingram, David, Green Screen: Environmentalism and Hollywood Cinema. Exeter: University Exeter Press, 2004. Reviewed by Elisa Aaltola in Environmental Values 14(2005):539-543.

Ingram, H; McDonald, B, "The State of the Natural Resources Literature; The Troubled Relationship of Science to Environmental Policy: Some New Perspectives," Natural Resources Journal 42(no.3, 2002): 673-685.

Ingwerson, Marshall. "A Bear's Tale Makes Russian Media's Fur Fly." The Christian Science Monitor, vol. 89, 11 Feb. 1997, p. 1-7.

Inner Voice, newsletter of the Association of Forest Service Employees for Environmental Ethics, continues alive and well, now in volume 6. The March/April issue features biodiversity and the role of forests in its conservation. For a sample issue, write AFSEEE, P. O. Box 11615, Eugene, OR 97440. Phone 503/484-2692. (v5,#1)

Innes, J. L., G. Hickey, and H. F. Hoen, eds. Forestry and Environmental Change: Socioeconomic and Political Dimensions. New York: Oxford University Press, 2006. Some of the biggest changes looming for forests result more from the socioeconomic environment than from the physical environment.

Innes, JL; Er, KBH, "Questionable Utility of the Frontier Forest Concept," Bioscience 52(no.12, 2002).

Inouye, DW; Brewer, C, "A Case Study of the Program in Sustainable Development and Conservation Biology at the University of Maryland," Conservation Biology 17(no.5, 2003):1204-1208. (v.14, #4)

Inquiry, Vol. 39, no. 2 (June 1996), is a special issue on "Arne Naess's Environmental Thought," and was guest edited by Andrew Light and David Rothenberg. Papers in the volume are Harold Glasser, "Naess's Deep Ecology Approach and Environmental Policy"; John Clark, "How Wide is Deep Ecology?"; Michael Vincent McGinnis, "Deep Ecology and the Foundations of Restoration"; Knut A. Jacobsen, "Bhagavadgita, Ecosophy T, and Deep Ecology"; Deane Curtin, "A State of Mind Like Water: Ecosophy T and the Buddhist Traditions"; David Rothenberg, "No World but in Things: The Poetry of Naess's Concrete Contents"; Andrew Light "Callicott and Naess on Pluralism." The volume was compiled as a tribute to Naess's 85th birthday. The single-issue price is US \$ 36.00 plus postage. Orders may be placed

directly at <ala@scup.no>. (v7, #3)

Insights on Global Ethics is a newsletter published by the Institute for Global Ethics, Box 563, 21 Elm Street, Camden, ME 04843. Phone 207/236-6658. (v2,#4)

Interdisciplinary Research Network on the Environment and Society (IRNES), Perspectives on the Environment 2. Aldershot, Hants., U.K.: Avebury, 1995. 248 pages. £ 37.50. Essays from the second conference of IRNES held in Sheffield, England in September 1993. Part I. Global climate models, agricultural biotechnologies, the environmental implications of building technologies. Part II. National and international politics of the environment in Britain, the Ukraine, Burma, Thailand, Indonesia. Part III: Sustainability in Japan and Britain. Part IV. Democracy and state and the European Union's principle of subsidiarity. A frequent theme is that different disciplines "produce" multiple conceptions of the environment and that somewhere in the midst of this public policy emerges. The first Perspectives on the Environment, ed. Holder et al, was by Avebury in 1993. (v6,#4)

Intergovernmental Panel on Climate Change. *Climate Change 2007: Synthesis Report (Summary for Policymakers)*. This can be downloaded as a pdf at:
<http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf>.

International Directory of Human Ecologists, The. 2nd edition, 1989, compiled by Richard J. Borden and Jamien Jacobs, is available c/o College of the Atlantic, Bar Harbor, ME 04609, at a cost of \$10 plus \$ 2 handling. Phone 207/288-5015. The directory lists over 700 human ecologists worldwide with descriptions of their work, research, and activities, addresses, phone numbers and topical index. (v1,#1)

International Environmental Affairs: A Journal For Research and Policy is published by the University Press of New England, 17 1/2 Lebanon Street, Hanover, NH 03755. Now in its second year. Sample articles: Diana Page, "Debt-for-Nature Swaps: Experience Gained, Lessons Learned"; Eckard Reh binder, "U.S. Environmental Policy: Lessons for Europe?" The editor is Konrad von Moltke, professor of environmental studies at Dartmouth College. (v2,#2)

International Journal of Ecoforestry: The Practices, Science, and Philosophies of Ecologically Responsible Forest Use is a new journal, announced by Alan Dregson. The first issue is expected April 1994. For details of subscription and manuscript submission, contact Dregson at Box 5885, Stn. B., Victoria, B.C., Canada V8R 6S8. (v5,#1)

International Journal of Wilderness has appeared, volume 1, no. 1, September 1995. John C. Hendee, Director of the University of Idaho Wilderness Research Center, Moscow, Idaho is the managing editor and there are five executive editors and a host of associate editors, and some eighteen sponsoring institutions, government agencies, and environmental organizations. Representative articles from the first issue: Ian Player, "Soul of the Wilderness"; G. John Roush, "The Biggest Threat to Wilderness"; Mark W. Brunson, "The Changing Role of Wilderness in Ecosystem Management"; Tom McDonald, "Mission Mountains Tribal Wilderness Area of the Flathead Indian Reservation"; Norman L. Christensen, "Fire and Wilderness." There is a feature section on the wilderness of Finland. Finland has become, in 1991, the most recent nation to adopt legislation that recognizes and protects wilderness areas. Also: Victor V. Nikiforov, "Strict Nature Reserves in the Russian Arctic," which are closed to hunting, fishing, agriculture, geological expeditions, agriculture, and tourism. There are five such reserves (18.5 million acres), and these, together with other nature reserves, protect about 10% of the tundra zone. (v6,#4)

International Journal of Wildland Fire is a publication of the International Association of Wildland Fire, featuring technical and policy articles on wildfire. Dr. Jason Greenlee, IAWF, P. O. Box 328, Fairfield, WA 99012. Phone 509/283-2397. Fax 509/283-2264. (v6,#1)

Interpretation: A Journal of Bible and Theology, vol. 50, no. 1 (January 1996), is a thematic issue on Theology and Ecology. Among the contributors are:

James A. Nash, "Toward the Ecological Reformation of Christianity" (pp. 5-15). Christian theology and ethics are largely inadequate to confront the ecological crisis of today. They are in need of reformation. At the center of Christian faith, we shall not find a mandate to pollute, plunder, and prey on the rest of nature. Instead, we shall discover that the core affirmations endow all life with a moral significance that entails human responsibility toward the whole of nature.

Holmes Rolston, III, "The Bible and Ecology" (pp. 16-26). The Bible is not a book of science, and therefore not of ecology. It does, however, sketch a vision of human ecology, and contemporary readers encounter claims about how to value nature. The Bible's vision is simultaneously biocentric, anthropocentric, and theocentric. The Hebrews discovered who they were as they discovered where they were, and their scriptures can be a catalyst in our ecological crisis.

W. Sibley Towner, "The Future of Nature" (pp. 27-35). Bible and biology agree: Human beings cast the biggest shadow over the future of nature. At the end of the millennium we face a choice: We can continue to overuse and exploit our ecosphere or we can exercise tender "dominion" in the world, as God's agents here.

Theodore Hiebert, "Re-Imaging Nature: Shifts in Biblical Interpretation" (pp. 36-46). Nature, and the place of humans within it, has again become a topic of much discussion. The tendency of biblical scholars has been to describe the human being in terms that set it apart from nature. More recently, ecological concerns have impelled biblical scholars to rethink their position. This has caused them to reevaluate the nature of humanity and to construe the human being not as standing above or at the center of nature, but as being part of nature. (v6,#4)

Introductory articles, Environmental Ethics. See more detail under the separate bibliographic entries for each.

--Brennan, Andrew, "Environmental Ethics," in Craig, Edward, ed., Routledge Encyclopedia of Philosophy, 10 vols. (London: Routledge, 1998), in vol. 3, pages 333-336.

--Brennan, Andrew, and Lo, Yeuk-Sze, "Ethics and the Environment," The Stanford Encyclopedia of Philosophy. Online at:

<http://plato.stanford.edu/entries/ethics-environmental/>

--Callicott, J. Baird, "Environmental Ethics: Overview" in Warren Thomas Reich, ed., Encyclopedia of Bioethics, rev. ed., vol. 2 (New York: Macmillan Library Reference, Simon & Schuster Macmillan, 1995), pages 676-686.

--Callicott, J. Baird, "The Search for an Environmental Ethic," in Tom Regan, ed., Matters of Life and Death: New Introductory Essays in Moral Philosophy, 3rd edition (New York: McGraw Hill, 1993). Earlier editions were in 1980 and 1986, first published by Random House and Temple University Press. The version in the 3rd edition is the most up-to-date.

--Callicott, J. Baird, "Environmental Ethics" in Lawrence C. Becker and Charlotte B. Becker, eds., Encyclopedia of Ethics, in 2 vols, Vol. I, A-K (New York: Garland Publishing Co., 1992), pages 311-315.

--Clark, Stephen R. L., "Environmental Ethics," in Byrne, Peter and Houlden, Leslie, eds., Companion Encyclopedia of Theology (London: Routledge, 1995).

--Elliot, Robert, "Environmental Ethics." Pages 284-293 in P. Singer, ed, A Companion to Ethics. Cambridge, MA: Basil Blackwell, 1991.

--Fox, Warwick, "A Critical Overview of Environmental Ethics," World Futures (Amsterdam) 46(1996):1-21.

--Grange, Joseph, "Types of Environmental Ethics: A Dialectical Exchange." Chapter Nine, pp. 161-186 in Nature: An Environmental Cosmology (Albany: State University of New York Press, 1997).

--Lemons, John, "Environmental Ethics." In Alexander, David E., and Fairbridge, Rhodes W., eds., Encyclopedia of Environmental Science. Hingham, MA: Kluwer Academic Publishers, 1999.

--Norton, Bryan and Minter, Ben A., "From environmental ethics to environmental public policy: Ethicists and economists, 1973-future." Pages 373-407 in Tom Tietenberg and Henk Folmer, eds., The

International Yearbook of Environmental and Resource Economics 2002/2003: A Survey of Current Issues (Cheltenham UK: Edward Elgar, 2002).

--Palmer, Clare, "A Bibliographic Essay on Environmental Ethics," Studies in Christian Ethics (Edinburgh) 7(1994):68-97.

--Palmer, Clare, "Introduction: What Is Environmental Ethics? The Study of Environmental Ethics, and Analyzing Issues in Environmental Ethics" in Palmer, Clare, Environmental Ethics (Santa Barbara, CA: ABC-CLIO, 1997), pages 1-21.

--Palmer, Claire, "An Overview of Environmental Ethics," in Light, Andrew, and Rolston, III, Holmes, eds., Environmental Ethics (Oxford: Blackwell, 2003), pages. 15-37.

--Rolston, Holmes, III, "Environmental Ethics," in Bunnin, Nicholas and Tsui-James, E.P., eds., The Blackwell Companion to Philosophy, 2nd. ed. (Oxford: Blackwell Publishers, 2003), pages 517-530.

Online at:

<http://lamar.colostate.edu/~rolston/ee-blackwell-comp.pdf>

--Rolston, Holmes, III, "Environmental Ethics: Values in and Duties to the Natural World," in F. Herbert Bormann, and Stephen R. Kellert, Ecology, Economics, Ethics: The Broken Circle (New Haven: Yale University Press, 1991), pp 73-96. Online at:

<http://lamar.colostate.edu/~rolston/ee-values-duties.pdf>

-Reprinted in Lori Gruen and Dale Jamieson, eds., Reflecting on Nature: Readings in Environmental Philosophy (New York: Oxford University Press, 1994) pp. 65--84.

-Reprinted in Earl R. Winkler and Jerrold R. Coombs, eds., Applied Ethics: A Reader (London: Blackwell, 1993), pp. 271-292.

-Reprinted in Donald VanDeVeer and Christian Pierce, eds., The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics (Belmont, CA: Wadsworth Publishing Co., 1994), pp. 88-93, 485-492.

--Rolston, Holmes, III, "Ethics and the Environment" (Types of Environmental Ethics). Chapter 11 in Emily Baker and Michael Richardson, eds., Ethics Applied, edition 2 (New York: Simon & Schuster, 1999), pages 407-437.

--Rolston, Holmes, III, "Environmental Bioethics," in Goudie, Andrew S., Editor in Chief, Encyclopedia of Global Change, 2 vols (Oxford: Oxford University Press, 2002), vol. 1, pp. 399-401.

--Scott, Peter, "Types of Ecotheology," Ecotheology 4(1998):8-19.

Invasive Species Specialist Group (ISSG), part of the World Conservation Union (IUCN) operates a website: www.issg.org. Information from scientific and policy experts on invasive species from forty-one countries. Extensive resources. (v. 15, # 3)

Iozzi, Louis Anthony, Moral Judgment, Verbal Ability, Logical Reasoning Ability, and Environmental Issues. Ed.D. dissertation. New Brunswick, NJ: Rutgers University, 1976. 197 pages.

Ip, Po-Keung. "Taoism and the Foundations of Environmental Ethics." Environmental Ethics 5(1983):335-43. I show how the Taoist philosophy, as exemplified by both Lao Tzu and Chung Tzu, is capable of providing a metaphysical foundation for environmental ethics. The Taoist concept of nature, the notions of ontological equality and axiological equality of beings, together with the doctrine of Wu Wei can fulfill, at least in a preliminary way, our purpose. The notion of a minimally coherent ethics is introduced and is shown to be pertinent to the construction of an ethics which bears a close relationship to science. Ip is in the department of philosophy, University of Western Ontario, London, Ontario, Canada. (China)

Ip, Po-Keung, "Taoism and the Foundations of Environmental Ethics," Environmental Ethics 5(1983):335-343. Both the Taoist concern for all beings and the principle of "nonaction" are offered as the basis of an environmental ethic. But the problem for any Eastern metaphysic is its acceptance in the West. (Katz, Bibl # 1)

Irland, LC; Adams, D; Alig, R; Betz, CJ; Chen, CC; Hutchins, M; McCarl, BA, Skog, K; Sohngen, BL, "Assessing Socioeconomic Impacts of Climate Change on US Forests, Wood-Product Markets, and Forest Recreation," Bioscience 51(no, 9, 2001):753-764. (v.13,#1)

Irland, Lloyd C., ed., Ethics in Forestry. Portland, OR: Timber Press, 1994. \$ 39.95. Section I: Codes of Ethics, foresters organizations. Section II. Professional Ethics, for foresters. Section III. Business Ethics. Section IV. Environmental Ethics (7 articles, including Leopold, "The Conservation Ethic", Sagoff, "Do We Need a Land Use Ethic?"). Section V: Government Service and Public Policy. Case Studies. Forty chapters by forty different authors. A thorough anthology. "Environmental ethics poses the single most difficult problem for forest managers. ... Environmental ethics represents an extension of ethics to broader realms beyond individual people. The concept of human responsibilities toward nature has raised religious and ethical discussion in all ages, but never more than today, as our ability to affect the very climate of the planet is becoming clear to all. The conflicts in land management have been deepened by our growing knowledge of the value of unmanaged ancient forests" (Editor's section introduction, p. 247). Irland is a forestry consultant, Winthrop, Maine. (v7,#2)

Irland, Lloyd C., ed., Ethics in Forestry. Portland, OR: Timber Press, 1994. ISBN 0-88192-281-1. \$ 39.95. (v6,#4)

Irvin, S, "Capacities, Context and the Moral Status of Animals", Journal of Applied Philosophy 21 (no.1, 2004): 61-76(16).

Irvine, Sandy, Review of Dobson, Andrew, Green Political Thought. Environmental Values Vol.1 No.3 (1992):270.

Irwin, E. R., and Freeman, M. C., "Proposal for Adaptive Management to Conserve Biotic Integrity in a Regulated Segment of the Tallapoosa River, Alabama, U.S.A," Conservation Biology 16(no.5, 2002): 1212-22. (v.13,#4)

Irwin, Kevin W. and Edmund D. Pellegrino, eds. Preserving the Creation: Environmental Theology and Ethics. Washington, DC: Georgetown University Press, 1994. 224 pages. \$40.00. An interdisciplinary Roman Catholic contribution by acknowledged experts in scripture, systematic theology, liturgical theology, and ethics. Articles by: Richard J. Clifford, Bernhard W. Anderson, Gabriel Daly, Elizabeth A. Johnson, Kevin W. Irwin, Daniel M. Cowdin, Drew Christiansen. (v5,#2)

Irwin, Victoria. "Make Room for Bluebirds." The Christian Science Monitor, vol. 89, 4 March, p. 16.

Isaacs, Jennifer, Australian Dreaming: 40,000 Years of Aboriginal History. Sydney: Lansdown Publishing Co., 1992, 1996. ISBN 0 7254 0884 7. With a history of creation, including Uluru. (v7,#4)

Isenberg, Andred W., The Destruction of the Bison: An Environmental History, 1750-1920. Cambridge: Cambridge University Press, 2002. The cultural and ecological encounter between Native Americans and Europeans caused the near extinction of the bison, but nostalgia and regret about this sad story has become an important impetus to conservation of the bison. Isenberg is at Princeton University. (v.13, #3)

Islam, Nazrul, et al., eds., Environmental Law in Developing Countries: Selected Issues. Covelo, CA: Island Press, 2001.

ISLE: Interdisciplinary Studies in Literature and Environment is the journal of the Association for the Study of Literature and Environment (ASLE). Published twice a year, it began publication in 1993 as a

forum for critical studies primarily of the literary and secondarily of the performing arts that proceed from or address environmental considerations, including ecological theory, conceptions of nature and their artistic depiction, the human/nature dichotomy, and related concerns. Contact: Patrick Murphy, ed., English Department, Indiana University of Pennsylvania, Indiana, PA 15704-1094, USA. (v6,#2)

ISLE: Interdisciplinary Studies in Literature and Environment is a new journal providing a forum for critical studies of literature that addresses ecological theory, environmentalism, concepts of nature and their artistic depictions, and the human/nature dichotomy. Sponsored by Indiana University of Pennsylvania and the University of Nevada, Reno. The editorial board (as yet incomplete) includes Gary Snyder, Karen Warren, Ariel Salleh, Judith Plant, and others. Papers and subscriptions are invited. Contact Patrick D. Murphy, editor, ISLE, English Department, Indiana University of Pennsylvania, Indiana, PA 15705-1094. (v3,#4)

Israel, Brian D. "An Environmental Justice Critique of Risk Assessment," New York University Environmental Law Journal 3(no.2, 1995):469- . (v6,#4)

Israel. A bibliography of environmental ethics and conservation in Israel is in the ISEE newsletter, vol. 5, no. 1, Spring 1994.

Istock, Conrad A., and Robert S. Hoffmann, eds., Storm Over a Mountain Island: Conservation Biology and the Mt. Graham Affair. Tucson: University of Arizona Press, 1996. \$ 20 paper. 288 pages. The opposition to the Mt. Graham International Observatory on a fragile mountain ecosystem in Arizona, also sacred land to the Apaches. But the Mt. Graham controversy was far more than a local issue, and this will not be the last time that the interests of science and the desire for enduring preservation collide. Istock teaches biology at the University of Arizona, Hoffmann is the provost at the Smithsonian Institution. (v7,#2)

Istock, Conrad A., Hoffmann, Robert S., Storm Over a Mountain Island: Conservation Biology and the Mt. Graham Affair. Tucson: University of Arizona, 1995. 288 pp. \$19.95 paper, \$39.95 cloth. A comprehensive case study of the building of the controversial telescope on Mt. Graham, in Arizona, for scientists, land managers, policymakers, and environmentalists who will face future ecological controversies. (v8,#2)

Italiano, Michael L.; Pomeroy, Christopher D.; and Torney, John R. "Environmental Due Diligence During Mergers and Acquisitions." Natural Resources and Environment 10, no.4 (1996): 17. (v7, #3)

IUCN - The World Conservation Union. IUCN Red List Categories. Gland, Switzerland: IUCN, 1994. (v.10,#1)

Ivakhiv, Adrian. "Toward a Multicultural Ecology", Organization and Environment, 15, (No. 4, 2002): 389-409. The debate between realists and constructivists has polarized environmental scholarship in recent years. Ivakhiv situates this debate within the longstanding modernist tradition of categorically distinguishing "nature" from "culture", and the natural sciences from the social sciences and humanities, and suggests that we need to find a non-dualistic space for rethinking cultural-ecological relations. Such a space has been articulated by actor-network theory, but this theory leaves significant gaps in its understanding of agency and of macro forces. To fill in these gaps, the author draws on perspectives that theorize perception and agency as embodied, animate, and ecologically embedded and that theorize macro forces as discursively shaped and amid causally multidirectional and multiscalar. The author proposes the concept of multicultural ecology as a way of articulating the indivisibility of nature and culture and the multiplicity of cultural-ecological practices, and suggests a normative dimension by which such practices can be compared and evaluated. Ivakhiv is an assistant professor in the Department of Religious Studies

and Anthropology and the Program in Environmental Studies at the University of Wisconsin, Oshkosh.

Ivancic, A., Turk, J., Rozman, C., and Sisko, M., "Agriculture in the Slovenian transitional economy: The preservation of genetic diversity of plants and ethical consequences," Journal of Agricultural and Environmental Ethics 16(2003):337-365. Slovene agriculture is going through drastic changes. Most of the land is still owned by small farmers. The production is oriented to the market and is based on modern Western technology. It is associated with increasing pollution and is becoming a serious threat to biodiversity. Many of the wild plants are endangered due to genetic erosion within species. The traditional crops and varieties are being replaced by imported materials and the use of chemicals has been increasing. Many of the traditional varieties have been neglected and/or lost. The legislation is not efficient enough to protect the environment and biotic diversity. KEY WORDS: biodiversity of plants, ethical issues, Slovene agriculture, transitional economy. (JAEE)

Iverson, L. R., "Book Review, Early Forestry and Conservation in America," Landscape Ecology 18(no. 2, 2003): 208-210.

Iverson, Nassauer J.; Corry, R.C., "Using normative scenarios in landscape ecology," Landscape Ecology 19(no.4, 2004):343-356(14). (v. 15, # 3)

Ives, Christopher, "Nature Wild and Stylized: Gary Snyder and the Japanese Love and Destruction of Shizen (Nature)." Paper given at American Academy of Religion, San Francisco, November 21-24. The Japanese are often said to love nature, but Japan has a dismal environmental record. One reason why the Japanese love of nature has produced such poor stewardship is that the nature loved by most Japanese has been nature simplified or reduced to what they regard as expressing its essence. This is stylized, not wild nature. Many of the remaining natural areas in Japan have been shaped and manipulated away from their wild state. Gary Snyder, though influenced by the Japanese, does not really appropriate the Japanese stylized nature but his orientation is primarily toward wild nature. Nevertheless Japanese ideas were useful to him and can be useful to others. Ives is in the Department of Religion, University of Puget Sound, Tacoma, WA 98416. Copies available from him. (v3,#4)

Iverson, D, "The Moralism of Multiculturalism," Journal of Applied Philosophy 22 (no. 2, August 2005): 171-184.

Jablonski, David "Extinctions: a Paleontological Perspective," Science, August 16, 1991, (v2,#3)

Jachtenfuchs, Markus. International Policy-Making as a Learning Process? The European Union and the Greenhouse Effect. Brookfield, Vt.: Ashgate, 1996. 232 pp. \$67.95. A study of policy making in a major field, climate change, and of a major player, the EU, and a contribution to social theory. Policy-making is treated in terms of learning, a perspective that sheds light on inter-relationships neglected by standard interest-oriented approaches. (v8,#2)

Jackson (Burgess-Jackson), Keith. Review of Hugh LaFollette and Niall Shanks Brute Science: Dilemmas of Animal Experimentation, Ethics and the Environment 4(1999):115-122. (E&E)

Jackson, Dana L., and Jackson, Laura L., eds., The Farm as Natural Habitat: Reconnecting Food Systems with Ecosystems. Washington, DC: Island Press, 2002. Modern farming is a booming success and simultaneously a crisis. Currently, the move toward industrialized agriculture is creating "ecological sacrifice zones." We make food on farms, and when we want nature we drive somewhere else to find it. We ought to ask if we can use farmland better, and make the farm a quality environment. The U.S. and other countries have a long history of government regulation to preserve other desired values on

farmlands (such as a fair wage, or limiting toxic pollutants); farmland policy can also be restructured to promote ecological values, with benefits to farmers and to the nation. This often works best and most easily, the authors concede, with lands that are not ideal for farming (hilly, semi-arid, poor soil); it is tougher with prime agricultural land.

Jackson, Michael, At Home in the World. Durham, NC: Duke University Press, 1995. 188 pages. A study of the Warlpiri people of the Tanami desert in north central Australia. The meaning that the nomadic Warlpiri give to "country" in their sense of identity. "Each person's sense of self [is] metaphorically fused with a sense of place" (p. 140).

Jackson, Peter and Kempf, Elizabeth. Tigers in the Wild. Gland, Switzerland: World Wildlife Fund, 1996. In this century, three subspecies of tiger have gone extinct. Struggling for living space in one of the most densely populated regions of the world, the remaining five subspecies are at risk of meeting the same fate. An overview of the situation, and steps that can be taken to prevent the extinction of the tiger in the wild, which otherwise will probably occur early in the next century. (v7,#4)

Jackson Smith, D., Kreuter, U. and Krannich, R. S., "Interpretation, Activity Participation, and Environmental Attitudes of Visitors to Penguin Island, Western Australia," Society and Natural Resources 18(no. 7, August 2005): 611-624.

Jackson, Thomas C., "Lessons from the Endangered Species Wars," Natural Resources and Environment 12 (Fall 1997):105-. (v.8,#4)

Jackson, Tim, "Sustainability and the 'Struggle for Existence': The Critical Role of Metaphor in Society's Metabolism," Environmental Values 12(2003): 289-316. This paper presents a historical examination of the influence of the Darwinian metaphor 'the struggle for existence' on a variety of scientific theories which inform our current understanding of the prospects for sustainable development. The first part of the paper traces the use of the metaphor of struggle through two distinct avenues of thought relevant to the search for sustainable development. One of these avenues leads to the biophysical critique of conventional development popularised by 'ecological economists' such as Georgescu-Roegen and Daly. This critique suggests that modern economic systems have gone astray by failing to respect the biological and physical limits to development and that they should be adapted to make them more like ecological systems. The other avenue leads to the modern insights of evolutionary psychology. These latter insights suggest that in certain key respects, the economic system (and actors within it) are already behaving more or less like an ecological system, driven as they are by evolutionary imperatives. Consequently, this second avenue appears to offer far bleaker prospects for achieving sustainable development than the first. However, the final part of the paper re-examines the historical roots of the metaphor itself, and suggests a number of ways in which a critical response to those historical roots might influence our understanding of the prospects for sustainable development.

Jackson, Tim, ed., *The Earthscan Reader in Sustainable Consumption*. Reviewed by Annukka Berg, Environmental Values 16(2007):408-410.

Jackson, Wes, Berry, Wendell, and Coleman, Bruce, eds. Meeting the Expectations of the Land: Essays in Sustainable Agriculture and Stewardship. Review essay by K. Houle in Journal of Agricultural and Environmental Ethics 8(1995):85-92. (JAEE)

Jackson, Wes, "Our Vision for the Agricultural Sciences Need Not Include Biotechnology", Journal of Agricultural and Environmental Ethics 4(1991):207-215. In a debate: Should our vision for the agricultural sciences include biotechnology?

Jacobs, Harvey L., and Annie L. Booth. "Ties that Bind: Native American Beliefs as a Foundation for Environmental Consciousness." Environmental Ethics 12(1990):27-43. In this article we examine the specific contributions Native American thought can make to the ongoing search for a Western ecological consciousness. We begin with a review of the influence of Native American beliefs on the different branches of the modern environmental movement and some initial comparisons of Western and Native American ways of seeing. We then review Native American thought on the natural world, highlighting beliefs in the need for reciprocity and balance, the world as a living being, and relationships with animals. We conclude that Native American ideas are important, can prove inspirational in the search for a modern environmental consciousness, and affirm the arguments of both deep ecologists and ecofeminists. Jacobs is in the department of Urban and Regional Planning, University of Wisconsin-Madison; Booth is at the Institute for Environmental Studies, University of Wisconsin-Madison, Madison, WI. (EE)

Jacobs, Harvey M., ed. Who Owns America? Social Conflict over Property Rights. Reviewed by Alan Zundel. Environmental Ethics 22(2000):423-424.

Jacobs, J. W. and Wescoat, J. L., "Managing River Resources: Lessons from Glen Canyon Dam," Environment 44(no.2, 2002): 8-19. (v.13,#2)

Jacobs, J. W., "Broadening U.S. Water Resources Project Planning and Evaluation," Natural Resources Journal 42(no.1, 2002): 21-32. (v.13,#4)

Jacobs, Jane. "Earth Honoring: Western Desires and Indigenous Knowledges." In Alison Blunt and Gillam Rose, eds., Writing Women and Space: Colonial and Postcolonial Geographies. New York: Guilford, 1994. (v7, #3)

Jacobs, Michael, The Green Economy: Environment, Sustainable Development and the Politics of the Future. London & Concord, MA: Pluto Press, 1991. 312 pages. Sample chapters: "Whose Environment?"; "The Invisible Elbow: Market Forces and Environmental Degradation"; "Valuing the Environment: The 'Orthodox Economist's' Approach to Environmental Problems"; "Making Sustainability Operational: The Meaning of 'Environmental Capacity'"; "Global Environmental Economic Policy"; "Making Environmental Decisions: The Limits of Cost-Benefit Analysis"; "The Standard of Living and the Quality of Life." Jacobs attempts to show how an ideal of sustainability can be converted into concrete policy objectives, and, though the meaning of "standard of living" must be reconsidered, the possibilities are more hopeful and politically feasible than might be anticipated. He is a British management consultant. (v5,#3)

Jacobs, Michael. "Sustainable Development, Capital Substitution and Economic Humility: A Response to Beckerman." Environmental Values 4(1995):57-68. Wilfred Beckerman [1] accepts two of the premises of the environmentalist argument: that long-term environmental impacts may have serious effects on future generations, and that these future generations should be the object of ethical concern. However he rejects the conclusion that is widely claimed to follow: namely that 'sustainability' should be a principal objective of economic policy. For him, the proper (and ultimately the only) objective of economic policy remains optimality, the maximisation of benefits over costs --even when environmental concerns are taken into account. His argument has five elements: a redefinition, a positive proposition, two negative ones, and a very large assumption. I shall take each in turn. Jacobs is in the Centre for Environmental Change, University of Lancaster. (EV)

Jacobsen, Eivind, and Arne Dulsrud, "Will Consumers Save The World? The Framing of Political Consumerism," Journal of Agricultural and Environmental Ethics 20(2007):469-482. An active ethically conscious consumer has been acclaimed as the new hero and hope for an ethically improved capitalism.

Through consumers' "voting" at the checkout, corporations are supposed to be held accountable for their conduct. In the literature on political consumerism, this has mainly been approached as political participation and governance. In this article, we do a critical review of this literature. We do so by questioning the existence of what we call a "generic active consumer model." At the core of this position, there is a belief that the active consumer is a universal entity, available across nations and time. Instead we call for an approach that takes accord of the ways consumers and consumer roles are framed in interactive processes in markets, governance structures, and everyday life. Consumers in different countries assess their responsibilities and their powers *as consumers* differently due to different institutionalizations within distinctive contexts. We also must take into account how the inertia of ordinary consumption and the moral complexities of everyday life restrict the adoption of an active consumerist role. Hence, the debate on political consumerism should make for a more realistic notion of ethical consumer-sovereignty and its role in improving the workings of capitalism. In our view, these findings have severe implications for understanding both theories of political consumption and the dynamics of political consumption per se. Keywords: consumer sovereignty, ethical shopping, political consumerism.

Jacobsen, Knut A. Review of Christopher Key Chapple and Mary Evelyn Tucker, eds., Hinduism and Ecology: The Intersection of Earth, Sky, and Water. Environmental Ethics 25(2003):333-336. (EE)

Jacobsen Knut A., Prakrti in Samkhya-Yoga: Material Principle, Religious Experience, Ethical Implications. New York: Peter Lang, 1999. This book is the first monographic study of "prakrti" (nature). It traces the history of the word "prakrti," the word chosen by the modern North Indian languages to translate the English word "nature," through the texts of the Hindu, Buddhist, and Jain systems of religious thought. "Prakrti" is one of the central metaphysical principles in the religious traditions of Hinduism, especially in the influential Samkhya and Yoga traditions. The second part of the book gives a systematic analysis of this important principle in the Proto-Samkhya, Samkhya, and Samkhya-Yoga texts. This book investigates a religious experience called "merging with prakrti" ("prakrtilaya"), which has been neglected in previous studies, but is described in the Samkhya and Yoga texts, with implications for issues of interspecies or environmental ethics. Jacobsen is in the Department of the History of Religions, University of Bergen, Norway. Knut.Jacobsen@krr.uib.no. (v.11,#1)

Jacobsen, Knut A., "The Institutionalization of the Ethics of 'Non-Injury' Toward All "Beings in Ancient India." Environmental Ethics 16(1994):287-301. The principle of non-injury toward all living beings (ahimsa) in India was originally a rule restraining human interaction with the natural environment. I compare two discourses on the relationship between humans and the natural environment in ancient India: the discourse of the priestly sacrificial cult and the discourse of the renunciants. In the sacrificial cult, all living beings were conceptualized as food. The renunciants opposed this conception and favored the ethics of non-injury toward all beings (plants, animals, etc.), which meant that no living being should be food for another. The first represented an ethics modeled on the power that the eater has over the eaten while the second attempted to overturn this food chain ethics. The ethics of non-injury ascribed ultimate value to every individual living being. As a critique of the individualistic ethics of non-injury, a holistic ethics was developed that prescribed the unselfish performance of one's duties for the sake of the functioning of the natural system. Vegetarianism became a popular adaptation of the ethics of non-injury. These dramatic changes in ethics in ancient India are suggestive for the possibility of dramatic changes in environmental ethics today.

Jacobsen is with the Dept. of Religious Studies, University of California at Santa Barbara. (EE)

Jacobsen, Knut A., "Bhagavadgita, Ecosophy T, and Deep Ecology," Inquiry 39(no. 2, June, 1996):219-38. "This article analyzes the influence of Hinduism on Ecosophy T. Arne Naess in several of his environmental writings quotes verse 6.29 of the Bhagavadgita, a Hindu sacred text. The verse is understood to illustrate the close relationship between the ideas of the oneness of all living beings, non-

injury, and self-realization. The article compares the interpretations of the verse of some of the most important Hindu commentators on the Bhagavadgita with the environmentalist interpretation. There is no agreement in the history of the Hindu tradition on the meaning of the verse. The interpretation of Ecosophy T contrasts sharply with the interpretations of the Hindu monastic traditions but has similarities with the twentieth-century social activist interpretations of Mohandas K. Gandhi and S. Radhakrishnan. In Ecosophy T aspects of this social activist version of Hinduism have been creatively reinterpreted in the context of contemporary environmentalism." Of interest is the fact that interpretations of this verse "were originally related to the attempt of the Hindu ascetics to free the self, or atman, from bondage to the material world, an effort which to some degree is the very opposite of that of integrating humans into the natural world the preservation of the biotic communities attempted by contemporary environmental thinkers" (p. 219). Jacobsen teaches at the University of Bergen, Norway. (v8,#3)

Jacobsen, Michael F., et al, Six Arguments for a Greener Diet: How a More Plant-Based Diet Could Save Your Health and the Environment. Washington, DC: Center for Science in the Public Interest, 2006. A diet with less meat consumption would reduce chronic disease, reduce foodborne illness, improve the quality of soil, water, and air; and reduce animal suffering. Supported with a relentless barrage of facts. Reviewed by David L. Katz, "Chewing on the Food Chain," Science 314(3 November 2006):762-763.

Jacobsen, Susan K., Mallory D. McDuff, and Martha C. Monroe, Conservation Education and Outreach Techniques. Oxford: Oxford University Press, 2006. An array of techniques for enhancing school resources, marketing environmental messages, using maps and media, partnerships for conservation, on-site programs for natural areas and community centers. Case studies from around the world. Jacobsen and Monroe are at the University of Florida; McDuff at Warren Wilson College, North Carolina.

Jacobson, M., "Wood Versus Water: Timber Plantations in Semiarid South Africa," Journal of Forestry 101(no. 5, 2003): 31-35. (v 14, #3)

Jacobson, Rebecca Sete. Review of The Aesthetics of Everyday Life. Edited by Andrew Light and Jonathan M. Smith. Environmental Ethics 28(2006):331-332. (EE)

Jacobson, Susan K., Marynowski, Susan B. "Public Attitudes and Knowledge about Ecosystem Management on Department of Defense Land in Florida," Conservation Biology 11(no.3, 1997):770. (v8,#2)

Jacobson, Susan K., Eleta Vaughan, and Sara Webb Miller. "New Directions in Conservation Biology: Graduate Programs." Conservation Biology 9 (no. 1, 1995):5-17. A summary of 51 programs, with representative faculty. Jacobson earlier wrote a 1990 account of the state of the discipline at that time. All authors are with the Program for Studies in Tropical Conservation, Department of Wildlife and Range Sciences, University of Florida. (v6,#1)

Jacobson, Susan K., "Graduate Education in Conservation Biology," Conservation Biology 4(1990):431-440. Evaluates 16 programs: Colorado State University, University of Colorado, Cornell University, Duke University, University of Florida, University of Georgia, University of Hawaii, Iowa State University, University of Maryland, University of Michigan, Montana State University, Stanford University, Texas A&M University, Tufts University, University of Washington, University of Wisconsin. The development of programs in conservation biology is inhibited by long-standing academic constraints, including disciplinary structure, communication barriers among disciplines, and lack of reward systems, research funds, model curricula, and evaluation of techniques for cross-disciplinary work. Jacobson is in the Department of Wildlife and Range Sciences, University of Florida, Gainesville. (v2,#2)

Jacobson, Susan K., ed. Conserving Wildlife: International Education and Communication Approaches.

New York: Columbia University Press, 1995. 312 pp. \$22 paper, \$45 cloth. Twenty-five exemplary education and communication programs from around the world that have contributed to the conservation of wildlife and the natural resources. (v8,#2)

Jacobson, Susan K., Balick, Michael J., ed. Conserving Wildlife: International Education and Communication Approaches. New York: Columbia University Press, 1996. 301 pp. \$22 paper, \$45 cloth. Comprehensive case studies of fifteen exemplary education and communication programs that have contributed to the conservation of wildlife and natural resources around the world. (v7,#4)

Jacques, David, The Millennial Landscape: The Ethics and Aesthetics of Dealing with the Landscape. New York: Garden Art Press, 2001. (v.13,#1)

Jacques, David, The Millennial Landscape: The Ethics and Aesthetics of Dealing with the Landscape. New York: Garden Press, 2003. (v.13,#4)

Jacques, Peter J., Riley E. Dunlap, and Mark Freeman. "The Organization of Denial: Conservative Think Tanks and Environmental Skepticism." *Environmental Politics* Vol. 17, no. 3 (2008): 349-85. The authors qualitatively analyze 141 English language environmental skeptical books published between 1972 and 2005 and find that over 92% of these books (most published in the US since 1992) are linked to conservative think tanks. The authors conclude that environmental skepticism is largely an elite-driven countermovement tactic to combat environmentalism, and the successful use of this tactic has helped weaken the US commitment to environmental protection.

Jacques, Peter J., Riley E. Dunlap, and Mark Freeman. "The Organization of Denial: Conservative Think Tanks and Environmental Skepticism." *Environmental Politics* Vol. 17, no. 3 (2008): 349-85. The authors qualitatively analyze 141 English language environmental skeptical books published between 1972 and 2005 and find that over 92% of these books (most published in the US since 1992) are linked to conservative think tanks. The authors conclude that environmental skepticism is largely an elite-driven countermovement tactic to combat environmentalism, and the successful use of this tactic has helped weaken the US commitment to environmental protection.

Jacques, Peter. *Globalization and the World Ocean*. Walnut Creek, CA: AltiMira Press, 2006. Jacques offers an analysis of the connections between global marine and atmospheric science to global political phenomena. He shows how human survival is intricately linked to the sustainability of the world ocean, a singular connected body of regional oceans that is by definition a global resource that touches all other ecosystems. Jacques warns that the world ocean now offers evidence of several existential crises for global human populations, including declining global fisheries, coral reef losses, and climate change, but there has been a lack of global or regional cooperation in sustaining this complex ecosystem. He suggests how we can synthesize and coordinate global ecological information, exploring three regional areas in their local and global context: the South Pacific, Caribbean basin, and Southeast Asia.

Jaffe, Adam B., Steven R. Peterson, Paul R. Portney, and Robert N. Stavins, "Environmental Regulation and the Competitiveness of US Manufacturing: What Does the Evidence Tell Us?" Journal of Economic Literature 33(March, 1995):132-163. The once-conventional wisdom was "that environmental regulations impose significant costs, slow productivity growth, and thereby hinder the ability of US firms to compete in international markets." But now prominent economists see environmental regulations as "not only benign in their impacts on international competitiveness, but actually as a net positive for driving private firms and the economy as a whole to become more competitive in international markets."

Jaggard, Alison M., ed., Living with Contradictions: Controversies in Feminist Social Ethics. Boulder, CO: Westview Press, 1994. 600 pages. \$ 55.00. A host of readings, with one section on "Environmentalism," contributors include Barbara Omolade, "We Speak for the Planet"; Karen J. Warren,

"Taking Empirical Data Seriously: An Ecofeminist Philosophical Perspective"; Marti Kheel, "From Healing Herbs to Deadly Drugs: Western Medicine's War Against the Natural World"; Vandana Shiva, "Development, Ecology, and Women"; Val Plumwood, "Conversation with Gaia", Judith Plant, "Searching for Common Ground: Ecofeminism and Bioregionalism"; Cynthia Hamilton, "Women, Home, and Community: The Struggle in an Urban Environment"; Ellen O'Loughlin, "Questioning Sour Grapes: Ecofeminism and the United Farm Workers Grape Boycott"; Jo Whitehorse Cochran, "Stealing the Planet"; Ronnie Zoe Hawkins, "Reproductive Choices: The Ecological Dimension"; The Committee on Women, Population, and the Environment, "Women, Population, and the Environment: Call for a New Approach." Jaggar is professor of philosophy and women studies at the University of Colorado. (v4,#3)

Jaggar, David H. Review of Alternatives to Pain in Experiments on Animals. By Dallas Pratt. Environmental Ethics 4(1982):273-79.

Jakle, John A. and David Wilson, Derelict Landscapes: The Wasting of America's Built Environment. Savage, MD: Rowman and Littlefield, 1992. 342 pp. Paper, \$ 22.95. Recent landscape change in America through the lens of dereliction. Americans "accept whole categories of decline as somehow natural, when decline is in fact a societal construction" (p. xvii). Chronic dereliction reveals a basic flaw in American values. With a sense of alarm for the state of the built environment. (v4,#2)

Jakobsson, K.M., Dragun, A.K. Contingent Valuation and Endangered Species. Review by Roy Brouwer, Environmental Values 7(1998):494.

Jakobsson, Kristin, and Andrew K. Dragun, Contingent Valuation and Endangered Species. Brookfield, VT: Edward Elgar Publishing Co., 1996. 304 pages. \$70.00. Jakobsson is at the Swedish University of Agricultural Sciences. Dragun is at La Trobe University, Australia. (v7,#2)

James, David. The Application of Economic Techniques in Environmental Impact Assessment. Dordrecht/Boston /London: Kluwer Academic Publishers, 1994. The contribution of economic thought and methods to environmental management, with many illustrations in practice, from studies growing out of UNEP reports. James is with Ecoservices, Pty, Ltd., Whale Beach (Sydney), NSW, Australia. (v6,#3)

James, Frances C., "Lessons Learned from a Study of Habitat Conservation Planning," Bioscience 49(no. 11, Nov 01 1999):871- . (v10,#4)

James, George A., ed., Ethical Perspectives on Environmental Issues in India. New Delhi: APH Publishing Corporation, 1998. ISBN 81-7648-050-9. A. P. H. Publishing Corporation, 5 Ansari Road, Darya Ganj, New Delhi 110 002, India. Available in the U.S. through South Asia Books, P.O. Box 502, Columbia, MO 65205. James is in philosophy at the University of North Texas. (v.10,#1)

James, Jr., Harvey S., "On finding solutions to ethical problems in agriculture," Journal of Agricultural and Environmental Ethics 16(2003):439-457. A distinction should be made between two types of ethical problems. A Type I ethical problem is one in which there is no consensus as to what is ethical. A Type II ethical problem is one in which there is a consensus as to what is ethical, but incentives exist for individuals to behave unethically. Type I ethical problems are resolved by making, challenging, and reasoning through moral arguments. Type II ethical problems are resolved by changing the institutional environment so that people do not have incentives to behave unethically. Type I solutions, however, will not be effective in solving Type II problems. Examples in agriculture and elsewhere show how distinguishing between Type I and Type II ethical problems will help in the identification of solutions to ethical issues in agriculture.

KEY WORDS: agricultural ethics, environmental ethics, ethical solutions, incentives, moral conflicts. (JAEE)

James, Ridgeway, *It 's All for Sale. The Control of Global Resources* (Durham, NC. Duke University Press, 2005), Reviewed by Richard P. Haynex in *Journal of Agricultural and Environmental Ethics* 21(2008):409-416.

James, Simon P. "'Thing-Centered' Holism in Buddhism, Heidegger, and Deep Ecology." *Environmental Ethics* 22(2000):359-375. I address the problem of reconciling environmental holism with the intrinsic value of individual beings. Drawing upon Madhyamaka ("middle way") Buddhism, the later philosophy of Martin Heidegger, and deep ecology, I present a distinctly holistic conception of nature that, nevertheless, retains a commitment to the intrinsic worth of individual beings. I conclude with an examination of the practical implications of this "thing-centered holism" for environmental ethics. (EE)

James, Simon P., *Zen Buddhism and Environmental Ethics*. Aldershot, Hants., and Burlington, VT: Ashgate, 2004. Reviewed by Deane Curtin in *Environmental Values* 14(2005):281-283.

James, Simon P., "Buddhism and the Ethics of Species Conservation," *Environmental Values* 15(2006): 85-97. Efforts to conserve endangered species of animal are, in some important respects, at odds with Buddhist ethics. On the one hand, being abstract entities, species cannot suffer, and so cannot be proper objects of compassion or similar moral virtues. On the other, Buddhist commitments to equanimity tend to militate against the idea that the individual members of endangered species have greater value than those of less-threatened ones. This paper suggests that the contribution of Buddhism to the issue of species conservation should not, however, be discounted. It argues, on the contrary, that Buddhist traditions, in reminding us of the moral significance of the suffering of individual animals, add an important dimension to debates concerning the ethical justification of efforts to conserve endangered species. (EV)

James, Simon P. "Human Virtues and Natural Values." *Environmental Ethics* 28(2006):339-353. In several works, Holmes Rolston, III has argued that a satisfactory environmental ethic cannot be built on a virtue ethical foundation. His first argument amounts to the charge that because virtue ethics is by nature "self-centered" or egoistic, it is also inherently "human-centered" and hence ill suited to treating environmental matters. According to his second argument, virtue ethics is perniciously human-centered since it "locates" the value of a thing, not in the thing itself, but in the agent who is "ennobled" by valuing it. These charges, though illuminating, are not in the final analysis compelling. The first misconceives the role of motivation in virtue ethics, while the second ultimately rests on a misunderstanding of the place of the human perspective in ethical considerations. (EE)

James Simon P., "Against Holism: Rethinking Buddhist Environmental Ethics," *Environmental Values* 16(2007): 447-461. Environmental thinkers sympathetic to Buddhism sometimes reason as follows: (1) A holistic view of the world, according to which humans are regarded as being 'one' with nature, will necessarily engender environmental concern; (2) the Buddhist teaching of 'emptiness' represents such a view; therefore (3) Buddhism is an environmentally-friendly religion. In this paper, I argue that the first premise of this argument is false (a holistic view of the world can be reconciled with a markedly eco-unfriendly attitude) as is the second (in speaking of emptiness, Buddhist thinkers are not proposing an 'ecological' conception of the world). Yet the conclusion is, I suggest, true: Buddhism is in certain respects environmentally-friendly, not for the reasons cited above, but because of the view, encapsulated in its teachings and practices, that certain dispositions to treat the natural environment well are an integral part of human well-being. James is in philosophy, Durham University, Durham, UK.

James, SM, "Bridging the Gap between Private Landowners and Conservationists," *Conservation Biology* 16(no.1, 2002):269-271. (v.13, #3)

Jamieson, Dale, "Climatic Change", *Encyclopedia of Bioethics*, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 393-99. (v6,#2)

Jamieson, Dale , ed. A Companion to Environmental Philosophy. Reviewed in Environmental Ethics 25(2003):99-104. (EE)

Jamieson, Dale, "Ethics, Public Policy and Global Warming," Science, Technology and Human Values 17(1992):139-153. Reprinted in Earl Winkler and Jerrold R. Coombes, eds., Applied Ethics: A Reader (Oxford: Blackwell, 1993). Though there are scientific issues involved, the global warming problem is not primarily a scientific problem. It is an ethical and political problem concerning values. The "policy management" approach derives from neo-classical economic theory and so dominates current public discussion that its assumptions and biases are hardly visible. But this approach can hardly succeed on its own terms because its analytic techniques are inadequate to the complexities of anthropogenic climatic change. Jamieson asks about what changes will be needed if humans and other animals are to survive current threats to the global environment. Jamieson is in philosophy at the University of Colorado, Boulder. (v5,#3)

Jamieson, Dale, Morality's Progress: Essays on Humans, Other Animals and the Rest of Nature. Oxford: Oxford University Press, 2002. Reviewed by Markku Oksanen, Environmental Values 13(2004):261-263. (EV)

Jamieson, Dale, Morality's Progress: Essays on Humans, Other Animals, and the Rest of Nature. New York: Oxford University Press, 2003. The summation of nearly three decades of work by a leading figure in environmental ethics and bioethics. The twenty-two papers here are invigoratingly diverse, but together tell a unified story about various aspects of the morality of our relationships to animals and to nature. Jamieson's direct and accessible essays will convince sceptics that thinking about these relations offers great intellectual reward, and his work sets a challenging, controversial agenda for the future. With a previously unpublished paper on "Values in Nature." Jamieson is at Carleton College, Northfield, MN.

Jamieson, Dale and Marc Berkoff. "Sport Hunting as an Instinct." Environmental Ethics 13(1991):375-78. (EE)

Jamieson, Dale, ed., Singer and His Critics. Oxford: Blackwell Publishers, 1999. 368 pages. \$ 64 hardcover. Responses to the work of Peter Singer. Contains of relevance here:
--Solomon, Robert C., "Peter Singer's Expanding Circle: Compassion and the Liberation of Ethics"
--McGinn, Colin, "Our Duties to Animals and the Poor"
--Holton, Richard and Langton, Rae, "Empathy and Animal Ethics"
--Hare, R.M., "Why I Am only a Demi-vegetarian"
--Rolston, Holmes, III, "Respect for Life: Counting what Singer Finds of no Account"
--Singer, Peter, "A Response." (v.10,#2)

Jamieson, Dale, Review of Shrader-Frechette, K.S., Risk and Rationality. Environmental Values Vol.1 No.3(1992):269.

Jamieson, Dale, "Ethics and International Climate Change," Climatic Change 33(1996):323-336. In recent years the idea of geoengineering climate has begun to attract increasing attention. There is the possibility that Earth may be undergoing a greenhouse-induced global warming, and few serious measures have been undertaken to prevent it. Jamieson argues for a set of conditions required for intentional climate change to be morally permissible and argues that these conditions are not now satisfied. However, research on intentional climate change should go forward, if other conditions are met. Jamieson is in technology and philosophy at Carleton College, Northfield, MN. (v.10,#1)

Jamieson, Dale, "Ethics and Animals: A Brief Review," Journal of Agricultural and Environmental Ethics

6, Special Supplement 1 (1993):15-20. (v5,#3)

Jamieson, Dale, "Ecology, Social Theory, and the Green Movement," Brock Review (Brock University, Canada), vol. 2, no. 1, pp. 22-33. The core values and commitments that drive the green movement. Why the green vision is a valuable contribution to social theory. Greens are fundamentally anti-hierarchical and for participatory democracy, although their basing these on deep ecology is more problematic. In its attaching value to systems, deep ecology is a fundamentally confused theory of value. Jamieson is in philosophy at the University of Colorado, Boulder. (v4,#3)

Jamieson, Dale and Lori Gruen, eds., Thinking of Nature: Readings in Environmental Philosophy. Oxford University Press. 1994. Anthology of about forty articles. (v4,#3)

Jamieson, Dale, "Animal Liberation is an Environmental Ethic," Environmental Values 7(1998):3-24. I begin by briefly tracing the history of the split between environmental ethics and animal liberation, go on to sketch a theory of value that I think is implicit in animal liberation, and explain how this theory is consistent with strong environmental commitments. I conclude with some observations about problems that remain. KEYWORDS: Environmental ethics, animal liberation, Callicott, sentientism, artworks. Dale Jamieson is at Carleton College, MN. (EV)

Jamieson, Dale, ed., A Companion to Environmental Philosophy. Oxford: Blackwell Publishers, 2001. Not cheap, \$ 125.00, and not small, 511 pages. Not just for philosophers, but quite inclusive. Major reference work for everybody, especially for libraries.

PART I: CULTURAL TRADITIONS

1 Indigenous perspectives, Laurie Anne Whitt, Mere Roberts, Waerete Norman, and Vicki Grieves.

2 Classical China, Karyn L. Lai.

3 Classical India, O. P. Dwivedi.

4 Jainism and Buddhism, Christopher Key Chapple.

5 The classical Greek tradition, Gabriela R. Carone.

6 Judaism, Eric Katz.

7 Christianity, Robin Attfield.

8 Islam, S. Nomanul Haq.

9 Early modern philosophy, Charles Taliaferro.

10 Nineteenth- and twentieth-century philosophy, Andrew Brennan.

PART II: CONTEMPORARY ENVIRONMENTAL ETHICS

11 Meta-ethics, John O'Neill.

12 Normative ethics, Robert Elliot.

13 Sentientism, Gary Varner.

14 The land ethic, J. Baird Callicott.

15 Deep ecology, Freya Mathews.

16 Ecofeminism, Victoria Davion.

PART III: ENVIRONMENTAL PHILOSOPHY AND ITS NEIGHBORS

17 Literature, Scott Slovic.

18 Aesthetics, John Andrew Fisher.

19 Economics, A. Myrick Freeman III.

20 History, Ian Simmons.

21 Ecology, Kristin Shrader-Frechette.

22 Politics, Robyn Eckersley.

23 Law, Sheila Jasanoff.

PART IV: PROBLEMS IN ENVIRONMENTAL PHILOSOPHY

24 Wilderness, Mark Woods.

25 Population, Clark Wolf.

- 26 Future generations, Ernest Partridge.
- 27 Sustainability, Alan Holland.
- 28 Biodiversity, Holmes Rolston III.
- 29 Animals, Peter Singer.
- 30 Environmental justice, Robert Figueroa and Claudia Mills.
- 31 Technology, Lori Gruen.
- 32 Climate, Henry Shue.
- 33 Land and water, Paul B. Thompson.
- 34 Consumption, Mark Sagoff.
- 35 Colonization, Keekok Lee.
- 36 Environmental disobedience, Ned Hettinger. (v.11,#4)

Jamieson, Dale, "Rights, Justice, and Duties to Provide Assistance: A Critique of Regan's Theory of Rights," Ethics 100(January 1990):349-362. Regan's Case for Animal Rights solves the predation problem by claiming that we humans are required to assist those who are victims of injustice, but we are not required to help those in need who are not victims of injustice. We have no duty to assist the sheep about to be eaten by the wolf, since the wolf is not committing an injustice. But that is an inadequate reply. Consider a case where a human is about to be injured by a boulder rolling down a hill? If the boulder is set in motion deliberately by another human wishing to kill the victim, we are required to assist. But if the boulder is set in motion by an animal inadvertently, we are not required to assist. We are required to help those about to be harmed regardless of whether moral agency is present at the source of harm. But with this Regan's reply about predation fails, and the predation problem is unsolved in the animal rights' view. Jamieson is at the University of Colorado, Boulder. (v2,#4)

Jamieson, Dale, "The Rights of Animals and the Demands of Nature," *Environmental Values* 17(2008):181-199. This paper discusses two central themes of the work of Alan Holland: the relations between the natural and the normative and how our duties regarding animals cohere with our obligations to respect nature. I explicate and defend an anti-speciesist argument that entails strong moral demands on how we should live and what we should eat. I conclude by discussing the implications of anti-speciesism for rewilding and reintroduction programmes.

Jamieson, Dale. "Rational Egoism and Animal Rights." Environmental Ethics 3(1981):167-71. Jan Narveson has suggested that rational egoism might provide a defensible moral perspective that would put animals out of the reach of morality without denying that they are capable of suffering. I argue that rational egoism provides a principled indifference to the fate of animals at high cost: the possibility of principled indifference to the fate of "marginal humans." Jamieson is in the department of philosophy, University of Colorado, Boulder, CO. (EE)

Jamieson, Dale. *Ethics and the Environment: An Introduction*. Cambridge: Cambridge University Press, 2008. Jamieson presents both a sophisticated introduction to environmental ethics and his own positions on a number of issues. He begins by discussing the environment as an ethical question, including technological, economic, religious, and aesthetic considerations. Subsequent chapters focus on topics such as human morality, metaethics, normative ethics (consequentialism, virtue ethics, and Kantianism), animal ethics, biocentrism and ecocentrism, and justice.

Jamieson, Dale. "Ecosystem Health: Some Preventive Medicine." Environmental Values 4(1995):333-344. Some ecologists, philosophers, and policy analysts believe that ecosystem health can be defined in a rigorous way and employed as a management goal in environmental policy. The idea of ecosystem health may have something to recommend it as part of a rhetorical strategy, but I am dubious about its utility as a technical term in environmental policy. I develop several objections to this latest version of scientism in environmental policy, and conclude that our environmental problems fundamentally involve problems in our institutions of governance, our systems of value, and our ways of knowing. These are the problems

that most need to be addressed. KEYWORDS: Desire, ecosystem health, health, objectivity, preference, scientism, subjectivity, values. Jamieson is in the department of philosophy, University of Colorado, Boulder. (EV)

Jamieson, Dale. *Ethics and the Environment: An Introduction*. Cambridge: Cambridge University Press, 2008. Jamieson presents both a sophisticated introduction to environmental ethics and his own positions on a number of issues. He begins by discussing the environment as an ethical question, including technological, economic, religious, and aesthetic considerations. Subsequent chapters focus on topics such as human morality, metaethics, normative ethics (consequentialism, virtue ethics, and Kantianism), animal ethics, biocentrism and ecocentrism, and justice.

Jamison, Andrew and Erik Baark. "National Shades of Green: Comparing the Swedish and Danish Styles in Ecological Modernisation." Environmental Values 8(1999):199-218. ABSTRACT: Throughout Europe, science and technology policy within the environmental field is currently in a process of transformation, which has been characterised by many observers as ecological modernisation. Emphasis is being given to preventive principles and so-called cleaner technologies in the quest for a more sustainable development. Each European country has, however, adapted the new doctrines and practices in distinctive ways. The main aim of the paper is to show how contemporary policies have been shaped by history, more specifically, by institutional and cognitive traditions, and by national policy styles. By comparing "ecological modernisation" in Sweden and Denmark, we attempt to indicate how such national cultural differences affect the ways in which science and technology policies in the environmental field are formulated and implemented. KEYWORDS: Environmentalism, science policy, ecological modernisation, national styles. Andrew Jamison Department of Development and Planning Fibigerstraede 13, Aalborg University, Dk-9220 Aalborg, Denmark and Erik Baark Division of Social Sciences Hong Kong University of Science and Technology Clearwater Bay, Hong Kong. (EV)

Jancar-Webster, Barbara. "Environmental Movement and Social Change in the Transition Countries." Environmental Politics 7(no.1, Spring 1998):69- . (v10,#4)

Jang, Christine J., Nishigami, Yasuko, Yanagisawa, Yukio. "Assessment of Global Forest Change Between 1986 and 1993 Using Satellite-derived Terrestrial Net Primary Productivity," Environmental Conservation 23(no.4 1996):315. (v8,#3)

Jang, Do Gon, God, Humanity, and Nature: Jesus-Centered Environmental Ethics, 1997, Southern Baptist Theological Seminary, Ph.D. thesis. 248 pages. The relationship between humanity and nature and the role of Jesus in understanding the right relationship. Different views of contemporary Christian scholars: humanity-over-nature, humanity-in-nature, and humanity-with-nature. Analysis of the power-relationship between humanity and nature, arguing a "power-with" position and humanity-with-nature view, for which Jesus is a model of a humble attitude toward nature. Christians ought to practice simplicity in every day life as his disciples. The effectiveness of the three positions in resolving human population regulation and the reduction of human consumption. The advisor was Glen H. Stassen. (v.10,#1)

Janofsky, Michael, "Judges Overturn Bush Bid to Ease Pollution Rules," *New York Times*. 18 March 2006. <http://www.nytimes.com/2006/03/18/politics/18enviro.html>

A federal appeals court rejected a clean air directive that would allow many power plants, refineries and factories to "avoid installing costly new pollution controls to help offset any increased emissions caused by repairs and replacements of equipment." The court ruled in favor of a coalition of states and environmental advocacy groups.

Janofsky, Michael, "E.P.A. Enforcement Shows Results," New York Times, November 16, 2004, p. A20. The Environmental Protection Agency claims its enforcement regulations will remove one billion pounds

of pollution from air and water in 2004, increased from 600 million pounds the previous year. The Agency sent 265 cases to court last year, a slight increase over the previous year. Environmentalist critics say fewer of the cases come to resolution in the courts, however. (v.14, #4)

Janofsky, Michael, "When Cleaner Air is a Biblical Obligation," New York Times, November 7, 2005. The National Association of Evangelicals, representing 45,000 churches serving 30 million people across the U.S., is circulating among its leaders a draft of a policy statement that encourages lawmakers to pass legislation creating mandatory controls for carbon emissions. A major obstacle to any measure that would address global warming is Senator James M. Inhofe, and Oklahoma Republican who is chair of the Senate Environment and Public Works Committee and an evangelical himself. He has called global warming "the greatest hoax ever perpetrated on the American people." He said the NAE had been "led down a liberal path" by environmentalists.

Janofsky, Michael, "Study Finds Mercury Levels in Fish Exceed U.S. Standards," New York Times, August 4, 2004, p. A15. "More than half the fish in the nation's lakes and reservoirs have levels of mercury that exceed government standards for women of child-bearing age and children, according to an environmental coalition's analysis of a survey by the Environmental Protection Agency." (v. 15, # 3)

Janse van Rensburg, Eureka, Environmental Education and Research in Southern Africa: A Landscape of Shifting Priorities. Ph.D. thesis in the Department of Education, Rhodes University, February 1995. 249 pages. Published copies are available from this department. Research priorities within universities and within the context of political and environmental change in southern Africa. The thesis seeks "a reflexive perspective" that is "outside modernist assumptions" and outlines "research priorities from this perspective. Reflexivity reveals the myths of expert-driven, instrumental and institutionalized research separated from environmental education and based upon rationalistic interpretations of science. It opens up possibilities for transformative knowledge emerging from 're-search' based versions of education as a process of, rather than a means to, social change." Janse van Rensburg is now teaching education at Rhodes University. (v6,#3)

Jansma, Pamela E., Reading about the Environment: An Introductory Guide. Libraries Unlimited. (v5,#4)

Jansson, Ann Mari, Monica Hammer, Carl Folke, and Robert Costanza, eds. Investing in Natural Capital: The Ecological Economics Approach to Sustainability. Washington, DC: Island Press, 1994. 520 pages, \$35. The papers in this book, the product of a meeting sponsored by the International Society for Ecological Economics, supply a thorough exploration of this alternative to conventional economics. Contributors include Fikret Berkes and Rudolf de Groot. (v6,#1)

Janzen, Daniel, "Gardenification of Wildland Nature and the Human Footprint," Science 279(1998):1312-1313. Wild species can no longer be left "out in the wild," but have to be brought into the human "wildland garden" (if that is not an oxymoron). Humans now have the power to domesticate nature, and their genes urge them to do so. "My genes also know that my inclusive fitness is maximized by supporting those tribal policies that give long-term survival and health to their tribe in the nearby environment. They know that my inclusive fitness is maximized by intensely studying that environment. And my genes' study of the nearby environment says that if we cannot figure out how to hide a package as large as 235,000 wild species in the human genome, my inclusive fitness--my tribe's future--will be severely impacted." (235,000 species is presumably a typical number in a nearby environment.) "The more quickly we can move the remaining large lumps of wild biodiversity into garden status, the greater the chance that they will still be with us in perpetuity." "Gardenification" is a softer word than "management," or "dominion," or "zoo," but the effect is the same. Janzen is well-intended, maybe right. But so much the worse for any species that the human tribe does not find genetically useful in our garden. Janzen is in biology at the University of Pennsylvania and a specialist in tropical ecology. (v9,#2)

Jardine, Kevin. "Finger on the Carbon Pulse: Climate Change and the Boreal Forests." The Ecologist 24 (no. 4, July, 1994): 220- . There are alarming signs that global warming is already affecting the boreal forests, increasing the intensity and frequency of fires, storms, and insect attacks. Many studies project that, as the forests decline, there will be a massive net release of carbon into the atmosphere, triggering a runaway greenhouse effect. (v6,#1)

Jarosz, Lucy. "Working in the Global Food System: A Focus for International Comparative Analysis." Progress in Human Geography 20, no.1 (1996): 41. (v7, #3)

Jarrell, Ken F. ,Bayley, Douglas P. and Thomas, Nikhil A. "Recent Excitement about the Archaea." Bioscience 49(no. 7, July 1999): 530- . The Archaea are valuable for studying basic biological questions and have novel biotechnology applications. (v.11,#1)

Jarrell, TC, "Review of: Population and Environment: Methods of Analysis edited by Wolfgang Lutz, Alexia Prskawetz, and Warren C. Sanderson," Journal of Environment and Development 11(no.4, 2002): 450-451.

Jarrell, TC, "Review of: Carter, Neil, The Politics of the Environment: Ideas, Activism, Policy", Journal of Environment and Development 12(no.1, 2003):129-130.

Jarrett, R, "The Environment: Collateral Victim and Tool of War," Bioscience 53(no.9, 2003):880-882. (v.14, #4)

Järvinen, Olli, and Kaarina Miettinen, Sammuuko suuri suku? Luonnon puolustamisen biologialla (Will Nature Die? Biology on Behalf of Nature). Helsinki: Suomen Luonnonsuojeluntuki Oy (Finnish Nature Conservation Council), 1987. (v5,#2) (Finland)

Jarvis, K, "Review of: Karen R. Jones. Wolf Mountains: A History of Wolves Along the Great Divide", Environmental History 9 (no.1, 2004): 138-139.

Jasanoff, Sheila, "New Modernities: Reimagining Science, Technology and Development," Environmental Values 11(2002):253-276. "Development" operates as an allegedly value-neutral concept in the policy world. This essay describes four mechanisms that have helped to strip development of its subjective and meaning-laden elements: persistent misreading of technology as simply material and inanimate; uncritical acceptance of models, including economic ones, as adequate representations of complex systems; failure to recognize routine practices as repositories of power; and erasing history and time as relevant factors in producing scenarios for the future. Failure to take these elements into account has led to inequality, injustice and unintended consequences in many development projects. Interpretive analysis of development tools and concepts is a much-needed corrective. (EV)

Jasanoff, Sheila. "The Dilemma of Environmental Democracy. " Issues in Science and Technology, Fall, 1996, pages 63-70. (v8,#3)

Jasanoff, Sheila. "The Songlines of Risk." Environmental Values 8(1999):135-152. ABSTRACT: Two decades of social and political analysis have helped to enrich the concept of risk that underlies the bulk of modern environmental regulation. Risk is no longer seen merely as the probability of harm arising from more or less determinable physical, biological or social causes. Instead, it seems more appropriate to view risk as the embodiment of deeply held cultural values and beliefs - the songlines of the paper's title - concerning such issues as agency, causation, and uncertainty. These values are incorporated into the formal methodologies, such as quantitative risk assessment, by which industrial societies assess risk. The meaning of risk accordingly varies from one cultural context to another, posing difficult problems for

global environmental governance. The paper reflects on the role of science in promoting convergent perceptions of risk across disparate political cultures. KEYWORDS: environmental risk, risk assessment, agency, causation, uncertainty. Sheila Jasanoff, John F. Kennedy School of Government Harvard University Cambridge, Massachusetts 02138, USA (EV)

Jasper, J. M., and Nelkin, D., The animal rights crusade: The growth of a moral protest. New York: Free Press, 1992.

Jax, Kurt and Ricardo Rozzi, "Ecological Theory and Values in the Determination of Conservation Goals: Examples from Temperate Regions of Germany, United States of America, and Chile," Revista Chilena de Historia Natural 77(2004):349-366. In English. An analysis of various kinds of conservation goals (biodiversity, ecotourism, cultural heritage, indigenous peoples). This analysis seeks that "nature and humans are brought together as much in the goals as in the processes of conservation," since "it is impossible to completely 'isolate' protected areas from direct or indirect human influence." This often requires active management. Applied to conservation areas in Germany, the U.S. (Yellowstone) and Chile. Jax is with the UFZ Centre for Environmental Research Leipzig-Halle, Department of Conservation Biology, Leipzig, Germany. Rozzi is with the Omoro Ethnobotanical Park, Universidad de Magallanes, Puerto Williams, Chile, also in philosophy, University of North Texas.

Jax, Kurt. Review of Naturschutzethik. Eine Einführung für die Praxis [Conservation Ethics: An Introduction to Practical Application]. By Uta Eser and Thomas Potthast. Environmental Ethics 24(2002):209-212 (EE)

Jax, Kurt. Review of Die Evolution und der Naturschutz: Zum Verhältnis von Evolutionsbiologie, Ökologie und Naturethik [Evolution and Conservation Biology: On the Relation between Evolutionary Biology, Ecology, and the Ethics of Nature]. By Thomas Potthast. Environmental Ethics 24(2002):209-212 (EE)

Jax, Kurt. Review of Der Naturschutz und das Fremde: Ökologische und Normative Grundlagen der Umweltethik [Conservation Biology and the Foreign: Ecological and Normative Foundations of Environmental Ethics]. By Uta Eser. Environmental Ethics 24(2002):209-212 (EE)

Jay, M., M. Morad and A. Bell, "Biosecurity, a Policy Dilemma for New Zealand," Land Use Policy 20(no. 2, 2003): 121-129. (v 14, #3)

Jeanes, Ike, Forecast and Solution: Grappling with the Nuclear. Reviewed by Kristin Shrader-Frechette. Journal of Agricultural and Environmental Ethics 10(1997):82-84. (JAEE)

Jeanrenaud, Sally, Communities and Forest Management in Western Europe. Covelo, CA: Island Press, 2001.

Jeffers, Tamar. Review of Warner Brothers' "The Matrix", Organization and Environment 14 (No. 2, June 2001) pp.238-9. Jeffers is a PhD student in the Department of Film and Television at the University of Warwick, UK. (v.13,#2)

Jegen, Mary Evelyn and Bruno V.Manno, eds. The Earth is the Lord's: Essays on Stewardship. New York: Paulist Press, 1978.

Jehlicka, P. and Kostelecky, T., "Czech Greens in the 2002 General Election: a New Lease of Life," Environmental Politics 12(no. 2, 2003):

Jelinski, Dennis, "There is No Mother Nature-There is No Balance of Nature: Culture, Ecology and Conservation," Human Ecology 33(no.2, April 2005):271-288(18).

Jenkins, Amelia Fine. "Forest Health: A Crisis of Human Proportions," Journal of Forestry 95(no.9, 1997):11. (v8,#3)

Jenkins D.H.; Devlin D.A.; Johnson N.C.; Orndorff S.P., "System Design and Management for Restoring Penns Woods," Journal of Forestry 102(no.3, April/May 2004):30-36(7).

Jenkins, Dennis, "Criminal Prosecution and the Migratory Bird Treaty Act: An Analysis of the Constitution and Criminal Intent in an Environmental Context," Boston College Environmental Affairs Law Review 24(no.3, 1997):595. (v8,#2)

Jenkins, M; Green, RE; Madden, J, "The Challenge of Measuring Global Change in Wild Nature: Are Things Getting Better or Worse?", Conservation Biology 17(no.1, 2003):20-23.

Jenkins, T. N., "Chinese Traditional Thought and Practice: Lessons for an Ecological Economics Worldview," Ecological Economics 40(2002):39-52. There is a need for a moral dimension regarding nature, which is lacking in the classical Western economic paradigm. The Chinese worldview, derived from Confucian, Taoist, Buddhist and popular religious practice, is based on ideals of harmony, human perfectibility and systemic fit within natural systems. However there are also strong worldly and utilitarian elements at the popular level, and environmental degradation in modern China results from increases in the importance of the pragmatic over the ideal. Chinese traditions offer conceptual resources for ecological thinking by placing economics within a wider socio-ecological fabric, emphasizing soft technologies, challenging meta-economic assumptions, and encouraging systemic wisdom. Jenkins is in Rural Studies, University of Wales, Aberystwyth. (v.13,#2)

Jenkins, Willis, "Biodiversity and Salvation: Thomistic Roots for Environmental Ethics", Journal of Religion, July 2003, pp. 401-20. (v 14, #3)

Jenkins, Willis J. *Ecologies of Grace: Environmental Ethics and Christian Theology*. Oxford: Oxford University Press, 2008. Jenkins develops a map of Christian environmental strategies that draws from traditions of salvation to engage the problems of environmental ethics. He shows how this map can be used to explore the ecological dimensions of Christian theology by discussing the strategies of ecojustice, stewardship, and ecological spirituality that draw on the patterns of sanctification, redemption, and deification and adapt to secular approaches to environmental ethics. Jenkins then examines the problems of these strategies through critical reappraisals of Thomas Aquinas, Karl Barth, and Sergei Bulgakov, each of which can be explored as an ecology of grace. He argues that environmental issues come to the heart of Christian experience and prepare fertile ground for theological renewal.

Jenkins, Willis. "Assessing Metaphors of Agency: Intervention, Perfection, and Care as Models of Environmental Practice." Environmental Ethics 27 (2005):135-154. While environmental ethicists often critique metaphors of nature, they rarely recognize metaphors of environmental practice, and so fail to submit background models of human agency to similar critique. In consequence, descriptions of nature are often shaped by unassessed metaphors of practice, and then made to bear argument for that preferred model. To relieve arguments over "nature" of this vicarious burden, models of agency can and should become a primary topic within the field. In response to some initial misgivings from Eric Katz and taking suggestions from Bryan Norton, Steven Vogel, Holmes Rolston, III, and others, some minimal framing criteria can be developed to promote and facilitate a broad debate over the most appropriate metaphors and models of environmental practice. (EE)

Jenkins, Willis. Review of *The Landscape of Reform: Civic Pragmatism and Environmental Thought in America*. By Ben A. Minter. *Environmental Ethics* 29(2007):427-430. (EE)

Jennings, Elisabeth. "Animal Damage Control: Laying Waste to the Land, the Animals, and the Public Trust," *The Animals' Agenda* 17(no.4, 1997):16.

By exposing the practices of the U.S. Animal Damage Control program in New Mexico, Jennings reveals a pattern of wanton killing, wasteful spending, and lawlessness. (v8,#3)

Jensen, D, "Bursting at the Seams", *Ecologist* 34 (no.2, 2004): 44-47. The Earth cannot sustain 6 billion of us, let alone the projected billions forecast for the future.

Jensen, Derrick, ed., Listening to the Land: Nature, Culture, and Eros. San Francisco: Sierra Club Books, 1995. 328 pages. \$ 15.00. Interviews with Paul Shepard, John Livingston, Christopher Manes, Thomas Berry, Dave Foreman, and others. (v6,#4)

Jensen, Derrick and George Draffan. Railroads and Clearcuts: Legacy of Congress' 1864 Northern Pacific Land Grant. Durango, CO: Kivaki Press (Way of the Mountain Center), 1995. \$ 15.00 198 pages. The wealth of four of the major timber corporations in the Northwest--Weyerhaeuser, Boise Cascade, Potlatch, and Plum Creek--is derived from land conditionally granted by Congress in 1864, intended for settlers, but which ended up establishing corporate empires. The land given away extends for 2,000 miles in a strip 120 miles long, 40 million acres.

Jensen, Derrick, and Stephanie McMillan. *As the World Burns: 50 Simple Things You Can Do to Stay in Denial*. New York: Seven Stories Press, 2007. In this graphic novel, environmental activists Jensen and McMillan offer a satire of modern environmental policy.

Jensen, Derrick, and Stephanie McMillan. *As the World Burns: 50 Simple Things You Can Do to Stay in Denial*. New York: Seven Stories Press, 2007. In this graphic novel, environmental activists Jensen and McMillan offer a satire of modern environmental policy.

Jensen, Jon, "The Virtues of Hunting," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):113-124. (v.13,#2)

Jensen, Jon. Review of Gary E. Varner, In Nature's Interests? Interests, Animal Rights, and Environmental Ethics, Ethics and the Environment 4(1999):235-240. (E&E)

Jensen, Karsten Klint and Jan Tind Sorensen. "The Idea of 'Ethical Accounting' for a Livestock Farm," Journal of Agricultural and Environmental Ethics 11(1999):85-100. This paper presents the idea of a decision-support system for a livestock farm, called "ethical accounting", to be used as an extension of traditional cost accounting. "Ethical accounting" seeks to make available to the farmer information about how his decisions affect the interests of farm animals, consumers and future generations. Furthermore, "ethical accounting" involves value-based planning. Thus, the farmer should base his choice of production plan on reflections as to his fundamental objectives, and he should make his final decision only after having seriously considered the various consequences for the affected parties.

KEY WORDS: animal welfare, consumers, economics, environment, ethics, planning, stakeholders

Jensen, Karsten Klint, "BSE in the UK: Why the Risk Communication Strategy Failed," Journal of Agricultural and Environmental Ethics 17(2004):405-423. The 2000 BSE Inquiry report points out that the most serious failure of the UK Government was one of risk communication. This paper argues that the government's failure to communicate the risks BSE posed to humans to a large degree can be traced back to a lack of transparency in the first risk assessment by the Southwood Working Party. This lack of

transparency ensured that the working party's risk characterization and recommendations were ambiguous and thus hard to interpret. It also meant that uncertainties were not addressed in a satisfactory way. In the recommendations, the attitude to uncertainty was implicit rather than explicit.

The risk communication based on the report amplified these flaws. ... In the concluding section of the paper, this analysis is compared with the food standards agency's (FSA's) approach to BSE. The intervention of this agency was seen as one of the more important efforts to restore consumer confidence in British beef. And the agency certainly appears to be committed to openness and to addressing scientific uncertainty. However, using the risk of BSE in sheep as a case study, the paper shows that transparency - i.e., the clear presentation of factual and normative claims and assumptions underlying advice, and openness about the reasoning based on these claims and assumptions - is less than fully achieved in the FSA's work. Keywords: normative premises, scientific advice, transparency, trust, uncertainty. The author is in the Department of Education, Philosophy and Rhetoric, University of Copenhagen, Denmark. (JAEE)

Jensen, Karsten Klint, "The Moral Foundation of the Precautionary Principle," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):39-55. The Commission's recent interpretation of the Precautionary Principle is used as starting point for an analysis of the moral foundation of this principle. The Precautionary Principle is shown to have the ethical status of an amendment to a liberal principle to the effect that a state only may restrict a person's actions in order to prevent unacceptable harm to others. The amendment allows for restrictions being justified even in cases where there is no conclusive scientific evidence for the risk of harmful effects.

However, the liberal tradition has serious problems in determining when a risk of harm is unacceptable. Nevertheless, reasonable liberal arguments in favor of precaution can be based on considerations of irreversible harm and general fear of harm. But it is unclear when these considerations can be overridden.

Within the liberal framework, the Commission advocates a so-called proportional version of the Precautionary Principle. This should be clearly distinguished from a welfare-based approach to precaution based on risk-averse weighing up of expected costs and benefits. However, in the last resort, the Commission does seem to make a covert appeal to such considerations. KEY WORDS: harm, liberalism, proportionality, rights, risk,

Jensen is with the Centre for Bioethics and Risk Assessment, Department of Education, Philosophy and Rhetoric, University of Copenhagen. (JAEE)

Jensen, Karsten Klint, "Conflict over Risks in Food Production: A Challenge for Democracy," Journal of Agricultural and Environmental Ethics 19(2006):269-283. When it comes to conflict over risk management priorities in food production, a number of observers, including myself, have called for some sort of public deliberation as a means of resolving the moral disagreements underlying such conflicts. This paper asks how, precisely, such deliberation might be facilitated. It is shown that representative democracy and the liberal regulation that most Western democracies adhere to place important constraints on public deliberation. The challenge is to find forums for public deliberation that can operate within these constraints while still making a constructive contribution. Keywords: food safety - GM crops - public deliberation - risk communication - values. Jensen is in the Danish Centre for Bioethics and Risk Assessment, Royal Veterinary and Agricultural University, Frederiksberg, Denmark. (JAEE)

Jensen, Karsten Klint and Sandøe, Peter, "Food Safety and Ethics: The Interplay Between Science And Values," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):245-253. The general public in Europe seems to have lost its confidence in food safety. The remedy for this, as proposed by the Commission of the EU, is a scientific rearmament. The question, however, is whether more science will be able to overturn the public distrust. Present experience seems to suggest the contrary, because there is widespread distrust in the science-based governmental control systems. The answer to this problem is the creation of an independent scientific Food Authority. However, we argue that independent scientific

advice alone is unlikely to re-establish public confidence. It is much more important to make the scientific advice transparent, i.e., to state explicitly the factual and normative premises on which it is based. Risk assessments are based on a rather narrow, but well-defined notion of risk. However, the public is concerned with a broader value context that comprises both benefits and risks. Transparency and understanding of the public's perception of food risks is a necessary first step in establishing the urgently required public dialogue about the complex value questions involved in food production. KEY WORDS: risk assessment, risk management, risk communication, scientific advice, value judgments. Jensen is with the Centre for Bioethics and Risk Assessment Department of Education, Philosophy and Rhetoric, University of Copenhagen. Sandøe is with the Centre for Bioethics and Risk Assessment, Department of Animal Science and Animal Health, Royal Veterinary and Agricultural University, Frederiksberg, Denmark. (JAEE)

Jensen, Karsten Klint, "Corporate Responsibility: The Stakeholder Paradox Reconsidered," *Journal of Agricultural and Environmental Ethics* 20(2007):515-532. Is it legitimate for a business to concentrate on profits under respect for the law and ethical custom? On the one hand, there seems to be good reasons for claiming that a corporation has a duty to act for the benefit of all its stakeholders. On the other hand, this seems to dissolve the notion of a private business; but then again, a private business would appear to be exempted from ethical responsibility. This is what Kenneth Goodpaster has called the stakeholder paradox: either we have ethics without business or we have business without ethics. Through a different route, I reach the same solution to this paradox as Goodpaster, namely that a corporation is the instrument of the shareholders only, but that shareholders still have an obligation to act ethically responsibly. To this, I add discussion of Friedman's claim that this responsibility consists in increasing profits. I show that most of his arguments fail. Only pragmatic considerations. Jensen is at the Danish Centre for Bioethics and Risk Assessment, Rolighedsvej 25, DK-1958 Frederiksberg C, Denmark

Jensen, M. N., "Climate Warming Shakes up Species," *BioScience* 54(no. 8, 2004): 722-729(8). Every spring robins come bob, bob, bobbin along to Gothic, the former Colorado mining community that's now the site of the Rocky Mountain Biological Laboratory. This year they didn't even wait for spring the first robin showed up on 13 March, more than a week before the spring equinox. (v.14, #4)

Jensen, Mari N, "Climate Warming Shakes up Species", *BioScience* 54 (no. 8, 1 August 2004):722-729(8). Every spring robins come bob, bob, bobbin along to Gothic, the former Colorado mining community that's now the site of the Rocky Mountain Biological Laboratory. This year they didn't even wait for spring-the first robin showed up on 13 March, more than a week before the spring equinox.

Jensen, MN, "Coming of Age at 100: Renewing the National Wildlife Refuge System", *Bioscience* 53(no.4, 2003):321-327.

Jenson, Derrick. *Endgame: The Problem of Civilization (Volume 1). Endgame: Resistance Volume 2*. New York: Seven Stories Press, 2006. Jenson begins this 900 page, two-volume set with twenty premises. Premise One is: "Civilization is not and never can be sustainable. This is especially true for industrial civilization" (p. ix). This premise is really the conclusion of Volume I a long critique of what is wrong with human civilization and why the needs of the natural world are more important than any needs of human economic systems. In Volume II, Jenson argues that because human civilization will not undergo a voluntary transformation to live sanely and sustainably with the natural world, civilization needs to be brought down violently.

Jenson, Derrick. *Endgame: The Problem of Civilization (Volume 1). Endgame: Resistance Volume 2*. New York: Seven Stories Press, 2006. Jenson begins this 900 page, two-volume set with twenty premises. Premise One is: "Civilization is not and never can be sustainable. This is especially true for industrial civilization" (p. ix). This premise is really the conclusion of Volume I a long critique of what is

wrong with human civilization and why the needs of the natural world are more important than any needs of human economic systems. In Volume II, Jenson argues that because human civilization will not undergo a voluntary transformation to live sanely and sustainably with the natural world, civilization needs to be brought down violently.

Jentoft, Svein, and Sandersen, Hakan T. "Cooperatives in Fisheries Management: The Case of St. Vincent and the Grenadines." Society and Natural Resources 9, no.3 (1996): 295. (v7, #3)

Jepson, Jr., Edward J., "Sustainability and Planning: Diverse Concepts and Close Associations," Journal of Planning Literature 15 (no. 4, 2001):499-510. Sustainability is a term that has received a significant amount of attention in the public policy arena. Within the planning profession, there has likewise been a growing recognition of its possible relevance in the areas of land use and general community development, and planners are increasingly finding themselves either leading or being expected to contribute to local "sustainable development" efforts. This article provides an introduction to the sustainability framework in terms of its scientific basis and cultural interpretations to explore the ties to the planning profession. Jepson is a planning consultant, Madison, Wisconsin. (v.13, #3)

Jepson, Jr., Edward J., "The Conceptual Integration of Planning and Sustainability: An Investigation of Planners in the United States," Environment and Planning C: Government and Policy 21(no. 3, 2003):389-410. A survey of over five hundred local planners to measure the extent to which an ecological definition of sustainable development is present in the planner's views and opinions. Much depends on their academic backgrounds and the state public policy context in which they work. There is much consistency in their views, but there is conflict particularly in relation to agriculture and natural areas open space, also in regard to private market forces that affect the use of the land. Jepson is in Urban and Regional Planning, Univ. of TN.

Jesdapipat, Sitanon. "Trade, Investment, and the Environment: Thailand," The Journal of Environment and Development 6(no.3, 1997):350.65

Jesse, Jennifer G., Review of Seigfried, Charlene Haddock, Pragmatism and Feminism: Reweaving the Social Fabric. American Journal of Theology and Philosophy 18(no. 1, 1997):91-97. (v8,#1)

Jha, CS et al., "Forest fragmentation and its impact on species diversity: an analysis using remote sensing and GIS," Biodiversity and Conservation 14 (no. 7, June 2005): 1681-1698.

Jha, Prabhat et al (12 others), "Improving the Health of the Global Poor," Science 295 (15 March 2002):2036-2029. Better nutrition and the curing of diseases that are routinely cured in developed countries could save millions of lives, especially children. The cost is not prohibitive, but infrastructures to deliver the care and to prevent wasted money where there is corruption and poor governance are serious problems. The poor tend to get hooked on tobacco, and tobacco-related diseases along will kill half a billion persons in the next half century. The authors are with the World Health Organization. There are also other articles in this issue in a section on world health, especially among the poor. (v.13,#2)

Jha, Sachida, "Can Natural World Heritage Sites promote development and social harmony?," Biodiversity and Conservation 14(no.4, April 2005):981-991(11).

Ji Zhichuang. "The Escape and Reconstruction of Context: The Discourse Reconstruction of Environmental Ethics from the Perspective of Pragmatism." *Science, Technology and Dialectics* No. 1 (2007): 35-37.

Jia Xiangtong, Wang Chunnian, "The new equal idea from the perspective of environmental ethics", Hebei Academic Journal, 2002(1)

Jiang, Y., M. Kang, Q. Gao, L. He, M. Xiong, Z. Jia and Z. Jin, "Impact of Land Use On Plant Biodiversity and Measures for Biodiversity Conservation in the Loess Plateau in China - A Case Study in a Hilly Gully Region of the Northern Loess Plateau," Biodiversity and Conservation 12(no. 10, 2003): 2121-2133. (v 14, #3)

Jiang Zhuojun, "The methodology of ecological ethics", Ethic and Civilization, 2002(1)

Jickling, Bob, ed., A Colloquium on Environment, Ethics, and Education. Whitehorse: Yukon: Yukon College, 1996. Proceedings of a Colloquium held at Yukon College, July 14-16, 1995. ISBN 0-9694150-1-X. Jickling is at Yukon College. (v.14, #4)

Jickling, Bob and Paul C. Paquet. "Wolf Stories: Reflections on Science, Ethics, and Epistemology." Environmental Ethics 27 (2005):115-134. Wolf stories, including the systematic and government-sponsored killing of Yukon wolves, provide a context for the examination of assumptions about Western epistemology, and particularly science, in light of the "ethics-based epistemology" presented by Jim Cheney and Anthony Weston, with implications for research, responsibility, and animal welfare. Working from a premise of universal consideration, and minding the ethical basis of knowledge claims, enables richer conceptions of Environmental Ethics and creates new possibilities for animal welfare and managing for wildlife. (EE)

Jiggins, Janice. Changing the Boundaries: Women-Centered Perspectives on Population and the Environment. Island Press, 1994. 316 pages, Cloth \$45, paper \$22. An iconoclastic book that focuses on the role of women but has an even broader message: "The idea that urgent global environmental action and population control are needed is both exaggerated and misdirected. Although serious and growing problems exist, police and action will not accomplish their goals unless they are accompanied by an understanding of the relationship between the laws of nature and the patterns of human behavior that drive global change."

Jobes, Patrick C., William F. Stinner, John M. Wardwell, eds., Community, Society and Migration: Noneconomic Migration in America. Lanham, MD: University Press of America, 1992. Hardback. 389 pages. \$ 48.50. The reasons people leave cities and move elsewhere, despite economics. One chapter of special interest is: Jobes, Patrick C., "Economic and Quality of Life Decisions in Migration to a High Natural Amenity Area." People who moved to the Gallatin Valley of Montana were studied 1981-1985, before and after moving. Economic factors are only one in a set of factors, and not the largest one; most such persons live neither in poverty nor with the likelihood of high incomes. The choice of destination is largely a decision how one wants to live; moving to Montana is often a quality of life decision. Jobes is a sociologist at Montana State University. (v5,#3)

Jobin, B; Beaulieu, J; Grenier, M; Belanger, L; Maisonneuve, C; Bordage, D; Fillion, B, "Landscape changes and ecological studies in agricultural regions, Quebec, Canada," Landscape Ecology 18(no.6, 2003):575-590. (v.14, #4)

Joern, Anthony and Keeler, Kathleen H. The Changing Prairie: North American Grasslands. New York: Oxford University Press, 1995. \$65.00. 268 pages. In the past, plowing virgin prairie could be easily defended on both economic and sociological grounds. But preservation of these regions is now an urgent need. The ecology of the North American prairie and conservation measures to protect remaining grasslands. Arguments for the value of undeveloped prairies, a current synthesis of prairie ecology to facilitate their best possible management, and a summary of conservation issues, pointing out the costs

and benefits of alternative actions. Ethical and aesthetic perspectives. Joern and Keeler are both at the University of Nebraska, Lincoln. (v7,#1)

Johansson, Per-Olov. Cost Benefit Analysis of Environmental Change. Cambridge: Cambridge University Press, 1993. 232 pages. An advanced text in applied welfare economics and its application to environmental economics. Claims to go far beyond the existing literature on the valuation of environmental benefits, deriving sets of cost-benefit rules which can be used to assess private and public sector projects which affect the environment. Argues that valuation studies can be augmented to as to yield the information necessary for decision-making, showing how externalities, taxes, unemployment, risk, irreversibilities, flow and stock pollutants, discounting, and intergenerational distribution should be treated in social cost-benefit analyses. Johansson is in economics at the Stockholm School of Economics. (v6,#3)

John D. Barrow, The Artful Universe Expanded, Second Edition. Oxford: Oxford University Press, 2005. The deep links between our aesthetic inclinations our art, our music, our appreciation of form, pattern, and landscape and the mathematical and physical structure of the Universe of which we form a part. Barrow challenges the commonly held view that our sense of beauty is entirely free and unfettered. He argues that as beings that have evolved in this Universe, we are products of its natural laws and its underlying mathematical forms. Our minds show the imprints of this structure, which constrains and moulds our perceptions and our aesthetic preferences. The evolution of complexity, form in painting, computer art and music, and how landscapes and the wheeling patterns of stars in the night sky have impinged upon the human psyche. Barrow is Professor of Mathematical Science, University of Cambridge.

John Lemons, "University Education in Sustainable Development and Environmental Protection." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

John Paul II. Solicitudo Rei Socialis. (December 30, 1987 Encyclical on Social Concerns). NC Documentary Service 17, no. 3 (Mar. 3 1988): 641, 643-660.

Johns, B.G. "Responses of Chimpanzees to Habituation and Tourism in the Kibale Forest, Uganda," Biological Conservation 78(no.3, 1996):257. (v8,#1)

Johns, David M., "The Relevance of Deep Ecology to the Third World: Some Preliminary Comments," Environmental Ethics 12(1990):233-252. A defense of deep ecology in practice, focusing on the importance of wilderness and the implications of biocentrism for policies of overconsumption and militarism. Part of the new and continuing dialogue between Western and non-Western environmental philosophers (see Guha, "Radical American Environmentalism and Wilderness Preservation: A Third World Perspective, Environmental Ethics 11 (1989):71-83. (Katz, Bibl # 2)

Johns, David M. "The Relevance of Deep Ecology to the Third World." Environmental Ethics 12(1990):233-52. Although Ramachandra Guha has demonstrated the importance of cross-cultural dialogue on environmental issues and has much to tell us about the problems of wilderness preservation in the Third World, I argue that Guha is partly wrong in claiming that deep ecology equates environmental protection with wilderness protection and simply wrong in calling wilderness protection untenable or incorrect as a global strategy for environmental protection. Moreover, I argue that the deep ecology distinction between anthropocentrism and biocentrism is useful in dealing with the two major problems which Guha identifies as undermining the health of the planet--overconsumption and militarism. Although it is true that preservation of wilderness will not be successful unless human social

dynamics are taken into consideration, nevertheless, a biocentrism which integrates critical social theory can provide the basis for an ethic that undercuts the environmental degradation from overconsumption and militarism more effectively than a human-centered system. Johns is in the department of Political Science, Portland State University, Portland, OR. (EE)

Johns, David. "The Ir/relevance of Environmental Ethics." Environmental Ethics 25(2003):223-224. (EE)

Johns, David. "On Watson's Response to Foreman." Environmental Ethics 14(1992):378-79. (EE)

Johns, DM, "Growth, Conservation, and the Necessity of New Alliances," Conservation Biology 17(no.5, 2003):1229-1237. (v.14, #4)

Johnsingh, AJ; Negi, AS, "Status of tiger and leopard in Rajaji-Corbett Conservation Unit, Northern India", Biological Conservation 111(no.3, 2003):385-393.

Johnson, Andrew, "Sociobiology and Concern for the Future." Journal of Applied Philosophy 6 (1989): 141-148. Sociobiology makes a contribution to ethics because it reveals a purpose in human life--the natural aim to produce descendants. This biological purpose is an improvement on ideas of "everlasting progress" that lead to technological degradation of the earth---but it is still an anthropocentric model that does little for environmental ethics. (Katz, Bibl # 2)

Johnson, Andrew, "The Good, the Bad and the Ugly: Science, Aesthetics and Environmental Assessment," Biodiversity and Conservation 4(no. 7, 1995):758-766. Are there peculiarly scientific values that can be applied in environmental assessment? The use of the expression "scientific interest" is traced from its 19th century origins to modern British statutes. Attempts to replace expert judgments by objective scientific criteria (e.g. indices of biodiversity) can never be completely successful. In particular, "interest" is an aesthetic attribute valued by scientists but incapable of precise measurement. While science provides the best framework for informed judgments on conservation issues, the judgments of scientists are inevitably distinct from their experimental results. Judgments rest on ethical and aesthetic values such as importance and interest, which are essential constituents of the scientific sub-culture, but which are not uniquely "scientific." Johnson is the editor of White Horse Press, publishing environmental books in the United Kingdom. (v6,#4)

Johnson, Andrew, Review of Kim, Tae-Chang et al, Thinking About Future Generations. (Kyoto: Institute for Integrated Study of Future Generations, 1994), and Kim, Tae-Chang, Dator, James, eds., Creating a New History for Future Generations. (Kyoto: Institute for Integrated Study of Future Generations, 1994). Environmental Values 6(1997):247-248.

Johnson, Andrew, Factory Farming. Basil Blackwell, 1992.

Johnson, Anne K., "The Influence of Institutional Culture on the Formation of Pre-Regime Climate Change Policies in Sweden, Japan and the United States," Environmental Values 7(1998): 223-244. This paper tests the claims of cultural theory using the formation of climate change policies in Sweden, the United States, and Japan as case studies. The theory posits that any social group consists of three main cultural types: the egalitarian, the market-oriented, and the hierarchical. Though all groups contain elements of each type, one cultural type usually prevails, giving the group its unique decision-making character. This paper applies cultural theory at the national level, testing to what extent the theory is able to project how countries will respond in addressing the issue of global warming. The results suggest that cultural theory may be useful to those involved in developing international agreements, enabling them to formulate regimes which are compatible with various cultural styles. KEYWORDS: climate change policies, cultural theory, greenhouse gases, Japan, Sweden, United States. Anne K. Johnson is at the

International Institute for Applied Systems Analysis, Laxenburg, Austria. (EV)

Johnson, Barbara Rose, ed., Who Pays the Price? The Sociocultural Context of the Environmental Crisis. Washington: Island Press, 1994.

Johnson, Baylor L., Ethical Obligations in a Tragedy of the Commons Environmental Values 12(2003): 271-287. When people use a resource without a co-ordinated plan the result is often a tragedy of the commons in which the resource is depleted. Many environmental resources display the characteristics of a developing tragedy of the commons. Many believe that each person is ethically obligated to reduce use of the commons to the sustainable level. I argue that this is mistaken. In a tragedy of the commons there is no reasonable expectation that individual, voluntary action will succeed. Our obligation is not fruitlessly to reduce individual use, but to support a collective agreement to reduce everyone's use to the sustainable level. (EV)

Johnson, Cassandra Y. and J. M. Bowker. "African-American Wildland Memories." Environmental Ethics 26(2004):57-75. Collective memory can be used conceptually to examine African-American perceptions of wildlands and black interaction with such places. The middle-American view of wildlands frames these terrains as refuges pure and simple, sanctified places distinct from the profanity of human modification. However, wild, primitive areas do not exist in the minds of all Americans as uncomplicated or uncontaminated places. Three labor-related institutions forest labor, plantation agriculture, and sharecropping and terrorism and lynching have impacted negatively on black perceptions of wildlands, producing an ambivalence toward such places among African Americans. (EE)

Johnson, Cassandra Y., J. M. Bowker, John C. Bergstrom, and H. Ken Hull, "Wilderness Values in America: Does Immigrant Status or Ethnicity Matter?" Society and Natural Resources 17(2004):611-628. If wilderness is a social construction, then perhaps wilderness is valued by U.S. born whites, and not by immigrants and minorities. Surveys show that immigrants are less likely to value on-site wilderness use. Blacks are also less likely to value on-site use, but are as likely as whites to value the continued existence of wilderness. Asians and Latinos are also less likely than whites to value on-site use. But there are some surprises. "U.-S. born Asians and women were more likely to indicate they believed the flora and fauna protected by wilderness had intrinsic value. ... The odds of an Asian respondent agreeing with this statement are about 3 times higher than for a White respondent, while a female is 1.63 times as likely to agree as a male" (p. 623).

Many differences are not statistically significant, beyond the fact that immigrant and minority groups expect to visit wilderness less, which may mostly be explained by the fact that they live in large cities and wilderness is not easy for them to visit. "For most of the value items, we cannot conclude that immigrants and natives perceive or construct wilderness in culturally different terms" (p. 624). On the basis of this study, the authors predict that "political support for wilderness may not diminish appreciably in the future as American becomes more diverse" (p. 625). Johnson, Bowker, and Hull are at the Southern Research Station, USDA Forest Service, Athens, GA; Bergstrom is in Agricultural and Applied Economics, University of Georgia.

Johnson, Cassandra; Bowker, J. M.; Bergstrom, John; Cordell, H. Ken, "Wilderness Values in America: Does Immigrant Status or Ethnicity Matter?," Society and Natural Resources 17(no.7, August 2004):611-628(18). (v. 15, # 3)

Johnson, CY; Bowker, JM; Cordell, HK, "Ethnic Variation in Environmental Belief and Behavior: An Examination of the New Ecological Paradigm in Social Psychological Context", Environment and Behavior 36 (no.2, 2004): 157-186.

Johnson, David Martel, How History Made the Mind: The Cultural Origins of Objective Thinking. Chicago: Open Court, 2003. The modern, Western mind is a product of the Greeks intellectual tradition,

unique in human history. Such minds can see nature objectively, as pre-Greeks could not (such as the Egyptians, where nature is tinged with fanciful mythology). This produces science in the West, which enables us not only to study and understand but to remake nature.

Johnson concludes: "We have to reconcile ourselves to the fact that, long into the foreseeable future, our world will contain an ever smaller percentage of its original 'wildness.' ... Our best hope of continuing to move towards a better world--or even of surviving--is by looking forward. Thus, in place of the once effective strategy of trying to tame wilderness, it now has become effective to create the sort of dynamically evolving, experimental, artificial (his emphasis) world that can help us meet our future needs." (p. 210). Johnson is in philosophy, York University, Toronto.

Johnson, Douglas B., "Green Businesses: Perspectives from Management and Business Ethics," Society and Natural Resources 11(1998):259-266. Management scholars, business ethicists, and social scientists are challenged to conceptualize and measure characteristics of the "green" business and the sustainable corporation. Two approaches in recent literature. Sixteen empirically tested hypotheses describing the "new ecological paradigm organization."

Johnson, E. A., Miyanishi, K. and Bridge, S. R. J., "Wildfire Regime in the Boreal Forest and the Idea of Suppression and Fuel Buildup," Conservation Biology 15(no.6, 2001): 1554-57. (v.13,#2)

Johnson, Edward. "Animal Liberation versus the Land Ethic." Environmental Ethics 3(1981):265-73. J. Baird Callicott misinterprets both the way in which pain seems important to animal liberationists and why it is thought important. Examination of Callicott's account reveals its inadequacies and strengthens the animal liberationist's position. It also indicates that resolution of the dispute between proponents of animal liberation and the land ethic demands consideration of the justifiability of "sentientism." Johnson is in the department of philosophy, University of New Orleans, New Orleans, LA. (EE)

Johnson, Elena. "Poor Environment, Poor Health." Alternatives 25(No.3, Summer 1999):17- . (v10,#4)

Johnson, Huey D., Green Plans: Greenprint for Sustainability. Lincoln: University of Nebraska, 1995. 206 pages. Sustainable futures, sustainable development, environmental policy and conservation. (v7,#4)

Johnson, K. L., "Review of: The Brazilian Amazon Rainforest: Global Ecopolitics, Development and Democracy by Luiz C. Barbosa," Journal of Environment and Development 10(no.4, 2001): 399-404. (v.13,#2)

Johnson, K. Norman, Swanson, Frederick, Herring, Margaret, Greene, Sarah, eds. Bioregional Assessments: Science at the Crossroads of Management and Policy. Covelo, CA: Island Press, 1999. 385 pp. \$65 cloth, \$32.50 paper. A new approach to environmental management and policymaking that gives science and scientists a crucial role in the policymaking process. Synthesizes the knowledge from many regions by examining the assessment process and detailing a series of case studies from around the country. (v.10,#1)

Johnson, Kirk, "Coloradoans Vote to Embrace Alternative Sources of Energy," New York Times, November 24, 2004, p. A13. Colorado voters approved, over the vehement objections of most energy companies, a proposal mandating that 10 percent of the state's electricity must come from wind and solar power by 2015. This energy proposal had failed three times in the state legislature but went to the polls and won. Colorado is the 18th U.S. state to set environmental friendly energy provisions in place, but is the first to do so by referendum. (v.14, #4)

Johnson, Kirk, "Filmmaking Where Acting Natural Comes With the Turf," New York Times, October 17, 2004. The nation's only film school dedicated to science and natural history is at Montana State

University. The program was founded with seed money from the Discovery Channel. (v.14, #4)

Johnson, Kirk, "How Drought Just Might Bring Water to the Navajo," New York Times, July 23, 2004, A16. The Navajo tribe has long claimed rights to the entire water supply of the San Juan River in New Mexico, a major tributary of the Colorado. If so, there would be no water for Gallup, NM and other areas, as well as reduced amounts for those on the Colorado River. In a proposed settlement, the tribe would get 55% of the river, a huge amount and more than some states get, as well as a federally constructed water supply system on the reservation, supplying water where many persons now have none (they have to drive trucks to get water now). But Gallup, NM would also get water in the deal, and many Navajos dislike that. River rights and racial tension. (v. 15, # 3)

Johnson, Kirk, "Debate Swirls Around the Status of a Protected Mouse," New York Times, June 27, 2004, p.14. The Preble's meadow jumping mouse is found in Colorado and Wyoming, and is on the Endangered Species List. But a prominent geneticist, Rob Roy Ramey II, says it does not differ genetically from the Bear Lodge meadow jumping mouse, found further north in Wyoming, Montana, and South Dakota, and which is not endangered. Ramey, at the Denver Museum of Nature and Science, says he firmly believes in protecting Endangered Species, but the Preble's mouse is not one. He also says this is only one case of what is often wrong with enforcing the Endangered Species Act: old and bad science that now needs to be replaced by genetically-based taxonomy. (v. 15, # 3)

Johnson, L., Padilla, D.K. "Geographic Spread of Exotic Species: Ecological Lessons and Opportunities from the Invasion of the Zebra Mussel Dreissena Polymorpha", Biological Conservation 78(no.1/2, 1996):23. (v7,#4)

Johnson, Lance, Philosophical Problems in the Evaluation of Genetic Engineering. M.A. thesis, Colorado State University, December 1998. Analysis of the ethical models that are used to consider the moral import of genetic engineering, a "scientific naysayer" model and an "intrinsically wrong model." Their evaluation involves the autonomy/provincialism debate in the philosophy of biology, the importance of ecology as a bridge between biology and the physical sciences, and the use of models in ecology. There are difficulties in assessing the potential effects of genetically engineered organisms released into the environment. This is demonstrated with a case study, a genetically modified canola (Brassica nigra), widely used and a plant with numerous wild relatives. Virus resistant plants are a special concern; genetically engineered microorganism are another. Rissler and Mellon's tiered approach to risk assessment here identifies two potential ethical difficulties. Genetically engineered organisms may be unique enough not to model analogously to wild species. Human activities disturbing the environment may invite invasive species problems; non-genetically engineered aggressive weedy species humans have introduced are already a quite serious problem. Users seeking commercial benefits are likely to underestimate the risks of harms. The thesis advisor was Holmes Rolston. Johnson is now finishing his teaching certificate in secondary school science at Metro State College, Denver, a post-baccalaureate certification. He has been for several years the supervisor of Inverness Water and Sanitation District, a subdivision of the Colorado state water authority, in the metro Denver area. (v.9,#3)

Johnson, Lawrence E., "Do Animals Have an Interest In Life", Australasian Journal of Philosophy, 61 (1983): 172-84. Does killing an animal - as distinguished from causing it pain - violate its interests? Does so killing a human violate his/her interests? The author maintains that it is possible for animals have an interest in life which does not entail a would-be preference. The claim is that animals have an interest in continued existence which is as viable as the claim that humans have an interest in continued existence. It is argued, in particular, that preference utilitarianism does not provide an adequate defence of the claim that only humans have an interest in life. The paper has particular application to Peter Singer's writings on the subject.

Johnson, Lawrence E. "Humanity, Holism, and Environmental Ethics." Environmental Ethics 5(1983):345-54. The human race is an ongoing entity, not just a collection of individuals. It has interests which are not just the aggregated interests of individual humans. These interests are morally significant and have important implications for environmental ethics. Johnson is at the School of Humanities, The Flinders University of South Australia, Bedford Park, Australia. (EE)

Johnson, Lawrence E., "Species: On their Nature and Moral Standing," Journal of Natural History 29(1995):843-849. If we exterminate a species, we adversely affect the well-being of individual organisms, human or otherwise, present and future, members and non-members of that species. But is that all there is to it? The extinction of a species is an enormity that goes beyond the fate of individual organisms, even as multiplied by big numbers. The species itself is of moral significance. But how can that be? That species are only aggregates of individuals may seem obvious, but only on the basis of a worldview that is fundamentally mistaken. Species are better thought of as living entities, which have moral standing in proportion to their nature and interests. Johnson teaches philosophy at Flinders University, Bedford Park, South Australia. (v6,#4)

Johnson, Lawrence E., A Morally Deep World: An Essay on Moral Significance and Environmental Ethics. New York: Cambridge University Press, 1990. 180 pages, \$ 39.50. Johnson advocates a major change in our attitude toward the nonhuman world. He argues that nonhuman animals, and ecosystems themselves, are morally significant beings with interests and rights. He considers recent work in environmental ethics in the introduction and then presents his case with precision and clarity. Written in an attractive, nontechnical style. Johnson is professor of philosophy, Flinders University, Australia. (v1,#4)

Johnson, Lawrence E. "Toward the Moral Considerability of Species and Ecosystems." Environmental Ethics 14(1992):145-57. I develop the thesis that species and ecosystems are living entities with morally significant interests in their own right and defend it against leading objections. Contrary to certain claims, it is possible to individuate such entities sufficiently well. Indeed, there is a sense in which such entities define their own nature. I also consider and reject the argument that species and ecosystems cannot have interests or even traits in their own right because evolution does not proceed on that level. Although evolution proceeds on the level of the genotype, those selected are able to cooperate in entities of various higher orders including species and ecosystems. Having their own nature and interests, species and ecosystems can meaningfully be said to have moral standing. Johnson is at the School of Humanities, The Flinders University of South Australia, Adelaide, South Australia. (EE)

Johnson, Lawrence E. A Morally Deep World. Reviewed by James Hatley. Environmental Ethics 18(1996):215-218. (EE)

Johnson, Lawrence E., "Humanity, Holism, and Environmental Ethics," Environmental Ethics 5(1983):345-354. An important paper that argues for a sense of "group interests" that transcend the interests of the individual members of the group. Johnson focuses on the interests of humanity as opposed to the interests of individual humans, and he hopes to generalize his conclusions to other areas of environmental ethics. But Johnson's argument (p. 350) seems to be based on the analogy between an individual organism and its constitutive elements: Smith has interests that are not the interests of his organs or cells. But it is unclear how this analogy works to supply interests for the species *Homo sapiens*. (Katz, Bibl # 1)

Johnson, Lawrence, Review of Don Marietta, Jr., For People and the Planet, Environmental Values 7(1998):485.

Johnson, Lawrence E., "Future Generations and Contemporary Ethics," Environmental Values 12(2003):

471-487. Future generations do not exist, and are not determinate in their make-up. The moral significance of future generations cannot be accounted for on the basis of a purely individualistic ethic. Yet future generations are morally significant. The Person-Affecting Principle, that (roughly) only acts which are likely to affect particular individuals are morally significant, must be augmented in such a way as to take into account the moral significance of Homo sapiens, a holistic entity which certainly does exist. Recent contributions to Environmental Values by Alan Carter and Ernest Partridge are criticised (but not entirely rejected). (EV)

Johnson, Lawrence E., "Can Animals Be Moral?" Ethics and Animals 4(no. 2, 1983):50-61. Blacksburg, VA: Society for the Study of Ethics and Animals. "I conclude then that some animals can act as moral agents and that a monkey who is reluctant to cause pain to his fellow monkey is morally better than a monkey who does not care" (p. 61).

Johnson, Lawrence. Review of Mary Ann Warren, Moral Status. Environmental Values 8(1999):517. (EV)

Johnson, Marguerite. "The Backyard Besieged." Time, 4 July 1994, p. 62. Environmentalists and regulators want to hush-up and clean-up lawnmowers. (v5,#2)

Johnson, Mark, "Bugged Bears and Collared Cougars," Radio Tracking Ethics, Yellowstone Science 1 (no. 1, Fall 1992):6-9. When is radio telemetry justified? Is it humane? Johnson is a wildlife veterinarian in Yellowstone National Park.

Johnson, Michael L. *Hunger for the Wild: America's Obsession with the Untamed West*. Lawrence: University of Kansas Press, 2007. Johnson provides a historical and cultural analysis of how wildness has shaped the ways Euro-Americans have perceived, reacted to, and acted upon the American West as waste, a promised land, a frontier, a region, and a postregion from the 1530s to today. He discusses a variety of historical topics such as conquistadors, Euro-American explorers and settlers, cowboys, myths of American Indians as noble savages and red devils, Wild West shows, and Dust Bowl woes, leading up the contemporary West's overtaxed water supplies, sprawling suburbs, degraded wilderness areas, and Disneyfied frontier inhabited by everyone from UFO fanatics to postregional cowgirls. Johnson is an English professor at the University of Kansas and is the recipient of a number of awards, including the Western Writers of America Spur Award.

Johnson, Michael L. *Hunger for the Wild: America's Obsession with the Untamed West*. Lawrence: University of Kansas Press, 2007. Johnson provides a historical and cultural analysis of how wildness has shaped the ways Euro-Americans have perceived, reacted to, and acted upon the American West as waste, a promised land, a frontier, a region, and a postregion from the 1530s to today. He discusses a variety of historical topics such as conquistadors, Euro-American explorers and settlers, cowboys, myths of American Indians as noble savages and red devils, Wild West shows, and Dust Bowl woes, leading up the contemporary West's overtaxed water supplies, sprawling suburbs, degraded wilderness areas, and Disneyfied frontier inhabited by everyone from UFO fanatics to postregional cowgirls. Johnson is an English professor at the University of Kansas and is the recipient of a number of awards, including the Western Writers of America Spur Award.

Johnson, Pierre Marc, Beaulieu, Andre. The Environment and NAFTA. Covelo, CA: Island Press, 1996. 432 pp. \$50 cloth, \$30 paper. How NAFTA and its interaction with NAAEC might take place and how that will affect trade policy and practices, environmental protection efforts, and the relationships between Canada, Mexico, and the United States. (v7,#4)

Johnson, Randy, Hiking in North Carolina. Helena. MT: Falcon Press, 1996. 200 hikes in all regions of

the state. Johnson lives in Greensboro, NC, and is the senior editor of United Airlines inflight magazine, Hemispheres. (v.9,#3)

Johnson, Randy, "Grandfather Mountain--A Private U.S. Wilderness Experiment," International Journal of Wilderness 2 (no. 3, December, 1996):

10-13. Johnson was, until recently, backcountry manager on Grandfather Mountain, in North Carolina. (v8,#1)

Johnson, Rebecca L., Alig, Ralph J., Moulton, Robert J. "NIPF Landowners' View of Regulation," Journal of Forestry 95(1997):23.

Johnson, S. E., and Graber, B. E., "Enlisting the Social Sciences in Decisions About Dam Removal," Bioscience 52(no.8, 2002): 731-38. (v.13,#4)

Johnson, Tim. "Green Options for Investments," Alternatives 22(no.1, Jan. 1996):7- . (v6,#4)

Johnson, Timothy A. "Coping with Change: Energy, Fish, and the Bonneville Power Administration." Environmental Law 26, no.2 (1996): 589. Johnson, an attorney with the Bonneville Power Administration (BPA), explores the significant challenges facing BPA in light of increased industry competition following the Energy Policy Act of 1992 and uncertain salmon recovery costs following recent court decisions. Johnson concludes that BPA's new market-oriented philosophy, in concert with the Clinton Administration's recent cap on BPA's salmon recovery expenditures, will enable BPA effectively to compete in the power market and continue to satisfy its statutory environmental and power obligations. (v7, #3)

Johnson, Todd R., "Community-Based Forest Management in the Philippines," Journal of Forestry. 97(no. 11, Nov 01 1999):26- . An initiative toward sustainable forest management in the Philippines shows some promise despite the dire condition of the islands' forest resource, primarily because the local residents are defining their own criteria and indicators. (v10,#4)

Johnson, W. C., et al., "Vulnerability of Northern Prairie Wetlands to Climate Change," Bioscience 55(no. 10, October 2005): 863-872. The prairie pothole region (PPR) lies in the heart of North America and contains millions of glacially formed, depressional wetlands embedded in a landscape matrix of natural grassland and agriculture. These wetlands provide valuable ecosystem services and produce 50 to 80 of the continent's ducks. The most productive habitat for breeding waterfowl would shift under a drier climate from the center of the PPR (the Dakotas and southeastern Saskatchewan) to the wetter eastern and northern fringes, areas currently less productive or where most wetlands have been drained. Unless these wetlands are protected and restored, there is little insurance for waterfowl against future climate warming.

Johnson-Groh, Condy, ""Conservation Text in Historical Context," Review of B. J. Weddell, Conserving Living Natural Resources in the Context of a Changing World." Conservation Biology 18(no.3, 2004):852-853. (v. 15, # 3)

Johnston, Barbara Rose, ed. Who Pays the Price? The Sociocultural Context of Environmental Crisis. Island Press, 1994. 272 pages, cloth \$45, paper \$19. The authors of the papers in this volume, sponsored by the Committee on Human Rights and the Environment of the Society for Applied Anthropology, look at the links between environmental degradation and human rights abuse. Included are case studies from China, Papua New Guinea, the Russian Far East, the Brazilian and Peruvian Amazon, the highland Yanomami people of Brazil and Venezuela, Southern Africa, Alaska, the U.S. Southwest, and the U.S. Virgin Islands. (v6,#1)

Johnston, Barbara Rose. "Human Rights and the Environment," Human Ecology 23, no. 2 (June 1995): 111- . (v6,#4)

Johnston, David, "Vail Fires Were Probably Arson, U.S. Agents Say," New York Times (10/23/98): A16, and Associated Press, "Vail Arsons Signal Eco-terrorism Trend," The Charleston Post and Courier (10/23/98): A3. Arson at Vail Ski Resort aimed at protecting lynx habitat. The "Earth Liberation Front" (ELF) has claimed responsibility for burning several buildings and chair ski lifts at the 11,000-foot level of Vail Mountain, Colorado USA, causing \$12 million in damage. Environmentalists and many residents of Eagle County, where Vail is located, have opposed the resort's planned 885-acre expansion into mountainous back country that is potential habitat in which to restore lynx. An ELF email message to news organizations states: "Putting profits ahead of Colorado's wildlife will not be tolerated. This action is just a warning. We will be back if this greedy corporation continues to trespass into wild and unroaded areas." The environmental activist in Portland, Oregon, who sent out the communique for ELF, said: "As long as it doesn't harm humans lives, we approve."

In response, arch anti-environmentalist Ron Arnold of the Center for the Defense of Free Enterprise declared: "They've stepped over a line they've never crossed before. Now they no longer care what the public thinks." Newspapers are suggesting that such acts of "environmental terrorism" are increasing, citing the destruction of fences, burned livestock buildings, tree spiking to prevent logging, and acts by the Animal Liberation Front that include freeing animals from fur farms. (v.9,#3)

Joireman, JA; VanLange, PAM; VanVugt, M, "Who Cares About the Environmental Impact of Cars? Those With an Eye Toward the Future", Environment and Behavior 36 (no.2, 2004): 187-206.

Jokimäki, Jukka, Anna-Liisa Sippola, and Päivi Junttila, eds., Erämaa-yhteisöomaisuusresurssin biologinen ja yhteiskunnallinen merkitys (Wilderness: The Biological and Sociological Meaning in the Northern Areas). Rovaniemi: Arctic Centre of Lapland, 1992. 152 pages. Eleven articles, some in Finnish, some in English. (v5,#2) (Finland)

Jokinen, Pekka, "Agricultural Policy Community and the Challenge of Greening: The Case of Finnish Agri-environmental Policy," Environmental Politics (Summer 1997):48-. (v.8,#4)

Joklik, Wolfgang K., and four others, largely virologists, "Why the Smallpox Virus Stocks Should Not be Destroyed," Science 262(1993):1225-1226. Also a summary report in New York Times, August 30, 1994. (v4,#4)

Jolly, Alison, Lucy's Legacy: Sex and Intelligence in Human Evolution. Cambridge, MA: Harvard University Press, 1999. Human evolutionary nature was forged by living in small groups where our chief competitors were rival groups of hominids. We have tendencies to violence but we also have tendencies to co-operation, reciprocity, and to make social arrangements that counter our tendencies to violence.

"Natural selection mimics purpose. It blindly creates the exquisite complexity of living things. When Darwin showed how a purposeless mechanism could have done so, that brought existential despair. Darwinian nature seemed even worse than cruel. Darwinian nature was indifferent. ... The less fit died, or died childless, culled by their immediate environment. The laws acting around us include no laws of morality or altruism.

But particulate individualism is only part of the story. Cooperation between entities evolved even before life itself. The major transitions in evolution, the major increases in complexity, all arose from cooperation. ... One social species communicates through speech, writing, and now electronic impulses. This is leading us to a fifth level of cooperation, species wide, planetwide. ... The information revolution makes those links global. It is not simply language but electronic communication of language that gives humanity the potential to become a new biological entity. ...

We may choose despotism. ecological blight, death for other species. Or else we may

successfully improve our lot, stabilize our demands, preserve and enrich the biosphere. Biology has nothing to predict about which course we take. It only says that we are something new under the sun. ... We may become even more important, not as individuals but as a global organism. ... Gaia is not our mother. She could be our daughter" (pp. 431-434). Jolly is a distinguished primatologist at Princeton University. (v.11,#3)

Joly, Carlos. "Ethical Bads From Investment Goods: Towards a Study of Fiduciary Responsibility." Pages 79-102 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Jonas, Hans. The Imperative of Responsibility. Reviewed in Environmental Ethics 8(1986):271-74.

Jones, Charles, Global Justice: Defending Cosmopolitanism. New York: Oxford University Press. The fundamental question of international distributive justice is: What obligations do the world's wealthy people have to ensure that the world's poor achieve a quality of life that is recognizably human? The relative merits of the utilitarian, human rights, and neo-Kantian perspectives. Nationalist, patriotic, relativist, and constitutivist challenges to universalism. Jones defends a form of cosmopolitanism involving a commitment to basic human rights, which can guide disputes about global justice. The moral case for change in the international system. Jones is in political science, University of Western Ontario. (v.10,#3)

Jones, Christopher D., and Hollenhorst, Steven J., "Toward a Resolution of the Fixed Anchors in Wilderness Debate," International Journal of Wilderness 8(no. 3, December 2002):15-20. Debate continues about technical climbers using fixed anchors in wilderness. Climbers and (other) environmentalists agree that if used they must be set by hand drill, not battery operated drill, but on little else. Many such fixed anchors were set before wilderness designation; some set by David Brower himself. Proponents say this insures legitimate and safe recreational use, in keeping with the intention of The Wilderness Act. Opponents say the bolts are forbidden "installations" and that climbers ought to face the mountains as did the first climbers, without preset aids. With such aids, the experience is less wild and less bold.

In 1998 U.S. Forest Service Chief Dombeck banned fixed anchors nationwide. There were many protests, and a powerful lobbyist, Recreational Equipment Incorporated (REI), headquartered in Washington state got their Senator to add a rider to the U.S.F.S. budget reversing the fixed anchor ban. A subsequent decision placed resolution in an appointed body of 23 stakeholders, if they could reach consensus; but they could not, so the matter remains unresolved. A big problem is the escalating number of climbers (especially now that climbing is safer with such aids), estimated at 8 million in the U.S. "A total ban of all fixed anchors would clearly have a major impact on the majority of wilderness climbers, a visitor group that has traditionally supported wilderness values and has been a strong voice in the wilderness movement. Yet, allowing unchecked fixed anchor installation represents a step backward in the century-old effort to protect wilderness values" (p. 19). Jones teaches physical education and recreation, Utah Valley State College, Orem, UT. Hollenhorst teaches recreation resources, University of Idaho.

Jones, Clara B. "Saving Howler Monkeys in Mexico", Wild Earth 6(no.3, 1996):31. (v7,#4)

Jones, Eileen Kerwin, "Weaving Perspectives: An Exploration of Economic Justice Based on the Work of Beverly Wildung Harrison and Marilyn Waring," Ecotheology Vol 6 (Jul 01/Jan 02):92-107. In this article, I underline the relevance of economic analysis in Christian social ethical deliberations on issues of justice. I show how connections are made between theological ethics, economics and ecology when Beverly Wildung Harrison, a Christian social feminist ethicist, and Marilyn Waring, a feminist economist, are in dialogue. I demonstrate how Waring's approach meets the four criteria of Harrison's adequate social

theory, and then suggest that Waring's economic insights provide critical data for theological reflection. Central to this article is the idea that conventional economic emphasis on the market presents only a partial analysis of the economy; it omits significant data, such as the work performed in the informal sector (work done mostly by women) and any costs due to environmental damage. This partial analysis poses both an economic and a moral problem. By weaving the perspectives of Harrison and Waring, the injustice is clearly detailed. This is seen as furthering a theological commitment to justice, not only for women, but also for all human beings and the natural world upon which we depend.

Jones, Jeff R., Martin, Roxanne, Bartlett, E.T. "Ecosystem Management: The U.S. Forest Service's Response to Social Conflict," Society and Natural Resources 8(no.2, Mar. 1995):161- . (v6,#4)

Jones, RE; Fly, JM; Talley, J; Cordell, HK, "Green Migration into Rural America: The New Frontier of Environmentalism?", Society and Natural Resources 16(no.3, 2003):221-238.

Jones, Robert Hunter. "NPS Prescribed Fire in the Post-Yellowstone Era", Wild Earth 6(no.3. 1996):37. (v7,#4)

Jones, Susan, "Becoming a Pest: Prairie Dog Ecology and the Human Economy in the Euroamerican West," Environmental History 4 (No. 4, Oct 01 1999): 531- . (v.11,#2)

Jones, Trevor, et al., "The Highland Mangabey *Lophocebus kipunji*: A New Species of African Moneky," Science 238(20 May 2005):1161-1164. A new species found independently and virtually simultaneously at two different sites. The monkey is arboreal with a distinctive call. Interestingly, because the monkey is presumed rare, no specimen has been taken and documentation is from photographs. See also Beckman, Mary, "Biologists Find New Species of African Monkey," Science 308(20 May 2005):1103.

Jongman, Rob, "From Boston to Barcelona: A Landscape Ecological Vision on Regional Planning," Landscape Ecology 21 (no.1, January 2006): 155-156 (2).

Jordan, A., R. Wurzel and A. Zito, "'New' Instruments of Environmental Governance: Patterns and Pathways of Change," Environmental Politics 12(no. 1, 2003): 1-26. (v 14, #3)

Jordan, A. and Fairbrass, J., "European Union Environmental Policy after the Nice Summit," Environmental Politics 10(no.4, 2001): 109-14. (v.13,#2)

Jordan, A., R. Wurzel, A. Zito and L. Bruckner, "Policy Innovation or 'Muddling Through'? 'New' Environmental Policy Instruments in the United Kingdom," Environmental Politics 12(no. 1, 2003): 179-200. (v 14, #3)

Jordan, A., R. Wurzel and A. Zito, "'New' Environmental Policy Instruments: An Evolution or a Revolution in Environmental Policy?," Environmental Politics 12(no. 1, 2003): 201-224. (v 14, #3)

Jordan, Andrew, Review of Hurrell, Andrew and Benedict Kingsbury, eds., International Politics of the Environment. Environmental Values Vol.2 No.2(1993):181.

Jordan, Andrew, Review of Porter, Gareth and Janet Welsh Brown, Global Environmental Politics. Environmental Values Vol.2 No.2(1993):181.

Jordan, Andrew, Review of Ramphal, Shridath, Our Country, The Planet. Environmental Values Vol.2 No.4(1993):369.

Jordan, Andrew, Review of Trudgill, S.T., Barriers to a Better Environment. Environmental Values Vol.2 No.1(1993):80.

Jordan, CF, "Genetic Engineering, the Farm Crisis, and World Hunger," Bioscience 52(no.6, 2002):523-529. (v.13, #3)

Jordan, III, William R., 1991. "Ecological Restoration and the Reintegration of Ecological Systems." Pages 151-162 in D. J. Roy, B. E. Wynne, and R. W. Old, eds., Bioscience--Society. San Francisco: John Wiley and Sons.

Jordan, III, William R., Michael E. Gilpin, and John D. Aber, eds., 1987. Restoration Ecology: A Synthetic Approach to Ecological Research. New York: Cambridge University Press.

Jordan, III, William, *The Sunflower Forest: Ecological Restoration and the New Communion with Nature*. Berkeley, CA: University of California Press, 2003.

Jordan, Thomas E., Weller, Donald E. "Human Contributions to Terrestrial Nitrogen Flux", Bioscience 46(no.9, 1996):655. Assessing the sources and fates of anthropogenic fixed nitrogen.

Jordan, William R., *The Sunflower Forest: Ecological Restoration and the New Communion with Nature*. Reviewed by Eric Katz, *Ethics and the Environment* 12(no. 1, 2007):97-104

Jorden, DA; Hentrich, MA, "Public Participation Is on the Rise: A Review of the Changes in the Notice and Hearing Requirements for the Adoption and Amendment of General Plans and Rezonings Nationwide and in Recent Arizona Land Use Legislation", Natural Resources Journal 43 (no.3, 2003): 865-886.

Jorgensen (JNrgensen), Christian, Katja Enberg, Erin S. Dunlop, Robert Arlinghaus, David S. Boukal, Keith Brander, Bruno Ernande, Anna Gårdmark, Fiona Johnston, Shuichi Matsumura, Heidi Pardoe, Kristina Raab, Alexandra Silva, Anssi Vainikka, Ulf Dieckmann, Mikko Heino, and Adriaan D. Rijnsdorp. "Managing Evolving Fish Stocks." *Science* Vol. 318, no. 5854 (23 November 2007): 1247-48. Intense harvesting of fish has resulted in the fish being placed under differing natural selection pressures. The fish are evolving different characteristics, such as earlier sexual maturation, smaller size, and elevated reproductive effort. In many fish stocks, death by being caught exceeds natural mortality by more than 400%.

Jose, S, "Seven Hurricanes and the Southeastern Forest Ecosystems: An Educational Opportunity," Journal of Forestry 103 (no. 7, Oct/Nov 2005): 327-327.

Joshi, UV, "Review of: International Law of Water Resources: Contribution of the International Law Association (1954-2000) By Slavko Bogdanovic," Natural Resources Journal 43(no.4, 2003):1296-1298. (v. 15, # 3)

Jost, Lawrence J. Review of Matters of Life and Death: New Introductory Essays in Moral Philosophy. Edited by Tom Regan. Environmental Ethics 3(1981):181-85.

Jost, Lawrence J. Review of The Philosophy of Vegetarianism. By Daniel A. Dombrowski. Environmental Ethics 9(1987):273-76.

Jostad, Patricia M., McAvoy, Leo H., McDonald, Daniel. "Native American Land Ethics: Implications for Natural Resource Management", Society & Natural Resources 9(no.6, 1996):565. (v7,#4)

Joubert, Leonie. *Scorched: South Africa's Changing Climate*. Johannesburg: Wits University Press, 2007.

Joubert describes journeys through South African landscapes and discusses how these landscapes are changing as a result of global climate change. She attempts to give local color to a global problem.

Journal of Forestry, "Nongovernmental Organizations: Their Power and Influence in the U.S. and the World," vol. 92, no. 6, June 1994. The whole issue is on nongovernmental organizations. (v5,#4)

Journal of the Philosophy of Sport, The, Vol. 23 (1996) is a special issue on animals and sport. Articles: "Rodeo and Recollection--Applied Ethics and Western Philosophy" by Bernard E. Rollin; "Sports and Speciesism," by Maurice L. Wade; and "The Killing Game: An Ecofeminist Critique of Hunting," by Marti Kheel. The JPS is published annually for the Philosophic Society for the Study of Sport (PSSS) by Human Kinetics, P.O. Box 5076, Champaign, IL 61825-5076. (v8,#1)

Journal of International Affairs, The, Winter 1991, vol. 44, no. 2, is an entire issue devoted to "The Politics of the Global Environment." Contributors: Maurice F. Strong, "Eco '92" (anticipating Rio de Janeiro); Dean E. Mann, "Environmental Learning", Sheldon Kamieniecki, "Political Mobilization"; Helmut Schreiber, "Eastern Europe"; Gary S. Hartshorn, "Developing Countries"; Richard Sandbrook, "Environment and Development"; Ernst U. von Weizsäcker, "Sustainability for the North"; Peter S. Thacher, "Multilateral Cooperation"; Oscar Schachter, "International Law"; Kilaparti Ramakrishna, "The Convention on Climate Change." The Journal of International Affairs is published by the School of International and Public Affairs, Columbia University. (v2,#4)

Journal of Sustainable Tourism. Started in 1993. Articles invited. Editors: Bill Bramwell and Bernard Lane, Channel View Publications, Frankfurt Lodge, Clevedon Hall, Victoria Road, Clevedon, Avon, U.K. BS21 7S. (v6,#1)

Journal of Social Philosophy 34, no. 1, Spring 2003, contains a special section on "Urban Environmental Ethics." The papers were generated from a workshop held in 2001 at the Blumenfeld Center for Ethics at Georgia State University on the same topic. Contains:

-Light, Andrew and Heath, Wellman Christopher, "Introduction: Urban Environmental Ethics," Journal of Social Philosophy 34(no. 1, 2003):1-5.

-deShalit (de-Shalit), Avner, "Philosophy Gone Urban: Reflections on Urban Restoration," Journal of Social Philosophy 34 (no. 1, 2003):6-27.

-Dagger, Richard, "Stopping Sprawl for the Good of All: The Case for Civic Environmentalism," Journal of Social Philosophy 34(no. 1, 2003):28-43.

-Light, Andrew, "Urban Ecological Citizenship," Journal of Social Philosophy 34(no. 1., 2003):44-63.

-Palmer, Clare, "Placing Animals in Urban Environmental Ethics," Journal of Social Philosophy 34(no. 1, 2003):64-78.

-Michelfelder, Diane P., "Valuing Wildlife Populations in Urban Environments," Journal of Social Philosophy 34(no. 1, 2003):79-90.

Journal of Interdisciplinary Studies, The, vol. 3, 1991, contains articles on the theme: "Ecology and Food: Restoring Man and Nature." (v2,#3)

Journal of Forestry 93 (no 2, February 1995). Theme issue on Forest Esthetics. Contains: (Forest aesthetics)

--Gobster, Paul H., "Aldo Leopold's 'Ecological Esthetic': Integrating Esthetic and Biodiversity Values"

--Jones, Geoffrey T., "The Careful Timber Harvest: A Guide to Logging Esthetics"

--Lewis, Richard, "Pardon the Mess, We're Growing a New Forest"

--Schuh, "Managing Esthetic Values: Weyerhaeuser Company's Approach"

--Bacon, Warren, "Creating an Attractive Landscape through Viewshed Management"

--O'Laughlin (O'Laughlin), and Belt, George H., "Functional Approaches to Riparian Buffer Strip Design"
--Bergen, Scott D., Fridley, James L., Ganter, Mark A., and Schiess, Peter, "Predicting the Visual Effect of Forest Operations." (v.10,#1)

Journal of Environment and Development is published twice a year, concerned with development and conservation, especially on international levels. Seeks to combine legal, scientific, policymaking, and academic communities. Sample articles: William K. Reilly, "The Greening of NAFTA: Continental Environmental Cooperation" (Winter 1993); Heraldo Munoz, "The 'Green' vs. Trade Debate in the Americas" (Winter 1994). JED, University of California at San Diego, Mail Code 0519, La Jolla, CA 92093. Phone 619/534-7617. (v5,#4)

Journal of Forestry, "Ethical Decisionmaking: A Roundtable Discussion," vol. 91, no. 4, April 1993. Contains:

Banzhaf, William H., "Rarely Black and White"

Irland, Lloyd C., "Developing Ethical Reflection"

Marshall, Fred, "Ethical Priorities"

Coufal, James E., and Zane J. Cornett, "The Ethics of Forest Stewardship"

The issue theme is "Environmental Ethics and Policies: Assessing the Benefits and Consequences." (v5,#4)

Journal of Forestry 93 (no. 9, September 1995) is a theme issue on ethics in forestry, "Word of Honor: The Role of Professional Ethics in Forestry." contains:

--Cornett, Zane J., "Birch Seeds, Leadership, and a Relationship with the Land"

--"Code of Ethics for Members of the Society of American Foresters"

--Force, Jo Ellen, "SAF's Code of Ethics: Time for Another Look?"

--"The Case of the Missing BMP's." A forest engineer working for a forestry company is asked to evaluate a piece of property recently received in trade from a government agency. He finds that a partially constructed road does not comply with volunteer best management practices (BMP). Following his report to his supervisors, his company puts the land on sale. Among others, his church is considering buying the land. Comments on this case by several foresters.

--Smyth, Arthur V., "Foresters and the Land: The Evolution of SAF's Land Ethic"

--Irland, Lloyd C., "Recognizing and Resolving Conflicts of Interest"

--Coufal, James E., and Spuches, Charles M., "Ethics in the Forestry Curriculum: A Challenge for All Foresters"

--Dickerson, Lynn, "Elements of 19th-Century Romanticism in Contemporary Forest Management Practices" (v.10,#1)

Journal of International Affairs, Winter 1991 issue is devoted to the theme "The Politics of the Global Environment." Eight contributors investigate international cooperation, economic development and the environment, and the role of the market in fashioning sound environmental policies. Single issue is \$ 7.00, JIA, Box 4, International Affairs Bldg, Columbia University, New York, NY 10027. (v2,#2)

Journal of Environmental Psychology, vol. 15, no. 3 (September 1995), is a special issue on Green Psychology, edited by Robert Gifford. Included are:

--Axelrod, Lawrence J., and Suedfeld, Peter. "Technology, Capitalism, and Christianity: Are They Really the Three Horsemen of the Eco-Collapse?" pp. 183-95. An examination of the evidence for the frequent accusation that technology, capitalism, and Christianity, the three bases of modern Western Society, are root causes of environmental degradation. Although these three are associated with failures to protect the environment, label them as causal factors contradicts known facts. Axelrod and Suedfeld are in psychology at the University of British Columbia.

--Biel, Anders, and Garling, Tommy. "The Role of Uncertainty in Resource Dilemmas," pp. 221-

33. Resource dilemmas entail a conflict between self-interests and the welfare of a group or society at large. Individuals with a pro-social orientation may act in the interest of the collective, but there are complications due to uncertainty. As the consequences are perceived to be uncertain, increasing uncertainty will be cooperation less consistent. Biel and Garling are in psychology, Göteborg University, Göteborg, Sweden.

--Reser, Joseph P. "Whither Environmental Psychology? The Transpersonal Ecopsychology Crossroads," pp. 235-57. Ecopsychology and its relationship to psychology and environmental psychology, with particular attention to Theodore Rozak. The nature and role of the "self" as the ultimate target and agent of meaningful change. Ecopsychology in Australia, and indigenous "earth wisdom." The prognosis for the greening of psychology is explored. Reser is in psychology at James Cook University, Townsville, Australia.

--Kaplan, Stephen. "The Restorative Benefits of Nature: Toward an Integrative Framework," pp. 169-82. Evidence pointing to the psychological benefits of nature has accumulated at a remarkable rate in a relatively short period of time. Natural environments are particularly rich in the characteristics necessary for restorative experiences. Kaplan is in psychology at the University of Michigan, Ann Arbor. (v7, #3)

Journal of Social Issues had a special issue on "Psychology and the Promotion of a Sustainable Future," edited by Doug McKenzie-Mohr and Stuart Oskamp, Vol. 51, no. 4 (Winter 1995). Twelve articles, including the 1994 Society address by Stuart Oskamp, "Apply Social Psychology to Avoid Ecological Disaster." Included is an article by John B. Cobb, Jr., "Toward a Just and Sustainable Economic Order." Available from Plenum Press (New York, London). (v8,#2)

Journal of Human Dimensions in Wildlife Management is a new journal, to advance the science of human dimensions of wildlife and its application to decision-making concerning wildlife conservation. Sample articles in volume 1, no. 1, Spring 1994. "Understanding Controversy in Wildlife Management"; "Basic Wildlife Beliefs, Orientations, and their Applicability to Wildlife Planning." The publisher is Sagamore Publishing Inc., Champaign, IL. Articles are invited: Co-editors, Michael J. Manfredo and Jerry J. Vaske, Human Dimensions Natural Resources Unit, College of Natural Resources, Colorado State University, Fort Collins, CO 80523. (v5,#3)

Journal of Ecotourism. Seeks to advance the development of a viable global ecotourism industry that is environmentally, socio-culturally, and economically sustainable. Started in 2001. www.channelviewpublication.net

Journal of Philosophy of Education (The Journal of the Philosophy of Education Society of Great Britain), volume 37, no. 4, 2003, is devoted to environmental education. Michael Bonnett, editor, writes in the introduction: "At this state in history it is difficult to identify an issue of greater importance for humankind than its relationship with the environment, nor one that is more fraught. It must be a unique phenomenon--on Earth at least--for a species to be contemplating the possibility of its self-extinction. Yet as evidence mounts daily to confirm that human action is affecting the environment in ways that are both unprecedented and unsustainable, the issues raised appear ever more complex and the way ahead far from straightforward. Given that the consequences of this situation are having to be faced in increasingly acute forms by the citizens of the early twenty-first century, clearly it would be irresponsible for education somehow to attempt to remain aloof from the issues that this state of affairs throws up."

Journal of Catholic Social Thought Vol. 4, no. 2 (2007). This is a themed issue on Catholic social teaching and ecology. Contents include: (1) "Introduction: Catholic Social Teaching and Ecology," by Barbara Wall (pp. 199-202), (2) "Catholic Social Teaching and Ecology: An Historical Perspective" by Bishop Walter Sullivan, Diocese of Richmond (pp. 203-09), (3) "Catholic Social Teaching and the Environment: A Pastoral Response" by Walter Grazer, U.S. Conference of Catholic Bishops (pp. 211-25),

(4) "Discerning the Environmental Perspective of Pope Benedict XVI" by Lucia Silecchia, Catholic University of America (pp. 227-69), (5) "Holy Ground: Protestant Ecotheology, Catholic Social Teaching and a New Vision of Creation as the Landed Sacred" by Mark I. Wallace, Swarthmore College (pp. 271-92), (6) "Ecology: A Primer for Christian Ethics" by Holmes Rolston III, Colorado State University (pp. 293-312), (7) "Science, Religion and the Environment" by Mark Sagoff, University of Maryland (pp. 313-30), (8) "Transdisciplinary Systems Science: Toward a Science of Connection, Integration, and Synthesis" by Robert Costanza, University of Vermont (pp. 331-53), (9) "Globalization, Catholic Social Teaching and the Environment" by Mary Evelyn Tucker, Yale University (pp. 355-71), (10) "Global Climate Change and Catholic Responsibility: Facts and Faith Response" by Gerald Braun, Monika Hellwig, and W. Malcolm Byrnes (pp. 373-401), (11) "Ecology and the Common Good: Sustainability and Catholic Social Teaching" by Russell Butkus and Steven Kolmes, University of Portland (pp. 403-36), (12) "Educating Practically Wise Professionals: The Role of the Catholic Social Tradition in Catholic Universities" by Stephen Miles, Loyola College (MD), and Michael Naughton Deborah Ruddy, University of St. Thomas (MN) (pp. 437-57), (13) "Problematic Uses of Patristic Sources in the Documents of Catholic Social Teaching" by Brian Matz, Katholieke Universiteit, Leuven (459-85), (14) "What Is Happening to Our Beautiful Land? A Pastoral Letter" Catholic Bishops Conference of the Philippines (pp. 487-96), and (15) "A Bibliography on Ecology and Religion" by Christopher Janosik, Villanova University (pp. 497-99).

Joyce, Richard. *The Evolution of Morality*. Cambridge, MA: The MIT Press, 2006. The evidence supports an innate basis to human morality. Might the fact that the human brain has been biologically prepared by natural selection to engage in moral judgment serve in some sense to vindicate this way of thinking - staving off the threat of moral skepticism, or even undergirding some version of moral realism? The evolutionary "vindication" of morality compared with the evolutionary "debunking" of morality.

Juang, C.H., Soushan Wu, and Her-Jiun Sheu. "A Group Decisionmaking Model for Siting LULUs." The Environmental Professional 17 (no. 1, 1995): 43- . (v6,#1)

Judd, Richard W., "The Coming of the Clean Waters Acts in Maine, 1941-1961," Environmental History Review 14(# 3, Fall 1990):51-73. (v1,#4)

Judgments of Justice Lionel Murphy, edited by A. R. Blackshield et al. Sixty judgments from a controversial High Court Judge, including that on Franklin Dam. (v1,#3)

Juillet, Luc, Roy, Jeffrey, Scala, Francesca. "Sustainable Agriculture and Global Institutions: Emerging Institutions and Mixed Incentives," Society & Natural Resources 10(no.3, 1997):309. (v8,#2)

Jukofsky, D, "Shared Conservation Experiences," Conservation Biology 15(no. 4, 2001):818-819. (v.13,#1)

Juma, Calestour and J.B. Ojwang, eds. In Land We Trust: Environment, Private Property and Constitutional Change. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1996. This book presses the development of an African perspective on environmental policy. Relevant not only in the developing world but also in those developed countries such as the United States where conservation efforts are hampered by the lack of an adequate constitutional basis. (v7,#1)

Juma, Calestous, John Mugabe and Patricia Kameri-Mbote, eds., Coming to Life: Biotechnology in African Economic Recovery. Nairobi: African Centre for Technology Studies, 1995. ISBN 9966-41-087-2. Also published by Zed Books, London, ISBN 1-85649-268-0. Science and technology policy formulation and the status of biotechnology in Cameroon, Ethiopia, Kenya, Tanzania, and Uganda. African countries have the potential to move into the field of biotechnology, but they are hindered by the

lack of coherent national policies. (v6,#3)

Jung, Hwa Yol. "The Orphic Voice and Ecology." Environmental Ethics 3(1981):329-40. The voice of Orpheus symbolizes the everlasting importance of music and poetry in the animus of man. According to the ancient legend, Orpheus by his very gift of music fills the radical sense of enjoyment in us all and enables entire nature to dance in delight. Music resonates the most primordial and invariant mood of man in his harmony with the universe (uni-verse) from time immemorial. On the basis of the image of "roundness" derived from the auditory model of space, an "ecotopia" or a new orientation of ecological ethics is projected. By affirming man as the responsible caretaker of the Earth, it rejects both speciesism and individualism--the antitheses of social principle. Jung is in the department of Political Science, Moravian College, Bethlehem, PA. (EE)

Jung, Hwa Yol. Review of The Imperative of Responsibility. By Hans Jonas. Environmental Ethics 8(1986):271-74.

Jung, Hwa Yol and Petee Jung, "Gary Snyder's Ecopiety," Environmental History Review 14(# 3, Fall 1990):75-87. (v1,#4)

Jung, Hwa Yol. Review of The Return to Cosmology. By Stephen Toulmin. Environmental Ethics 7(1985):277-81.

Jung, Hwa Yol. "Marxism, Ecology, and Technology." Environmental Ethics 5(1983):169-71. The recent controversy over whether Marxism is an ecologically viable theory or can justify a state of harmony between man and nature has a serious flaw because none of the participants in the discussion seems to think that technology is intrinsic to the reconciliation of man with nature. While it is correct that the writings of the early Marx offer some basis for the reconciliation, the later Marx was preoccupied with the question of nature's instrumentality or the human significance of nature, and he saw technology as the human mode of dealing with nature. Marx and Marxists have contributed to making us aware of man's exploitation of and alienation from other men, but not man's exploitation of and alienation from nature. To eradicate the second requires a radical deconstruction of modern technomorphic culture and its metaphysical foundations. Jung is in the department of Political Science, Moravian College, Bethlehem, PA. (EE)

Jung, L. Shannon. We are Home: A Spirituality of the Environment. Mahwah, NJ: Paulist Press, 1993.

Jung, Shannon, We are Home: Spirituality of the Environment. Ramsey, NJ: Paulist Press, 1993. Paper, \$ 7.95. Jung is professor at Wartburg Theological Seminary, Dubuque, IA. (v3,#4)

Justice, Max E., Hicks, I. Faison. "Trends & Insights: The Fourth Amendment Goes 'Underground': EPA Soil and Water Sampling," Natural Resources & Environment 11(1997):40.

Juuti Petri S., and Tapio S. Katko, eds., *Water, Time and European Cities*. Reviewed by Harald D. Frederiksen, Environmental Values 16(2007):277-279.

Kada, N, "Review of: Rock, Michael T., Pollution Control in East Asia: Lessons from Newly Industrializing Economies," Journal of Environment and Development 12(no.1, 2003):131-135.

Kada, N, "Greening the Firm: The Politics of Corporate Environmentalism," Journal of Environment and Development 10(no. 2, 2001):207-211. (v.13,#1)

Kadetsky, Elizabeth, "Guarding Nature," article and related features on religion and environment, Science

and Spirit, March/April 2002, pp. 28-39, including Bill McKibben (front cover, pictured in upscale Goretex Jacket), "What Would Jesus Drive?" (v.13,#1)

Kaelin, Albin and M. M. Mehalik, "The Development of Climatex Lifecycle, a Compostable, Environmentally Sound Upholstery Fabric." In Sustainable Solutions: Sustainable and Eco-product and Service Development, ed. Martin Charter. London: Greenleaf Publishing, 2000. (v.11,#2)

Kafin, Robert J., "Can You Canoe a Canoe? New York Rules on Navigability." Journal of Environmental Law & Practice 6(No. 4, Spring, 1999):53- . (v10,#4)

Kagan, Robert A., "Trying to Have It Both Ways: Local Discretion, Central Control, and Adversarial Legalism in American Environmental Regulation," Ecology Law Quarterly 25(No.4, 1999):718-. (v.10,#2)

Kagen, Shelly, "Rethinking Intrinsic Value," The Journal of Ethics 2:(1998):277-297.

Kahn, Joseph, "The Science and Politics of Super Rice," New York Times, October 22, 2002, pp. C1, C12. China was once enthusiastic about genetically modified, pesticide resistant rice, and the Chinese at their National Rice Research Institute, Hangzhou, have developed such a rice. But now the Chinese are going quite slow about using it, worrying that pests quickly evolve to overcome the resistance (as has happened with corn in China). Even more they seem to fear that Chinese inefficient farmers cannot compete with food imports from the United States and other big high-tech producers. (v.13,#4)

Kahn, Jr, Peter H., "Developmental Psychology and the Biophilia Hypothesis: Children's Affiliation with Nature," Developmental Review 17(1997):1-61. A useful review of the biophilia hypothesis of Edward O. Wilson and Stephen R. Kellert. There are three overarching concerns: (1) The genetic basis of biophilia. (2) How to understand seemingly negative affiliations with nature. (3) The quality of the supporting evidence. Biophilia is a valuable interdisciplinary framework for investigating the human affiliation with nature, though a nascent framework. The second half of the article discusses recent studies on children's environmental reasoning and values, conducted in the U.S. and in the Brazilian Amazon. Kahn is in education and human development, Colby College, Waterville, ME. (v9,#1)

Kahn, Jr., Peter H., "Children's Moral and Ecological Reasoning About the Prince William Sound Oil Spill," Developmental Psychology 33(No. 6, 1997):1091-1096. School children were interviewed about the 1990 Exxon Valdez oil spill. Children cared that harm occurred to the shoreline and marine life and conceived of both types of harm as violating a moral obligation. Fifth and eighth graders used more anthropocentric reasoning than did second graders. (v9,#1)

Kahn, Jr., Peter H., and Batya Freidman, "Environmental Views and Values of Children in an Inner-City Black Community," Child Development 66(1995):1403-1417. Overall, children showed sensitivity to nature and awareness of environmental problems, although attenuated by both developmental and cultural factors. Most children believed that polluting a waterway was a violation of a moral obligation. Children's environmental moral reasoning largely focused on homocentric considerations (e.g. that nature ought to be protected in order to protect human welfare). With much less frequency, children focused on biocentric considerations (e.g. that nature has intrinsic value or rights). Findings are discussed in terms of moral-developmental theory, and the place of social-cognitive research in understanding the human relationship to the natural environment. Kahn and Friedman are in human development at Colby College, Maine. (v6,#4)

Kahn, P. H. , and Lourenco, O., "Water, Air, Fire, and Earth: A Developmental Study in Portugal of Environmental Moral Reasoning," Environment and Behavior 34(no.4, 2002): 405-30. (v.13,#4)

Kahn, Peter H., Jr., The Human Relationship with Nature: Development and Culture. Cambridge, MA: MIT Press, 1999. 281 pages. Research and theory on how humans develop a relationship with nature, using a developmental psychology framework. An analysis of eight years of study of children, young adults, and parents in diverse geographical locations, ranging from an economically impoverished black community in Houston, Texas, to a remote village in the Brazilian Amazon. Features children, with the question how far environmental sensitivity is already present in children and how far it develops in later life. Analyzes whether there are universal features in the human relationship with nature, and discovers some tendencies toward biophilia transculturally, with cultural modifications. Challenges the postmodern claim that nature is only a cultural construction. An excellent combination of philosophical analysis and empirical research. Kahn is in psychology at Colby College, Waterville, Maine. (v.10,#2)

Kahn, Peter H., Jr., "Bayous and Jungle Rivers: Cross-Cultural Perspectives on Children's Environmental Reasoning." In Saltzstein, H., ed., Culture as a Context for Moral Development: New Perspectives on the Particular and the Universal. No. 76 in the series, New Directions for Child Development, Summer 1997, pp. 23-36. San Francisco: Jossey-Bass, Inc., Publishers. Contrary to previous research that found that economically impoverished African Americans have little interest in and concern for the natural environment, research with children and parents in an African American community in Houston, Texas shows environmental sensitivity and commitment. Two groups are studied in Brazil, one in Manaus, a large city on the Amazon River, where children live in great poverty, and a second group in a remote village of 4,000 inhabitants on the Rio Negro. Both groups of children demonstrated environmental sensitivities and commitments based on a wide range of measures. Similarly in Howe, Daniel C. (Education and Development, Colby College) and Kahn, Jr., Peter H., "Along the Rio Negro: Brazilian Children's Environmental Views and Values," Developmental Psychology 32(No. 6, 1996):979-987. (v9,#1)

Kahn, Peter H., Jr., and Kellert, Stephen R., eds., Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations. Cambridge, MA: MIT Press, 2002. Experience of the natural world has traditionally been significant in the maturing of children, and it still may be a critical component of human physical, emotional, intellectual, and even moral development. Research from cognitive science, developmental psychology, ecology, education, environmental studies, evolutionary psychology, political science, primatology, psychiatry, and social psychology on the formation of children in interaction with the natural world. (v.13,#2)

Kahn, Peter H., Jr., "Resolving Environmental Disputes: Litigation, Mediation, and the Courting of Ethical Community." Environmental Values 3(1994):211-228. Litigation and mediation offer substantive and important approaches toward resolving environmental disputes. Yet as currently practiced both approaches have shortcomings. For example, litigation often promotes divisive, adversarial relationships. Mediation often yields untenable ground given the seriousness of many environmental problems. This paper offers a reconception of both approaches. It is argued that both litigation and mediation need to be embedded within a more ethically comprehensive context, one of 'courting ethical community'. Discussion focuses on what it means in this sense to court, on what defines and bounds the ethical, and how courting depends on understanding not only differences but commonalities in people's environmental views and values. KEYWORDS: Community, environmental dispute resolution, environmental ethics, litigation, mediation, moral psychology, morality. Kahn is at the Department of Education and Human Development at Colby College, Maine. (EV)

Kahn, Peter H., Jr., "Developmental Psychology and the Biophilia Hypothesis: Children's Affiliation with Nature." Paper at the April 1995 Society for Research in Child Development. A venturesome hypothesis has been put forth by E. O. Wilson, and is gaining increasing support: biophilia is a fundamental, genetically-based human need and propensity to affiliate with other living organisms and life-like

processes. While the biophilia hypothesis can help us to understand the biological underpinnings of how humans come to value nature, the construct itself needs to include substantively ontogenetic considerations. An alternative means, by which to understand biophilia, is grounded in structural-development psychological theory. Data from three recent studies conducted in the United States and the Brazilian Amazon support this reconception. Paper available from the author at: Program in Education and Human Development, Colby College, 4420 Waterville, ME 04901-8844.

Kahn, Peter and Stephen Kellert, Children and Nature: Psychological, Sociocultural and Evolutionary Investigations. Cambridge, MA: The MIT Press, 2002. Reviewed by David Sobel. Environmental Values 13(2004):409-412. (EV)

Kaiser, Jocelyn, "Military Wins Changes that May Ease Research," Science 302(28 November 2003):1487-1488. The U.S. Congress has exempted the Department of Defence from environmental rules protecting endangered species and marine mammals. Congress did reject military requests for exemption from some pollution laws. Also, language of the law is rather vague at points, especially regarding whether the military itself or subcontractors do the research.

Kaiser, Jocelyn, "Academy Panel Mulls Ethics of Human Pesticide Experiments," Science 299(17 January 2003):327-328. Ethics of human pesticide studies. The U.S. Environmental Protection Agency sets permissible levels of human exposure to pesticides at 10-fold or more lower than the dosage that produces toxicity in animals, levels that might even get lower with new regulations protecting children. To get more data on human toxicity levels, and to avoid such stringent standards, a number of companies have been dosing volunteers (mostly in the U.K.) with experimental levels of pesticides, and paying them \$ 600 or more to participate in such tests. The National Academy of Sciences has a panel questioning whether such experiments are ethical, and the EPA is undecided whether they can or ought to use such data. Much of the ethics debate hinges on whether the industry motives are perceived to be expressly for the benefit of the company or conducted with larger benefits to society as a goal.

Kaiser, Jocelyn, "Unique, All-Taxa Survey in Costa Rica 'Self-Destructs,'" Science 276 (1997)893. A unique, all-taxa survey in Costa Rica fails. A promising survey of all the species in species-rich Costa Rica, designed co-operatively among a number of groups, including the World Bank, the Netherlands, and Norway, has failed, rather unexpectedly. One spokesman said, "The ATBI (survey) was a beautiful scientific project, but there are social and economic considerations that are more relevant than scientific ones." The \$ 90 million project was canceled because it seemed to benefit science more than the Costa Rican people. (v8,#3)

Kaiser, Jocelyn, "Booby-Trapped Letters Sent to 87 Researchers," Science 286(5 November 1999):1059. Letters with razor blades, and a note: "You have until August 2000 to release all of your primate captives and get out of the vivisection industry," have been sent to 87 researchers in the U.S. The responsible group seems to be one called "The Justice Department," originating in the U.K. (v10,#4)

Kaiser, Jocelyn, "Population Growing Pains," Science 279(1998):1309. Does adding more people to the planet make society any worse off? Economists have tended to reject gloom and doom scenarios of impending environmental catastrophe, concluding that population growth should only slightly perturb living standards. But two economists, William Nordhaus and Joseph Boyer, of Yale University, argue that, although the next generation may not be much affected, if one projects eight or so generations, the cost can become enormous. Most of the costs are diminishing returns as land and capital are divvied up among descendants. Short story. This could seem obvious simply by thinking about it, but at least economists are making common sense respectable!

Kaiser, Jocelyn, "Science Board Floats \$ 1 Billion Trial Balloon," Science 285(1999):816-817. \$ 1 billion

for environmental science? The U.S. National Science Foundation (NSF) has a recommendation from its governing board to increase support of environmental science, following years of criticism that it pays environmental research short shrift. The recommendation increases spending from \$ 600 million to \$ 1.6 billion in five years. NSF Director Rita Colwell is herself an ecologist. Chair of the NSF panel that produced the report is Jane Lubchenco, Oregon State University. (v. 10, # 3)

Kaiser, Jocelyn, "New Wetlands Proposal Draws Flak," Science 279(1998):980. The Army Corps of Engineers has proposed revisions to current policy, which, though from one perspective can seem to be more conservative about wetlands, in fact opens up the possibility of much more wetland development, say critics. (v9,#1)

Kaiser, Jocelyn, "Caribou Study Fuels Debate on Drilling in Arctic Refuge," Science 296(19 April 2002):444-445. Caribou study fuels debate on drilling in Arctic refuge. The US Department of Interior, US Geological Survey, released a report that said oil drilling would harm caribou in the Arctic National Wildlife Refuge (ANWR), a report that came out on the eve of a Senate vote on drilling. But a week later there was a hastily done addendum, with revised conclusions. Some interpreted this as Interior Secretary Gail Norton manipulating science to promote the Bush Administration's views. Other scientists say the first report was based on a larger drilling area, which has since been reduced in size, and hence the addendum. Also the debate turns not only on where the caribou calve, but on where they then go to escape insects. Meanwhile other geologists note that best estimates are that drilling in ANWR would reduce U.S. dependence on foreign oil from 62% to 60%, a drop in the bucket. (v.13,#2)

Kaiser, Jocelyn, "Rift over Biodiversity Divides Ecologists," Science 289(25 August, 2000):1282-1283. An acrimonious dispute has broken out over whether the data on biodiversity are robust enough to inform public policy. The stability-diversity connection flares up again--this time when the Ecological Society of America distributed a pamphlet to members of Congress and federal agencies advocating the importance of biodiversity and citing research connecting it with ecosystem stability. Other ecologists retort that the biodiversity studies are "irrelevant" and "politically manipulated," a "propaganda document."

Kaiser, Matthias, et al., "Developing the ethical matrix as a decision support framework: GM fish as a case study," Journal of Agricultural and Environmental Ethics 20(2007):65-80. The Ethical Matrix was developed to help decision-makers explore the ethical issues raised by agri-food biotechnologies. Over the decade since its inception the Ethical Matrix has been used by a number of organizations and the philosophical basis of the framework has been discussed and analyzed extensively. The role of tools such as the Ethical Matrix in public policy decision-making has received increasing attention. In order to further develop the methodological aspects of the Ethical Matrix method, work was carried out to study the potential role of the Ethical Matrix as a decision support framework. When considering which frameworks to apply when analyzing the ethical dimensions of the application of agri-food biotechnologies, it is important to clarify the substantive nature of any prospective framework. In order to further investigate this issue, reflections on the neologism "ethical soundness" of an ethical framework are presented here. This concept is introduced in order to provide more structured evaluations of a range of ethical tools, including ethical frameworks such as the Ethical Matrix. As well as examining the philosophical dimensions of the method, theoretical analysis and literature studies were combined with stakeholder engagement exercises and consultations in order to review the Ethical Matrix from a user perspective. This work resulted in the development of an Ethical Matrix Manual, which is intended to act as a guide for potential user groups. Keywords: biotechnology - decision support - Ethical frameworks - Ethical Matrix - GM fish. Kaiser is with the National Committee for Research Ethics in Science and Technology (NENT), Sentrum, Prinsensgate, Oslo, Norway.

Kaiser, Matthias, Guest Editor, "Special Issue: The Precautionary Principle," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002) (JAEE)

Kalas, Peggy Rodgers and Herwig, Alexia, "Dispute Resolution Under the Kyoto Protocol," Ecology Law Quarterly 27 (No. 1, 2000): 53- . (v.11,#4)

Kalb, Claudia, "Paradise Found," *Newsweek*, February 20, 2006, pp. 42-43. A Conservation International team has made startling discoveries of new species in the Foja Mountains region, Papua province of Indonesia. Rare and critically endangered golden-mantled tree kangaroo, never before seen in Indonesia. 20 species of new frogs. Long-beaked echidna, egg-laying mammal, giant white rhododendrons, with flowers matching the largest rhododendron on record, Berlepsch's six-wired bird of paradise. A new species of honeyeater, first new bird species discovered on the island of New Guinea since 1939. And more.

Kalechofsky, Roberta, ed. Rabbis and Vegetarianism: An Evolving Tradition. Marblehead, MA: Micah Publications, 1995. 104 pages. \$ 10. Seventeen rabbis in brief essays enlist Biblical and Talmudic authority to justify their abstention from meat. Eden was vegetarian and in Isaiah's vision of a future peaceable kingdom, the lion, like the ox, will eat straw. Meat eating, though pervasive in Judaism, has been a concession to human weakness. Kalechofsky is president of Jews for Animal Rights. (v7, #3)

Kalechofsky, Roberta, Autobiography of a Revolutionary: Essays on Animal and Human Rights. Marblehead, MA: Micah Publications, 1991. 200 pages. \$ 11.95. Fourteen essays, including, "The Animal Rights Movement and Religion," "The Women's Movement and Anti-vivisection in the 19th century," and "Humans and Animals as Victims." (v2,#4)

Kalechofsky, Roberta. "Nazis and Animals: Debunking the Myth." The Animals' Agenda 16(1996):32. Refutes claims of Nazi benevolence toward animals. (v8,#1)

Kallard, Arne., "Super Whale: The Use of Myths and Symbols in Environmentalism." Pages 5-11 in Blichfeldt, Georg, ed., 11 Essays on Whale and Man (Lofoten, Norway: High North Alliance, 2nd ed., 1994. Characters of various whales have been aggregated and escalated to create a mythical "super whale", as a "totem animal" for environmentalist activists. In result all whales are majestic, gentle, warm-blooded animals that mate for life, travel in family groups, feel pain, and are incredibly intelligent. Whales are thereby put in a category apart from all other animals, such as those that are otherwise routinely harvested. This is more rhetoric that serves the cause of environmentalist activists than truth about whales. (v.13,#2)

Kallistos, Bishop of Diokleia, "Through the Creation to the Creator," Ecotheology No 2(Jan1997):8-30

Kalof, Linda, and Amy Fitzgerald, eds. *The Animals Reader: The Essential Classic and Contemporary Writings*. Oxford: Berg Publishers, 2007. Contents include: (1) "Editorial Introduction" by Linda Kalof and Amy Fitzgerald, (2) "The History of Animals" by Aristotle, (3) "Principles of Morals and Legislation" by Jeremy Bentham, (4) "In Defense of Slavery" by Marjorie Spiegel, (5) "Animal Liberation or Animal Rights?" by Peter Singer, (6) "The Rights of Humans and Other Animals" by Tom Regan, (7) "The Moral Status of Animals" by Martha Nussbaum, (8) "Becoming-Animal" by Gilles Deleuze and Félix Guattari, (9) "An Apology for Raymond Sebond" by Michel de Montaigne, (10) "From the Letters of 1646 and 1649" by René Descartes, (11) "Speaking for Dogs" by Clinton R. Sanders and Arnold Arluke, (12) "Wild Justice and Fair Play: Cooperation, Forgiveness, and Morality in Animals" by Marc Bekoff, (13) "Grief, Sadness, and the Bones of Elephants" by Jeffrey Moussaieff Masson and Susan McCarthy, (14) "Orangutan Cultures and the Evolution of Material Culture" by Carel P. van Schaik, Marc Ancrenaz, Gwendolyn Borgen, Birute Galdikas, Cheryl D. Knott, Ian Singleton, Akira Suzuki, Sri Suci Utami, and Michelle Merrill, (15) "The Hunter-Gatherer Prehistory of Human-Animal Interactions" by Steven Mithen, (16) "Animal Planet" by Harriet Ritvo, (17) "Animal Pets: Cruelty and Affection" by Yi-

Fu Tuan, (18) "The Eating of Flesh" by Plutarch, (19) "Brave New Farm?" by Jim Mason and Mary Finelli, (20) "The Sexual Politics of Meat" by Carol J. Adams, (21) "The Promotion of 'Meat' and its Consequences" by David Nibert, (22) "Combats of Elephants" by Pliny the Elder, (23) "On Being Human in the Bullfight" by Garry Marvin, (24) "Dogfighting: Symbolic Expression and the Validity of Masculinity" by Rhonda Evans, DeAnn K. Gauthier, and Craig J. Forsyth, (25) "Zoo Spectatorship" by Randy Malamud, (26) "Hunting and Humanity in Western Thought" by Matt Cartmill, (27) "Why Look at Animals?" by John Berger, (28) "The Totemic Illusion" by Claude Lévi-Strauss, (29) "Animals as Tradition" by Boria Sax, (30) "What is the Postmodern Animal?" by Steve Baker, (31) "The Illumination of the Animal Kingdom: The Role of Light and Electricity in Animal Representation" by Jonathan Burt, (32) "The Brown Dog Riots of 1907" by Coral Lansbury, (33) "Into the Laboratory" by Lynda Birke, (34) "Hybrid Geographies: Rethinking the 'Human' in Human Geography" by Sarah Whatmore, (35) "Dolly's Body: Gender, Genetics and the New Genetic Capital" by Sarah Franklin, and (36) "Cyborgs to Companion Species: Reconfiguring Kinship in Technoscience" by Donna Haraway.

Kalupahana, David J. "Man and Nature: Toward a Middle Path of Survival." Environmental Ethics 8(1986):371-80. I highlight the philosophical standpoints of two traditions, one from the East and the other from the West, that seem to avoid any form of reductionism resulting from the search for ultimate objectivity in human knowledge and understanding. I compare the pragmatic teachings of the Buddha and William James in order to show how both accommodate the human perspective as an inalienable part of the philosophical enterprise, and, further, how these perspectives contribute to their humanistic approaches and to the valuing of the environment in a way that is essential for human survival. Kalupahana is at the Institute for Comparative philosophy, University of Hawaii, Honolulu, HI. (EE)

Kamdar, M, "The Struggle for India's Soul," World Policy Journal 19(no.3, 2002): 11-28.

Kamieniecki, Sheldon, Gonzalez, George A., Vos, Robert O., eds. Flashpoints in Environmental Policymaking: Controversies in Achieving Sustainability. Ithaca, N.Y.: State University of New York Press, 1997. \$59.50. A contribution to public policy and natural resource issues. The likely "hot spots" of environmental policy, presenting alternative and often opposing points of view on the major controversies that are likely to be with us well into the next century. (v8,#1)

Kamieniecki, Sheldon, ed. Environmental Politics in the International Arena: Movements, Parties, Organizations, and Policy. Albany, New York: State University of New York Press. Essays united by a common emphasis upon the linkage between internal and external political forces and institutions affecting environmental policy in nations and global regions. (v7, #3)

Kammen, David M., and Hassenzahl, Should We Risk It? Princeton, NJ: Princeton University Press, 1999. \$ 40. An attempt to organize and evaluate previously disparate theories and methodologies connected with risk analysis for health, environmental, and technological problems. Kammen is in energy and society at the University of California, Berkeley. Hassenzahl is in science, technology, and society at the Woodrow Wilson School of Public and International Affairs, Princeton University. (v10,#4)

Kamsler, Victoria, "Review of Suzanne Antonetta, The Body Toxic: An Environmental Memoir," Ethics and the Environment 7(no. 2, 2002):194-196.

Kanagy, Conrad and Willis, Fern, "A Greening of Religion?" Social Science Quarterly 74(1993):674-683. (v8,#3)

Kanagy, Conrad L., and Nelsen, Hart M., "Religion and Environmental Concern: Challenging the Dominant Assumptions," Review of Religious Research 37(1995):33-45. The authors, in a social science

survey, tested three measures of religious activity (attendance at church, born-again Christian, personal religion) in relationship to three environmental attitudes (increase federal spending, relax environmental controls for economic growth, self-identification as an environmentalist), and found various connections, but, "overall, our interpretation of these findings challenges the dominant view that those in Judeo-Christian traditions--particularly religiously conservative individuals in these traditions--are less concerned about environmental issues than are others. The authors are at The Pennsylvania State University. (v8,#3)

Kane, Hal. Triumph of the Mundane: The Unseen Trends that Shape Our Lives and Environment. Covelo, CA: Island Press, 2000. 208 pages. Cloth \$22.95. How and why our day-to-day lives have changed in recent decades, and the wide-ranging impacts of those changes. Using a variety of indicators--distances between family members, the things we own, the pace of our lives, he traces the social transformations that have occurred, and considers the profound effects of those changes on our values, relationships, and physical surroundings. (v.11,#4)

Kanis, Egbert, Groen, Ab F. and De Greef, Karel H., "Societal concerns about pork and pork production and their relationships to the production system," Journal of Agricultural and Environmental Ethics 16(2003):137-162. Pork producers in Western Europe more and more encounter a variety of societal concerns about pork and pork production. So far, however, producers predominantly focused on low consumer prices, therewith addressing just one concern. This resulted in an intensive and large-scale production system, decreasingly related to the area of farm land, and accompanied with increasing concerns about safety and healthiness of pork, animal welfare, environmental pollution, and others. An overview is given of possible concerns about West-European pork production with the consumers, citizens, and producers, and those concerns are traced back to the pork production system. Accounting for the type and relevance of the concerns, legislation is necessary to address societal concerns in a balanced way such that pork production systems become acceptable for the majority of our society. KEY WORDS: acceptability, actors, dealing with concerns, pork production system, quality schemes. (JAEE)

Kant, Sashi and Susan Lee, "A Social Choice Approach to Sustainable Forest Management: An Analysis of Multiple Forest Values in Northwestern Ontario," Forest Policy and Economics 6(2004):215-227. Market value techniques for valuing forests are limited. Multiple forest values are closer to the concept of "social states" than market price or monetary value. A multiple values account tested in Northwestern Ontario. A need for developing context-specific social welfare maximizing inter-group preferences aggregation rules is highlighted. Kant and Lee are at the Faculty of Forestry, University of Toronto.

Kantor, Jay E. "The `Interests' of Natural Objects." Environmental Ethics 2(1980):163-71. Christopher D. Stone has claimed that natural objects can and should have rights. I accept Stone's premise that the possession of rights is tied to the possession of interests; however, I argue that the concept of a natural object needs a more careful analysis than is given by Stone. Not everything that Stone calls a natural object is an object "naturally." Some must be taken as artificial rather than as natural. This type of object cannot be said to have intrinsic interests and hence cannot be given rights that can protect "its own sake"--which is the sort of right that Stone focuses on. Further, there are other sorts of natural objects which, although they are objects "naturally," cannot meaningfully be said to have intrinsic interests, and thus cannot have the sorts of rights that Stone is concerned with. Finally, there are other sorts of natural objects which are objects naturally and which have intrinsic interests, but which are not proper candidates for the possession of rights. The prerequisites for being "owed" rights are the possession of intrinsic interests and the capability to suffer when those interests are interfered with or denied or threatened. Kantor is in the department of philosophy, Long Island University, Brooklyn, NY. (EE)

Kapczynski, Amy, Crone, E. Tyler, and Merson, Michael, "Global Health and University Patents," Science 301 (19 September 2003):1629. A fierce debate rages about whether and when patents promote

innovation in life-saving medicines and technologies; but, meanwhile, universities are taking out patents in unprecedented numbers. A group of experts recently concluded that universities can improve and save lives by working collectively to adopt access-friendly intellectual property. This will require developing specific licensing and patenting strategies that are applicable to low and middle-income countries. (v.14, #4)

Kaplan, R, "The Nature of the View From Home: Psychological Benefits," Environment and Behavior 33(no. 4, 2001):507-542. (v.13,#1)

Kaplan, Rachel and Stephen Kaplan, The Experience of Nature. New York: Cambridge University Press, 1989. 340 pages. An assessment of scientific-academic studies that analyze the various kinds of experience of nature that persons have. Is the effect of nature on people as powerful as it intuitively seems to be? How does it work? What lies behind the power of environments that not only attract and are appreciated by people but are apparently able to restore hassled individuals to healthy and effective functioning? Are some natural patterns better than others? Is there a way to design, manage, to interpret natural environments so as to enhance these beneficial influences? Part I deals with research on the perception of and preference for natural environments. There are broad areas of agreement, and variations. Part II deals with research on the satisfactions and benefits people derive from contact with natural environments, with particular attention to wilderness environments, but also to nearby nature, such as gardens. Part III develops the concept of a restorative environment in which the recovery of mental energies and effectiveness is enhanced. The Kaplans are in natural resources at the University of Michigan. (v7,#1)

Kaplan, Rachel, Kaplan, Stephen. With People in Mind: Design and Management of Everyday Nature. Washington, D.C.: Island Press, 1998. \$29.95. 320 pp. (v9,#2)

Kaplan, Robert D., "The Coming Anarchy," The Atlantic Monthly, vol. 273, no. 2, February 1994. Nations break up under the tidal flow of refugees from environmental and social disaster. As borders crumble, another type of boundary is erected--a wall of disease. Wars are fought over scarce resources, especially water, and war itself becomes continuous with crime, as armed bands of stateless marauders clash with the private security forces of the elites. The world faces a period of unprecedented upheaval, brought on by scarce resources, worsening overpopulation, uncontrollable disease, brutal warfare, and the widespread collapse of nation-states, and, indeed, of any semblance of government. A preview, the author claims, of the first decades of the twenty-first century. (v5,#1)

Kaplan, Stephen. "The Restorative Benefits of Nature: Toward an Integrative Framework," Journal of Environmental Psychology, vol. 15, no. 3 (September 1995): 169-82. Evidence pointing to the psychological benefits of nature has accumulated at a remarkable rate in a relatively short period of time. Natural environments are particularly rich in the characteristics necessary for restorative experiences. Kaplan is in psychology at the University of Michigan, Ann Arbor. (v7, #3)

Karafyllis, Nicole C., "Renewable resources and the idea of nature - what has biotechnology got to do with it?" Journal of Agricultural and Environmental Ethics 16(2003):3-28. The notion that the idea of nature is not quite the unbiased rule to design sustainable futures is obvious. But, nevertheless, questions about nature, how it functions and what it might aim at, is leading the controversial debates about both sustainability and biotechnology. These two research areas hardly have the same theory background. Whereas in the first concept, the idea of eternal cyclical processes is basic, the latter focuses on optimization. However, both concepts can work together, but only under a narrow range of public acceptance in Europe. KEY WORDS: bioenergy, biofuels, eco-ethics, efficiency, functions, philosophy of science, plant biotechnology, public acceptance, renewable resources, sustainability, technology assessment. (JAEE)

Karageorgakis, Stavros "Environmental Ethics: Updates from Greece," *Newsletter, International Society for Environmental Ethics*, vol 19, no. 2, Spring/Summer 2008, pp.28-29. Environmental ethics is being taught at the University of Crete, University of Aegean, University of Athens, and the University of Patra. Books in Greek on Environmental Ethics. Internet Blog: Environmental Ethics and Philosophy in Greece: <<http://enveth.blogspot.com/>>
Online at: <http://www.cep.unt.edu/ISEE/index.htm>

Karageorgakis, Stavros, *Environmental Ethics and Political Ecology: The Obligations of an Ecological Society to Non-human Nature*. Athens: University of Athens & National Technical University, 2006. PhD. thesis.

Karant, K. Ullas, and Madhusudan, M.D. "Avoiding Paper Tigers and Saving Real Tigers: Response to Saberwal," *Conservation Biology* 11(no.3, 1997):818-820. The situation is critical and urgent, and, while everyone hopes for local based-decisions, the social reform of existing practices comes quite slowly; by then tiger will be extinct. In the last 6-7 years there has been a sharp deterioration of wildland protection in India, with cutbacks of staff and resources, with dramatic increase in poaching, 200-400 killed annually for the traditional medicine trade. There is also a great increase in local hunting of the ungulates which are the tiger prey base. The tiger lives in areas characterized by rising human populations that are economically and politically marginalized, a situation not likely soon to change. India has a land area of over 3 million km² and it is not unreasonable to set aside a few inviolate 500-1000 km² sanctuaries, core conservations refuges that are part of a more extensive tiger conservation matrix. Lions are different, and there is no site in Asia where high density, productive tiger populations exist with high density agricultural and pastoral human occupation. Relocations should be voluntary, the present encroachments on tiger habitat are not sustainable, and are no long-term solution. The authors are with the Wildlife Conservation Society, Bangalore, India. (v8,#2)

Karesh, William B., "Wildlife Rehabilitation--Additional Considerations for Developing Countries," *Journal of Zoo and Wildlife Medicine* 26(no. 1, 1995):2-9. Wildlife rehabilitation in developing countries faces veterinary challenges no longer a problem for most programs in North America and Europe: availability of local vets, competent and qualified workers, access to medical information, lack of equipment, supplies, pharmaceuticals, diagnostic capacities, control of contagious diseases during care, and general lack of financial resources, as well as political pressures for politically correct rehabilitation. Care of a single primate can cost more than the combined salaries of two park rangers, protecting animals in the wild, leading some to wonder whether such money might be better spent protecting wild animals. Karesh is with the Department of Field Veterinary Studies, Wildlife Health Sciences, Wildlife Conservation Society, Bronx, NY, associated with the Bronx Zoo. (v.10,#1)

Kargel, Jeffrey S., "Proof for Water, Hints of Life?" *Science* 306(3 December 2004):1689-1690. Recent Mars probes have established there was water, but whether there was (or is) life remains uncertain. Nevertheless, "given what we now know about Mars, planetary protection considerations require the assumption that martian life exists, until we learn otherwise. All possible care must be taken to avoid cross-contamination between Earth and Mars. ... The possible future discovery of life (or fossil life) beyond Earth, anticipated for millennia, would complete the Galilean revolution that removed Earth and its life from the center of the universe. Alternatively, if we search martian aqueous deposits and find them barren, then Earth might be seen as the only land of the living for light-years around. Methane and salts may then provide humans with raw materials for building a new civilization on Mars and with an increased respect for life on our own planet." Kargel is with the U.S. Geological Survey, Flagstaff, AZ.

Karjalainen, Timo Pauli and Joachim Otto Habeck, "When 'The Environment' Comes to Visit: Local Environmental Knowledge in the Far North of Russia," *Environmental Values* 13(2004):167-186. Based on field research in villages and towns in the Komi Republic (northeastern European Russia), this article

compares the perception of the environment with environmental knowledge, and examines their interrelations in local contexts. An individual's perception of the environment is embedded in his/her everyday engagement with the surroundings ('the environment' as seen from within). Environmental knowledge is of more cognitive character: it originates mainly from outside the context of everyday life and is imparted via various forms of communication ('The Environment' as seen from the outside). From the interplay of these two levels arises what we call local environmental knowledge, a kind of knowledge which has its own moral and symbolic dimension within the social, cultural and political setting. Similarly, the concept of environmentalism is increasingly recognised as a wide diversity of 'green' views and actions rather than as a single project of a globally consistent normative character; thus there is a need to examine the contextuality of environmental concern. Our findings explain the failure of the 'information deficit' model, according to which the dissemination of scientific knowledge about environmental problems should result in local inhabitants changing their attitudes towards 'The Environment'. Instead, our findings support the insight that, rather than accepting environmental knowledge from external sources as a factual given, individuals restate it in terms of their everyday life contexts and local discourses about socio-political issues. Karjalainen is in Sociology and Environmental Studies, Faculty of Education, University of Oulu, Finland. Habek is in anthropology, University of Aberdeen, UK. (EV)

Karliner, Joshua, Morales, Alba, O'Rourke, Dara. "The Barons of Bromide: The Corporate Forces Behind Toxic Poisoning and Ozone Depletion," The Ecologist (1979) 27(no.3 1997):90. The pesticide, methyl bromide, poisons farm workers and communities and destroys the ozone layer. A broad coalition is working for the chemical's rapid and total phase-out worldwide and its replacement by sustainable agricultural practices. Methyl bromide's manufacturers, however, are lobbying hard at local, national and international levels to keep the chemical on the market. (v8,#3)

Karliner, Joshua. "Co-opting the UN." The Ecologist 29(No. 5, August 1999):318- . The UNDP's new "GSDF" programme links the UN with some of the world's worst corporations, with the aim of "bringing 2 million more people to the market" early next century. (v10,#4)

Karlsson, Mikael, "Ethics of sustainable development - A study of swedish regulations for genetically modified organisms," Journal of Agricultural and Environmental Ethics 16(2003):51-62. In spite of stricter provisions in the new EU directive on deliberate release of genetically modified organisms (GMOs), critics still advocate a moratorium on permits for cultivation of GMOs. However, in an attempt to meet concerns raised by the public, the directive explicitly gives Member States the possibility to take into consideration ethical aspects of GMOs in the decision-making. This article investigates the potential effects of such formulation by means of an empirical analysis of experiences gained the last years from similar Swedish regulations for GMOs, aiming at promoting sustainable development. The faulty implementation shown in the Swedish case indicates that legal stipulations for ethics as such have limited importance. It is suggested that public participation is an important factor for successful implementation of the ethics of sustainable development. KEY WORDS: environmental code, ethics, genetically modified, GMO, public participation, sustainable development. (JAEE)

Karlsson, Rasmus, "Reducing Asymmetries in Intergenerational Justice: Descent from Modernity or Space Industrialization?", Organization and Environment 19 (no. 2, June 2006): 233-50. Although contractual conceptions of intergenerational justice normally regard the responsibility held by each generation as symmetrical, this article argues that the late modern society has created an asymmetry between generations because of its unprecedented instrumental and destructive capacity. Extending one contractual device used by John Rawls in line with what Brian Barry has suggested, this article analyzes the roots of the asymmetry and presents two political strategies to end it. The first strategy resembles the traditional deep ecological program whereas the second holds an imaginative vision of a human future in

space. Both strategies seek to reduce the influence present generations exercise on the level of opportunity available to future generations, and the key normative argument is that intergenerational justice requires spatial and temporal limits on political action. Karlsson is a graduate student in political science at the University of Lund, Sweden.

Karlsson, SI, "Agricultural Pesticides in Developing Countries: A Multilevel Governance Challenge," Environment 46(no.4, 2004):22-41. (v. 15, # 3)

Karoliner, Joshua, The Corporate Planet: Ecology and Politics in an Age of Globalization. San Francisco: Sierra Club Books, 1998. How transnational corporations cause environmental ruin in the global economy. (v9,#2)

Karp, David Gutierrez. "Values and Their Effect on Pro-Environmental Behavior," Environment and Behavior 28, no. 1 (Jan.1996): 111- . (v6,#4)

Karp, L; Zhao, J; Sacheti, S, "The long-run effects of environmental reform in open economies", Journal of Environmental Economics and Management 45(no.2, 2003):246-264.

Karper, Karen, Where God Begins to Be: A Woman's Journey into Solitude. Grand Rapids, MI: Eerdmans, 1994. Karper lived for three decades in a monastery, then moved to take up solitary residence in the mountains of Appalachia, near Spencer, West Virginia, to discover there that the grace of God abounds. (v7,#1)

Karr et al., James R., "The Effects of Postfire Salvage Logging on Aquatic Ecosystems in the American West," BioScience 54(no. 11, 2004):1029-1033. Recent changes in the forest policies, regulations, and laws affecting public lands encourage postfire salvage logging, an activity that all too often delays or prevents recovery. In contrast, the ten recommendations proposed here can improve the condition of watersheds and aquatic ecosystems.

Karr, James R., Chu, Ellen W. Restoring Life in Running Waters: Better Biological Monitoring. Covelo, CA: Island Press, 1999. 200 pp. \$29.95. 37 premises and 7 myths that explore the theory and practice of biological monitoring and the use of multimetric indexes. (v.10,#1)

Karr, James R., and D. R. Dudley, 1981. "Ecological Perspective on Water Quality Goals," Environmental Management 5:55-68.

Karvonen, Andrew. Review of Design on the Edge: The Making of a High-Performance Building. By David W. Orr. Environmental Ethics 30(2008):105-106. (EE)

Kasanmoentalib, Soemini, and Visser, Matthew B.H., "Perspectives on Animal Consciousness," Journal of Agricultural and Environmental Ethics 10(1997/1998):215. (JAEE)

Kasanmoentalib, Soemini. "Science and Values in Risk Assessment: The Case of Deliberate Release of Genetically Engineered Organisms," Journal of Agricultural and Environmental Ethics 9(1996):42-60. To make more responsible decisions regarding risk and to understand disagreements and controversies in risk assessments, it is important to know how and where values are infused into risk assessment and how they are embedded in the conclusions. In this article an attempt is made to disentangle the relationship of science and values in decision-making concerning the deliberate release of genetically modified organisms (GMOs) into the environment. This exercise in applied philosophy of science is based on Helen Longino's contextual empiricism which attempts to reconcile the "objectivity" of science with its social and cultural construction. Longino distinguishes different levels of research on which values

apparently contextual with respect to a given research program can shape the knowledge emerging from that program. Her scheme is applied for locating and identifying the values that affect environment risk assessments of the field experiments with GMOs. The article concludes with some provisional suggestions for the decision process and the role of scientists in it. Keywords: applied philosophy of science, science in policy, risk assessment, fact-value dichotomy, biotechnology, genetically modified organisms, deliberate release. Kasanmoentalib teaches biology at the Institute for Ethics Free University in Amsterdam. (JAEE)

Kasemir, Bernd, Jull Jager, Carlo C. Jaeger and Matthew T. Gardners, eds., Public Participation in Sustainability Science: A Handbook. Cambridge: Cambridge University Press. Reviewed by Kirsty Sherlock. Environmental Values 13(2004):415-417. (EV)

Kasemir, Bernd, Schibli, Daniela, and Jaeger, Carlo C., "Involving The Public In Climate And Energy Decisions," Environment 42 (No. 3, Apr 01 2000): 32- . Public participation in decisions affecting environmental problems helps citizens own solutions and provides useful information, as recent European focus groups on climate change attest. (v.11,#2)

Kashian, D, "Considering Sustainable Forestry on Modern Landscapes," Landscape Ecology 20 (no. 8, December 2005): 1025-1027.

Kasperson, Jeanne X., and Roger E. Kasperson, *The Social Contours of Risk*, vols. 1 & 2. Reviewed by Irene Lorenzoni, *Environmental Values* 16(2007):401-404.

Kasperson, Jeanne X., Kasperson, Roger E. Turner II, B.L. "Regions at Risk: Exploring Environmental Criticality", Environment 38(No.10, 1996):4. Looks at nine critical zones and examines the social, political, and economic factors that place in question the future of key environments around the globe. (v.7,#4)

Kassas M., "Agriculture in North Africa: Sociocultural Aspects", Journal of Agricultural Ethics 2(1989):183-190. This article documents, in the cases of Libya and Egypt, situations that occur in many other nations: conversion of farmlands to nonagricultural uses, exhaustion of nonrenewable water resources, irrigation leading to waterlogging and salinization of agricultural lands, development that does not benefit people in the regions being developed. It is suggested that the use of natural resources should be in accord with nationally determined priorities and should occur in a sustainable manner. Kassas is at the University of Cairo, Giza, Egypt.

Kassas M., "Agriculture in North Africa: Sociocultural Aspects", Journal of Agricultural Ethics 2(1989):183-190. This article documents, in the cases of Libya and Egypt, situations that occur in many other nations: conversion of farmlands to nonagricultural uses, exhaustion of nonrenewable water resources, irrigation leading to waterlogging and salinization of agricultural lands, development that does not benefit people in the regions being developed. It is suggested that the use of natural resources should be in accord with nationally determined priorities and should occur in a sustainable manner. Kassas is at the University of Cairo, Giza, Egypt.

Kassiola, Joel J., "Can Environmental Ethics 'Solve' Environmental Problems and Save the World? Yes, but First We Must Recognise the Essential Normative Nature of Environmental Problems," Environmental Values 12(2003): 489-514. What is the nature of environmental problems? This article attempts to illuminate this question by exploring the relationship between environmental ethics, environmental problems and their solution. It does this by examining and criticising the argument contained in a recent issue of Environmental Values asserting that environmental ethics does not have a role to play in solving environmental problems. The major point made in this rebuttal article is that

environmental problems are essentially normative in nature. Therefore, normative discourse, and environmental ethics in particular, do have a crucial role to play in environmental thought and action. The discussion concludes with the judgment that a failure to recognise this essential contribution of normative discourse to environmentalism by committing to a conservative empirical reductionism of environmental problems is detrimental to the necessary ethical and social change required to save the world. (EV)

Kassiola, Joel Jay, The Death of Industrial Civilization: The Limits to Economic Growth and the Repoliticization of an Advanced Industrial Society (Albany: State University of New York Press, 1990). \$ 19.95 paper; \$ 59.50 hardback. The contemporary ecological crisis within industrial society is caused by the values inherent in unlimited economic growth and competitive materialism. The limits-to-growth critique of industrial civilization is the most effective stance against an otherwise dominant and invincible social order. A prescription of the social changes that must be implemented to transform industrial society into a sustainable and more satisfying society. Kassiola is professor of political science at Brooklyn College. (v1,#3)

Kassiola, Joel Jay, ed., Explorations in Environmental Political Theory, Thinking About What We Value." Armonk: M.E. Sharpe, 2003. Essays by Kassiola, Milbraith, Pirages, Dobson, Paehle, McLaughlin, Goodin, and Zimmerman. Focuses on political and value issues that underlie the global environmental crisis. (Thanks to Andy McLaughlin.)

Kates, Carol A., "Reproductive Liberty and Overpopulation: Reply to Stanley Warner," Environmental Values 14(2005): 265-270. Reply to Stanley Warner's response in Environmental Values 13.3 to the article by Carol Kates in Environmental Values 13.1. Kates is in philosophy and religion, Ithaca College, Ithaca, NY. (EV)

Kates, Carol A., "Reproductive Liberty and Overpopulation," Environmental Values 13(2004):51-79. Despite substantial evidence pointing to a looming Malthusian catastrophe, governmental measures to reduce population have been opposed both by religious conservatives and by many liberals, especially liberal feminists. Liberal critics have claimed that 'utilitarian' population policies violate a 'fundamental right of reproductive liberty'. This essay argues that reproductive liberty should not be considered a fundamental human right, or certainly not an infeasible right. It should, instead, be strictly regulated by a global agreement designed to reduce population to a sustainable level. Three major points are discussed: 1) the current state of the overpopulation problem; 2) the claim of a fundamental human right of reproductive liberty; 3) an outline of a global agreement to address overpopulation as a 'tragedy of the commons'. Kates is in philosophy and religion, Ithaca College, Ithaca, NY. (EV)

Kates, Robert W., "Population And Consumption: What We Know, What We Need To Know," Environment 42 (No. 3, Apr 01 2000): 10- . Population is well understood and predictable. Consumption, however, is less studied and growing. Still, getting from more to enough is the key to a sustainable future. (v.11,#2)

Kates, Robert W., "Sustaining Life on Earth," Scientific American 271 (No. 4, October, 1993):114-122. In a special issue on "Life in the Universe," and after nine articles about how Earth originated, life on Earth originated, and human life on Earth originated, Scientific American wonders whether, now that technological humans are here, life can be sustained in the future. Through intelligence, human beings have become a natural force to be reckoned with. Each major technological revolution--toolmaking, agriculture, and manufacturing--has triggered geometric population growth. Can we learn enough about physical, biological, and social reality to fashion a future that our planet can sustain? Kates is a geographer formerly at Brown University. (v5,#3)

Kates, Robert W., "Environmental Surprise: Expecting the Unexpected?", Environment, 38(No.2,

1996):6- . Although environmental surprises are unavoidable, humanity can learn both to anticipate them and to respond to them more effectively. (v7,#1)

Kates, RW; Wilbanks, TJ, "Making the Global Local: Responding to Climate Change Concerns from the Ground Up", Environment 45(no.3, 2003):12-23.

Kati, V; Devillers, P; Dufrene, M; Legakis, A; Vokou, D; Lebrun, P, "Testing the Value of Six Taxonomic Groups as Biodiversity Indicators at a Local Scale," Conservation Biology 18(no.3, 2004):667-675. (v. 15, # 3)

Katoh, Hisatake, Kankyo-Rinrigaku No Susume (Recommendation for Environmental Ethics). Tokyo: Maruzen Library, 1991. 227 pages. paper. ISBN 4-621-05032-X C0212. The first book in Japanese in environmental ethics. The book is divided into three parts: The chapter topics are: 1. The Basic Three Points of Environmental Ethics. 2. Nature and Human Beings. 3. Future Generations. 4. Globalism. 5. The Role of Japan. 6. Population and Environment. 7. Bioethics and Environmental Ethics. 8. Garbage and Nature. 9. Generations and Historical Relativism. 10. Rights of Future Generations. 11. How Far Can We Extend Rights? 12. Conservation and Land Ethics in the United States. 13. Ecology and Economics. 14. Reconsidering Naturalism. Hisatake Katoh is professor of ethics at Chiba University, and is in the Department of Literature there. The city of Chiba is in Chiba prefecture, near Tokyo. (v4,#2)

Katz, Eric, "The Problem of Ecological Restoration," Environmental Ethics 18(1996):222-224. Reply to Donald Scherer, who thinks ecological restoration is an expression of faith. Katz: "The practice of ecological restoration can only represent a misguided faith in the hegemony and infallibility of the human power to control the natural world."

Katz, Eric, "The Liberation of Humanity and Nature," Environmental Values 11(2002):397-405. What does the "liberation" of nature mean? In this essay, I use a pragmatic methodology to (1) reject the idea that we need a metaphysical understanding of the nature of nature before we can speak of nature's liberation, and (2) explain the sense of liberation as being the continuation of human non-interference in natural processes. Two real life policy cases are cited as examples: beach restoration on Fire Island and rock climbing in designated wilderness areas. (EV)

Katz, Eric, Review of Robert Elliot, Faking Nature: The Ethics of Environmental Restoration, Ethics and the Environment 3(1998):201-205.

Katz, Eric, "Towards a Global Ethic of Partnership." Technology Studies No. 8 (Fall, 1989): 1-4. Remarks presented at the United Nations, arguing for a community-based holistic environmental ethic based on the notion of partnership. (Katz, Bibl # 2)

Katz, Eric, "Searching for Intrinsic Value: Pragmatism and Despair in Environmental Ethics," Environmental Ethics 9(1987):231-241. A criticism of an earlier paper by Anthony Weston (see Environmental Ethics 1985). Pragmatism is not an adequate basis for an environmental ethic because it is an anthropocentric, and, ultimately, a subjective system of values. (Katz, Bibl # 1)

Katz, Eric, "Defending the Use of Animals by Business: Animal Liberation and Environmental Ethics," in Hoffman, Frederick, and Petry, above. Katz argues "that the adoption by business of a more conscious environmentalism can serve as a defense against the animal liberation movement. This strategy may seem paradoxical: how can business defend its use of animals by advocating the protection of the environment? But the paradox disappears once we see that animal liberation and environmentalism are incompatible practical moral doctrines." "Business must stress that the primary value to be promoted in the human interaction with the animal kingdom is the natural fit with the ecological processes. ... As long

as animals are used in ways that respect their natural integrity or their natural functions in ecological systems, then they are being treated with the proper moral consideration. Human beings, as natural omnivores, are not acting directly against moral value when they raise and kill animals for food." Katz is professor of philosophy at the New Jersey Institute of Technology. (v2,#1)

Katz, Eric, "Ethics and Philosophy of the Environment: A Brief Review of the Major Literature," special issue: The Moral Sense of Nature, Environmental History Review, vol. 15, no. 2, Summer 1991. (v2,#3)

Katz, Eric, and Lauren Oechsli. "Moving beyond Anthropocentrism: Environmental Ethics, Development, and the Amazon." Environmental Ethics 15(1993):49-59. We argue for the rejection of an anthropocentric and instrumental system of normative ethics. Moral arguments for the preservation of the environment cannot be based on the promotion of human interests or goods. The failure of anthropocentric arguments is exemplified by the dilemma of Third World development policy, e.g., the controversy over the preservation of the Amazon rain forest. Considerations of both utility and justice preclude a solution to the problems of Third World development from the restrictive framework of anthropocentric interests. A moral theory in which nature is considered to be morally considerable in itself can justify environmental policies of preservation, even in the Third World. Thus, a nonanthropocentric framework for environmental ethics should be adopted as the basis for policy decisions. Katz and Oechsli are at the Center of Technology Studies, New Jersey Institute of Technology, Newark, NJ. (EE)

Katz, Eric, "Artefacts and Functions: A Note on the Value of Nature." Environmental Values Vol.2 No.3(1993):223-232. ABSTRACT: This paper examines and compares the ontological and axiological character of artefacts--human creations--with nonhuman natural entities. The essential difference between artefacts and natural entities is that the former are always the result of human intention and design, while the latter are independent of human purpose. Artefacts have functions; natural entities do not. The connection to human intentional purpose implies a different kind of value for artefacts. Artefacts are evaluated solely by their instrumental (and anthropocentric) use, while natural entities can be appreciated for their independent and autonomous existence. This distinction has normative implications, especially for environmental policy and the development of an environmental ethic. Intervention in natural processes, even to 'improve' nature, must be limited, for human action changes natural entities and systems into artefacts. A moral imperative requires respect for the autonomy of nature and resistance to the human domination of nature. KEYWORDS: Ecological restoration, environmental sustainability, biological function, environmental ethics, natural value, artefacts, autonomy. Science, Technology, and Societies Program, Department of Social Sciences and Policy Studies, New Jersey Institute of Technology, Newark, New Jersey 07102, USA.

Katz, Eric, "Organism, Community, and the 'Substitution Problem'" Environmental Ethics 7(1985):241-256. An examination of two holistic models of the natural environment: organism and community. An organic conception of nature considers the parts of nature--individuals, species, ecosystems--to be instrumentally valuable. A community model is preferred, because it permits the possibility of the intrinsic value of the individual members of the holistic community. This essay is one of the few that examines crucial principles and distinctions within environmental holism. (Katz, Bibl # 1)

Katz, Eric, "Imperialism and Environmentalism," Social Theory and Practice 21 (no. 2, Summer 1995):271-285. Imperialism--power, force, and domination--as a model or metaphor for understanding the human relationship with nature. A metaphor of imperialism is rather different from the benign and optimistic metaphor of "the balance of nature." One purpose of this examination into the power of nature is to open a dialogue about the forms of rhetoric that help to determine environmental policy. Which metaphors of the human/nature relationship are more appropriate? Should we view nature as a complex of aggressive forces, or as a balanced system of cooperation and harmony? Why not use both metaphors? The metaphor we choose will have a fundamental impact on our ideas concerning the appropriate role of

human action in the natural world. Four possibilities are examined, especially the first three: (1) Imperialistic humans over other humans, and (2) over nature. (3) Imperialistic nature over humans, and (4) over other things in nature. Nature can be the "other" that is dominated by humanity, or it can be the (nonintentional) dominating and imperialistic force that subdues some aspect of humanity. Katz teaches philosophy and policy at the New Jersey Institute of Technology. (v6,#4)

Katz, Eric, Nature as Subject: Human Obligation and Natural Community. Lanham, MD: Rowman and Littlefield, 1997. The collected essays that Katz has written over twenty formative years of environmental philosophy. Sixteen essays. "My basic critical idea is that human-centered (or 'anthropocentric') ethical systems fail to account for a moral justification for the central policies of environmentalism. From this negative account of anthropocentrism, I derive my fundamental position in environmental ethics: the direct moral consideration and respect for the evolutionary processes of nature. I believe that it is a basic ethical principle that we must respect Nature as an ongoing subject of a history, a life-process, a developmental system. ... I consider Nature as analogous to a human subject, entitled to moral respect and subject to traditional ethical categories. I do not anthropomorphize Nature; I do not ascribe human feelings and intentions to the operations of natural processes. I do not consider natural processes to be sentient or alive. I merely place Nature within the realm of ethical activity. The basis of a moral justification of environmental policy is that we have ethical obligations to the natural world, just as we have ethical obligations to our fellow human beings" (p. xvi). Includes the essays in which Katz has been especially provocative, such as "The Big Lie" (restoration biology), "Imperialism and Environmentalism" (Nature as an imperialist), and continues such stimulating metaphors in the theme of "nature as (analogous to a human) subject". Also notable for essays on Judaism and environmentalism. Katz is in philosophy at the New Jersey Institute of Technology. (v7,#4)

Katz, Eric, Light, Andrew, and Rothenberg, David, eds., Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology. Cambridge, MA: The MIT Press, 2000. Fourteen contributors. Focuses on deep ecology as a philosophy, not as a political, social, or environmental movement. Relations of deep ecology to social ecology, ecofeminism, and moral pluralism, continental philosophy, postmodernism, and non-Western philosophical traditions. The first anthology on deep ecology that is not primarily the work of the movements followers. Katz and Rothenberg are in philosophy at the New Jersey Institute of Technology. Light is in environmental philosophy at New York University. Contents:

--Clark, John, "How Wide is Deep Ecology?"

--Katz, Eric, "Against the Inevitability of Anthropocentrism"

--Grey, William, "A Critique of Deep Green Theory"

--Plumwood, Val, "Deep Ecology, Deep Pockets, and Deep Problems: A Feminist Ecosocialist Analysis"

--Humphrey, Mathew, "Ontological Determinism and Deep Ecology: Evading the Moral Questions?"

--Salleh, Ariel, "In Defense of Deep Ecology: An Ecofeminist Response to a Liberal Critique"

--Light, Andrew, "Callicott and Naess on Pluralism"

--Rothenberg, David, "'No World but in Things: The Poetry of Naess's Concrete Contents"

--Zimmerman, Michael, "Possible Political Problems of Earth-Based Religiosity"

--Gare, Arran, "The Postmodernism of Deep Ecology, the Deep Ecology of Postmodernism, and Grand Narratives"

--Maskit, Jonathan, "Deep Ecology and Desire: On Naess and the Problem of Consumption"

--Jacobsen, Knut A., "Bhagavadgita, Ecosophy T, and Deep Ecology"

--Curtin, Deane, "A State of Mind Like Water: Ecosophy T and the Buddhist Traditions"

--Taylor, Bron, "Deep Ecology and Its Social Philosophy: A Critique." (v.11,#2)

Katz, Eric, Nature as Subject: Human Obligation and Natural Community. Reviewed by Ned Hettinger. Environmental Ethics 20(1998):109-12.

Katz, Eric, "Is There a Place for Animals in the Moral Consideration of Nature?" Ethics and Animals

Vol. 4, no. 3 (September 1983): 74-87. The development of an environmental ethic that combines features of holism and individualism (with an emphasis on holism). The discussion focuses on the compatibility of an ethic of animal rights and an environmental ethic. (Katz, Bibl # 1)

Katz, Eric, Light, Andrew and Thompson, William, B., eds. Controlling Technology, second edition. Amherst, NY: Prometheus Books, 2002. 41 classic and new papers on philosophy of technology with some focus on technology, development and the environment. Section headings include: "Defining Technology," "The Blessings of Technology," "The Autonomy of Technology and Its Philosophical Critics," "Demystifying Autonomous Technology Through the History of Technology," "Technology, Ethics, and Politics," "Appropriate Technology," and two sets of case studies, "Computers, Information Technology and Virtual Reality," and "Technology and the Recreation of Nature." Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. Katz is in Science and Technology Studies at the New Jersey Institute of Technology. Thompson is emeritus from SUNY Potsdam.

Katz, Eric., Review of Jordan, William R., *The Sunflower Forest: Ecological Restoration and the New Communion with Nature*. *Ethics and the Environment* 12(no. 1, 2007):97-104.

Katz, Eric. "Utilitarianism and Preservation." Environmental Ethics 1(1979):357-64. In "The Concept of the Irreplaceable," John N. Martin claims that utilitarian arguments can explain the environmentalist position concerning the preservation of natural objects as long as human attitudes toward preservation are considered along with the direct benefits of environmental preservation. But this type of utilitarian justification is biased in favor of the satisfaction of human preferences. No ethical theory which calculates goodness in terms of the amount of human satisfaction can present an adequate justification of environmental preservation. Since human interests must be considered primary, natural objects will only be preserved when their preservation is in accord with human preferences. Katz is in the department of Philosophy and Environmental Science, Barnard College. (EE)

Katz, Eric. Review of Environmental Justice. By Peter Wenz. Environmental Ethics 11(1989):269-75.

Katz, Eric. "Organism, Community, and the 'Substitution Problem.'" 7(1985):241-56. Holistic accounts of the natural environment in environmental ethics fail to stress the distinction between the concepts of community and organism. Aldo Leopold's "Land Ethic" adds to this confusion, for it can be interpreted as promoting either a community or an organic model of nature. The difference between the two concepts lies in the degree of autonomy possessed by constituent entities within the holistic system. Members within a community are autonomous, while the parts of an organism are not. Different moral conclusions and environmental policies may result from this theoretical distinction. Treating natural entities as parts of an organism downgrades their intrinsic value as individual natural beings, since the only relevant moral criterion in an organic environmental ethic is the instrumental value that each natural entity has for the system. This ethic allows instances of the "substitution problem"--the replacement of one entity in an ecosystem by another provided that the overall functioning of the system is not harmed. However, since substitution violates environmentalist principles, for example, calling for respect for the integrity of the entities in a natural system, an organic environmental ethic must be rejected. A community model focuses on both the functional value and the autonomous intrinsic value of natural entities in a system. A community environmental ethic thus avoids the substitution problem. Katz is in the department of Philosophy and Environmental Science at Barnard College. (EE)

Katz, Eric. "A Pragmatic Reconsideration of Anthropocentrism." Environmental Ethics 21(1999):377-390. For much of its brief history, the field of environmental ethics has been critical of anthropocentrism. I here undertake a pragmatic reconsideration of anthropocentrism. In the first part of this essay, I explain what a pragmatic reconsideration of anthropocentrism means. I differentiate two distinct pragmatic strategies, one substantive and one methodological, and I adopt methodological pragmatism as my guiding principle. In the second part of this essay, I examine a case study of environmental polic--the problem of beach replenishment on Fire Island, New Yor--as a pragmatic test of

anthropocentrism. I conclude that the debate between anthropocentrism and nonanthropocentrism needs to be expressed in non-absolutist terms, i.e., in a language that permits compromise, flexibility, and a pluralism of values. The choice between anthropocentrism and nonanthropocentrism as the basis of both environmental policy and environmental ethics is highly contextual and thus requires a subtle examination of the concrete policy situation. (EE)

Katz, Eric. "Searching for Intrinsic Value." Environmental Ethics 9(1987):231-41. Anthony Weston has criticized the place of "intrinsic value" in the development of an environmental ethic, and he has urged a "pragmatic shift" toward a plurality of values based on human desires and experiences. I argue that Weston is mistaken for two reasons: (1) his view of the methodology of environmental ethics is distorted: the intrinsic value of natural entities is not the ground of all moral obligations regarding the environment; and (2) his pragmatic theory of value is too anthropocentric and subjective for the development of a secure and reliable environmental ethic. The obligation to protect the natural environment should not be based on certain "correct" experiences of humans as they interact with wild nature. Katz is in the department of Philosophy and Environmental Science, Barnard College. (EE)

Katz, Eric. "The Call of the Wild." Environmental Ethics 14(1992):265-73. In this essay, I use encounters with the white-tailed deer of Fire Island to explore the "call of the wild"--the attraction to value that exists in a natural world outside of human control. Value exists in nature to the extent that it avoids modification by human technology. Technology "fixes" the natural world by improving it for human use or by restoring degraded ecosystems. Technology creates a "new world," an artifactual reality that is far removed from the "wildness" of nature. The technological "fix" of nature thus raises a moral issue: how is an artifact morally different from a natural and wild entity? Artifacts are human instruments; their value lies in their ability to meet human needs. Natural entities have no intrinsic functions; they were not created for any instrumental purpose. To attempt to manage natural entities is to deny their inherent autonomy: a form of domination. The moral claim of the wilderness is thus a claim against human technological domination. We have an obligation to struggle against this domination by preserving as much of the natural world as possible. Katz is at the Center of Technology Studies, New Jersey Institute of Technology, Newark, NJ. (EE)

Katz, Eric. Review of The Abstract Wild. By Jack Turner. Environmental Ethics 22(2000):105-108.

Katz, Eric. "Imperialism and Environmentalism." Social Theory and Practice 21 (no. 2, Summer 1995):271-285. (v6,#4)

Katz, Eric. "Unfair to Foundations? A Reply to Weston." Environmental Ethics 10(1988):288. (EE)

Katz, Eric. Review of John Dewey and Environmental Philosophy. By Hugh P. McDonald. Environmental Ethics 29(2007):313-316. (EE)

Katz, Eric. Review of Nature by Design: People, Natural Process, and Ecological Restoration. By Eric Higgs. Environmental Ethics 29(2007):213-216. (EE)

Katz, Eric. Review of Nature, Value, Duty: Life on Earth with Holmes Rolston, III. Edited by Christopher J. Preston and Wayne Ouderkirk. Environmental Ethics 30(2008):89-92. (EE)

Katz, Michael and Dorothy Thornton. Environmental Management Tools on the Internet. Delray Beach, FL: St. Lucie Press, 1996. Besides emphasizing the tools needed to find valuable information, this manual shows a number of actual sites where no-cost data can be pulled off the internet. (v7,#1)

Katzman, Martin T., & Cale, William G. Jr., "Economic Incentives for Tropical Forest Preservation: Why

and How?", Journal of Agricultural Ethics 1(1988):257-273. In addition to reviewing the arguments in favor of and against habitat preservation, this paper proposes some innovative institutions that can both satisfy developmental aspirations and account for the global benefits of habitat preservation. Katzman is in research economics at Oak Ridge National Laboratory, Tennessee. Cale is in natural sciences and mathematics at Indiana University of Pennsylvania, Indiana, PA.

Kauffman, Stuart A., The Origins of Order: Self-Organization and Selection in Evolution. New York: Oxford University Press, 1993. A summary is: "Antichaos and Adaptation," Scientific American 265(no. 2, August 1991):78-84. Since Darwin, biologists have seen natural selection as virtually the sole source of that order. But Darwin could not have suspected the existence of self-organization, a recently discovered, innate property of some complex systems. It is possible that biological order reflects in part a spontaneous order on which selection has acted. Selection has molded, but was not compelled to invent, the native coherence or ontogeny, or biological development. We may have begun to understand evolution as the marriage of selection and self-organization. Natural selection may drive ordered systems to the edge of chaos because that is where the greatest possibility for self-organization, and survival in changing environments, occurs. Kauffman is professor biochemistry and biophysics at the University of Pennsylvania School of Medicine. (v5,#4)

Kauffman, Stuart A. "Beyond Reductionism: Reinventing the Sacred." *Edge* (November 17, 2006). Edge is online at: <<http://www.edge.org>>. "National parks are valuable because life is valuable on its own, a wonder of emergence, evolution and creativity. Reality is truly stunning." Kauffman argues that scientists should reinvent the sacred as this stunning creativity, which theologians have called God. Kauffman is in biology and physics at the University of Calgary and is also at the Sante Fe Institute.

Kaufman, Frederik, "Callicott on Native American Attitudes," Environmental Ethics 18(1996):437-438. Callicott claims that Native Americans extend the idea of community to nature which they populate with other, nonhuman persons. But if so, this has nothing to do with Leopold's land ethics, which extends moral considerability to animals, plants, soils, waters, not other persons. (EE)

Kaufman, Frederik, "Warren on the Logic of Domination." Environmental Ethics 16(1994):333-334

Kaufman, Frederik A., Foundations of Environmental Philosophy: A Text with Readings. New York: McGraw Hill, 2003. Combines an authored text with readings. Focus: "The central question in environmental ethics is this: Which things count morally?" Chapter 1. Case study of the banana industry, used as a springboard into moral philosophy and the relevance of utilitarianism, Kantianism, natural law, and virtue ethics to the environment. Chapter 2. Moral reasoning and argument identification and analysis. Chapters 3-10: Differing conceptions of our relation to the nonhuman world. Chapter 3: The Human-Nature Relation (Human Dominion over Nature; Endangered Species). Chapter 4. Intrinsic Value in Nature. Chapter 5. Animals. Chapter 6. Biocentrism. Chapter 7. Ecocentric Ethics. Chapter 8. A New Anthropocentrism. Chapter 9. Environmental Economics and Policy. Chapter 10: Thoreau, Deep Ecology, and Ecofeminism. Kaufman is in philosophy at Ithaca College, Ithaca, NY. (v.13,#4)

Kaufman, Frederik. "Machines, Sentience, and the Scope of Morality." Environmental Ethics 16(1994):57-70. Environmental philosophers are often concerned to show that non-sentient things, such as plants or ecosystems, have interests and therefore are appropriate objects of moral concern. They deny that mentality is a necessary condition for having interests. Yet they also deny that they are committed to recognizing interests in things like machines. I argue that either machines have interests (and hence moral standing) too or mentality is a necessary condition for inclusion within the purview of morality. I go on to argue that the aspect of mentality necessary for having interests is more complicated than mere sentience. Kaufman is in the department of Philosophy and Religion, Ithaca College, Ithaca, NY. (EE)

Kaufman, Gordon D., "Ecological Consciousness and the Symbol 'God'." Pages 72-95 in Deborah A. Brown, ed., Christianity in the 21st Century (New York: Crossroad Publishing Co., 2000). Understanding God in terms of the metaphor of serendipitous creativity manifesting itself in a variety of evolutionary and historical trajectories facilitates maintaining a decisive qualitative distinction (though not an ontological separation) between God and the created order. Conceiving humans as biohistorical beings makes it clear that we humans are indissolubly a part of the created order. In the picture sketched here, the too-easy-anthropocentrism of traditional Christian thinking is undercut. Kaufman is professor of divinity emeritus, Harvard Divinity School. (v.14, #4)

Kaufman, Gordon D., In Face of Mystery. Cambridge, MA: Harvard University Press, 1993. 528 pages. \$ 39.95. Reconstructing the order of human life within the ecological web. Theology is an imaginative construction, a symbolic world for ordering life. Kaufman suggest that since it has been constructed, so it can be reconstructed, and he proceeds to do so using a "bio-historical" interpretation of human life. His interpretation of human historical existence situates human beings, with their capacity for freedom and creativity, within the ecological web that sustains life. This involves reevaluating the concept of God and the symbol of Christ as a point of reference. Kaufman teaches theology at Harvard Divinity School. (v6,#4)

Kaufman, Gordon D., "The Theological Structure of Christian Faith and the Feasibility of a Global Ecological Ethic," Zygon 38(no. 1, 2003):147-161. Scientific evolutionary/ecological understandings of nature are the basis of realizing that we are in an ecological crisis. Western understandings of God are being re-formulated in these scientific terms. But for a global ethic, Asian religions have typically tried to retain more traditional, prescientific concepts. These will need also to be scientifically re-formulated before we reach a feasible global ethic. Some say that it is presumptuous for the West to impose their scientific views on the East. But without such transformations in religious traditions East and West, is the development of a truly global ecological ethic possible? Kaufman is emeritus professor of divinity, Harvard University Divinity School. (v 14, #3)

Kaufmann, Thomas DaCosta. The Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance. Princeton University Press, 1993. 300 pages. \$39.95. Kaufmann, who is Professor of Art and Archaeology at Princeton, discusses the depiction in Renaissance art of nature as it relates to science ("scientific revolution") and world imperialism. (v5,#2)

Kaul, D., "Ecofeminism in the Nordic Countries," Ecotheology, No. 2, January, 1998, p. 100- . (v9,#2)

Kaul, Dagny, "Eco-News: Ecofeminism in the Nordic Countries," Ecotheology No 2 (Jan 1997):100-108.

Kavanaugh, John F., Following Christ in a Consumer Society--Still. Maryknoll, NY: Orbis Books, 1992. \$ 13.95. Updated from an earlier edition. A diagnosis of consumerism in contrast to personalism. (v3,#1)

Kawall, Jason, "Is (Merely) Stalking Sentient Animals Morally Wrong?" Journal of Applied Philosophy 17 (no. 2, 2000):195-204. Such activities as tracking, watching, and photographing animals are frequently presented as morally superior alternatives to hunting, but could they themselves be morally problematic? I argue that, despite certain differences from the stalking of humans, a strong case can be made for the prima facie wrongness of stalking sentient animals. The chief harm of stalking is the fear and altered patterns of behavior which it forces upon its victims. Similar harms arise for both human and non-human victims of stalking; thus I argue that stalking animals is a prima facie, but overridable wrong. Still, a significant disanalogy between stalking humans and stalking animals can be seen in cases in which the victim is unaware of being stalked. I argue that such stalking is generally acceptable with respect to animals, but morally wrong with respect to humans. More generally, it is much harder to justify the stalking of humans than the stalking of animals, given the greater human interest in privacy. Kawall is in

philosophy and religion at the University of Tennessee at Chattanooga. (v.11,#3)

Kawall, Jason, "Review of: Bryan Norton, Searching for Sustainability: Interdisciplinary Essays in the Philosophy of Conservation Biology," Conservation Biology 18(2004):589-590. (v. 15, # 3)

Kawall, Jason, "Inner Diversity: An Alternative Ecological Virtue Ethics," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 27-35. Kawall proposes a modified virtue ethics, grounded in an analogy between ecosystems and human personalities. He suggests that we understand ourselves as possessing changing systems of inter-related subpersonalities with different virtues, and view our characters as flexible and evolving. Kawall is in the Department of Philosophy and Religion, University of Tennessee at Chattanooga. (v.13,#2)

Kawall, Jason, book review of Bryan Norton, Searching for Sustainability: Interdisciplinary Essays in the Philosophy of Conservation Biology, Conservation Biology 18 (no. 2, 2004): 589-90.

Kawall, Jason. Review of Environmental Virtue Ethics. Edited by Ronald Sandler and Philip Cafaro. Environmental Ethics 28(2006):429-432. (EE)

Kawall, Jason. "Reverence for Life as a Viable Environmental Virtue." Environmental Ethics 25(2003):339-358. There have been several recent defenses of biocentric individualism, the position that all living beings have at least some moral standing, simply insofar as they are alive. I develop a virtue-based version of biocentric individualism, focusing on a virtue of reverence for life. In so doing, I attempt to show that such a virtue-based approach allows us to avoid common objections to biocentric individualism, based on its supposed impracticability (or, on the other hand, its emptiness). (EE)

Kawall, Jason. "On Behalf of Biocentric Individualism: A Response to Victoria Davion." Environmental Ethics 30(2008):69-88. Victoria Davion in "Itch Scratching, Patio Building, and Pesky Flies: Biocentric Individualism Revisited" takes biocentric individualism to task, focusing in particular on my paper, "Reverence for Life as a Viable Environmental Virtue." Davion levels a wide-range of criticisms, and concludes that we humans would be better off putting biocentric individualism aside to focus on more important issues and positions. Worries raised by Davion can be defended by elaborating on the position laid out in the original paper, including a background normative theory appealing to hypothetical virtuous ideal observers, upon which the position is drawn. Many of her criticisms appear to arise out of misreading or ignoring what is explicitly argued. When these misconstruals are corrected, it becomes clear that there is still space for a viable virtue of reverence for life. (EE)

Kay, Charles E., "Aboriginal Overkill: The Role of Native Americans in Structuring Western Ecosystems." Human Nature 5(1994):359-398. Kay maintains that Native Americans historically kept the ecosystems of the (now) American landscape in a structure maximizing biodiversity. Forthcoming as a book from Oxford University Press. (v8,#2)

Kay, Charles E., "Yellowstone: Ecological Malpractice," special issue of PERC Reports (502 S. 19th Ave., Suite 211, Bozeman, MT 59718), vol. 15, no. 2, June 1995. The "natural regulation" of elk in Yellowstone National Park has disastrously failed. Overpopulating elk are destroying the park, adversely affecting not only vegetation, but bear, beaver, and other wildlife. "The simple truth is that ungulate populations will not internally self-regulate before having had a serious impact on vegetation. Elk and bison never historically overgrazed Yellowstone or other national parks because hunting by Native Americans kept ungulate numbers low, promoting biodiversity." Park officials have repeatedly biased research and suppressed this fact. Kay teaches political science, with training in wildlife biology, at Utah State University. This study is forthcoming as a book. (v8,#2)

Kay, Jeanne, "Concepts of Nature in the Hebrew Bible," Environmental Ethics 10(1988):309-327. A detailed introduction to the complex array of ideas of nature in the Old Testament. Kay argues that the controversy generated by Lynn White, Jr. between models of stewardship and domination is overly simplistic. The Bible must be understood as a literary text rooted in a specific historical and ecological system. This perspective reveals the importance of the environment as an element in divine reward and punishment: environmental destruction results from human disobedience to the commandments. Outside of its specific historical/ecological context, debates over the meaning of the Bible for environmental policies becomes largely irrelevant. Kay presents an anthropocentric vision of the Old Testament and the role of God and nature in human life. (Katz, Bibl # 2)

Kay, Jeanne. "Comments on 'The Unnatural Jew.'" Environmental Ethics 7(1985):189-91. (EE)

Kay, Jeanne. "Concepts of Nature in the Hebrew Bible." Environmental Ethics 10(1988):309-27. The lack of resolution in the debate about the Bible's environmental despotism or stewardship may be resolved by more literal and literary approaches. When the Bible is examined in its own terms, rather than in those of current environmentalism, the Bible's own perspectives on nature and human ecology emerge. The Hebrew Bible's principal environmental theme is of nature's assistance in divine retribution. The Bible's frequent deployment of contradiction as a literary device, however, tempers this perspective to present a moral, yet multi-sided view of nature. Kay is in the department of Geography, University of Utah, Salt Lake City, UT. (EE)

Kaye, Roger, "The Arctic National Wildlife Refuge: An Exploration of the Meanings Embodied in America's Last Great Wilderness," Wild Earth 9 (No. 4, Wint 1999): 92-. (v.11,#2)

Kaye, Roger. *The Last Great Wilderness: The Campaign to Establish the Arctic National Wildlife Refuge*. Fairbanks: University of Alaska Press, 2006. Years of steadfast determination among conservationists (Bob Marshall, Olaus Murie, Howard Zahniser, and Aldo Leopold) led up to the passage of the Arctic National Interest Lands Conservation Act (ANILCA) in 1980.

Kaza, Stephanie, "Acting With Compassion: Buddhism, Feminism and the Environmental Crisis," Ecotheology No 1 (July 1996):71-98.

Kaza, Stephanie. "Shedding Stereotypes," Wild Earth 7 (no.1, 1997): 11. (v8,#2)

Kazimi, Camilla. "Evaluating the Environmental Impact of Alternative-Fuel Vehicles," Journal of Environmental Economics and Management 33(no.2, 1997):163. (v8,#3)

Kealey, Daniel A., Revisioning Environmental Ethics. Albany: SUNY Press, 1990. Pp. xiii, 136. This short book is another contribution to a growing literature analyzing the "world-view" that has caused the environmental crisis. Kealey uses the psychohistorical concepts of Jean Gebser---the archaic, magical, mythic, and mental---as a "hermeneutical tool" for the analysis of various strands of environmental philosophy. He argues for an "integral" ecological ethic combining aspects of neoplatonism, Asian philosophy, and personalism. (Katz, Bibl # 2)

Kealey, Daniel H. Revisioning Environmental Ethics. Chapter titles: Environmental Ethics and Psychohistory; Mental and Magical Environmental Ethics; Mythic and Integral Environmental Ethics, Plotinus on Nature and Contemplation and the One; All Life is Yoga; Towards an Integral Ecological Ethic. Drawing on Plotinus, Aurobindo, and Max Scheler, Kealey outlines an adequate ecological ethic. Kealey is assistant professor in the department of philosophy and religion at Towson State University. 131 pages. State University of New York Press, 1990. \$ 44.50 hardback, \$ 14.95 paper. (v1,#2)

Kearns, Laurel Diane. Saving the Creation: Religious Environmentalism. Ph. D. Dissertation, Emory University, 1994. 365 pages. Recently there has been much activity from denominations, grassroots groups, and theologians articulating Christian responses to the ecological crisis. This study is not an analysis of academy-produced theological responses per se, but rather of the theologies held by those who see themselves "converting the pews." Drawing upon both theology and the sociology of religion to categorize these responses, there are three main religious-environmental "ethics" emerging in the United States: the "stewardship" ethic, the "eco-justice" ethic, and the "creation spirituality" ethic. Analysis of Lynn White's thesis and the development of ideas regarding nature from the Bible through American religious history. A sociological account of the environmental movement and American religion beginning in the sixties, with a focus on the creation spirituality of Matthew Fox and Thomas Berry and the stewardship theology of evangelicals such as Cal DeWitt and the North American Conference on Christianity and Ecology (NACCE). These two theologies clashed in the first attempt at forming a national eco-theological organization (NACCE), resulting in a splinter organization--the North American Conference on Religion and Ecology (NACRE). But these two ethics have much in common. Both are articulated primarily by similar organizations located outside of official denominations. They are also similar in their reliance on the natural sciences to support and inform their sacred vision. In an effort to re-enchant the world, they have similar emphases on a more holistic understanding of humans place in "creation". Yet their basic theological assumptions are quite different. The adviser was Nancy Tatom Ammerman. (v.11,#1)

Kearns, Laurel D. "Noah's Ark Goes to Washington: A Profile of Evangelical Environmentalism." Social Compass 44 (1997): 349-66. (v.11,#1)

Kearns, Laurel, "Saving the Creation: Christian Environmentalism in the United States," Sociology of Religion 57(no. 1, 1996):55-70. In the mid 1980's, religious environmental activism in the United States increased dramatically. Based on field study of this emerging movement, Kearns proposes three models or ethics of Christian-related eco-theology: Christian stewardship, eco-justice, and creation spirituality. As a portrait of the boundaries of this movement, Kearns focuses in detail on Christian stewardship and creation spirituality. She then examines religious environmentalism through the cultural shift/change frameworks of W. G. McLoughlin, Ann Swidler, Ronald Inglehart, James Beckford, and Roland Robertson (analysts of social change, especially of meaning shifts). Of particular interest is the synoptic, holistic, global perspective transcending the privatized self and the individual state, also the non-doctrinal character of the religious consciousness. With a bibliography. Worth reading. Kearns is at The Theological School, Drew University, Madison, NJ. (v8,#2)

Kearns, Laurel, and Catherine Keller, eds. *Ecospirit: Religions and Philosophies for the Earth*. New York: Fordham University Press, 2007. Contents include: (1) "Ecotheology and World Religions" by Jay McDaniel, (2) "Talking the Walk: A Practice-Based Environmental Ethic as Grounds for Hope" by Anna L. Peterson, (3) "Talking Dirty: Ground is Not Foundation" by Catherine Keller, (4) "Ecofeminist Philosophy, Theology, and Ethics: A Comparative View" by Rosemary Radford Ruether, (5) "Cooking the Truth: Faith, Science, the Market, and Global Warming" by Lauren Kearns, (6) "Ecospirituality and the Blurred Boundaries of Humans, Animals, and Machines" by Glen A. Mazis, (7) "Getting Over 'Nature': Modern Bifurcations, Postmodern Possibilities" by Barbara Muraca, (8) "Toward an Ethics of Biodiversity: Science and Theology in Environmental Dialogue" by Kevin J. O'Brien, (9) "Indigenous Knowing and Responsible Life in the World" by John Grim, (10) "The Preoriginal Gift—and Our Response to It" by Anne Primavesi, (11) "Prometheus Redeemed? From Autoconstruction to Ecopoetics" by Kate Rigby, (12) "Toward a Deleuze-Guattarian Micropneumatology of Spirit-Dust" by Luke Higgins, (13) "Specters of Derrida: On the Way to Econstruction" by David Wood, (14) "Sacred-Land Theology: Green Spirit, Deconstruction and the Question of Idolatry in Contemporary Earthen Christian" by Mark J. Wallace, (15) "Grounding the Spirit: An Ecofeminist Pneumatology" by Sharon Betcher, (16) "Hearing the Outcry of Mute Things: Toward a Jewish Creation Theology" by Lawrence Troster, (17) "Creation ex

Nihilo, Terra Nullius, and the Erasure of Presence” by Whitney A. Bauman, (18) “Surrogate Suffering: Paradigms of Sin, Salvation, and Sacrifice Within the Vivisection Movement” by Antonia Gorman, (19) “The Hope of the Earth: A Process Ecoeschatology for South Korea” by Seung Gap Lee, (20) “Restoring Earth, Restored to Earth: Toward an Ethic for Reinhabiting Place” by Daniel T. Spencer, (21) “Caribou and Carbon Colonialism: Toward a Theology of Arctic Place” by Marion Grau, (22) “Diving New Orleans: Invoking Wisdom for the Redemption of Place” by Anne Daniell, (23) “Constructing Nature at a Chapel in the Woods” by Richard R. Bohannon II, (24) “Felling Sacred Groves: Appropriation of a Christian Tradition for Antienvironmentalism” by Nicole A. Roskos, (25) “Ethics and Ecology: A Primary Challenge of the Dialogue of Civilizations” by Mary Evelyn Tucker, (26) “Religion and the Earth on the Ground: The Experience of GreenFaith in New Jersey” by Fletcher Harper, (27) “Cries of Creation, Ground for Hope: Faith, Justice, and the Earth Interfaith Worship Service” by Jane Ellen Nickell and Lawrence Troster, (28) “The Firm Ground for Hope: A Ritual for Planting Humans and Trees” by Heather Murray Elkins, with assistance from David Wood, and (29) “Musings from White Rock Lake: Poems” by Karen Baker-Fletcher.

Kearns, R., and Moon, G., "From Medical to Health Geography: Novelty, Place and Theory after a Decade of Change," Progress in Human Geography 26(no.5, 2002): 605-28. (v.13,#4)

Kearns, Robin A. "Narrative and Metaphor in Health Geographies," Progress in Human Geography 21(no.2, 1997):269. (v8,#3)

Keat, Russell, "Citizens, Consumers, and the Environment: Reflections on The Economy of the Earth." Environmental Values 3(1994):333-349. This paper presents a critical evaluation of Mark Sagoff's critique of economic approaches to environmental decision-making in The Economy of the Earth. Whilst endorsing many of Sagoff's specific arguments against the use of extended versions of cost-benefit analysis in making such decisions, it criticizes the conceptual framework within which these arguments are developed. In particular, it suggests that what Sagoff represents as a tension between consumers and their public roles as citizens is better understood as one between culturally shared values concerning both the protection of nature and the pursuit of consumption; and that this conflict has itself to be resolved by them as citizens. KEYWORDS: Citizens, consumers, environment, Sagoff. Keat is in the Department of Politics, University of Edinburgh, U.K. (EV)

Keeley, J. E. and Fotheringham, C. J., "History and Management of Crown-Fire Ecosystems: A Summary and Response," Conservation Biology 15(no.6, 2001): 1561-67. (v.13,#2)

Keeley, J. E. and Fotheringham, C. J., "Historic Fire Regime in Southern California Shrublands," Conservation Biology 15(no.6, 2001): 1536-48. (v.13,#2)

Keeling, Paul M., “Does the Idea of Wilderness Need a Defence?” *Environmental Values* 17(2008):505-519. The received wilderness idea of nature as untrammelled by human beings has been accused of assuming an untenable human/nature dualism which denies the Darwinian fact that humans are a part of nature. But the meaning of terms like 'nature' and 'natural' depends on the context of use and the contrast class implied in that context. When philosophers such as J. Baird Callicott and Steven Vogel insist that the only correct view is that humans are a part of nature, they ignore the perfectly ordinary context in which 'nature' is used to mean 'other than human'. What is at issue here are a priori grammatical rules which stand in no need of empirical justification. There is no incompatibility between the view that humans are a part of nature and the idea that nature is valuable because of its non-human origin. The essentialism about the word 'nature' endemic to this debate distracts from the real issue, which is the value of nature's wildness.

Keen, David, "Creation Spirituality and the Environment Debate," Ecotheology Vol 7 (No. 1 July

2002):10-29. Matthew Fox's Original Blessing, published in 1983, remains one of the best selling books in the field of Christian environmentalism. In it, Fox expounds his 'Creation Spirituality' as a solution to the global environmental crisis, along with several other major world issues of the late 20th century. Fox's work (over 20 books, and countless tapes, videos and lecture tours) is devoured at a popular level, but routinely dismissed by many 'green' theologians. This paper seeks to evaluate Creation Spirituality as an environmental theology.

Keen, David. "The Benefits of Famine: A Case Study of the Sudan." The Ecologist (1979) 25(no.6, Nov.1995):214. Discussions of famine relief--and the development process in general--tend to assume that the policies of national and international agencies alike reflect benevolent aims. The possibility that politically powerful groups may actively promote famine, or obstruct relief, for rational purposes of their own is rarely considered or addressed. (v7,#1)

Keese, James R., "International NGOs and Land Use Change in a Southern Highland Region of Ecuador," Human Ecology, 26(no.3, 1998), p. 451. (v.9,#4)

Keffer, Steven, Sallie King and Steven Kraft. "Process Philosophy and Minimalism: Implications for Public Policy." Environmental Ethics 13(1991):23-47. Using process philosophy, especially its view of nature and its ethic, we develop a process-based environmental ethic embodying minimalism and beneficence. From this perspective, we criticize the philosophy currently underlying public policy and examine some alternative approaches based on phenomenology and ethnomethodology. We conclude that process philosophy, minus its value hierarchy, is a powerful tool capable of supporting both radical and moderate changes in environmental policy. Keffer is in the department of Zoology, King is in the department of philosophy, Kraft is in the department of Agribusiness Economics, Southern Illinois University at Carbondale, Carbondale, IL. (EE)

Kehm, George H., Whose World Is It? Responding to God's Covenant with the Earth. A study unit for churches published by The Theology and Worship Ministry Unit, Presbyterian Church (U.S.A.), Louisville, KY. \$ 2.00. 44 pages. 800/524-2612. Seven units. Kehm is professor of theology, Pittsburgh Theological Seminary. (v2,#3)

Keirle, I, "Should access to the coastal lands of Wales be developed through a voluntary or statutory approach? A discussion," Land Use Policy 19(no.2, 2002):177-185. (v.13, #3)

Keiter, Robert B. "Preserving Nepal's National Parks: Law and Conservation in the Developing World," Ecology Law Quarterly 22(no.3, 1995):591- . (v6,#4)

Keiter, Robert B., and Locke, Harvey. "Law and Large Carnivore Conservation in the Rocky Mountains of the U.S. and Canada." Conservation Biology 10, no.4 (1996): 1003. (v7, #3)

Keiter, Robert B., "Taking Account of the Ecosystem on the Public Domain: Law and Ecology in the Greater Yellowstone Ecosystem," University of Colorado Law Review, 60 (no. 4, 1989):923-1007. There is developing "a new vision of public land management--a vision that bases management on ecosystem principles rather than on traditional boundary lines," and much recent law moves in this direction. "Greater Yellowstone presents federal land managers with a paradigmatic setting for testing and implementing an ecosystem-based management philosophy." "Already the Greater Yellowstone Ecosystem concept has fused two world-renowned national parks, several well-known wilderness areas, and the adjoining national forest lands into a regional entity that has engaged public attention at national and international levels. ... In short, the ecosystem concept provides the fundamental premise for regional management and thus brings a compelling new vision to the ongoing debate over the future of the public domain." Keiter is professor of Law, University of Wyoming, Laramie. (v1,#4)

Keiter, Robert B. and Mark S. Boyce, eds., The Greater Yellowstone Ecosystem: Redefining America's Wilderness Heritage. New Haven: Yale University Press. Hardbound, 428 pages. Twenty-four articles, many with a philosophical bent. Samples: Mark S. Boyce, "Natural Regulation or the Control of Nature?"; Robert B. Keiter and Mark S. Boyce, "Greater Yellowstone's Future: Ecosystem Management in a Wilderness Environment"; Joseph L. Sax, "Ecosystems and Property Rights in Greater Yellowstone: The Legal System in Transition." "Yellowstone is the symbol of modern society's commitment to preserving the vestiges of its wilderness heritage." "There simply is no alternative but to collaborate in defining an ecosystem-management ethic" (Preface). Keiter is in the College of Law and Boyce in the Department of Zoology, University of Wyoming, Laramie. (v3,#4)

Keith, David W., "The Earth is not yet an Artifact," IEEE Technology and Society Magazine 19(no. 4, 2000):25-28. Replying to the claim made by Brad Allenby that "the earth has become a human artifact." Earth's systems have indeed been much modified by human actions, but some more, some less. Affecting an ecosystem does not make an artifact of it; intentional management is required to make an artifact. We still need to think of fitting our agricultural and industrial processes in with earth's ecosystems, not of actively managing the whole planet. "We would be wise to walk before we try to run, to learn to mitigate before we try to manage" (p. 28). Keith is in engineering and public policy, Carnegie Mellon University, Pittsburgh.

Kelbessa, Workineh, Indigenous and Modern Environmental Ethics: A Study of the Indigenous Oromo Environmental Ethic and Oromo Environmental Ethics in the Light of Modern Issues of Environment and Development. PhD. dissertation, University of Wales, Cardiff, Fall 2001. Explores the linkage between indigenous and modern environmental ethics by examining the indigenous Oromo environmental ethic. The Oromo are a minority, traditionally pastoralist people in South-West Ethiopia, comprising some 30% of the entire Ethiopian population. This undercuts some modern arguments about what counts as authority, who counts as an expert, and who counts as a scientist. The Oromo people have developed complex systems of agriculture and intensive soil, water, vegetation and wildlife management that have survived the test of time and the vagaries of the environment. These practices incorporate Oromo values and beliefs more than Western practices incorporate Western traditional values.

Further, the Oromo world view can serve as the basis for a contemporary environmental ethic. Unlike anthropocentrists the Oromo have deep concerns for the future and health of both humans and nonhuman creatures. But indigenous and modern knowledge are not mutually exclusive. Each has limitations and neither can be a panacea for all ills in isolation. Both have something to teach as well as something to learn. In some instances one is superior to the other.

Conventional intellectual property rights should be revised to include local knowledge entitlements. The privatisation of environmental resources will aggravate the gap between the rich and the poor, both within and between nations. Power relations at local and international levels should be changed in the direction of just and environmentally and socially sound development. The thesis advisor was Robin Attfield. Kelbessa is in philosophy, Addis Ababa University, Addis Ababa, Ethiopia. (v.13,#1)

Kelbessa, Workineh, Traditional Oromo Attitudes towards the Environment: An Argument for Environmentally Sound Development. Addis Ababa, Ethiopia: Organization for Social Science Research in Eastern and Southern Africa, Social Science Research Report Series No. 19. ISSN 1608-6287. The Oromo are a people in Ethiopia. The environment is their constant concern, and they have accumulated practical knowledge through their experience and productive activity. They have complex systems of agriculture and intensive soil, water, vegetation and wildlife management that have survived the test of time and the vagaries of environmental change. Although this knowledge has limitations, there can be a productive dialogue between the Oromo and modern scientific and Western knowledge about environmental conservation. Peasants and modern environmental scientists and technicians can learn

from one another. Kelbessa is in philosophy, University of Addis Ababa, Ethiopia. (v.14, #4)

Kelbessa, Workineh, "Indigenous and Modern Environmental Ethics: Towards Partnership," in Gail M. Presbey et al, eds., Thought and Practice in African Philosophy. Occasional Papers, East Africa. Papers from the sixth annual conference of the International Society for African Philosophy and Studies. ISSN 1681-5890. "The world view of many African societies has included an environmental ethic that can serve as the basis for modern environmental ethics" (p. 47). (v.14, #4)

Kelbessa, Workineh, "Globalization and Indigenous Environmental Knowledge in Ethiopia," in Taye Assefa, Severine M. Rugumamu, and Abdel Ghaffar M. Ahmed, eds., Globalization, Democracy and Development in Africa (Addis Ababa, Ethiopia: Organization for Social Science Research in Eastern and Southern Africa, 2001. ISBN 0 9521269 4 X. Kelbessa is in philosophy, University of Addis Ababa, Ethiopia. (v.14, #4)

Kelbessa, Workineh, "Environmental Ethics in Theory and Practical Application," Ethiopian Journal of the Social Sciences and Humanities, vol. 1, no. 1, December 2003, pages 63-88. Some of the key positions in environmental ethics presented for Ethiopian readers. Despite the misgivings of some, environmental ethics has much to contribute to the solution of global environmental problems. Examples are the precautionary principle, concerns for environmental justice, and concerns for nonhuman species. Environmental ethics could have a paramount role in creating concern about the actions of transnational corporations, irresponsibly capitalist countries and local industries that damage the environment. Environmental ethics can also alert peasant farmers, pastoralists and other indigenous peoples to understand the long-range effects of environmental degradation that are beyond the purview of local farmers. Farmers and pastoralists, however, often have local and multi-dimensional knowledge of their environments. "What must be clear is that environmental questions are not simply ethical. Environmental and development issues involve more than moral persuasion. They cannot be addressed without taking political power into account." (p. 81) Kelbessa is in philosophy, Addis Ababa University, Ethiopia, and completed his Ph.D. several years ago under Robin Attfield, University of Wales. (v.14, #4)

Kelbessa, Workineh. "Oral Traditions, African Philosophical Methods, and Their Contributions to Education and Our Global Knowledge." *Educations and their Purposes: A Conversation among Cultures* edited by Roger T. Ames and Peter D. Herschok. Honolulu: University of Hawaii Press and East-West Philosophers Conference, 2008. From the article: "This essay examines the nature and role of oral traditions in education and our global knowledge by taking the Oromo oral traditions as an example—the Oromo being the largest ethnic group in Ethiopia. The very existence of African philosophy is sometimes denied, owing to the lack of a written philosophical tradition, and the failure of oral narratives and performances to sustain analytical and rigorous philosophical dialogue. However such claims concerning philosophy were often based on a misunderstanding of orality. I will argue that oral tradition is a viable source of philosophical ideas and education. This is often expressed in proverbs. This includes highly developed environmental knowledge." Kelbessa is in philosophy at the University of Addis Ababa in Ethiopia.

Kelbessa, Workineh. "The Rehabilitation of Indigenous Environmental Ethics in Africa." *Diogenes* Vol. 52, no. 3 (2005): 17-34. From the article: "This article examines the rehabilitation of an indigenous environmental ethic and indigenous environmental ethics in Africa. It seeks to provide an understanding of how the many culture-specific African societies view their relationship to the natural world. It aims to contribute to the articulation of environmental ethics grounded in indigenous traditions and inspired by broad ecological perspectives. The article begins with a survey of modern environmental ethics. It will then examine indigenous attitudes toward nature in Africa by focusing on the environmental ethics of the Oromo of Ethiopia. The Oromo constitute the largest ethnic group in Ethiopia. The last part provides a general conclusion."

Kelch, Thomas G., "The Role of the Rational and the Emotive in a Theory of Animal Rights," Boston College Environmental Affairs Law Review 27 (No. 1, Fall 1999): 1- . (v.11,#2)

Keller, C., "Eschatology, Ecology, and a Green Ecumancy," Ecotheology, No. 2, January, 1998, p. 84- . (v9,#2)

Keller, Catherine, "The Heat Is On: Apocalyptic Rhetoric and Climate Change," Ecotheology No 7 (July 1999):40-58.

Keller, Catherine, "The Lost Fragrance: Protestantism and the Nature of What Matters," Journal of the American Academy of Religion 65(1997):355-370. Examines the key paradigms of Protestant theology, especially those of Calvin, Barth, and Kierkegaard for insight into the Protestant ambivalence about "nature" and all matters of materiality. A characteristic denaturalization inhibits Protestant thought; Keller wishes to re-embed the human within the planetary society of mostly nonhuman life as a sustainable, civil and humane economy within nature. Keller teaches theology at Drew University Theological School, Madison, NJ. (v8,#3)

Keller, Catherine, "Eschatology, Ecology, and a Green Ecumenacy," Ecotheology No 2 (Jan 1997):84-99.

Keller, D. R. and Brummer, E. C., "Putting Food Production in Context: Toward a Postmechanistic Agricultural Ethic," Bioscience 52(no.3, 2002): 264-71. (v.13,#2)

Keller, David R., and Golley, Frank B., eds. The Philosophy of Ecology: From Science to Synthesis. Athens: University of Georgia Press, 2000. Anthology on philosophy and ecology edited by a philosopher and an ecologist. The challenges of defining scientific ecology, tracing its genealogy, and distinguishing the science from various forms of "ecological-like" thinking. The ontology of ecological entities and processes. Selected concepts of community, stability, diversity, and niche. The methodology of ecology (rationalism and empiricism, reduction and holism). The significance of evolutionary law for ecological science.

Contents:

"Introduction: Ecology as a Science of Synthesis."

PART ONE. Entities and Process in Ecology

1. Frederic E. Clements, "Preface to Plant Succession: An Analysis of the Development of Vegetation."

2. Henry A. Gleason, "The Individualistic Concept of the Plant Association."

3. Arthur G. Tansley, "The Use and Abuse of Vegetational Concepts and Terms."

4. Daniel Simberloff, "A Succession of Paradigms in Ecology: Essentialism to Materialism and Probabilism."

5. Robert E. Ulanowicz, "Life after Newton: An Ecological Metaphysic."

PART TWO. Community, Niche, Diversity, and Stability

6. Karl Möbius, "An Oyster Bank Is a Biocönose, or a Social Community."

7. Robert H. Whittaker, Simon A. Levin, and Richard B. Root, "On the Reasons for Distinguishing Niche, Habitat, and Ecotype."

8. Ruth Patrick, "Biological Diversity in Ecology."

9. Andrew Redfearn and Stuart L. Pimm, "Stability in Ecological Communities."

PART THREE. Rationalism and Empiricism

10. Karl R. Popper, "The Bucket and the Searchlight: Two Theories of Knowledge."

11. Robert M. May, "The Role of Theory in Ecology."

12. Kristin Shrader-Frechette and Earl D. McCoy, "Community Ecology, Population Biology, and the Method of Case Studies."

PART FOUR. Reductionism and Holism

13. Thomas W. Schoener, "Mechanistic Approaches to Ecology: A New Reductionism?"
14. Eugene P. Odum, "The Emergence of Ecology as a New Integrative Discipline."
15. Donato Bergandi, "'Reductionist Holism': An Oxymoron or a Philosophical Chimera of Eugene Odum's Systems Ecology?"
16. Richard Levins and Richard C. Lewontin, "Dialectics and Reductionism in Ecology."
17. T.F.H. Allen and Thomas B. Starr, "Hierarchy: Perspectives for Ecological Complexity."
Part Five. Ecology and Evolution
18. David L. Hull, "The Metaphysics of Evolution."
19. Stephen J. Gould and Richard C. Lewontin, "The Spandrels of San Marco and the Panglossian Paradigm: A Critique of the Adaptationist Program."
20. Ernst Mayr, "How to Carry Out the Adaptationist Program?"
21. James P. Collins, "Evolutionary Ecology and the Use of Natural Selection in Ecological Theory."
22. Craig Loehle and Joseph H. K. Pechmann, "Evolution: The Missing Ingredient in Systems Ecology."
(v.11,#4)

Keller, David, "Gleaning Lessons From Deep Ecology," Ethics and the Environment 2(1997):139-148. By reflecting on Deep Ecology, several lessons can be culled for environmental philosophy in general. The Deep Ecology of Arne Naess, Bill Devall, and George Sessions is appropriately characterized as a theory founded on the principles of biocentric egalitarianism and metaphysical holism. After considering each of these principles in turn, and then in relation to each other, the lesson turns out to be that the ontological foundation for environmental ethics must be nonegalitarian and polycentric. Keller is in philosophy at Utah Valley State College in Orem. (E&E)

Keller, David R., Review of David Rothenberg, ed., Wild Ideas. Environmental Ethics 19(1997):315-318. (EE)

Keller, David, Review of Patrick Curry, *Ecological Ethics: An Introduction* (Malden, MA: Polity Press, 2007), Ethics and the Environment 13(no. 1, 2008):153-165.

Keller, EF, "Ecosystems, Organisms, and Machines," BioScience 55 (no. 12, December 2005): 1069-1074. My theme is the concept, and the term, "self organization." The history of this term, originally introduced by Immanuel Kant to characterize the unique properties of living organisms, is inseparable from the history of biology. Only in the second half of the 20th century does it begin to acquire the promise of a physicalistic understanding. This it does with two critical transformations in the meaning of the term: first, with the advent of cybernetics and its dissolution of the boundary between organisms and machines, and second, with the mathematical triumphs of nonlinear dynamical systems theory and claims to having dissolved the boundary between organisms and such physical phenomena as thunderstorms. I explore the applicability of self organization to the ecosystem—a hybrid entity that is part organism, part machine, and perhaps even part thunderstorm.

Keller, Gregory S.; Avery, Julian D., "How Teaching Institutions Can Help Conservation Biology," BioScience 56 (no.5, May 2006): 374-375 (2).

Keller, Kenneth H. "Unpackaging the Environment", World Policy Journal 13(no.3, 1996):11. (v7,#4)

Kellert, S. R., "Japanese Perceptions of Wildlife," Conservation Biology 5(1991):297-308.

Kellert, Stephen R. Kinship to Mastery. Covelo, CA: Island Press, 1997. 240 pp. \$25. Kellert describes and explains the concept of biophilia, and demonstrates to a general audience the wide-ranging implications of environmental degradation. (v9,#2)

Kellert, Stephen R. The Value of Life: Biological Diversity and Human Society. Reviewed in Environmental Ethics 21(1999):213-216.

Kellert, Stephen R. and Edward O. Wilson, eds., The Biophilia Hypothesis. Washington, DC: Island Press, Shearwater Books, 1993. Biophilia is E. O. Wilson's term for an innate human affinity for the natural world. People are disposed to like certain kind of environments. Experience with natural life and the life processes is a biologically based need, integral to our development as individuals. There is also, perhaps, some biophobia, innate fear of nature, for example of snakes and spiders. Biological conservation can, in part at least, be built on these innate, genetic dispositions. We need to save nature for our own well-being. Sixteen contributors. The philosophical contribution is by Holmes Rolston, who asks whether Wilson's ideas about biophilia are compatible with his ideas about selfish genes. Kellert is in forestry at Yale University, Wilson is a zoologist at Harvard University. (v4,#2)

Kellert, Stephen R., "Values and Perceptions of Invertebrates," Conservation Biology 7(1993):845-855. Ecological, utilitarian, scientific, and cultural benefits provided by invertebrates. The general public and farmers view most invertebrates with aversion; scientists and conservation organization members have more positive and knowledgeable attitudes. The motivational basis for hostile attitudes: possibly an innate learning disposition, the association of many invertebrates with disease and agricultural damage, the multiplicity of invertebrates, the presumption of mindlessness, and their radical autonomy from human control. Kellert is at the Yale School of Forestry and Environmental Studies. (v4,#4)

Kellert, Stephen R. Kinship to Mastery: Biophilia in Human Evolution and Development. Reviewed in Environmental Ethics 21(1999):213-216.

Kellert, Stephen R., and Farnham, Timothy J., eds., The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World. Reviewed by Andrews, John, Environmental Values 12(2003):539-542. (EV)

Kellert, Stephen R., and Farnham, Timothy J., eds., The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World. Washington, DC: Island Press, 2002. 16 contributors. Part I. Scientific and spiritual perspectives of nature and humanity. Part II. Linking spiritual and scientific perspectives with an environmental ethic. Sample contributions: Calvin B. DeWitt, "Spiritual and Religious Perspectives of Creation and Scientific Understanding of Nature"; Dorion Sagan and Lynn Margulis, "Gaia and the Ethical Abyss: A Natural Ethic Is a G[o]d Thing"; David Peterson, "Hunting for Spirituality: An Oxymoron?"; Wendell Berry, "The Idea of a Local Economy"; and more. From a conference at Yale University in May 2000. Kellert is at Yale University School of Forestry, and Farnham is a doctoral candidate there. Reviewed by R. HaluzaDeLay in Society and Natural Resources 16(no. 7, 2003):663-664. (v 14, #3)

Kellert, Stephen R., The Value of Life: Biological Diversity and Human Society. Washington, DC: Island Press, 1995. The values of living diversity and how these are integral to being fully human. How the current destruction of life on earth threatens humankind's physical, emotional, intellectual, and spiritual well-being. Actual and perceived importance of biological diversity, the social science counterpart to E. O. Wilson's The Diversity of Life. Kellert has spent twenty years assessing, as a social scientist, the human relationship to nature. He is in the school of forestry and environmental sciences at Yale University. (v6,#4)

Kellert, Stephen R.; Black, Matthew; and Bath, Alistair J. "Human Culture and Large Carnivore Conservation in North America." Conservation Biology 10, no.4 (1996): 977. (v7, #3)

Kellert, Stephen R., Wilson, Edward O., eds. The Biophilia Hypothesis. Reviewed by O. Gene Myers.

Environmental Ethics 18(1996):327-330. (EE)

Kellert, Stephen H., In the Wake of Chaos. Chicago: The University of Chicago Press, 1993. 176 pages. Hardbound, \$ 19.95. We are in the wake of chaos, trying to make sense of the news that the universe is a far more unpredictable place than anyone ever imagined. The randomness that was first discovered in simple systems--a curl of smoke, a tumble of water--has exploded into a fascination with chaotic modes of everything from evolutionary history, ecosystem functioning, brain waves, business cycles. How order and turbulence, long-term predictability and short-term instability balance each other in the picture of nature. Kellert teaches philosophy of science at Indiana University. (v4,#2)

Kellert, Stephen R. and Edward O. Wilson, eds., The Biophilia Hypothesis. Washington: Island Press, 1993. 484 pages. Hardbound. Essays on our innate affinity for the natural world, "biophilia," how our tendency to focus on life and lifelike processes might be a biologically based need, integral to our development as individuals and as a species. Biophilia and its converse, biophobia (such as fear of snakes and spiders) may have a genetic component. Edward O. Wilson, "Biophilia and the Conservation Ethic"; Stephen R. Kellert, "The Biological Basis for Human Values of Nature"; Roger S. Ulrich, "Biophilia, Biophobia, and Natural Landscapes"; Judith H. Heerwagen and Gordon H. Orians, "Humans, Habitats, and Aesthetics"; Aaron Katcher and Gregory Wilkins, "Dialogue with Animals: Its Nature and Culture"; Richard Nelson, "Searching for the Lost Arrow: Physical and Spiritual Ecology in the Hunter's World"; Gary Paul Nabhan and Sara St. Antoine, "The Loss of Floral and Faunal Story: The Extinction of Experience"; Jared Diamond, "New Guineans and Their Natural World"; Paul Shepard, "On Animal Friends"; Elizabeth Atwood Lawrence, "The Sacred Bee, the Filthy Pig, and the Bat Out of Hell: Animal Symbolism as Cognitive Biophilia"; Dorion Sagan and Lynn Margulis, "God, Gaia, and Biophilia"; Madhav Gadgil, "Of Life and Artifacts"; Holmes Rolston, III, "Biophilia, Selfish Genes, Shared Values"; David W. Orr, "Love It or Lose It: The Coming Biophilia Revolution"; Michael E. Soulé, "Biophilia: Unanswered Questions." A wide-ranging group of essays by persons from many disciplines and likely to prove a definitive, if also exploratory, work in this field. Wilson is a zoologist at Harvard University; Kellert is a professor at the School of Forestry and Environmental Studies, Yale University. (v4,#3)

Kellert, Stephen R. "The Animal Rights Movement: A Challenge or Conspiratorial Threat to the Wildlife Management Field." In a short article, Kellert, professor at the Yale School of Forestry and Environmental Studies, argues that the animal rights movement is more challenge and opportunity than conspiratorial threat to the wildlife management profession. In Human Dimensions in Wildlife Newsletter, vol. 8, no. 4, Fall 1989. (v1,#2)

Kellert, Stephen, Building for Life: Designing and Understanding the Human-Nature Connection. Washington: Island Press, 2005. Sustainable and restorative design will minimize adverse impacts on the natural environment and also will enhance human health and well being by fostering positive contact between people and nature in the built environment. Interaction with nature is critically important to human well-being and development. But contemporary society has become confused about the role of the natural environment in human physical and mental lives and has tended to impoverish this connection especially in the urban built environment. The scale and character of the modern environment has compromised and diminished the relation between people and the natural world. This is more of a design failure than an intrinsic flaw of contemporary life. Kellert is in social ecology at Yale School of Forestry and Environmental Studies.

Kelley, Kevin W., ed., The Home Planet Reading, MA: Addison-Wesley, 1988. Also published in Moscow: MIR Publishers. An extraordinary book of photographs of Earth from space, with reflections from the hundred or so men and women from thirteen countries who have flown into Earth orbit or to the lunar surface. Edited for the Association of Space Explorers, this large volume conveys the dazzling and profound existential and visual impact of seeing our planet from space. With the Soviets and others alike,

the experiences are often religious in the broad sense of that term, a sense of being grasped by an unexpected encounter with this mysterious and ineffable planet. The perception of vulnerability, combined with wonder and adoration, give rise to a resolve to protect the planet against onslaughts by the human species. For a perceptive review see, James Huchingson, "Earthstruck," Zygon, September 1990. (v1,#3)

Kelly, Michael, ed., Encyclopedia of Aesthetics. New York: Oxford University Press, 1998. 3 volumes. Contains:

--Berleant, Arnold, "Environmental Aesthetics," vol. 2, pp. 114-120.

--Carlson, Allen C., "Contemporary Thought [Nature]" (How experience and concepts of nature are understood in contemporary aesthetics).

--Carlson, Allen C., "Landscape Assessment," vol. 3, pp. 102-105.

--Foster, Cheryl, "Nature and Artistic Creation," vol. 3, pp. 338-340.

--Rolston, Holmes, III, "Landscape from Eighteenth Century to the Present," vol. 3, pp. 93-99.

--Saito, Yuriko, "Japanese Aesthetic Appreciation of Nature," vol. 3, pp. 343-346.

--Seel, Martin, "Aesthetics of Nature and Ethics," vol. 3, pp. 341-343. (v.9,#3)

Kelly, Phillip F., "The geographies and politics of globalization," Progress In Human Geography 23 (No. 3, 1999): 379- . (v.11,#4)

Kelly, S. E., "Public Bioethics and Publics: Consensus, Boundaries, and Participation in Biomedical Science Policy," Science Technology and Human Values 28(no. 3, 2003): 339-364.

Kelman, Stephen. What Price Incentives-Economists and the Environment. Reviewed in Environmental Ethics 5(1983):271-75.

Kelsey, Elin, "Integrating Multiple Knowledge Systems into Environmental Decision-making: Two Case Studies of Participatory Biodiversity Initiatives in Canada and their Implications for Conceptions of Education and Public Involvement," Environmental Values 12(2003): 381-396. Biodiversity initiatives have traditionally operated within a 'science-first' model of environmental decision-making. The model assumes a hierarchical relationship in which scientific knowledge is elevated above other knowledge systems. Consequently, other types of knowledge held by the public, such as traditional or lay knowledges, are undervalued and under-represented in biodiversity projects. Drawing upon two case studies of biodiversity initiatives in Canada, this paper looks at the role that constructivist conceptions of education play in the integration of alternative knowledge systems in environmental decision-making. In so doing, it argues that the conservation, sustainable use and equitable sharing goals outlined by the Convention on Biological Diversity (signed in 1992 under the auspices of the United Nations Environmental Programme) demand new models of governance which embrace the adaptive management qualities of learning organisations. (EV)

Keltner, Dacher and Jonathan Haidt, "Approaching Awe, a Moral, Spritual, and Aesthetic Emotion," Cognition and Emotion 17 (no. 2, 2003):297-314. Two elements are central: (1) vastness, and (2) a need for accomodation, resulting from an inability to assimilate an experience into current mental structures. Variations involve threat, beauty, exceptional ability, virtue, and the supernatural. Analysis of what has been written in religion, philosophy, sociology, and psychology. Fleeting and rare, experiences of awe can change the course of a life in profound and permanent ways. With attention to awe in encounter with nature. Keltner is at University of California, Berkeley; Haidt is at the University of Virginia, Charlottesville.

Kemal, Salim, and Ivan Gaskell, eds., Landscape, Natural Beauty and the Arts. Cambridge: Cambridge University Press, 1993. 278 pages. Twelve essays. Salim Kemal and Ivan Gaskell, "Nature, Fine Arts, and Aesthetics"; T. J. Diffey (University of Sussex), "Natural Beauty Without Metaphysics"; Ronald W.

Hepburn (University of Edinburgh), "Trivial and Serious in Aesthetic Appreciation of Nature"; John Barrell (University of Sussex), "The Public Prospect and the Private View: the Politics of Taste in Eighteenth-century Britain"; P. Adams Sitney (Princeton University), "Landscape in the Cinema: The Rhythms of the World and the Camera"; Don Gifford (Williams College), "The Touch of Landscape"; Yi-Fu Tuan (University of Wisconsin), "Desert and Ice: Ambivalent Aesthetics"; Stephanie Ross (University of Missouri, St. Louis), "Gardens, Earthworks, and Environmental Art"; Donald W. Crawford (University of California, Santa Barbara), "Comparing Natural and Artistic Beauty"; Allen Carlson (University of Alberta), "Appreciating Art and Appreciating Nature"; Arnold Berleant (Long Island University, C. W. Post), "The Aesthetics of Art and Nature"; Noël Carroll (University of Wisconsin), "On Being Moved by Nature: Between Religion and Natural History." Kemal is at Pennsylvania State University; Gaskell at Harvard University Art Museum. (v5,#3)

Kemal, Salim, and Gaskell, Ivan, eds. Landscape, Natural Beauty and the Arts: (Cambridge University Press, 1993). Reviewed by Cheryl Foster in Environmental Values 4(1995):88-89. (EV)

Kempf, Elizabeth, ed., Indigenous Peoples and Protected Areas: The Law of Mother Earth. London: Earthscan Publications, 1993. 296 pages. Foreword by Sir Edmund Hillary. Sample articles: Kempf, Elizabeth, "In Search of a Home: People Living in or near Protected Areas"; Cordell, John, "Who Owns the Land? Indigenous Involvement in Australian Protected Areas"; Lewis, Connie, "Nature in the Crossfire"; Prokosch, Peter, "Siberia's Keepers of the Tundra"; Hackman, Arlin, "Inuit Create a Whale Sanctuary." "The remote areas of our world, with their unique flora and fauna and their often remarkable indigenous peoples, must be protected. We cannot allow the voracious appetites of the increased world population to absorb and destroy them. Modern technology and finance can certainly be useful, but not at the expense of crushing a traditional culture or an exceptional natural environment. Often, over the centuries, these indigenous peoples have learned to handle their remote areas in a very efficient and inimitable fashion" (p. xii). Kempf is senior conservation editor with WWF International. (v.9,#4)

Kemmerer, Lisa, *In Search of Consistency: Ethics and Animals* (Leiden: Brill, 2006). Reviewed by Richard C. Foltz. *Journal of Agricultural and Environmental Ethics* 20(2007):543-544.

Kemmis, Daniel, Community and the Politics of Place. Norman, Oklahoma: University of Oklahoma Press, 1990. A former speaker of the Montana House of Representatives and presently the mayor of Missoula, Montana, argues that the American loss of capacity for public life parallels their loss of a sense of place. Highly recommended by Wes Jackson, Land Institute, Salina, Kansas. (v1,#3)

Kemp, Elizabeth, ed., Indigenous Peoples and Protected Areas. London: Earthscan Publications, 1993. Includes Kemp, Elizabeth, "In Search of a Home: Living in or near Protected Areas." (v.9,#4)

Kempton, Willet M., James S. Boster, and Jennifer A. Hartley, Environmental Values in American Culture. Cambridge, MA: MIT Press, 1995. 320 pages. \$ 39.95. Fundamental environmental beliefs and value are not restricted to those who are white, liberal, educated, and wealthy, but are held by many Americans in various socioeconomic groups, so widely held as to constitute "an American paradigm." A six year study sponsored by the National Science Foundation and conducted by a team of cultural anthropologists. Some surprising results: with a question such as "Justice is not just for human beings. We need to be as fair to plants and animals as we are towards people," 97 percent of Earth First types agreed, but so did 63 percent of sawmill workers from the Pacific Northwest. "Our obligation to preserve nature isn't just a responsibility to other people but to the environment itself," 97 percent of Earth First agreed, and 82 percent of sawmill workers (p. 113). The study concentrated on the lay public and avoided political, financial, and industrial "elites." The researchers especially conclude that environmentalists are missing an opportunity by depending heavily on utilitarian arguments and neglecting traditional religious teaching and biocentrism, which they identify as the belief that nonhumans

have rights and values too. "An environmental view of the world is more universal than previous studies have suggested" (p. ix). (v7,#1)

Kempton, Willett, Boster, James S., Hartley, Jennifer A., Environmental Values in American Culture. Reviewed by Karina Bray. Environmental Values 5(1996):274-276. (EV)

Kendle, A. D., and Rose, J. E., "The Aliens Have Landed! What Are the Justifications for 'Native Only' Policies in Landscape Planting," Landscape and Urban Planning 47(2000):19-31.

Keniry, Julian, Ecodemia: Campus Environmental Stewardship at the Turn of the 21st Century. Washington, DC: National Wildlife Foundation, 1995. Lessons in smart management from administrators, staff, and students.

Kennedy, Donald, "Animal Activism: Out of Control," Science 313(15 September 2006):1541. Dario Ringach, a member of the neurobiology faculty at the University of California, Los Angeles, has been harassed for four years by animal rights activists ("terrorists") of the Animal Liberation Front, who attempted to firebomb his home (mistakenly placed on a neighbor's porch) and made threats against his family. Ringach did work on higher order information in visual systems that involved animal vivisection, and now has stopped such research, fearing the threats. Kennedy also complains of lack of support from UCLA authorities and colleagues, and laments that some students supported the harassment and gave inside help. Kennedy is editor-in-chief of Science.

Kennedy, Elizabeth T.; Costa, Ralph; and Smathers, Webb M., Jr. "Economic Incentives: New Directions for Red-Cockaded Woodpecker Habitat Conservation." Journal of Forestry 94, no.4 (1996): 22. (v7, #3)

Kennedy, Greg, *An Ontology of Trash: The Disposable and its Problematic Nature* (Albany, NY: State University of New York Press, 2007). Reviewed by Peter Lucas in *Environmental Values* 17(2008):550-552.

Kennedy, Greg. *An Ontology of Trash: The Disposable and Its Problematic Nature*. Albany: State University of New York Press, 2007. Kennedy presents a philosophical exploration of the problematic nature of the disposable by understanding trash as an ontological problem that is a result of our unsettled relation to nature. He argues that our metaphysical drive from immanence to transcendence leaves us in an alien world of objects drained of a meaningful physical presence, and consequently we interpret these objects as lacking essential meaning that exist only to disappear as trash.

Kennedy, James J., and Niels Elers Koch, "Viewing and Managing Natural Resources as Human-Ecosystem Relationships," Forest Policy and Economics 6(2004):497-504. The increasing diversity, complexity and dynamics of ecosystem values and uses over the last 50 years requires new ways for natural resource managers (foresters, wildlife biologists, etc) to understand and relate to their professional roles and responsibilities. Three stages in Western-world natural resources management are identified: (1) Traditional stage, natural resources, first, foremost and forever, to (2) Transitional stage, natural resource management, for better or worse, involves people, to (3) Relationship stage: managing natural resources for valued people and ecosystem relationships. Kennedy is in Environmental Science, Wageningen University, Netherlands and Utah State University. Koch is at the Danish Forest and Landscape Research Institute, Hoersholm, Denmark.

Kennedy, John S., The New Anthropomorphism. Cambridge and New York: Cambridge University Press, 1992. 208 pages. Paper, \$ 17.95. Anthropomorphism still lurks under different disguises; scientists constantly slip into anthropomorphism in researching and interpreting animal behavior. Some examples, now rather well exposed, are "search image," "trail-following," and "grammatical language."

Others, not yet realized to be erroneous, are "goal-directedness, self-awareness, cognition, and suffering." Kennedy was formerly at the University of London. (v4,#2)

Kennedy, Robert F., Jr., "Why It Matters: How Wilderness Has Defined Our National Character," Sports Afield, August 1998, p. 65. One page article of interest mostly because of who Kennedy is. (v.9,#3)

Kennedy, Roger, "Managing Wilderness in Perpetuity and in Democracy," International Journal of Wilderness 2 (no. 3, December, 1996):6-9. Kennedy is Director of the U.S. National Park Service. (v8,#1)

Kenworthy, Eldon, Review of David Dinerstein, Douglas J. Olson, Avis L. Graham, Steven A. Webster, Marnie P. Primm, Bookbinder, and George Ledec, A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean. Environmental Ethics 20(1998):325-28.

Kenworthy, Tom, "Fish Hatcheries Caught Between the Wisdom and the Politics of Stocking," Washington Post (12/1/96): A3. Fish hatcheries do more harm than good? With the notable exception of Montana--which stopped stocking its streams and rivers in the 1970s--most western states are heavily dependent on fish hatcheries to supply fish for an economically and politically powerful sport fishing industry. But a growing body of evidence suggests that fish hatcheries may do more harm than good. Reliance on catchable trout production often leads to a loss of genetic diversity and the spread of disease. Whirling disease, first discovered in Colorado in 1987, is now found in many of the state's premier trout rivers and in about 1/2 of the state's hatcheries. One study suggests that hatchery fish were contributing to a decline in the Northwest's troubled wild-salmon stocks. Critics favor shifting from producing fish for recreation to protecting fish habitat and declining species. They think building more and more hatcheries is not likely to make up for ecological damage caused by dams, timber cutting, industrial pollution, and other destructions of fish habitat. (v8,#2)

Kenworthy, Tom, "Wolf Reintroduction Program is Illegal," Washington Post (12/13/97): A2
Robbins, Jim, "In 2 Years, Wolves Reshaped Yellowstone," New York Times (12/30/97): F1. Restoration of Yellowstone Wolves Ruled Illegal. A federal judge has ruled that the restoration of 150 wolves to Yellowstone and central Idaho was illegal. The introduced wolves were designated an "experimental, nonessential population" which allows the U.S. Fish and Wildlife Service (and ranchers) more control over "problem" wolves. Wolves who migrated on their own into these areas and mingled with the restored wolves were to be treated under this experimental designation as well. The judge ruled that it violated the Endangered Species Act to provide these naturally-occurring wolves with less than full protection. The suit had been brought not only by ranchers opposing wolf restoration, but by some environmental groups who wanted the wolves to have full protection under the Act. Some fear that the judge's order to remove the wolves, if upheld, will result in the federal government killing the animals because recapturing the packs would be exceedingly difficult. The judge's decision has been appealed. The restored wolves have had a significant impact in Yellowstone, killing half the coyotes in the Park, which in turn has made rodents more plentiful, leading to a increase in hawks and eagles. The wolves have also become a major Park attraction. (v.8,#4)

Kenyon, Wendy, Review of Fischer, Frank, Citizens, Experts and the Environment: The Politics of Local Knowledge. Durham, NC: Duke University Press, 2000. Environmental Values 12(2003):263-265. (EV)

Keohane, Nathaniel O., and Sheila M. Olmstead. *Markets and the Environment*. Washington, DC: Island Press, 2007. This is the third volume in the new Island Press series "Foundations of Contemporary Environmental Studies." Keohane and Olmstead offer a short introduction to environmental economics, with chapters on economic efficiency and environmental protection, cost-benefit analyses, environmental

market failures, the economics of natural resources management, market-based environmental policies, and sustainability and economic growth.

Keohane, Nathaniel O., and Sheila M. Olmstead. *Markets and the Environment*. Washington, DC: Island Press, 2007. This is the third volume in the new Island Press series "Foundations of Contemporary Environmental Studies." Keohane and Olmstead offer a short introduction to environmental economics, with chapters on economic efficiency and environmental protection, cost-benefit analyses, environmental market failures, the economics of natural resources management, market-based environmental policies, and sustainability and economic growth.

Keohane, Robert O., Levy, Marc A., eds. Institutions for Environmental Aid: Pitfalls and Promise. Cambridge, MA: MIT Press, 1996. 480 pp. \$23.50. Draws on research from economics, international relations, and development assistance, as well as the growing literature on international environmental relations, to evaluate the effectiveness of international institutions designed to facilitate the transfer of resources from richer to poorer countries, in conjunction with efforts to improve the natural environment. (v.9,#4)

Kerasote, Ted, "The Untouchable Wild," Audubon 101 (no. 5, Sept./Oct. 1999):82-86. Are today's eco-trips really better for Africa's habitat than the shooting parties of Hemingway's era? Hemingway had to shoot a lion and eat part of it raw; but that macho hunter era is gone. Kenya has banned hunting entirely since 1977. Other countries seek to combine hunting and ecotourism, hoping that both will contribute to sustainable development, typically where the annual per capita income is \$ 500. Kerasote concedes that no good studies exist, but speculates that ecotourists in their fancy lodges may be more demanding on the environment than a few hunters in a temporary tent. He also thinks that neither hunters nor ecotourists get very close to the real wild. Kerasote, who lives in Wyoming, is the author of Bloodties: Nature, Culture, and the Hunt. (v10,#4)

Kerasote, Ted, Bloodties: Nature, Culture, and the Hunt. Reviewed by Steven Bissell. Environmental Ethics 19(1997):441-444. (EE)

Kerasote, Ted, "What We Talk About When We Talk About Wilderness," Sports Afield, August 1998, pp. 68-73. "The essential ingredient is big, dangerous animals that can kill you." Well, that's the talk of the macho types anyway; ecofeminists might talk about something else. The macho talk at least sells outdoor sports magazines.

Kernohan, Andrew. "Rights against Polluters." Environmental Ethics 17(1995):245-257. When there is only one source of pollution, the language of rights is adequate for justifying solutions to pollution problems. However, pollution is often both a public and an accumulative harm. According to Feinberg, an accumulative harm is a harm to some person brought about by the actions of many people when the action of no single person is sufficient, by itself, to cause the harm. For example, although no single car emits enough exhaust to do any harm, the emissions from many cars can accumulate to an unhealthy level. In this paper, I argue that rights, understood in terms of the will theory of Hart and the interest theories of Lyons and Raz, cannot justify protecting people from public, accumulative harms. I conclude that pollution regulation should focus not on protecting people's rights, but on preventing harm to people's interests. Kernohan is in the department of philosophy, Dalhousie University, Halifax. (EE)

Kerr, Alexander M., and Andrew H. Baird. "Natural Barriers to Natural Disasters." *BioScience* Vol. 57, no. 2 (2007): 102-3.

Kerr, Andrew J. "The Possibility of Metaphysics: Environmental Ethics and the Naturalistic Fallacy." Environmental Ethics 22(2000):85-99. One of the most distinguishing features of environmental ethics

has been the effort to develop a nonanthropocentric intrinsic value theory, that is, a definition of the good which is not dependent upon some quality particular to humanity, a definition of the good whereby properties found in the terrestrial, nonhuman world are constitutive of that definition. In this paper, I argue that major nonanthropocentric theories suffer from arbitrariness. I argue through the use of representative thinkers that much nonanthropocentric theory has committed the naturalistic fallacy because it has deployed various forms of empirical naturalism, and that to meet this challenge nonanthropocentrism must employ a form of metaphysically based nonanthropocentrism. I do not argue that the naturalistic fallacy is valid. Rather, I show that a sample of major thinkers, representative of a logically exhaustive set of possible evasions of the naturalistic fallacy, all fail to evade the fallacy. Further, I show that the failure of this set of possible evasions leaves but one evasion possible, namely, ethical theory grounded in metaphysics. Finally, I recommend "process" metaphysics as the most promising metaphysical ground for environmental ethics, assuming the validity of the naturalistic fallacy. (EE)

Kerr, Andy, "Big Wild: A Legislative Vehicle for Conserving and Restoring Wildlands in the United States," Wild Earth 9 (No. 4, Wint 1999): 77- .

Kerr, Richard A., "Big El Niños Ride the Back of Slower Climate Change," Science 283(1999):1108-1109. After two El Niños of the century in fifteen years, climate researchers are finding explanations in long-term climate change. Global warming seems to intensify the El Niños. (v.10,#1)

Kerr, Richard A., "Three Degrees of Consensus," Science 305(13 August, 2004):932-934. Climate researchers are finally homing in on just how bad greenhouse warming could get--and it seems increasingly unlikely that we will escape with a mild warning. Almost all the evidence points to 3 degrees centigrade as the most likely amount, by present projections. (v. 15, # 3)

Kerr, Richard A., "The Next Oil Crisis Looms Large--and Perhaps Close," Science 281(1998):1128-1131. Many economists foresee another half century of cheap oil, but a growing contingent of geologists warns that oil will begin to run out much sooner--perhaps in only ten years. Everyone agrees that the fossil fuel accumulated over half a billion years will be all consumed in a two century binge of profligate energy use. (v.9,#3)

Kerr, Richard A., "Acid Rain Control: Success on the Cheap," Science 282(1998):1024-1027. The free-market approach has curbed acid rain beyond expectations and far cheaper than predicted. At many plants, sulphur dioxide emissions have already dropped beyond those required by law. The cost estimates are about \$ 1 billion a year, dramatically lower than earlier forecasts of \$ 10 billion. Multiple factors are involved, with economists still asking why, but one factor has been the flexibility in the emissions trading system (the so-called "rights to pollute"). A new round of reductions is forthcoming. Can anything like this work for reducing global carbon dioxide emissions? (v.9,#4)

Kerr, Richard A., "Life Goes to Extremes in the Deep Earth--and Elsewhere?" Science 276(1997):704-704. Life has been discovered up to 2.8 kilometers under the surface of the earth (in Virginia), as well as half a kilometer beneath the deep ocean floor, the latter associated with hydrothermal vents. It has also been found 1.5 kilometers below the Columbia Plateau in bare salt rock. This leads to much speculation about extensive underground life, largely microbial. In underground life, metabolism may be quite slow, and nutrients quite scarce. (v8,#2)

Kerr, Richard A., "Requiem for Life on Mars? Support for Microbes Fades," Science 282(1998):1398-1400. Few now think that the Martian meteorite from Antarctica contains any evidence of life on Mars, despite the startling announcement two years ago. NASA has spent \$2.3 million to decide not so. One main reason is that the alleged microbes are far too small to have ever been alive (See Vogel, Gretchen, "Finding Life's Limits," Science 282(1998):1399). (v.9,#4)

Kerr, Richard A. "Pushing the Scary Side of Global Warming." *Science* Vol. 316, no. 5830 (8 June 2007): 1412-15. Greenhouse warming might be more disastrous than the recent international assessment managed to convey, scientists are realizing. But how can they get the word out without seeming alarmist?

Kerr, Richard A. "Global Warming is Changing the World." *Science* Vol. 316, no. 5822 (13 April 2007): 188-90. Another Intergovernmental Panel on Climate Change (IPCC) declares in no uncertain terms that the world is warming and that humans are mostly to blame. Humans are altering their world and the life in it by altering climate. Looking ahead, global warming's impacts will only worsen.

Kerr, Richard A. "Mammoth-Killer Impact Gets Mixed Reception from Scientists." *Science* Vol. 316, no. 5829 (1 June 2007): 1264-65. Some scientists claim that an exploding comet wreaked havoc on both humans and animals, including mammoths, some 13,000 years ago. But other scientists are unconvinced by the evidence. Kerr's article is another in a series of "impact wars," controversies over whether and how far extinctions and other disruptions on Earth can be attributed to extraterrestrial causes.

Kerr, Richard A. "Record U.S. Warmth of 2006 Was Part Natural, Part Greenhouse." *Science* Vol. 317, no. 5835 (13 July 2007): 182-83. According to National Oceanic and Atmospheric Administration (NOAA) scientists, anthropogenic greenhouse warming was behind more than half of 2006's record-breaking heat. The year 2006 was the warmest year for the lower 48 U.S. states since record-keeping began in 1895.

Kerridge, Richard, and Sammells, eds., Writing the Environment: Ecocriticism and Literature. London: Zed Books, 1998.

Kerridge, Richard and Neil Sammells, eds. Writing the Environment: Ecocriticism and Literature. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1996. The rich variety of environmentalist positions--from ecofeminism to deep ecology--and theories about their contribution to critical theory, literature and popular culture. Contributors explore a wide variety of issues including sexual politics and nature, the link between environmental and cultural degradation, the influence of Heidegger on environmentalism and the degree of continuity between poststructuralist theory and ecological perspectives. (v7,#1)

Kerry, John, and Teresa Heinz Kerry. *This Moment on Earth: Today's New Environmentalists and Their Vision for the Future*. New York: Perseus Group, Public Affairs Books, 2007. This is a call to environmentalism by the former Democratic presidential candidate and his wife. The environment, and the movement that grew up to protect it, is under attack concerted and purposeful. Yet the need for solutions to pressing environmental problems grows more urgent each day. These issues unite people across party and ideological lines. From the San Juan Basin to the Gulf of Mexico to the South Bronx, from mothers on Cape Cod to Colorado ranchers, the Kerrys find a vibrant coalition of people and communities deploying ingenuity, technology, and sheer will power to save the world they know and love. They focus on these new environmental pioneers.

Kershaw, Baz. *Theatre Ecology: Environments and Performance Events*. Cambridge: Cambridge University Press, 2008. Kershaw explores questions such as: What are the challenges to theatre and the purposes of performance in an ecologically threatened world? Is there a future for theatre as an ethically and politically alert art through environmental action? How might ecological understandings refigure the natural virtues of theatre and performance?

Kershaw, Sarah, "A Right to Hunt, Fish and Trick Bears," New York Times, November 7, 2004, section 4, page 2. In Alaska and Maine voters rejected ballot measures that would have banned bear-hunting by

bait and dogs. Louisiana, the "sportsman's paradise," overwhelmingly approved to make "the freedom to hunt, fish and trap" a state constitutional right, also affirming that this is a "valued natural heritage that shall be forever preserved for the people." Similar amendments to constitutions are pending in several other states--driven by fears that animal rights activists will ban hunting. (v.14, #4)

Kerski, Joseph, and Simon Ross. *the essentials of... The Environment*. New York: Hodder Arnold, 2005. The authors provide 196 alphabetized listings of environmental topics from acid rain to woodland ecosystems.

Kerski, Joseph, and Simon Ross. *the essentials of... The Environment*. New York: Hodder Arnold, 2005. The authors provide 196 alphabetized listings of environmental topics from acid rain to woodland ecosystems.

Kersten, Michael T., "Exactions, Severability, and Takings: When Courts Should Sever Unconstitutional Conditions From Development Permits," Boston College Environmental Affairs Law Review 27 (No. 2, Wint 2000): 279- . (v.11,#2)

Kervan, Peter, Review of Michael Allaby, Basics of Environmental Science. London and New York: Rutledge, 1996. 297 pp. Hard cover, \$65.00 U.S.; Soft cover, \$17.95 U.S. Journal of Agricultural and Environmental Ethics 10(1997/1998):199-200. Kervan is in Environmental Biology at the University of Guelph.

Kesel, M. Lynne, "Veterinary Ethics," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 2520-25. (v6,#2)

Ketelaar, James E. Review of The Green Archipelago. By Conrad Totman. Environmental Ethics 12(1990):91-93.

Keulartz, Jozef, Henny van der Windt, and Jacques Swart, "Concepts of Nature as Communicative Devices: The Case of Dutch Nature Policy," Environmental Values 13(2004):81-99. The recent widespread shift in governance from the state to the market and to civil society, in combination with the simultaneous shift from the national level to supra-national and sub-national levels has led to a significant increase in the numbers of public and private players in nature policy. This in turn has increased the need for a common vocabulary to articulate and communicate views and values concerning nature among various actors acting on different administrative levels. In this article, we will examine the role of concepts of nature as communicative devices in public debates and political decision-making. We try to show that the now dominant functionalist approach to concepts of nature, due to its focus on interests, threatens to narrow public and political communications to purely strategic negotiations. Instead of this functionalist approach we put forward a structuralist approach, which focuses not on interests but on values. Keulartz is in applied philosophy, Wageningen University and Research Center, Wageningen, The Netherlands. van der Windt and Swart are in the Science and Society Section, Department of Biology, University of Groningen, The Netherlands. (EV)

Keulartz, Jozef, The Struggle for Nature: A Critique of Radical Ecology. London: Routledge, 1999. 208 pages. \$ 23. Originally published in Dutch in 1995. Keulartz finds environmental philosophy to be "a young discipline that has swiftly gained international academic success ... due to the rapid growth of a strong consensus among the most prominent environmental philosophers on the basic tenets of the discipline, a consensus which has enabled them to close ranks and unite into a single front" (p. 1) (!!!) Nevertheless he dismisses rather easily deep ecology, social and political ecology, ecofeminism and eco-anarchism, environmental pragmatism, and all the others, criticizing the dependence on science of these philosophies and the social problems they engender, often because this "has a stifling effect on all those voices trying to make themselves heard in the social debate about a future sustainable society that base

their case on other than ecological considerations" (p. 21). Power struggles are the real determinants, and "bio-power" struggles important among these. Keulartz argues for a "post-naturalistic" environmental philosophy. It is no longer enough to be post-modern; we also need to be post-natural. Keulartz is in the Department of Applied Philosophy at Wageningen Agricultural University, Netherlands. (v10,#4)

Keulartz, Jozef. The Struggle for Nature: A Critique of Radical Ecology. Reviewed by George W. Matthews. Environmental Ethics 22(2000):431-434.

Kevles, Daniel J. and Leroy Hood, eds., The Code of Codes: Scientific and Social Issues in the Human Genome Project. Cambridge, MA: Harvard University Press, 1992. 397 pages. Paper. Thirteen essays. The substance and possible consequences of the human genome project in relation to ethics, law, and society, as well as to science, technology, and medicine. Includes essays by scientists James D. Watson and Walter Gilbert, and the social analysts of science Dorothy Nelkin and Evelyn Fox Keller. An early National Academy of Sciences report concludes: "Homo sapiens has overcome the limitations of his origin. ... Now he can guide his own evolution. In him, Nature has reached beyond the hard regularities of physical phenomena. Homo sapiens, the creature of Nature, has transcended her. From a product of circumstances, he has risen to responsibility. At last, he is Man. May he behave so!" (p. 288). Kevles teaches humanities at California Institute of Technology; Hood teaches biology there. (v7,#1)

Kevles, Daniel J., "Some Like It Hot" (with reference to global warming), New York Review of Books, March 26, 1992. Extensive review of the following seven current environmental titles with an ethical or philosophical emphasis: Jessica Tuchman Mathews, ed., Preserving the Global Environment: The Challenge of Shared Leadership. New York: Norton, \$ 22.95. 362 pages. Anita Gordan and David Suzuki, It's a Matter of Survival. Cambridge, MA: Harvard University Press. 278 pages. \$ 19.95. F. Herbert Bormann and Stephen R. Kellert, eds., Ecology, Economics, Ethics: The Broken Circle. New Haven: Yale University Press, 1991. 233 pages. \$ 26.50. Helena Northberg-Hodge, Ancient Futures: Learning from Ladakh. San Francisco: Sierra Club. 204 pages. \$ 25.00. Rik Scarce, Eco-Warriors: Understanding the Radical Environmental Movement. Noble Press. 291 pages. \$ 12.95 paper. Christopher Manes, Green Rage: Radical Environmentalism and the Unmaking of Civilization. Little, Brown. 291 pages. \$ 18.95 hardbound, \$9.95 paper. Richard Elliot Benedick, Ozone Diplomacy: New Directions in Safeguarding the Planet. Cambridge, MA: Harvard University Press. (v3,#1)

Kew, B., The pocketbook of animal facts and figures. London: Green Print, 1991.

Kgathi, D., Hall, D., Hategeka, A. and Sekhwela, M., eds., Biomass Energy Policy in Africa. New York: Zed Books, 1998. (v.9,#3)

Khalid, Fazlun with Joanne O'Brien, ed., 111 pages. In a series; the others are: Batchelor, Martine, and Kerry Brown, ed., Buddhism and Ecology, 114 pages. Breuilly, Elizabeth and Martin Palmer, ed., Christianity and Ecology, 118 pages. Ranchor Prime, Hinduism and Ecology, 118 pages. Rose, Aubrey, ed., Judaism and Ecology, 142 pages. The editors in each case include a variety of perspectives from that tradition (Prime is a single author, but interviews various persons). All in paper. London: Cassell Publishers Limited, for the World Wide Fund for Nature, 1992. \$ 5.99 each. A review of the series is in CTNS (Center for Theology and Natural Sciences) Bulletin 16 (no. 3, Summer, 1996):18-19.

Khanbivardi, Reza M., "How Innovative, Cost-Effective Technologies Can Help Protect the World's Supply of Fresh Drinking Water." Journal of Environmental Law & Practice 6(No. 4, Spring, 1999):57- . (v10,#4)

Kheel, Marti, "The Liberation of Nature: A Circular Affair," Environmental Ethics 7(1985):135-149. A major criticism of both of the dominant schools in environmental ethics: individualism and holism. Both

camps seem to be locked into a dualistic mind-set that has dominated and exploited men and women, nature, and the lower classes of human beings. What is needed in environmental ethics is a new feminist holism which values the whole and its parts, using both reason and emotion. This is one of the better essays on feminism and environmental thought, yet it remains unsatisfying because it relies on a nonrational solution to environmental problems. (Katz, Bibl # 1)

Kheel, Marti, "From Heroic to Holistic Ethics: The Ecofeminist Challenge," in Greta Baard, ed. Ecofeminism: Women's Relationship with the Earth. (v2,#1)

Kheel, Marti, "License to Kill: An Ecofeminist Critique of Hunters' Discourse," pages 101-104 in Adams, Carol J., and Donovan, Josephine, eds., Animals and Women: Feminist Theoretical Explanations. (v.11,#1)

Kheel, Marti, "License to Kill: An Ecofeminist Critique of Hunters' Discourse," pages 101-104 in Adams, Carol J., and Donovan, Josephine, eds., Animals and Women: Feminist Theoretical Explanations. (v10,#4)

Kheel, Marti, "Ecofeminism and Deep Ecology: Reflections on Identity and Difference," in Robb and Casebolt, above. An abridged version is in Diamond and Ornstein, above. Ecofeminism and deep ecology share the view that ecological problems arise from a failure to feel connected to all life. Deep ecology transcends human self-consciousness. But Kheel warns that the tasks involved in reconnecting human sensibilities with the rest of nature are quite different for women than for men, because the self is different for the two genders. This is illustrated with sport hunting. The crucial spiritual problem in the environmental crisis is not anthropocentrism but androcentrism.

Kheel, Marti, *Nature Ethics. An Ecofeminist Perspective* (Rowman & Littlefield Publishers, 2008). Reviewed by Richard P. Haynes in *Journal of Agricultural and Environmental Ethics* 21(2008):469-475.

Kheel, Marti. *Nature Ethics: An Ecofeminist Perspective*. Lanham, MD: Rowman & Littlefield Publishers, 2007. Kheel discusses four representatives of holist philosophy Theodore Roosevelt, Aldo Leopold, Holmes Rolston III, and Warwick Fox and argues that their moral allegiance to abstract constructs such as species and ecosystems represents a masculinist orientation that devalues concern for individual animals. She develops an ecofeminist philosophy that stresses the importance of care and empathy for both individual beings and larger wholes. Her discussion of Fox as a transpersonal Self deep ecologist is somewhat dated, as Fox is no longer a deep ecologist.

Kheel, Marti. "The Liberation of Nature: A Circular Affair." Environmental Ethics 7(1985):135-49. I show the relevance of feminist thought to some of the major debates within the field of environmental ethics. The feminist vision of a holistic universe is contrasted with the dualistic notions inherent in both the "individual rights" and traditionally defined "holist" camps. I criticize the attempt in environmental ethics to establish universal, hierarchical rules of conduct for our dealing with nature (an up-down dualism) as well as the attempt to derive an ethic from reason alone (the dualism of reason and emotion). I maintain that the division between the "holist" and "individual rights" camps is yet another form of dualist thinking, and propose in its stead a holistic vision that concerns itself both with the individual and with the whole of which the individual is a part. Kheel is co-founder of Feminists for Animal Rights, Oakland, CA. (EE)

Kheel, Marti. *Nature Ethics: An Ecofeminist Perspective*. Lanham, MD: Rowman & Littlefield Publishers, 2007. Kheel discusses four representatives of holist philosophy Theodore Roosevelt, Aldo Leopold, Holmes Rolston III, and Warwick Fox and argues that their moral allegiance to abstract constructs such as species and ecosystems represents a masculinist orientation that devalues concern for

individual animals. She develops an ecofeminist philosophy that stresses the importance of care and empathy for both individual beings and larger wholes. Her discussion of Fox as a transpersonal Self deep ecologist is somewhat dated, as Fox is no longer a deep ecologist.

Kibel, Paul Stanton, ed. *Rivertown: Rethinking Urban Rivers*. Cambridge, MA: The MIT Press, 2007. Contents include: (1) "Bankside Urban: An Introduction" by Paul Stanton Kibel, (2) "Bankside Los Angeles" by Robert Gottlieb and Andrea Misako Azuma, (3) "Bankside Washington, D.C." by Uwe Steven Brandes, (4) "Bankside Chicago" by Ron Love, (5) "Bankside Salt Lake City" by Ron Love, (6) "Bankside San Jose" by Richard Roos-Collins, (7) "Bankside Federal" by Melissa Sarnet, (8) "Bankside Citizens" by Mike Houck, and (9) "Bankside Katrina: A Postscript" by Paul Stanton Kibel.

Kidd, Charles V., "The Evolution of Sustainability", Journal of Agricultural and Environmental Ethics 5(1992):1-28. The roots of the term "sustainability" are so deeply embedded in fundamentally different concepts, each of which has valid claims to validity, that a search for a single definition seems futile. The existence of multiple meaning is tolerable if each analyst describes clearly what he means by sustainability.

Kidd, Charles V., "The Evolution of Sustainability," Journal of Agricultural and Environmental Ethics 5(no. 1, 1992):1-26. (v5,#1)

Kidner, David W., Nature and Psyche: Radical Environmentalism and the Politics of Subjectivity. Albany: State University of New York Press, 2000. Psychological and environmental writing are all too often colonized by the same assumptions that inhibit ecological and cultural diversity. Industrialized monocultures conceal the character of our alienation from nature and, thus, prevent the emergence of effective solutions. Traditional psychological understanding is often inherently hostile to the natural order, and the dominant form of selfhood that has emerged in the industrialized world promotes the domestication of nature. In fact, even some of the most radical environmentalists, who simplistically oppose technology, are also trapped within this paradigm. A more critical historical and cultural awareness, rooted in nature, can enable a re-integration of nature and psyche. Kidner is in psychology, humanities, and communication studies at Nottingham Trent University. (v.11,#3)

Kidner, David W., "Why Psychology Is Mute about the Environmental Crisis." Environmental Ethics 16(1994):359-376. Psychology, often defined as the science of human behavior, has so far had little to say about the environmental destruction which is currently occurring as the result of human behavior. I consider the reasons why it has not and suggest that the ideological preconceptions that underpin the discipline are similar to those of the technological-economic system that is largely responsible for degradation of the environment. Psychology, by normalizing the behavioral, life-style, and personality configurations associated with environmental destruction, and lacking a historical perspective on changes in consciousness and technology, is unable to contribute effectively to the ecological debate. I conclude that the discipline needs to locate itself historically and ideologically before it can offer an adequate analysis of environmental destruction. Kidner is with the Dept. of Secondary and Tertiary Education, Nottingham Trent University, England. (EE)

Kidner, David W. "Fabricating Nature: A Critique of the Social Construction of Nature." Environmental Ethics 22(2000):339-357. Models of nature have usually referred to ecological, or more generally, scientific understandings, and have seldom included cultural factors. Recently, however, there has been a trend toward defining nature as a "social construction," that is, as an artifact of human social and linguistic capability. I argue that constructionism attempts to assimilate nature to an exclusively anthropocentric "reality," and that it should be seen as expressing long-term industrialist tendencies to separate the "human" and the "natural" realms and to assimilate the latter to the former. Consequently, the constructionist approach, rather than offering us a fertile means of incorporating cultural influences within

environmental theorizing, is better viewed as a cognitive counterpart to industrialism's physical assimilation of the natural world. (EE)

Kidner, David W. "Industrialism and the Fragmentation of Temporal Structure." Environmental Ethics 26(2004):135-153. Industrialism's assimilation of the natural world has developed over the centuries through complex hierarchies of effects involving ecological, cultural, and psychological dimensions. One of the consequences of this assimilation is the fragmentation of the temporal structure of the world and its replacement by a short-term logic that also infects human subjectivity. Because of this fragmentation, the healing of the natural world cannot be realized either simply or directly, and effective action requires us to locate our immediate objectives within a recovered longer-term vision of a healthy natural world. (EE)

Kidner, David W. "Culture and the Unconscious in Environmental Theory." Environmental Ethics 20(1998):61-80. I argue that much current environmental theory is unwittingly grounded in assumptions about personhood that entangle it within existing ideology. Culture theory, I suggest, offers a way out of this entanglement through its perception of our immersion within a symbolic realm which precedes consciousness. Environmental theory, by embodying, articulating, and legitimating cultural forms, can avoid being assimilated by those individualistic and scientific assumptions which undermine its potential. Kidner is in secondary and tertiary education, Nottingham Trent University, UK. (EE)

Kidner, David W. "Fraud, Fantasy, and Fiction in Environmental Writing." Environmental Ethics 27 (2005):391-410. During the past several decades, a number of accounts of environmental and ethnic wisdom have appeared which have later been exposed as fraudulent. The widespread popularity of these accounts should be understood as symptomatic of valid feelings and awarenesses that are unable to find expression in the modern world, and are usually dissociated from mainstream decision-making processes. As the natural order continues to be degraded, forms such as fiction which currently have relatively low status will become more important as vehicles for feelings, ideas, and possibilities which can find no other refuge within a world increasingly dominated by technological and economic viewpoints. (EE)

Kiepas, A., (ed.), Człowiek-Technika-Drozdowisko. Człowiek współczesny wobec wyzwań 1/2 kołca wieku, (Human - Technicity - Environment. Contemporary Human in the Face of the Challenges of 20th Century's End), Philosophy Department of Silesian University Press, Katowice, 1999. Including articles of Czech, Polish, and Slovak authors. (v.13,#4)

Kier, G. and Barthlott, W, "Measuring and Mapping Endemism and Species Richness: A New Methodological Approach and Its Application on the Flora of Africa," Biodiversity and Conservation 10(no.9, 2001): 1513-29. (v.13,#2)

Kiers, E. Toby, Roger R.B. Leakey, Anne-Marie Izac, Jack A. Heinemann, Erika Rosenthal, Dev Nathan, and Janice Jiggins. "Agriculture at a Crossroads." *Science* Vol. 320, no. 5874 (18 April, 2008): 320-21. The present path of agricultural development will not achieve development goals, but there are opportunities for improvement. Agriculture is the single largest threat to biodiversity, requiring more land, water, and human labor than any other industry. Some 75% of the world's poor and hungry live in rural areas and depend directly or indirectly on agriculture for their livelihoods. Governing agriculture requires new thinking, new technology to reduce hunger and poverty and to facilitate equitable, sustainable development. Kiers is at the Institute of Ecological Science at Vrije Universiteit, Amsterdam.

Kiester, A. Ross, "Aesthetics of Biological Diversity," Human Ecology Review 3 (no. 2, 1996):151-157. Aesthetic value is included in virtually all accounts of the values of biodiversity, but this value is still incompletely understood. Here I offer an account of the aesthetics of biodiversity based on the understanding of aesthetics developed by Immanuel Kant. The claim of this analysis is that (to use Kant's terminology) while individual organisms may be considered beautiful, biodiversity as a whole is sublime.

This distinction poses challenges and opportunities for those who manage lands for biodiversity value. Comparison to managing art museums and wine cellars and a new vision for the role of systematics and taxonomy offer some insight into the management of the sublime aspects of biodiversity. Kiester is with the U.S. Forest Service, Corvallis, OR. Followed by: Ribe, Robert G., "Commentary on 'Aesthetics of Biological Diversity'" 3 (no. 2, 1996):158-160, and Levine, Steven Z., "'Aesthetics of Biological Diversity' by A. Ross Kiester: An An-Aesthetic Response" 3 (no. 2, 1996):161-162, and author's rejoinder, p. 163. Ribe is in Landscape Architecture, University of Oregon. Levine is in art history, Bryn Mawr. (v.11,#1)

Kiester, A. Ross, Scott, J. Michael, White, Denis. "Conservation Prioritization Using GAP Data", Conservation Biology 10(no.5,1996). Gap analysis deal with spatially distributed entities, vegetation cover, species, existing reserves, and land ownership, to determine where and whether further conservation is most needed, in the U.S. Gap Analysis Program.

Kiester, Edwin, Jr., "A New Park Saved the Tall Trees, but at a High Cost to the Community," Smithsonian, October 1993. The full-sized Redwood National Park in northern California is fifteen years old, but the surrounding area is still searching for economic recovery, partially because visitor use of the park has only been about one-third of what was predicted. The two affected counties Del Norte and Humboldt are depressed. Preservation and restoration efforts with the redwoods have been impressive, though the article rings with melancholy for persons affected by a lumber industry that is no more, even if the saved redwoods would have sustained the industry only for another decade or so, and even if lumber industries were reducing their labor due to automation. A sad story of an exploitive economy gone bust, but a redwoods park does survive. (v4,#4)

Kiley-Worthington, M., "Ecological, Ethological, and Ethically Sound Environments for Animals: Toward Symbiosis", Journal of Agricultural Ethics 2(1989):323-347. There are inconsistencies in the treatment and attitudes of human beings to animals and much confusion in thinking about what are appropriate conditions for using and keeping animals. This article outlines some of these considerations and then proposes guidelines for designing animal management systems. Different ethical positions toward animals and their treatment are briefly outlined, and it is argued that, provided animals are in ecologically and ethologically sound environments, their use by human beings is ethically acceptable. Kiley-Worthington is in agriculture at the University of Edinburgh, Scotland.

Kileyworthington (Kiley-Worthington), Marhe. Animals and Nature: Cultural Myths, Cultural Realities, Environmental Values 9(2000):399.

Kilham, Lawrence, "Instinct for Beauty and Love of Animals," Defenders 63(no. 3, 1988):38-40. A brief essay illustrating the innateness of the sense of beauty.

Kilham, Lawrence, "Instinct for Beauty and Love of Animals," Defenders 63(no. 3, 1988):38-40. A brief essay illustrating the innateness of the sense of beauty.

Killingbeck, Keith. Review of *A River Runs Through It: Riparian Ecology, Conservation, and Management of Streamside Communities* by R. J. Naiman, H. Decamps, and M. E. McClain. Landscape Ecology Vol. 21, no. 8 (2006): 1377-78.

Killingsworth, M. Jimmie, and Palmer, Jacqueline S., Ecospeak. Carbondale, IL: Southern Illinois University Press, 1992. "The patterns of rhetoric typically used in written discourse on environmental politics," offering "a provisional map of recent writers' attempts to reach new stages of consciousness and action through the medium of language." (v.8,#4)

Kilman, Scott, "McDonald's, Other Fast-Food Chains Pull Monsanto's Bio-Engineered Potato," The Wall Street Journal (4/28/00), Dillin, John, "White House enters the biotech food fight," The Christian Science Monitor (5/5/00): 1, and Melody Petersen, "U.S. to Keep a Closer Watch On Genetically Altered Crops," New York Times (5/4/00): A23. Setbacks for gene-altered foods in the U.S. According to one estimate, 60 percent of the products in America's grocery stores contain some genetically modified ingredients. But with consumer skepticism about biotech foods continuing to grow, U.S. farmers are now reversing the trend toward more biotech foods and plan to grow millions fewer acres of genetically modified, corn, soybeans and cotton. Fast-food chains such as McDonald's and potato chip makers Frito-Lay and Procter and Gamble are telling their potato suppliers to stop using genetically modified potatoes. At the prompting of food companies hoping to quiet consumer fears, the U.S. Federal government is reviewing its regulations on biotech foods. Plans are under way to require genetically engineered crops to be kept separate from those that are not so altered and to require biotech companies to notify regulators four months before new biotech products enter the food supply. Critics argue that the changes are far too modest. They are sponsoring legislation that would require mandatory labeling of genetically-altered foods (a proposal strongly opposed by the industry). Congressman Dennis Kucinich of Ohio, a leading critic of biotech foods, charges that biotech food companies are "arrogantly assuming god-like power to bring forth a second genesis" and are "combining genetic materials from plants, animals, and humans in some weird commercial potion and then marketing it for all to consume." The director of the Center for Food Safety Andrew Kimbrell says: "Genetic engineering allows you to mix life forms that have never been mixed in traditional breeding. At least, I am not aware of any instance when a flounder has been mated with a tomato." (v.11,#4)

Kim, Ke Chung, "Preserving Biodiversity in Korea's Demilitarized Zone," Science 278(1997):242-243. The demilitarized zone separating North and South Korea has been uninhabited by humans for 45 years, rigidly enforced, and this provides sanctuary to endangered animals and plants. Damaged forests have been rehabilitated and farmlands that are thousands of years old have returned to a natural state. The DMZ has, in fact, become a unique nature reserve containing the last vestiges of Korea's natural heritage. The Korean Peace Bioreserves System provides a strategy to preserve the rich biodiversity of the DMZ, and here is one place North and South Korea can work together. Kim is at the Center for Biodiversity Research, Pennsylvania State University. (v.8,#4)

Kim, Ke Chung, and Robert D. Weaver, eds. Biodiversity and Landscapes: A Paradox of Humanity. New York: Cambridge University Press, 1994. 431 pages. Hardbound only and expensive, \$60. Can civilization be sustained, and for how long, without fundamental changes that ensure the conservation and restoration of natural landscapes and biological diversity? What role will science and technology play? What fundamental changes must we make for the sustained evolution of human civilization? 22 contributors. The philosophers are: Bryan G. Norton, "Thoreau and Leopold on Science and Values"; Holmes Rolston, III, "Creation: God and Endangered Species"; Eric Katz, "Biodiversity and Ecological Justice"; and Eugene Hargrove, "The Paradox of Humanity: Two Views of Biodiversity and Landscapes." Many other contributors address ethical questions as well, and all of them have policy implications. Samples: James Karr, "Landscapes and Management for Ecological Integrity"; Alan Randall, "Thinking about the Value of Biodiversity"; M. Rupert Cutler, "The Watchdog Role of Nongovernmental Environmental Organizations." Kim is at the Center for Biodiversity Research, Pennsylvania State University; Weaver is in agricultural economics and rural sociology there. (v6,#1)

Kim, Sung-Hae. "The Immortal World: The Telos of Daoist *Environmental Ethics*." *Environmental Ethics* 30(2008):135-157. Four Daoist texts illustrate the dynamic image of the Daoist immortal world on which a Daoist *Environmental Ethics* can be built. The first text is the Daodejing with two of the oldest commentaries. The second is Tao Hongjing's Diagram of Rank and Functions of True Spirits. The third is the collection of poems by Immortal Changchun, titled Panxiji. The fourth is the Morning and Evening Liturgical Prayer Book of the Quanzhen Order, which represents Daoist ecological concerns for the

natural world. Daoism not only accords with the impetus and spirit of *Environmental Ethics* but can also make a concrete contribution to its implementation. (EE)

Kim, Sung-Jin. "Environmental History and the Origin of Ecological Crisis." Environmental Philosophy (Official Journal of the Korean Society for the Study of Environmental Philosophy) 3 (2004): 89-109. In English.

Kim, Sung-Jin. "The Philosophy Department of the Colorado State University and Prof. Holmes Rolston." Environmental Philosophy (Official Journal of the Korean Society for the Study of Environmental Philosophy) 3 (2004) 127-52. In Korean.

Kim, Tae-Chang et al, Thinking About Future Generations. (Kyoto: Institute for Integrated Study of Future Generations, 1994).

Kim, Tae-Chang, Dator, James, eds., Creating a New History for Future Generations. (Kyoto: Institute for Integrated Study of Future Generations, 1994). Reviewed by Andrew Johnson, Environmental Values 6(1997):247-248. (EV)

Kim, Unhee, Falkenbury, John. Environmental and Safety Auditing: Program Strategies for Legal, International, and Financial Issues. Boca Raton, FL: Lewis Publishers, 1997. 240 pp. \$59.95. Systematic guidance on setting up an audit program for nearly every major component of environmental concern, from air standards to workplace safety, and from efficient discharge to waste handling and disposal. (v8,#3)

Kimbrell, Andrew and Davis, Donald E. "Globalisation and Food Scarcity." The Ecologist 29(no. 3, May 1999):185- . (v.11,#1)

Kimbrell, Andrew, ed., Fatal Harvest: The Tragedy of Industrial Agriculture. Washington: Island Press, 2002. Published by the Foundation for Deep Ecology, by arrangement with Island Press. Our currently ecologically destructive agricultural system, and a vision for an organic and environmentally safer way of producing the food we eat. An abstract is reprinted as: "Silent Earth: Industrial Farming in the US Alone Kills 67 Million Birds a Year. When Will Agribusiness Stop Pretending They Care About the Environment?," Ecologist 33(no. 5, 2003): 58-59. (v.14, #4)

Kimbrell, Andrew. "Seeds of Conflict." The Ecologist 29(no. 4, July 1999):249- . (v.11,#1)

Kimmerer, R. W. and Lake, F. K., "Maintaining the Mosaic: The Role of Indigenous Burning in Land Management," Journal of Forestry 99(no.11, 2001): 36-41. (v.13,#2)

Kimmins, Hamish (J. P.), Balancing Act: Environmental Issues in Forestry. Vancouver: UBC (University of British Columbia) Press, 1992. 244 pages. Paper. Canadian \$ 29.95. Sample chapters: Clearcutting: Ecosystem Destruction or Environmentally Sound Timber Harvesting? Chemicals in Forest Management: Responsible Use or Environmental Abuse? Are Old-Growth Forests Forever? Where Have All the Species Gone? The Question of the Loss of Biological Diversity. "New Forestry": Is It Old Forestry Revisited? Forestry and Climate Change. Acid Rain: Is It as Bad for Forests as It Is for Lakes? "Brazil North": Is Forestry in British Columbia Really Worse than Deforestation in the Tropics? Future Shock in Forecasting Forest Growth and Timber Yields: How Cloudy Is Our Crystal Ball? Kimmins is a forest ecologist at the University of British Columbia. (v4,#4)

Kimmins, J. P. (Hamish), "Ecology, Environmentalism and Green Religion," The Forestry Chronicle (Canada), 69 (no. 3, June):285-289. Management of forests to optimize the many values there will not be

successful if based solely on the science of ecology, because this science cannot tell foresters what their goals should be. There really is no such thing as "ecologically sound" or "ecologically destructive" forest management outside the context of a society's prevailing value judgment system. Management will also fail if based solely on green religion, because this frequently ignores the ecological requirements of many of the living organisms in forest systems. By "green religion" Kimmins seems to mean beliefs about forest ecosystems that are held contrary to what he thinks is sufficient evidence to the contrary. In any case, foresters need to learn from those Kimmins calls "environmentalists," who have sensitized contemporary society to the diverse values in forests, much better than did ecologists or foresters, but to avoid the blind faith of green religion. Kimmins is in forest ecology at the University of British Columbia. (v5,#4)

King, Carolyn, Immigrant Killers: Introduced Predators and the Conservation of Birds in New Zealand. Auckland: Oxford University Press, 1984. (v6,#4)

King, Carolyn M., "Ecotheology: A Marriage between Secular Ecological Science and Rational, Compassionate Faith," Ecotheology No 10 (Jan 2001):40-69.

King, David A., "Climate Change Science: Adapt, Mitigate, or Ignore?" Science 303(9 January 2004):176-177. "Climate change is the most severe problem that we are facing today--more serious even than the threat of terrorism." The British face serious flooding, with storms reaching further inland and being much more frequent. The number of persons in Britain who face serious flooding could double, to 3.5 million. Flood levels that now occur only once in 100 years could occur every three years. Americans face serious consequences as well, and are doing even less about it. In "tackling what is a truly global problem ... developing countries would need to be brought into the process as part of a North-South science and technology capacity-building exercise embedded in a framework that recognizes that issues of justice and equity lie at the heart of the climate change problem." King is Chief Scientific Advisor, H. M. Government, Office of Science and Technology, London.

King, David I., Griffin, Curtice R., Degraaf, Richard M. "Effects of Clearcutting on Habitat Use and Reproductive Success of the Ovenbird in Forested Landscapes", Conservation Biology 10(no.5,1996):1380.

King, Dwight Y. "The Political Economy of Forest Sector Reform in Indonesia." The Journal of Environment and Development 5, no.2 (1996): 216. (v7, #3)

King, Gina M., Bevis, Kenneth R., Vitello, John R. "Northern Spotted Owl Management: Mixing Landscape and Site-Based Approaches," Journal of Forestry 95(no.8, 1997):21. (v8,#3)

King, Roger J. H. "Environmental Ethics and the Case for Hunting." Environmental Ethics 13(1991):59-85. Hunting is a complex phenomenon. I examine it from four different perspectives--animal liberation, the land ethic, primitivism, and ecofeminism--and find no moral justification for sport hunting in any of them. At the same time, however, I argue that there are theoretical flaws in each of these approaches. Animal liberationists focus too much on the individual animal and ignore the difference between domestic and wild animals. Leopold's land ethic fails to come to terms with the self-domestication of humans. I argue that the holism of the land ethic does not in itself justify hunting as a human act of predation appropriate to the demands of wild biotic communities. Primitivists, such as Paul Shepard and Ortega y Gasset, mistakenly argue that hunting is an essential part of human nature and hence part of a healthy return to a natural way of life. Their argument marginalizes women's relations to nature. Finally, I take seriously the ecofeminist claim that sport hunting is a symptom of patriarchy's fixation on death and violence, although I criticize the more radical claim that women are closer to nature than men. Hunting should be investigated within the broader context of patriarchal social

relations between men and women. As an act of violence it constitutes one element of a cultural matrix which is destructive to both women and nature. King is in the department of philosophy, University of Maine, Orono, ME. (EE)

King, Roger J. H. "Environmental Ethics and the Built Environment." Environmental Ethics 22(2000):115-131. I defend the view that the design of the built environment should be a proper part of environmental ethics. An environmentally responsible culture should be one in which citizens take responsibility for the domesticated environments in which they live, as well as for their effects on wild nature. How we build our world reveals both the possibilities in nature and our own stance toward the world. Our constructions and contrivances also objectively constrain the possibilities for the development of a human way of life integrated with wild nature. An environmentally responsible culture should require a built world that reflects and projects care and respect toward nature. (EE)

King, Roger J. H., "How to Construe Nature: Environmental Ethics and the Interpretation of Nature." Between the Species 6 (1990): 101-108. A criticism of the dominant method of environmental ethics, the search for objective value in natural entities. Nature is subject to contextualist strategies of inquiry; the value of Nature "depends on the place which Nature has acquired in our discourses with one another" (p. 101). (Katz, Bibl # 2)

King, Roger J. H. Review of Deliberative Democracy and the Environment. By Graham Smith. Environmental Ethics 27 (2005):221-223.

King, Roger J.H., "Narrative, Imagination, and the Search for Intelligibility in Environmental Ethics," Ethics and the Environment 4(1999):23-38. This essay presents a contextualist defense of the role of narrative and metaphor in the articulation of environmental ethical theories. Both the intelligibility and persuasiveness of ecocentric concepts and arguments presuppose that proponents of these ideas can connect with the narratives and metaphors guiding the expectations and interpretations of their audiences. Too often objectivist presuppositions prevent the full contextualization of environmental ethical arguments. The result is a disembodied environmental discourse with diminished influence on citizens and policy makers. This essay is a pragmatist call for more philosophical attention to locating speakers, audiences, and meanings in more intelligible "discursive spaces." King is in philosophy at the University of Maine, Orono. (E&E)

King, Sallie, Steven Keffer and Steven Kraft. "Process Philosophy and Minimalism: Implications for Public Policy." Environmental Ethics 13(1991):23-47. Using process philosophy, especially its view of nature and its ethic, we develop a process-based environmental ethic embodying minimalism and beneficence. From this perspective, we criticize the philosophy currently underlying public policy and examine some alternative approaches based on phenomenology and ethnomethodology. We conclude that process philosophy, minus its value hierarchy, is a powerful tool capable of supporting both radical and moderate changes in environmental policy. Keffer is in the department of Zoology, King is in the department of philosophy, Kraft is in the department of Agribusiness Economics, Southern Illinois University at Carbondale, Carbondale, IL. (EE)

Kingsland, Sharon E., Modeling Nature: Episodes in the History of Population Ecology. 2nd ed. Chicago: University of Chicago Press, 1995. (v7,#2)

Kingston, Naomi; Waldren, Steve, "A conservation appraisal of the rare and endemic vascular plants of Pitcairn Island," Biodiversity and Conservation 14(no.4, April 2005):781-800(20).

Kingwell, Mark, *Catch and Release: Trout Fishing and the Meaning of Life*. Viking, 2004. Musings on angling, fitted into a philosophy of life: fishing, casting, killing, patience, outdoorsmanship. He invokes

Aristotle, Nietzsche, Tom Wolfe, Hemmingway, Isaak Walton and others. Lots of humor surrounding a family fishing trip, and some tall tales as well. Kingwell teaches philosophy at the Univ of Toronto.

Kinnaird, MF; Sanderson, EW; Obrien, TG; Wibisono, HT; Woomer, G, "Deforestation Trends in a Tropical Landscape and Implications for Endangered Large Mammals", Conservation Biology 17(no.1, 2003):245-257.

Kinnas, Y., "Book Review: Guide To Sustainable Development and Environmental Policy by Natalia Mirovitskaya and William Ascher (Eds.)," Journal of Environment and Development 12(no. 2, 2003): 264-265. (v 14, #3)

Kinnear, J. E., Sumner, N. R., and Onus, M. L., "The Red Fox in Australia - an Exotic Predator Turned Biocontrol Agent," Biological Conservation 108(no.3, 2002): 335-59. (v.13,#4)

Kinsley, David, Ecology and Religion: Ecological Spirituality in Cross-Cultural Perspective. Englewood Cliffs, NJ: Prentice-Hall, 1995. 248 pages. Chapters: "The Mistassini Cree: Hunting as a Religious Ritual," "Australian Aboriginal Religion," "Native American Religion: Ecological Themes," chapters on Hinduism, Buddhism, Chinese religion, "Christianity as Ecologically Harmful," "Christianity as Ecologically Responsible," "Nature Disenchanted," "Ecological Spirituality in Thoreau, Muir, and Leopold," "Contemporary Ecotheology," "Animal Rights and Ecological Ethics," "Deep Ecology," "Ecoactivism," "Ecofeminism: The Exploitation of Nature and Women," "Four Ecovisionaries: Murray Bookchin, Wendell Berry, Gary Snyder, and Barry Lopez." Kinsley is at McMaster University. (v5,#4)

Kintisch, Eli, "Evangelicals, Scientists Reach Common Ground on Climate Change," Science 311 (24 February 2006): 1082-1083. A statement by the National Association of Evangelicals, formulated in consultation with scientists, argues for mandatory controls on U.S. greenhouse gas emissions. A leading figure is atmospheric scientist John Houghton, former co-chair of the Intergovernmental Panel on Climate Change report, also a Christian (www.christiansandclimate.org). A story in Christian Century, "Evangelicals Split on Global Warming," March 7, 2006, p. 10, gives more attention to the evangelicals that refused to support the statement.

Kintisch, Eli, "Court Tightens Rules on Gene Tags," Science 309(16 September, 2005):1797-1799. In a new court ruling, researchers cannot patent DNA strands that bind genes whose function is unknown. The ruling involved agbiotech giant Monsanto involving strings of corn DNA. It involved patents for gene-grabbing tools called expressed sequence tags (ESTs). The court thinks patentable innovations ought to be "useful," and not just "tools along the way." Generally, the ruling frees researchers to do more research without worries about patents, and argues that to be patentable an invention must have both a "significant and presently available [and] well defined" benefit.

Kintisch, Eli. "Tougher Ozone Accord Also Addresses Global Warming." Science Vol. 317, no. 5846 (28 September 2007): 1843. The Montreal Protocols on chlorofluorocarbons (CFCs), now twenty years old, have been periodically strengthened, and the latest round also has measures that reduce global warming.

Kintisch, Eli. "Making Dirty Coal Plants Cleaner." Science Vol. 317, no. 5835 (13 July 2007): 184-86. Worldwide and also in the U.S., coal plants produce about one-third of all carbon dioxide emissions. In the U.S., this greatly surpasses all the emissions produced by cars and all other industries combined. China is now the largest carbon dioxide emitter. But cleaning up the dirt plants is not cheap.

Kintisch, Eric. "Wall Stall." Science Vol. 315, no. 5810 (19 Jan 2007): 315. The massive Israeli defense wall may block Palestinians, but the wildlife? Israeli Defense Minister Amir Peretz has announced that, in the midst of lawsuits by environmentalist organizations, he is suspending construction on the 300

kilometer separation wall into the southeastern Judean Desert. The wall is in most places an eight foot high cement barrier, but Israeli biologists and environmentalists want the government to build a chain link fence that will allow small animals to pass through, and even to make some allowances for ibex and wolves.

Kipnis, Kenneth and South, David B, "Personal Values and Professional Ethics," Journal of Forestry 98 (No. 7, 2000 July 01): 11- . A professional code of ethics should reflect the core values of the profession: the question before SAF, then, is whether each principle in the proposed new code expresses a value we all share. (v.11,#4)

Kirchmann, Holger, "Biological Dynamic Farming - An Occult Form of Alternative Agriculture?", Journal of Agricultural and Environmental Ethics 7(1994):173-188. An analysis of the theory of biodynamic farming, founded by Austrian Rudolf Steiner, Ph.D., is presented. His purpose was to show mankind a form of agriculture that enables not only the production of healthy foods but also the achievement of harmonious interactions in agriculture and a spiritual development of mankind through "cosmic forces" captured in the foods. Those predictions that can be tested scientifically have been found to be incorrect. It is concluded that Steiner's instructions are occult and dogmatic and cannot contribute to the development of alternative or sustainable agriculture.

Kirk, Ruth with Jerry Franklin, The Olympic Rain Forest: An Ecological Web. Seattle: University of Washington Press, June 1992. Franklin was chief plant ecologist for the U.S. Forest Service and is now professor of ecosystem analysis at the University of Washington. (v2,#4)

Kirkham, Georgiana, "'Playing God' and 'Vexing Nature': A Cultural Perspective," Environmental Values 15(2006): 173-195. In this paper I examine the twin concepts of 'playing God', and its secular equivalent that which I term for the purpose of this discussion 'vexing Nature' as they relate to arguments against (or for) certain human technological actions and behaviours. While noting the popular subscription to the notion that certain acts constitute instances of 'playing God' or interfering in the natural order, philosophers often deny that such phrases have any application to the central ethical issues in the areas where they are most commonly applied. I examine, in detail, the interpretations of these phrases put forward by bio-ethicists Ruth Chadwick and John Harris and argue that the concepts 'playing God' and 'vexing nature' are best understood as an expression of a moral intuition that is both significant and deserving of serious philosophical attention. My contention is that intuitions of this kind often express a concern for the virtue of, and doubt about the intentions of, the agent whose acts are described in these terms, and that these concepts are best understood as part of an historical and cultural continuum specific to the Western tradition. Understood as such, this indicates that debate continues over the purpose of art and technology, and the place of humanity within the natural environment, and that a kind of traditional teleological virtue ethics still exerts a significant influence on popular conceptions of the moral issues underlying this debate. (EV)

Kirkman, Robert, Skeptical Environmentalism: The Limits of Philosophy and Science. Bloomington: Indiana University Press, 2002. Reviewed by Norva Y.S. Lo in Environmental Values 14(2005):519-522.

Kirkman, Robert, Environmentalism Without Illusions: Rethinking the Roles of Philosophy and Ecology." December 1995, PhD thesis in philosophy at the State University of New York at Stony Brook. Drawing from his studies of the history and philosophy of the natural sciences (especially ecology), phenomenology, and the history of the philosophy of nature, Kirkman raises an epistemological challenge to environmental philosophy insofar as it is grounded in factual claims about the world. He concludes that many of these claims are unwarranted, particularly those which come about through an appropriation, or rather a misappropriation, of scientific concepts. Finally, he recommends that environmental philosophers attend more carefully to the scope and limits of human knowledge, and that they shift their

emphasis away from the construction of speculative cosmological or ethical systems to a more direct engagement in seeking practical solutions to environmental problems. Address: P.O. Box 438, Millwood, NY 10546. Email: <bandreoba@aol.com>. (v7,#1)

Kirkman, Robert, Skeptical Environmentalism: The Limits of Philosophy and Science. Bloomington: Indiana University Press, 2002. A critical overview of the speculative tendencies of academic environmental philosophy. Drawn in part from sources in the history of philosophy and the history and philosophy of the natural sciences, the argument concludes with a reconception of environmental problems, and of the proper roles of philosophy and the natural sciences in addressing them. Kirkman is in science and technology studies, Lyman Briggs School, Michigan State University, East Lansing. (v.13,#1)

Kirkman, Robert, "Darwinian Humanism: A Proposal for Environmental Philosophy," *Environmental Values* 16(2007): 3-21. There are two distinct strands within modern philosophical ethics that are relevant to environmental philosophy: an empiricist strand that seeks a naturalist account of human conduct and a humanist strand rooted in a conception of transcendent human freedom. Each strand has its appeal, but each also raises both strategic and theoretical problems for environmental philosophers. Based on a reading of Kant's critical solution to the antinomy of freedom and nature, I recommend that environmental philosophers consider the possibility of a Darwinian humanism, through which moral agents are understood as both free and causally intertwined with the natural world. Kirkman is in the School of Public Policy, Georgia Institute of Technology, Atlanta, GA.

Kirkman, Robert. "Why Ecology Cannot Be All Things to All People: The "Adaptive Radiation" of Scientific Concepts." Environmental Ethics 19(1997):375-390. On the basis of a model of the development of scientific concepts as analogous to the "adaptive radiation" of organisms, I raise questions concerning the speculative project of many environmental philosophers, especially insofar as that project reflects on the relationship between ecology (the science) and ecologism (the worldview or ideology). This relationship is often understood in terms of an opposition to the "modern" worldview, which leads to the identification of ecology as an ally or as a foe of environmental philosophy even as ecological concepts are freely appropriated to inform speculation. I argue that ecology does not fit into the intellectual framework of such an opposition and that its concepts cannot readily be made to serve purposes outside of their specialized context without a loss of meaning. Finally, I suggest that environmental thought might do well to divest itself of its ecologicistic commitments, adopting instead a skeptical approach to human-environment relations. Kirkman is in philosophy, University of New Hampshire, Durham, NH. (EE)

Kirkman, Robert. Review of Bjørn Lomborg. The Skeptical Environmentalist: Measuring the Real State of the World. Environmental Ethics 25(2003):423-426. (EE)

Kirkman, Robert. "Reasons to Dwell on (if Not Necessarily in) the Suburbs." Environmental Ethics 26(2004):77-95. Environmental philosophers should look beyond stereotypes to consider American suburbs as an environment worthy of serious philosophical scrutiny for three reasons. First, for better or worse, the suburbs are the environment of primary concern to most Americans, and suburban patterns of development have caught on elsewhere in the industrialized world. Second, the suburbs are much more of a problem than many environmental theorists suppose, in part because suburban patterns of development are entrenched and difficult to change, and in part because they pose an important challenge to the very idea of an environmental ethic. Third, the search for sound policies and practices for metropolitan growth involves two crucial tasks for which philosophers may be particularly well suited: grappling with the ethical complexity of the suburbs, and fostering a robust and nuanced normative debate about the future of the built environment. (EE)

Kirkman, Robert. Book Review of Democracy's Dilemma: Environment, Social Equity, and the Global Economy. By Robert C. Paehlke. Environmental Ethics 26(2004):331-332 (EE)

Kirkman, Robert. Review of John R. E. Bliese. The Greening of Conservative America. Environmental Ethics 25(2003):221-222. (EE)

Kirkman, Robert. "Through the Looking-Glass: Environmentalism and the Problem of Freedom." Journal of Value Inquiry 36:2 (2002): 27-41. (v.13, #3)

Kirkman, Robert. Review of The Green State: Rethinking Democracy and Sovereignty. By Robyn Eckersley. Environmental Ethics 27 (2005):437-440.

Kirkman, Robert. Review of Mindful Conservatism: Rethinking the Ideological and Educational Basis of an Ecologically Sustainable Future. By C. A. Bowers. Environmental Ethics 29(2007):217-218. (EE)

Kirkman, Robert. Review of Luc Ferry, The New Ecological Order. Environmental Ethics 20(1998):101-04.

Kirkman, Robert. Review of Ecological Politics and Democratic Theory: The Challenge to the Deliberative Ideal. By Mathew Humphrey. Environmental Ethics 30(2008):437-438. (EE)

Kirkpatrick, Colin, and John Weiss, Cost Benefit Analysis and Project Appraisal in Developing Countries. Brookfield, VT: Edward Elgar Publishing Co., 1996. 336 pages. \$ 80.00!!! Kirkpatrick and Weiss are at the University of Bradford, UK. (v7,#2)

Kirkwood, Judith, "Do Commercial Butterfly Releases Pose a Threat to Wild Populations?" National Wildlife, December/January 1999, page 70.

Butterflies at weddings? At weddings all across the country, the smiling newlyweds are suddenly surrounded by a fluttering cloud of butterflies released by guests. But scientists say the fad may cause problems, and have called for a ban on such releases. Others deny there is likely to be a problem. (v.10,#1)

Kirn, Andrej, "Nekoliko temeljnih dilema eloloske etike (Some Basic Dilemmas of Ecological Ethics)," Socijalna Ekologija (Zagreb, Croatia) 7(No. 3, 1998):257-270. In Croatian. The relationship between nature and society directly determines the possibility of establishing an ecological ethics. The relation to nature has always implied also the relation towards men and inversely. An "efficient" use of nature begins with submitting of a man by another man. Contemporary processes of technological and ecological globalization do not dissolve this historical relation between man and nature, but elevate it on a higher level and give it a new form. There have been three important historical socioecological transformations: the paleolithic, the neolithic and the industrial. Mankind is now entering a fourth post-industrial and postmodern period, which transcends the traditional opposition between nature and society leading towards a complete dissolution of society within nature (naturalism), and inversely - towards the dissolution of nature within society (social constructivism of nature). A complete naturalization the social excludes and makes ecological ethics impossible. The intrinsic ecological ethics can be conceived both instrumentally and anthropocentrically. The predominance of anthropocentricity has begun with modernism and enlightenment, as man started to be understood even more as a subject - as a basis of the all being. Discussion of Callicott, Oelschlaeger, Harlow, Roderick Nash, Paul Taylor, and others. Key words: anthropocentricity, anthropocentrism, intrinsic and instrumental ecological ethics, nature, society. Kirn is in the Faculty of Social Sciences, Ljubljana. (v.10,#1)

Kiros, Teodros, Moral Philosophy and Development: The Human Condition in Africa. Athens, OH: Ohio

University Press, 1992.

Kirsch, Scott, *Proving Grounds: Project Plowshare and the Unrealized Dream of Nuclear Engineering*. New Brunswick, NJ: Rutgers University Press, 2005. A sobering story of brilliant and overly ambitious scientists who hoped to use nuclear explosions for large scale earth-moving. A group led by Edward Teller planned to join the Tennessee and Tombigbee Rivers in Mississippi, blast a harbor in Alaska and build highways in southern California. They conducted half a dozen tests, never with all the predicted results, always with more radioactive fallout than they expected from their "clean" explosions. If you ever need evidence why not trust the experts who want to manage nature, you'll find it here. Kirsch is in geography at the University of North Carolina. Reviewed by Hugh Gusterson, Science 311 (17 March 2006): 1556.

Kiser, LK, "The Garden of St. Francis: Plants, Landscape, and Economy in Thirteenth-Century Italy", Environmental History 8(no.2, 2003):229-245.

Kishore, Malia Simon. "Property Owners Score Victory over Wetlands Easements," Natural Resources & Environment 11(1997):44.

Kispert, Robert, Calvin Nygaard, Alienation in Nature's Nation: A Practical-Theological Analysis of the Resource Conservation and Wilderness Preservation Pieties in American Civil Religion (Environmental Ethics), 1997, University of Chicago, Ph.D. thesis in religious studies. 478 pages. The Hetch Hetchy Valley controversy caused a rift in the fledgling American environmental movement between wilderness preservationists and resource conservationists, which continues to define contemporary environmental debates. The United States is faced today with political and environmental issues that cannot be resolved on the basis of the premises of liberal democracy. Therefore religious convictions are appropriately brought to public policy debate. Pinchot and Muir are located in American civil religion, including the American pastoral myth and the myth of manifest destiny. Paul Tillich is used to criticize these myths. Pinchot and Muir both characterized their visions as Christian, but both deviate from Christian onto-theological presuppositions. A more adequate and redemptive environmental praxis for Nature's Nation can be envisioned. The advisors were: Don S. Browning, Alexander Campbell, and J. Ronald Engel. (v.10,#1)

Kiss, Alexandre and Dinah Shelton, International Environmental Law: A Worldwide Perspective. Transnational Publishers, Inc. (see above). 575 pages. \$ 95.00. 1991. (v4,#3)

Kiss, Alexandre. "The Common Heritage of Mankind: Utopia or Reality," International Journal, 1985. 11:423-431. (v8,#3)

Kitcher, P, "Responsible Biology", BioScience 54 (no.4, 2004): 331-336(6). Responsible conduct in science is more than simply a matter of following everyday ethical imperatives--not misreporting what actually happened in the lab, dealing honestly with colleagues, and so forth. Scientific responsibility arises because scientists play a special role, and that role brings obligations. In this article I maintain that scientists have an obligation to reflect on the ends of scientific research; that scientists should work for the public good, directing their efforts toward an ideal of well-ordered science; and that the ideal of well-ordered science should be understood in a global and democratic fashion.

Kitcher, Philip, The Lives to Come: The Genetic Revolution and Human Possibilities. New York: Simon and Schuster, 1996. 381 pages. The ethical and social issues raised by the Human Genome Project. The hopeful possibilities of molecular genetics for improving medical care, also the implications of genetic testing for insurance and employment discrimination. The impact of ideas about genetic destiny on philosophical assumptions about human life and freedom. Combines scientific knowledge, moral

sensibility, and philosophical analysis on the unsettling questions raised by the rapidly increasing information about our genes. Kitcher is in philosophy at the University of California at San Diego. (v8,#2)

Kitcher, Philip, The Lives to Come: The Genetic Revolution and Human Possibilities. New York: Simon and Schuster, 1996. 381 pages. \$ 25. During the academic year 1993-94, Kitcher served as Senior Fellow with the U.S. Library of Congress assigned to report on ethical and social issues associated with the Human Genome Project. His assessment of the potential outcomes of genetic technology on the human future grows out of that experience. Three percent of the funds for the Project have been earmarked for the study of the ethical, legal, and social implications of the project. Reviewed by Lisa Gannett in Biology and Philosophy 12(1997):403-419. (v8,#3)

Kitcher, Philip, "Responsible Biology," BioScience 54(no. 4, 2004):331-336. Responsible biologists reflect on the ends of their research and they ought to work toward an ideal of well-ordered science understood in a global and democratic fashion. In particular this means more research on ecological issues, such as the environmental degradation in tropical forests. But even more serious is shifting the proportions of medical research toward global health for the poorer nations. At present only 10% of the world's scientific resources are spent on the diseases that afflict 90% of Earth's population. This is not well-ordered science. Kitcher is in philosophy, Columbia University.

Kitchin, Robert M., Blades, Mark, Golledge, Reginald G. "Relations Between Psychology and Geography," Environment and Behavior 29(no.4 1997):554. (v8,#3)

Kittredge Jr., David B., Mark G. Rickenbach, and Broderick, Stephen H. "Regulation and Stumpage Prices: A Tale of Two States." Journal of Forestry 97(No. 10, Oct. 1999):12- . Contrary to conventional wisdom, a study finds that Massachusetts regulations do not seem to adversely affect stumpage prices and landowner profit from the sale of timber. (v10,#4)

Kivell, Philip, Roberts, Peter, Walker, Gordon, P. eds. Environment, Planning and Land Use. Brookfield, VT: Ashgate, 1998. 185 pp. \$59.95. Practical issues and policies relating to planning and managing both built and natural environments. Kivell is at the University of Keele, UK; Roberts at the University of Dundee, UK; and Walker at Staffordshire University, UK. (v9,#2)

Kjellberg, Seppo, ed. Environmental Values in Finnish Community Planning. Housing & Environment No 3. University of Tampere, Department of Social Policy and Social Work, 1996. The writer is a social ethicist who argues that in city planning discourses, "sustainable development" in a narrow, technical sense is mainly supported by official planning, whereas an existentially holistic understanding of the integration of life often is supported by citizens' movements. Finnish Academy. "Ecopolis" is a multidisciplinary research project sponsored by the Finnish Academy. Email: lapintie@arc.tut.fi. (v7, #3)

Kjellberg, Seppo, Urban Ecotheology. Utrecht, Netherlands: International Books, 2000. The need for an ecological city. Ecotheology in an urban context. The Tampere, Finland, case. Nature as part of the urban environment. Kjellberg is senior lecturer at the Abo Akademi University in Turku, Finland. (v10,#4)

Klare, Michael T., *Blood and Oil: The Danger and Consequences of America's Growing Dependency on Imported Petroleum*. New York: Metropolitan Books, 2000.

Klare, Michael T., *Resource Wars: The New Landscape of Global Conflict*. New York: Metropolitan Books, 2001. Nation states and their armies will increasingly define resource security as their main mission, with resulting widespread instability, especially where mounting demand collides with long-

standing territorial and religious disputes. There is a new geography of conflict based on scarce resources concentrated in regions where the human rights picture is dimmest.

Klarer, Jurg, Moldan, Bedrich. The Environmental Challenge for Central European Economies in Transition. Chichester, U.K.: John Wiley and Sons, 1997. 300 pp. £ 45, cloth. The authors outline the state of the environment in Central and Eastern Europe since the decline of Communist rule with attention given to air and water pollution, land management and nature conservation, and the consequences of environmental degradation such as human health, biodiversity losses, and economic damage. Secondly they outline the causes of environmental degradation and discuss the failure of the Communist regime to address environmental issues and compare this to the failure of mixed capitalist economies. They analyze the present policies in place within the countries and the developments likely to unfold in Eastern Europe in the future, as well as the social and economic factors used to facilitate these changes. (v8,#2)

Klaver, Irene, Jozef Keulartz, Henk van den Belt, and Bart Gremmen. "Born to be Wild: A Pluralistic Ethics Concerning Introduced Large Herbivores in the Netherlands." With the turning of wilderness areas into wildlife parks and the returning of developed areas of land to the forces of nature, intermediate hybrid realms surface in which wild and managed nature become increasingly entangled. A partitioning of environmental philosophy into ecoethics and animal welfare ethics leaves these mixed territories relatively uncharted—the first dealing with wild (animals), the second with the welfare of captive or domestic animals. In this article, we explore an environmental philosophy that considers explicitly these mixed situations. We examine a recent Dutch policy of introducing domesticated and semi-wild large herbivores in newly developed nature areas. Larger issues are at stake, such as the intertwining of nature and culture, the dynamic character of de-domestication processes, and the relation between concepts of authenticity and the wild. We sketch a pluralistic, dynamic, and pragmatic environmental philosophy that is capable of dealing with the complicated ethical problems concerning creatures and land caught between domestication and the wild. Environmental Ethics 24(2002):3-21. (EE)

Kleese, D, "Contested Natures: Wolves in Late Modernity," Society and Natural Resources 15(no.4, 2002):313-326. (v.13, #3)

Kleese, Deborah A. and Michael R. Edelstein. "Cultural Relativity of Impact Assessment: Native Hawaiian Opposition to Geothermal Energy Development." Society and Natural Resources 8 (no. 1, 1995): 19- . (v6,#1)

Kleijn, D; Berendse, F; Smit, R; Gilissen, N; Smit, J; Brak, B; Groeneveld, R, "Ecological Effectiveness of Agri-Environment Schemes in Different Agricultural Landscapes in The Netherlands," Conservation Biology 18(no.3, 2004):775-786. (v. 15, # 3)

Kleiman, D. G., Allen, M. E., Thompson, K. V., and Lumpkin, S., eds., 1996. Wild mammals in captivity: Principles and techniques. Chicago: University of Chicago Press, 1996.

Kleiman, Devra G., Allen, Mary E., Thompson, Katerina V., Lumpkin, Susan, eds. Wild Mammals in Captivity: Principles and Techniques. Chicago: University of Chicago Press, 1996. 550 pp. This reflects the many changes that have occurred in zoo philosophy and practice in the past several decades. The editors have organized 52 chapters written by specialists that cover the basic principles of husbandry, nutrition, exhibiting animals, population management for conservation, behavior, reproduction, and research. Four appendices provide valuable information on available literature, management regulation, inventories and studbook, and inter-zoo breeding loans. (v8,#2)

Kleinig, John, Valuing Life. Princeton: Princeton University Press, 1991. The main aim is to argue for the value of life in various human settings (chapter 7, "Towards a Morality of Life"), but Kleinig analyzes "organismic life" (chapter 3), "plant life" (chapter 4), and "animal life" (chapter 5). (v2,#4)

Kleiven J.; Bjerke T.; Kaltenborn B.P., "Factors influencing the social acceptability of large carnivore behaviours," Biodiversity and Conservation 13(no.9, August 2004):1647-1658(12). (v. 15, # 3)

Klenk, Nicole, "Listening to the Birds: A Pragmatic Proposal for Forestry," Environmental Values 17(2008):331-351. Recently, natural scientists have begun to support an interpretive turn in ecology. Yet the ethical implications of interpreting nature have not been sufficiently addressed. In this essay, I use different interpretations of nature to make three distinct but related points relevant to forestry: (1) ecological narratives should be evaluated on the basis of ethical norms, (2) the choice of which interpretations of nature and ethical norms to use in environmental policy should be conducted by a process of public deliberation, and (3) scientific narratives should be denied a priori privilege over non-scientific interpretations of nature for policy purposes.

Kline, A. David. "We Should Allow Dissection of Animals." Journal of Agricultural and Environmental Ethics 8(1995):190-197. The focus of the paper is the ethical issues associated with the practice of dissecting animals in lower level college biology classes. Several arguments against dissection are explored. Furthermore, the issue is examined from the point of view of the instructor's academic freedom and the point of view of a student's moral autonomy. It is argued that even though the arguments against dissection fail, it is very important to respect the moral autonomy of students who oppose the practice. Often this can be accomplished in a manner that is consistent with academic freedom and good science education. (JAEE)

Kline, Benjamin, First Along the River: A Brief History of the U. S. Environmental Movement. San Francisco, CA: Acada Books, 1997. 176 pages. "The environmental movement is part of a long struggle to manage our natural resources more responsibly. What we decide to do about our environment today affects human existence forever, whether for good or bad. ... Despite many obstacles, the people of the United States have accepted the daunting challenge of dealing with environmental decay and, with the often contentious behavior of an open society, accomplished a great deal" (p. 139). Kline teaches history at San Jose State University, San Jose.

Kline, Benjamin, First Along the River: A Brief History of the U.S. Environmental Movement. San Francisco: Acada Books, 1998. Claims to be the first concise overview of the United States environmental movement from the colonial era to the present. Kline teaches environmental history at San Jose State University. (v9,#1)

Kline, David A., "We Have Not Yet Identified the Heart of the Moral Issues in Agricultural Biotechnology", Journal of Agricultural and Environmental Ethics 4(1991):216ff.

Kline, JD; Azuma, DL; Moses, A, "Modeling the spatially dynamic distribution of humans in the Oregon (USA) Coast Range," Landscape Ecology 18(no.4, 2003):347-361. (v.14, #4)

Kline, Jeffrey D; Alig, Ralph J; Garber-Yonts, Brian, "Forestland Social Values and Open Space Preservation", Journal of Forestry 102(no.8, December 2004):39-45(7).

Kline, Ronald R., "Resisting Development, Reinventing Modernity: Rural Electrification in the United States before World War II," Environmental Values 11(2002):327-344. The essay examines local resistance to the New Deal rural electrification program in the United States before World War II as a crucial aspect of socio-technical change. Large numbers of farm men and women opposed the introduction of the new technology, did not purchase a full complement of electrical appliances, and did not use electric lights and appliances in the manner prescribed by the government modernizers (the Rural Electrification Administration) and manufacturers. These acts of "transformative resistance" helped to

shape artifacts and social practices. (EV)

Kline, Syril. "The Invasion of the Winged One." The Christian Science Monitor, vol. 88, 18 Oct. 1996, p. 16.

Klinkenborg, Verlyn, "The Mustang Myth," Audubon 96 (no. 1, January/February 1994):34-43. America's wild horses have inspired one of the nation's most passionate conservation battles, but how much of the "wildness" is in the horses and how much is in our minds? Horses were domesticated late, about 5,000 years ago, some 2,000 years after cattle, more than 4,000 years after sheep and goats, and perhaps as many as 7,000 years after dogs. The Spanish mustangs that multiplied across the Western range were the products of more than 5,000 years of coevolution with humans. The fact that they can be adopted and re-domesticated as easily as they can is evidence of this. Once a species is domesticated, it can never again become fully wild. They are feral, not wild. There is no adopt-a-coyote program because coyotes are truly wild and cannot be domesticated. The wildness of wild horses like the wildness of humans is a metaphor. Humans cannot represent wild horses without conceptualizing them, without making an issue of their history or their association with Indians or especially their freedom, their symbolic value. No matter how hard you try to acknowledge the intrinsic reality of their lives--what you might call the "ownness" of their existence--they soon become almost ghostly with abstraction. And the greatest abstraction of all is wildness.

Klinkenborg, Verlyn, "The Self-Discipline of Leaving Room for Nature in the Gulf of Mexico," New York Times, July 8, 2004. An op-ed piece following encounter with a Kemp's ridley sea turtle, and its determination to survive. (v. 15, # 3)

Klint, K.K., et al., 2003. "Making The EU 'Risk Window' Transparent: The Normative Foundations Of The Environmental Risk Assessment Of GMOs." Environmental Biosafety Research 3:161-171. In Europe, there seems to be widespread, morally based scepticism about the use of GMOs in food production. Mapping the value judgements that are made in an environmental risk assessment and approval procedure, we describe the political liberal nature of the EU legislation.

Kloor, Keith, "Lynx and Biologists Try to Recover After Disastrous Start," Science 285(1999):320-321. A Science story on the troubled effort to bring lynx back to Colorado, mired in controversy after five animals starved to death this year. Some think the risk justified; some think it bad science; some think it morally wrong, putting the lynx to unjustified risk and suffering. (v.10,#3)

Kloor, Keith, "A Surprising Tale of Life in the City," Science 286(22 October, 1999):663. Ecologists are finding webs of life in the city more intricate than suspected. The U.S. National Science Foundation's Long Term Ecological Research program, mostly studying wild sites, added two urban sites for comparison, Phoenix and Baltimore, and discovered more biodiversity in the nooks and crannies, the lawns, waste lots, and parks of the cities than anticipated: 75 species of bees, 200 species of birds, and hundreds of species of insects in Phoenix, along with 2.8 million people. But the larger wildlife, such as bighorn sheep, were absent. Also 95% of plant species and one in four kinds of birds were introduced exotics. Still, says John Wiens, the bottom line is that "cities are not the kind of sterile wastelands that some people think." (v10,#4)

Kloppenbug Jr., Jack, Burrows, Beth. "Biotechnology to the Rescue? Twelve Reasons Why Biotechnology Is Incompatible with Sustainable Agriculture." The Ecologist 26(Mar.1996):61. Proponents of biotechnology claim that genetic engineering is the only way to achieve sustainable agriculture and feed the world's poor and hungry. In fact, genetic engineering will exacerbate many existing problems in agriculture and introduce new ones. The main beneficiaries will be its corporate backers. (v7,#2)

Kloppenburger Jr., Jack, Lezberg, Sharon, "Getting it Straight Before We Eat Ourselves to Death: From Food System to Foodshed in the 21st Century", Society and Natural Resources, 9(No.1, 1996):93- .

Klug, H., "Straining the Law: Conflicting Legal Premises and the Governance of Aquatic Resources," Society and Natural Resources 15(no.8, 2002): 693-708. (v.13,#4)

Klyza, Christopher McGrory. Review of Wilderness on the Rocks. By Howie Wolke. Environmental Ethics 15(1993):91-92.

Klyza, Christopher McGrory, and Stephen C. Trombulak, eds., The Future of the Northern Forest. Hanover, NH: University Press of New England, 1994. 270 pages, \$ 19.95, paper. \$ 45 cloth. Essays from a variety of academics and environmental and political activists involved in the two major studies of the 25 million acres of northern forests at stake: the Governors' Task Force on Northern Forest Lands and the Northern Forest Lands Study. (v5,#4)

Klyza, Christopher McGrory. Review of The Shaping of Environmentalism in America. By Victor B. Scheffer. Environmental Ethics 13(1991):371-374.

Klyza, Christopher McGrory, and David Sousa. *American Environmental Policy: 1990-2006: Beyond Gridlock*. Cambridge, MA: The MIT Press, 2008. Since 1980 environmental issues have been legislatively gridlocked between the Democrat and Republican parties in the United States and have engendered bitter interest group politics. This has forced environmental policy-making onto other pathways in the US, both inside and outside government. Klyza and McGrory analyze five alternative policy paths: appropriations politics in Congress, executive authority, the judiciary, policy-making at the state level, and next generation collaborative experiments. In spite of legislative gridlock, the authors argue that the policy legacies of the 1960s and 1970s live on in an enduring green US state, rooted in bureaucratic routines, statutes, and public expectations.

Knapp, S, "The Unified Neutral Theory of Biodiversity and Biogeography," Biological Conservation 110(no.2, 2003): 305.

Knapp, SM; Russell, RE; Swihart, RK, "Setting priorities for conservation: The influence of uncertainty on species rankings of Indiana mammals", Biological Conservation 111(no.2, 2003):223-234.

Kneen, Brewster, Invisible Giant: Cargill and its Transnational Strategies. Reviewed by Dean Spaner. Journal of Agricultural and Environmental Ethics 10(1997):92-95. (JAEE)

Kneese, Allen V. Review of What Price Incentives-Economists and the Environment. By Stephen Kelman. Environmental Ethics 5(1983):271-75.

Kneeshaw K.; Vaske J.J.; Bright A.D.; Absher J.D., "Situational Influences of Acceptable Wildland Fire Management Actions," Society and Natural Resources 17(no.6, July 2004):477-489(13). (v. 15, # 3)

Knegtering, E; Hendrickx, L; vanderWindt, HJ; Uiterkamp, AJMS, "Effects of Species' Characteristics on Nongovernmental Organizations' Attitudes Toward Species Conservation Policy," Environment and Behavior 34(no.3, 2002):378-400. (v.13, #3)

Kneller, Jane, "Beauty, Autonomy and Respect for Nature," a paper presented at "L'Esthetique de Kant," Centre Culturel International De Cerisy la Salle, in Normandy, France, June 15-21, 1993. Aesthetics was earlier much concerned with nature, subsequently mostly concerned with artifacts, and today there is a renewed interest in nature. Natural beauty is the centerpiece of Kant's account, and there is the possibility

of an account of intrinsic value in nature. On the other hand Kant claims that nothing is valuable in itself except the morally good will, and Kant can seem a pillar of anthropocentrism. Kneller argues for a nuanced account by which Kant does value nature for nature's sake, though there is a tension in Kant's thought with respect to nature's value in itself and the absolute value of the good will. She finds what "looks for all the world like an avowal of his belief in the intrinsic value both of external nature and the inner moral realm. Kant's account of the experience of the beautiful is perhaps best seen as his attempt to work out precisely this tension." Kneller is in the Department of Philosophy, Grinnell College, Grinnell IA 50122. (v4,#2)

Knetsch, Jack L., "Environmental Valuation: Some Problems of Wrong Questions and Misleading Answers." Environmental Values 3(1994):251-268. Contingent valuation of people's willingness to pay has rapidly become the method of choice to value all manner of environmental damages. The correct measure is, however, the sum people require to compensate them for such losses, an amount which will normally be far larger than their willingness to pay. And on present evidence, responses to contingent valuation questions are not likely to represent any measure of economic values. The results of these valuation practices will, therefore, bias environmental policies and distort incentives. KEYWORDS: Contingent valuation, endowment effect, valuation. Knetsch is at the School of Resource and Environmental Management, Simon Fraser University, British Columbia. (EV)

Knickerbocker, Brad, "Making a Space for the Heart: Hoichi Kurisu Aspires to Have His Gardens Change the Way Vistors Think," The Christian Science Monitor 86 (6 September 1994): 10-11. (v5,#3)

Knickerbocker, Brad, "Biodiversity: Top Concern in Saving Species," December 23, 1991; "Extinctions `Reduced to a Trickle'", December 24, 1991; and "Species Act Pits Property Rights Against Nature," December 27, 1991, in Christian Science Monitor. "The political battle over the Endangered Species Act reaches far beyond the wisdom or cost of saving this or that plant or animal. It involves deep philosophical questions of mankind's place in nature and the rights of a free society--the responsibilities that come with the power to exploit natural resources and the freedom to use private property for economic gain with as little government interference as possible." (v2,#4)

Knickerbocker, Brad, "Harboring a Forest of Fragile Species," The Christian Science Monitor 86 (30 August 1994): 10-11. Unique in its biodiversity, the Klamath-Siskiyou region of the Pacific Northwest is unprotected from development. (v5,#3)

Knickerbocker, Brad, "Excess Water Use in West Kicks Up Dust," The Christian Science Monitor 86 (5 August 1994): 2. (v5,#3)

Knickerbocker, Brad, "Turning Man-Made Creations Back to Nature," Christian Science Monitor 89 (26 September 1997): 1, 5. Draining Lake Powell. See write up under the entry for Brooke, James, "In the Balance, the Future of a Lake," New York Times (9/22/97): A10. (v8,#3)

Knickerbocker, Brad, " The Wilderness Act: Work Continues After 30 Years," The Christian Science Monitor 86 (13 September 1994): 11. (v5,#3)

Knickerbocker, Brad, "World Bank Turns From Saving Trees to Saving Cities," The Christian Science Monitor 86 (27 September 1994): 13. (v5,#3)

Knickerbocker, Brad, "Watching the State of the World," The Christian Science Monitor 86 (2 August 1994): 13. About Lester Brown, the founder of the Worldwatch Institute. (v5,#3)

Knickerbocker, Brad, "Cooperation, Trust Begin to Restore an Oregon Ecosystem: Ranchers, Ecologists

Are Optimistic About Watershed's Recovery," The Christian Science Monitor 86 (4 October 1994):10-11. (v5,#3)

Knickerbocker, Brad, "When Ecology and Economy Meet in a Business," The Christian Science Monitor 86 (26 July 1994):10-11. (v5,#3)

Knickerbocker, Brad. "Animal Activists Get Violent." Christian Science Monitor 89 (29 August 1997): 1, 5. People for the Ethical Treatment of Animals (PETA) and especially Animal Liberation Front (ALF) actions have been violent. ALF saboteurs destroyed a horse slaughterhouse in Redmond, Oregon, causing \$1 million damage, and also damaged a Fur Breeders Co-op in Sandy, Utah, estimated also at \$1 million. (v8,#3)

Knickerbocker, Brad. "Why 'Green' Is No Longer Radical." The Christian Science Monitor 89.101 (21 April 1997): 1.

Knickerbocker, Brad. "No Spotted Owls In Your Backyard." The Christian Science Monitor, vol. 89, 27 Jan. 1997, p. 3.

Knickerbocker, Brad. "Turning Man-Made Creations Back to Nature." Christian Science Monitor 89 (26 September 1997): 1, 5. The Sierra Club has proposed breaching the Glen Canyon Dam and draining Lake Powell, the US's second largest water impoundment. At a congressional hearing in Washington, DC,, draining the lake was compared to tearing down the Empire State Building in New York City. Yet, from Oregon to Maine, dams that are economically or environmentally detrimental are being taken out. (The Glen Canyon Dam is the target in Ed Abbey's novel The Monkeywrench Gang.)

Knickerbocker, Brad. "Separating the Park System's Chaff From Its Wheat." The Christian Science Monitor, June 26, 1995, pp. 1, 4. (v6,#2)

Knickerbocker, Brad. "Reclaiming the Ancient Lands of the 'Old Ones.'" The Christian Science Monitor, 14 June 1994, 10-11. Oregon native Americans vie for shared management of national forests. (v5,#2)

Knickerbocker, Brad. "In 1997, Expect Moderation in All Things Environmental." The Christian Science Monitor, vol. 88, 14 Nov. 1996, p. 3.

Knickerbocker, Brad. "Will Congress Heed Public on Energy?" The Christian Science Monitor, July 11, 1995, p. 13. (v6,#2)

Knickerbocker, Brad. "Chainsaw Requiem." The Christian Science Monitor, vol. 88, 24 Sept. 1996, p 9-12.

Knickerbocker, Brad. "Butting Heads With the Environmental Status Quo." The Christian Science Monitor, vol. 89, 24 Jan. 1997, p. 4.

Knickerbocker, Brad. "Saving an Icon of the Pacific Northwest." The Christian Science Monitor, vol. 89, 30 Jan. 1997, p. 4.

Knickerbocker, Brad. "A Colorado Eco-Story With a Dash of Humor." The Christian Science Monitor, vol. 89, 5 Feb. 1997, p. 15.

Knickerbocker, Brad. "'New Forestry': A Kinder, Gentler Approach to Logging." The Christian Science

Monitor, June 20, 1995, pp. 10, 11. (v6,#2)

Knickerbocker, Brad. "Dead End for Logging Roads?" Christian Science Monitor 89 (28 July 1997): 1, 8. (v8,#3)

Knickerbocker, Brad. " Court Sends Mixed Signals in Landmark Rulings: Endangered Species Act Weathers Court Battle." The Christian Science Monitor, June 30, 1995, pp. 1, 18. (v6,#2)

Knickerbocker, Brad. "Oregon's Open-Range Ranching Spurs Battle Over Bovine Control." The Christian Science Monitor, vol. 88, 30, Oct. 1996, p. 3.

Knickerbocker, Brad. "Bully Pulpit: Clergy Preach Conservation." The Christian Science Monitor, vol. 89, 3 Feb. 1997, pp. 1-18.

Knickerbocker, Brad. "Western States Chart New Course: Fighting Summer Fires with Fire." The Christian Science Monitor, July 11, 1995, pp. 1, 4. (v6,#2)

Knickerbocker, Brad. "Earth Day at 25: A US Environmental Report Card." The Christian Science Monitor, 18 April 1995, pp. 10-11. Excellent summary and chronology of developments since the first Earth Day in 1970. (v6,#1)

Knickerbocker, Brad. "New Green Council Appeals to All Sides." The Christian Science Monitor, 5 July 1994, p. 11. First introduced in 1989, the US legislative proposal for the National Institute for the Environment, which would oversee grants for research, has won support from conservative Republicans, liberal Democrats, Greenpeace, and Dow Chemical. (v5,#2)

Knickerbocker, Brad. "Americans Go `Lite Green.'" The Christian Science Monitor, 18 April 1995, pp. 1, 11. On current legislative changes before Congress from the perspective of the first Earth Day in 1970. (v6,#1)

Knickerbocker, Brad. "Congress Ponders Competing Proposals For Utah Wilderness." The Christian Science Monitor, June 27, 1995, p. 11. (v6,#2)

Knickerbocker, Brad. "Sagebrush Revolt: Ranchers Clash with Rangers in Wild West." The Christian Science Monitor, July 13, 1995, pp. 1, 18. (v6,#2)

Knickerbocker, Brad. "Is Environmental Education Just `Green' Propaganda?" The Christian Science Monitor 89.90 (4 April 1997): 3.

Knickerbocker, Brad. "Dolphin-Safe Standard Revised for Tuna Fishers." Christian Science Monitor 89 (31 July 1997): 3. (v8,#3)

Knickerbocker, Brad. "Dustup Ahead as Air Particle Rules Go Under Microscope." The Christian Science Monitor, vol. 88, 19 Nov. 1996, pp. 1, 4.

Knickerbocker, Brad. "Oregon Community Finds Many Hearts Make Light Work." The Christian Science Monitor, vol. 89, 15 January 1997, p. 3.

Knight, Denis H. Mountains and Plains: The Ecology of Wyoming Landscapes. New Haven: Yale University Press, 1994. 352 pages. \$40.00. Includes Yellowstone National Park, Grand Teton National Park, the Black Hills, as well as the general landscape of Wyoming. Knight is in botany at the University of Wyoming, a past president of the Ecological Society of America. (v6,#1)

Knight, Richard L. "Private Lands: The Neglected Geography," Conservation Biology 13(No .2, 1999):223-. (v.10,#2)

Knight, Richard L., Smith, Frederick W., Buskirk, Steven W., Romme, William H., and Baker, William L., eds., Forest Fragmentation in the Southern Rocky Mountains. Niwot, CO: University Press of Colorado, 1999. Human and natural factors that fragment forests, and the implications for conservation. (v.10,#3)

Knight, Richard L., and Riedel, Susanne, eds., Aldo Leopold and the Ecological Conscience. New York: Oxford University Press, 2002. Twelve personal essays describing the impact Leopold has had on ecologists, wildlife biologists, and other professional conservationists. Knight is in wildlife biology at Colorado State University; Riedel is at the North Carolina Zoological Park.

Knight, Richard L. and Sarah F. Bates, eds. A New Century for Natural Resources Management. Washington: Island Press, 1995. Twenty-one contributors. The more philosophical articles include: Eric Katz (New Jersey Institute of Technology), "The Traditional Ethics of Natural Resource Management"; David W. Orr (Oberlin College), "A World That Takes Its Environment Seriously"; James J. Kennedy (Utah State University) and Jack Ward Thomas (Chief, USDA Forest Service), "Managing Natural Resources as Social Value"; Holmes Rolston, III (Colorado State University), "Global Environmental Ethics: A Valuable Earth"; and R. Edward Grumbine (Sierra Institute), "Three Bear Stories: Toward a Sustainable Resource Management Future." Knight is in wildlife conservation at Colorado State University; Bates directs the Utah office of the Grand Canyon Trust. (v6,#3)

Knight, Richard, and Landres, Peter B. eds. Stewardship Across Boundaries. Washington, D.C.: Island Press, 1998. \$60 cloth, \$29.95 paper. 352 pp. (v9,#2)

Knight, Richard L., and Kevin Gutzweiler, eds., Wildlife and Recreationists: Coexistence through Management and Research. Washington, DC: Island Press, 1995. 372 pages. Contains Max Oelschlaeger, "The Land Ethic and Outdoor Recreation," which uses Leopold's land ethic as a frame for critiquing the recreation industry that has emerged as big business in the last half of this century. Other papers note that recreation has more adverse effects on wildlife than often thought, but that careful management can reduce these impacts. (v5,#3)

Knights, Paul, "Native Species, Human Communities and Cultural Relationships," *Environmental Values* 17(2008):353-373. Species are ordinarily conceived of as being native or non-native to either a geographical location or an ecological community. I submit that species may also be native or non-native to human communities. I argue, by way of an analogy with varieties of domesticated and cultivated species, that this sense of nativity is grounded by the cultural relationships human communities have with species. A further analogy is drawn with the motivations of varietal nativists - who seek to protect native varieties of domesticated and cultivated species for the sake of their cultural value - to argue for the consideration of the cultural value of native species in environmental policy decisions regarding invasive non-native species.

Knisley, Amy. Review of Allen Carlson. Aesthetics and the Environment. Environmental Ethics 25(2003):203-206. (EE)

Knitter, Paul F., One Earth: Many Religions: Multifaith Dialogue and Global Responsibility. Maryknoll, NY: Orbis, 1995. 218 pages. Paper. \$ 17. Nothing less than enlisting the world's religions is likely to save the earth. Practical actions and projects that can be undertaken to stem the tide of environmental degradation and human suffering. (v7,#2)

Knize, Peri, "The Mismanagement of the National Forests," Atlantic Monthly, October 1991, pp. 98-112.. The U. S Forest Service, protected from congressional scrutiny by pork-barrel politics and imaginative booking, is devastating America's national forests through needless and unprofitable timber sales. A feasible and inexpensive policy alternative is available. The once-proud and formerly revered U. S. Forest Service, the administrators of the national forests, are losing credibility as forty years of forest devastation come to light. (v2,#4)

Knopman, Debra S., Susman, Megan M. and Landy, Marc K., "Civic Environmentalism: Tackling Tough Land-Use Problems With Innovative Governance," Environment 41(no. 10, Dec 01 1999):24- . Citizen leaders who want to mobilize their deep concerns for a local place can make a significance difference in improving their environment. (v10,#4)

Knowles, R, "Review of: Vigar, G. The politics of mobility. Transport, the environment and public policy," Progress in Human Geography 27(no.5, 2003):675-676. (v.14, #4)

Knox, Margaret L., "The Wise Use Guys," Buzzworm: The Environmental Journal, November/December 1990, pp. 30-36. "They love the land and can't stand to see it locked up." Features wise use advocates, such as Grant Gerber, founder of the Wilderness Impact Research Foundation, Elko, Nevada, to help fight the preservationists, or Ron Arnold of the Center for the Defense of Free Enterprise, Bellevue, Washington, who vows "to destroy the environmental movement once and for all" with legislation like the Property Rights Protection Act. The 167-page wise use agenda includes opening all wilderness to energy and mineral production, massive expansions of concessions in the national parks, amending the Endangered Species Act, amending the Wilderness System to allow hostels and toilets, developed campsites, motorized travel, and commodity industry in times of high demand, using gasoline taxes to build more ATV roads, and the systematic conversion of decadent old growth forests into young oxygen-producing stands to help reverse global warming.(v2,#1)

Knox, Margaret L., "In the Heat of the Hunt," Sierra, November/December 1990. Article on hunting, with subsidiary essays by a hunter and a non-hunter, also a short on an iguana hunt in Africa. Many environmentalists say the debate should not be about wildlife, but about ecosystems. Thinking about animals as a resource does for deer what the timber industry has done for old-growth forests. Militant anti-hunters share a moral certainty with anti-abortionists who throw blood on pregnant women entering planned parenthood clinics. Their fervor makes it easy for hunters to dismiss their arguments. (v1,#4)

Knudson, Douglas M., Cable, Ted T., Beck, Larry. Interpretation of Cultural and Natural Resources. State College, PA: Venture Publishing Co. 1995. 197pp. \$24.95. Case studies about innovative programs, facilities and management practices that are setting the pace in municipal recreation and park services. Examples: successful "contracting out," and creative partnerships to new ways to reach at-risk youth. Where municipal recreation and park services are headed and how to get there.

Ko, Dong, "Computer-based Environmental Management," Landscape Ecology 21 (no.4, May 2006): 627-628 (2).

Kocieniewski, David, "Where Eagles Fly into Eco-Political Fray," New York Times, June 11, 2004, p. A25. In New Jersey, a pair of bald eagles nested and hatched an eaglet on a wooded island tucked in between a bustling container shipping port and an abandoned petroleum tank farm. The island is Petty's Island on the Delaware River between Camden, N.J. and Philadelphia. Citgo Petroleum Corporation decided to turn the entire 300 acre island into a nature preserve. But the Democratic government and developers are pushing instead to turn the island into a resort with hotel and golf course, 300 homes and a conference center. Jeff Tittel, executive director of the New Jersey Sierra Club commented, "It's kind of

sad when Democratic elected officials make an oil company look environmentally friendly." (v. 15, # 3)

Koehn, Joerg. Review of K.J. Noorman and T.S. Uiterkamp, eds., Green Households? Domestic Consumers, Environment and Sustainability. Environmental Values 8(1999):404.

Koellner, Thomas, and Oswald J. Schmitz. "Biodiversity, Ecosystem Function, and Investment Risk." *BioScience* Vol. 56, no. 12 (2006): 977-85. Biodiversity has the potential to influence ecological services. Management of ecological services thus includes investments in biodiversity, which can be viewed as a portfolio of genes, species, and ecosystems. As with all investments, it becomes critical to understand how risk varies with the diversity of the portfolio. The goal of this article is to develop a conceptual framework, based on portfolio theory that links levels of biodiversity and ecosystem services in the context of risk-adjusted performance. We illustrate our concept with data from temperate grassland experiments conducted to examine the link between plant species diversity and biomass production or yield. These data suggest that increased plant species diversity has considerable insurance potential by providing higher levels of risk-adjusted yield of biomass. We close by discussing how to develop conservation strategies that actively manage biodiversity portfolios in ways that address performance risk, and suggest a new empirical research program to enhance progress in this field.

Koenig, Robert, "The Pink Death: Die-Offs of the Lesser Flamingo Raise Concern," Science 313(22 September 2006):1724-1725. Mass deaths of flamingos seem to be linked to changes in East Africa's lakes, but researchers are still investigating the causes. A likely cause is changes in pollutants and lake levels caused by development. The flamingos nest and feed in alkaline, soda-rich Rift Valley lakes and seem quite sensitive to upsets in the niche they occupy.

Koenig, W. D., "Persistence in Adversity: Lessons from the Ivory billed Woodpecker," Bioscience 55(no. 8, August 2005): 646-647.

Koetsier, Peter, et al., "Rejecting Equilibrium Theory: A Cautionary Note," Bulletin of the Ecological Society of America 71(no. 4, December 1990):229-230. Equilibrium theory and non-equilibrium theory represent two ends of a spectrum with real ecosystems somewhere in between (Steward Pickett). Non-equilibrium theory is trendy, used to polarize ecologists, but may be no more true than equilibrium theory. Often whether one sees equilibrium or non-equilibrium depends on the level and scale of analysis. If density or community structure as a whole is studied, equilibria may appear never to be reached. However, at population levels, species diversity, or community composition, ecosystems may approach a predictable pattern or steady state. The four authors are in biological sciences at Idaho State University. (v.9,#4)

Koggel, Christine M., ed., Moral Issues in Global Perspective. Peterborough, Ontario: Broadview Press, 1999. 812 pages. \$ 30.00 paper. Chapter 24 is "Animals and the Environment." Singer, "Animal Liberation"; Callicott, "Animal Liberation: A Triangular Affair"; Shrader-Frechette, "Environmental Ethics"; Guha, "Wilderness Preservation: A Third World Critique"; Patterson, "Maori Environmental Values." (v10,#4)

Kohak, Erazim, The Embers and the Stars: A Philosophical Inquiry into the Moral Sense of Nature. Chicago: University of Chicago, 1984. Pp. xiii, 269. The author uses his experiences building and living in an isolated mountain cottage as the basis of wide-ranging philosophical reflections. But Kohak is not a disciple of Thoreau; he is not calling for a "return to nature" in the sense of becoming less technological. Rather, like Robert Frost, he is using his "lived experience" of nature to ground fundamental philosophical conclusions about humans and the universe. The claim is made that anyone who lives in nature while "bracketing out" the technological objects of contemporary existence will come to see the order, unity, and harmony of the natural universe with humanity. But there are two problems here: first, it

is not clear how practical environmental decisions can be derived from this reborn consciousness; the book contains little environmental ethics. And second, the argument ultimately rests on each person sharing/living these natural experiences. But ethics should not have to be based on experience. I can refrain from adultery, and know why it is wrong ethically, without having experienced it. I should be able to protect a wilderness-if it is a moral act-also without experiencing it. Nonetheless, an interesting book filled with philosophical speculations from the perspective of phenomenology and personalism. (Katz, Bibl # 1)

Kohák, Erazim, The Green Halo: A Bird's Eye View of Ecological Ethics. Chicago: Open Court, 2000. Czech environmental ethics -- now for everyone! Perhaps the most remarkable of the several introductions to environmental ethics in a growing literature--remarkable both for the unusual career of its author and the multi-dimensional nature of the work. First published in Czech. Kohák fled Czechoslovakia with the coming of the Soviet regime, had a distinguished career at Boston University, living in a one-room rural home without electricity, then returned to his native country after the Soviet collapse, and is on the Philosophical Faculty of Charles University in Prague. This was originally written as an introduction for his students there.

Kohák joins conviction and strategy, although he refrains from prescribing straight forth what we ought to do. He claims only to describe ideas, challenges, problems, opportunities, and invites readers to think for themselves. Readers who accept this invitation will find that conviction and action are inescapable. "Ecology"--the conscious search for long-term sustainable modes of cohabitation of humankind and the Earth--is no longer the hobby of nature lovers. It is the task of humankind and the meaning of our being" (p. 163).

Kohák's life in multiple worlds gives him resources lacking to other environmental philosophers. He knows the naturalists as well as the philosophers. He knows American philosophy with as much facility as European philosophy. In Europe he knows not only British and Western European sources, analytic and continental philosophy; he draws readily from scholars and original sources in Central and Eastern Europe, both those challenging as well as those within the former Soviet ideology. (v.11,#1)

Kohák, Erazim, "Of Dwelling and Wayfaring," Pages 30-46 in Rouner, Leroy ed., The Longing for Home. Notre Dame; IN: Notre Dame University Press, 1977. Autobiographical reflection on the relation of humans to a place.

Kohák, Erazim, The Green Halo: A Bird's Eye View of Ecological Ethics. Chicago: Open Court, 2000. Czech environmental ethics! -- now for everyone. Perhaps the most remarkable of the several introductions to environmental ethics in a growing literature--remarkable both for the unusual career of its author and the multi-dimensional nature of the work. First published in Czech. Kohák fled Czechoslovakia with the coming of the Soviet regime, had a distinguished career at Boston University, living in a one-room rural home, without electricity, then returned to his native country after the Soviet collapse, and is on the Philosophical Faculty of Charles University in Prague. This was originally written as an introduction for his students there.

Kohák's life in multiple worlds gives him resources lacking to other environmental philosophers. He knows the naturalists as well as the philosophers. He knows American philosophy with as much facility as European philosophy. In Europe he knows not only British and Western European sources, analytic and continental philosophy; he draws readily from scholars and original sources in Central and Eastern Europe, both those challenging as well as those within the former Soviet ideology.

Kohák joins conviction and strategy, although he refrains from prescribing straight forth what we ought to do. He claims only to describe ideas, challenges, problems, opportunities, and invites readers to think for themselves. Readers who accept this invitation will find that conviction and action are inescapable. "Ecology"--the conscious search for long-term sustainable modes of cohabitation of humankind and the Earth--is no longer the hobby of nature lovers. It is the task of humankind and the meaning of our being" (p. 163). (v10,#4)

Kohák, Erazim, "Druhy Ekologické Zkusebnosti (Varieties of Ecological Experience)," Filosofický Casopis (Prague) 43(1995):899-919. In Czech. Also published in English: "Varieties of Ecological Experience," Environmental Ethics 19(1997):153-171, and see abstract at that entry. Kohák is in philosophy, Charles University, Prague, and was formerly in philosophy, Boston University. (v.10,#1)

Kohák, Erazim. "Varieties of Ecological Experience." Environmental Ethics 19(1997):153-171. I draw on the resources of Husserlian phenomenology to argue that the way humans constitute nature as a meaningful whole by their purposive presence as hunter/gatherers (nature as *mysterium tremendum*), as herdsman/farmers (nature as partner), and as producer/consumers (nature as resource) affects the way they respond to its distress--as to a resource failure, as to a flawed relationship, or as to a fate from which "only a god could save us." I find all three responses wanting and look to a different experience, that of nature as an endangered species, as the ground for a more adequate response of accepting responsibility for our freedom, with the consequence of imposing ethical limits on the way that humans relate to all being, not to humans alone. Kohák now lives in the Czech Republic, in Prague, associated with Charles University. He is professor emeritus of Boston University. (EE)

Kohák, Erazim. "Speaking to Trees." Critical Review 6 (1992): 371-388. What is the epistemological status of a world within which speaking to trees would appear as appropriate behavior? It would be a world perceived as a community of autonomous beings worthy of respect. Such a world contrasts with the anthropocentric conception of the world as a value-free reservoir of raw materials, but neither worldview can or should claim descriptive accuracy. Both are equally "manners of speaking" and the choice between them must rest on whether they are conducive to ecologically constructive or ecologically destructive behavior. On that basis, speaking to trees is a legitimate, speaking of biomechanisms an illegitimate form of verbal behavior. Kohák is professor of philosophy at Boston University, and also in Prague, Czechoslovakia. (v6,#1)

Kohák, Erazim. The Embers and the Stars. Reviewed in Environmental Ethics 7(1985):87-89.

Kohen, James L., Aboriginal Environmental Impacts. Sydney: University of New South Wales Press, 1995. ISBN 0 86840 301 6. Available in North America through International Specialized Book Services, Portland, Oregon 97213-3644. 503/287-3093. Fax 503/280-8832. \$ 25.00. Kohen argues that the Aboriginal influence on many, but by no means all, of the ecosystems of Australia was profound and that any understanding of the Australian environment must take this into account. He cites many authorities who both agree and disagree with him. The latter typically see climatic change as the major determinant of the structure of the vegetation. He closes with the observation that, nevertheless, the Aboriginals had less impact on the landscape in 50,000 years than the Europeans have in the last 200 years. Kohen is a biologist at Macquarrie University, Sydney. (v7,#4)

Kohler, Cynthia, "Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy," Ecology Law Quarterly 22(no.3 1995):541- . (v6,#4)

Kohler, J., et al., "New Amphibians and Global Conservation: A Boost in Species Discoveries in a Highly Endangered Vertebrate Group," Bioscience 55(no. 8, August 2005): 693-696. Amphibians are characterized both by a strongly increasing number of newly discovered species and by a high degree of decline. The observed increase in species numbers, over 25 percent in 11 years, is largely due to the intensified exploration of tropical areas and the application of more efficient techniques such as bioacoustics and molecular genetics, rather than to the elevation of subspecies to species rank or the distinction of species that were formerly considered synonymous. In the mantellid frogs of Madagascar, the many species newly described between 1992 and 2004 were as genetically divergent as those described in previous research periods, and most had not been collected previously, corroborating the lack of "taxonomic inflation" in this vertebrate class. Taxonomic exploration is still desperately needed to

avoid misinterpretations in global conservation policy.

Kohler, Jonathan, Review of: Dieter Helm (ed.), Climate Change Policy, Environmental Values 15(2006):529-531.

Kohler, Wolfgang R., "Is Man Morally Obligated Not to Destroy Nature?" Ratio 28 (1986):20-35. This German philosopher seems unaware of much of the environmental literature that has appeared in English. Nonetheless, this is a reasonable argument (heavy on Continental thought) that claims there is only an indirect obligation to preserve nature--an obligation to future generations of human beings. (Katz, Bibl # 1)

Kohm, Kathryn and Franklin, Jerry, eds. 1997. Creating a Forestry for the 21st Century: The Science of Ecosystem Management. Covelo: Island Press, 1997. (v.9,#3)

Kohm, Kathryn A., Balancing on the Brink of Extinction: The Endangered Species Act and Lessons for the Future (Washington, D. C. and Covelo, CA: Island Press, 1991). 318 pages. Twenty articles reflecting over a decade and a half of experience implementing the Endangered Species Act and anticipating what next. Some original articles; some published earlier. Some examples: Michael J. Bean, "Looking Back over the First Fifteen Years"; Holmes Rolston, III, "Life in Jeopardy on Private Property" (a shorter version of an article that appeared in the University of Colorado Law Review, vol. 61, no. 2, 1990); Steven L. Yaffee, "Avoiding Endangered Species/Development Conflicts Through Interagency Consultation"; A. Dan Tarlock, "Western Water Rights and the Act"; Hal Salwasser, "In Search of an Ecosystem Approach to Endangered Species Conservation" and Anne H. Ehrlich and Paul R. Ehrlich, "Needed: An Endangered Humanity Act?" Readable by college-level students and a useful reference. Kathryn Kohm is an editor and writer specializing in biodiversity conservation and other natural resource issues, formerly with the Wilderness Society. (v2,#1)

Kohm, Kathryn A., and Franklin, Jerry F. Creating a Forestry for the Twenty-first Century: The Science of Ecosystem Management. Washington, D.C.: Island Press, 1996. 576 pages. \$50 cloth, \$30 paper. Drawing upon the expertise of professionals in the field, here is an up-to-date synthesis of principles of ecosystem management and their implications for forest policy, after examining the current state of forestry and its relation to ecosystem management. (v7, #3)

Kokko, Hanna, Lindstrom, Jan, Ranta, Esa. "Risk Analysis of Hunting of Seal Populations in the Baltic," Conservation Biology 11(no.4, 1997):917. (v8,#3)

Kolakowski, Leszek, "On Respect for Nature," in Freedom, Fame, Lying and Betrayal. London: Penguin Books, 1999. Boulder, CO: Westview Press, 1999. Respect for nature is puzzling; it may reside in a lingering sense of the sacred, that God created nature and humans ought to respect it. But "today we are constantly being told to respect nature, because our continued thoughtless devastation of it will ultimately bring about our own destruction. But such claims are an abuse of language. ... It makes no sense to insist, like the ecological slogans that harangue us at every turn, that we must protect and respect nature for its own sake; it is humanity that we must respect. Nature alone, considered apart from the human costs and benefits of its preservation, deserves no respect" (p. 124)

But this logic is difficult to keep. "Often we are happy just to gaze at the various wonders of nature without any thought of the human benefits, amazed at how it is just the way it should be and glad that we are a part of it" (p. 126). It is difficult to find arguments for this too, and equally difficult to say it is unreasonable. In sum, "it may be that by extending our respect to nature we can gain a better understanding of our humanity" (p. 126). Kolakowski is a Polish philosopher, now retired, once expelled from Poland, and sometime visiting professor at various U.S., U.K., and Canadian universities. (v.13, #3)

Kolarsky, Rudolf, "Sblizovani antropocentrickyh a neantropocentrickyh koncepci filosofie zivotniho

prostredi (Reconciling the Anthropocentric and Non-anthropocentric Concepts of Environmental Philosophy)," Filosoficky Casopis 48(2000):717-729. Anthropocentric and nonanthropocentric concepts of environmental philosophy can be brought together not only in environmental policy (B. Norton) and the justification of the moral basis of a just solution of conflicts between people and nature (J. Sterba), but also in clarifying questions of what it means to be a human in an age of environmental crisis. These concepts make it possible to see the environmental crisis as an opportunity for the development of personality (A. Naess, H. Skolimowski, B. Norton, H. Rolston), and to defend the need to speak in the name of endangered natural entities (A. Naess, R. Nash, K. Ott, V. Hála). The possibilities of reconciling these concepts are signaled by reconciling the interest of people with those of other inhabitants of the planet. A main trouble is anthropocentrism with a preconceived idea that only instrumental relations with nature can be justified by philosophy. Kolarsky is with Filosoficky ustav AC CR [Philosophical Institute, Academy of Sciences, Czech Republic], Prague. (v.13, #3)

Kolasa, Jurek and Steward T. A. Pickett, eds., Ecological Heterogeneity. New York: Springer-Verlag, 1991. 332 pages. Volume 86 in the series Ecological Studies. With nearly two dozen contributors. What is ecological heterogeneity (roughly the ecosystem level word for diversity)? Does it differ from complexity? What dimensions need to be considered to evaluate heterogeneity adequately? Can heterogeneity be measured at various scales? Is heterogeneity a part of the organization of ecological systems? How does it change in time and space? What are the causes of heterogeneity and of its change? Philosophers will want to add: What is the value of ecological heterogeneity? One conclusion: "Heterogeneity emerges and disappears with scale. Scale is the window; heterogeneity is a characteristic of the view in it" (p. vi). An introductory problem is "the heterogeneity of heterogeneity" (p. 1). Kolasa is in biology at McMaster University, Hamilton, Ontario. Pickett is in the Institute of Ecosystem Studies, New York Botanical Garden. (v5,#2)

Kolata, Gina, "With Cloning of a Sheep, the Ethical Ground Shifts," New York Times (2/24/97): A1. See also Kirkpatrick Sale, "Ban Cloning? Not a Chance" New York Times (3/7/97): A35. For a useful discussion of the ethical issues, see Jessica Mathews, "Post-Clone Consciousness," Washington Post (3/7/97): A19. For helpful details on the science involved, see Rick Weiss, "Lost in the Search for a Wolf Are Benefits in Sheep's Cloning," Washington Post (3/7/97): A3. Mammal cloning stirs ethics debate. Scottish scientists took a mammary cell from a 6 year-old adult sheep, starved it of nutrients in order to turn off the genes that made it specifically a mammary cell, and then fused this undifferentiated cell with a sheep egg cell whose own DNA had been removed. The result was a sheep genetically identical to the adult donor of the mammary cell. A week later, scientists in Oregon revealed they had produced a pair of rhesus monkeys from cloned embryo cells. Some of the possible uses of this new technology include: Producing cloned herds of prized livestock (excellent meat or milk producers), cloning genetically-altered animals whose human-protein coated organs won't be rejected when transplanted, and cloning humans for various reasons. The cloning work might also help in developing techniques to turn specific genes on and off in order to correct genetic diseases or to genetically enhance people or animals. President Clinton quickly banned federal funding of human cloning research and asked the National Bioethics Advisory Commission to produce a report by June assessing the legal and ethical implications of human cloning research. No U.S. law prohibits human cloning. The scientist who led the team that cloned the sheep said that there is no reason in principle why humans couldn't be cloned, but that "all of us would find that offensive." Others argue that there are times where human cloning might be acceptable. For example, a couple whose baby was dying might want literally to replace the child, or infertile couples desiring children might want to use cloning to insure that their children have good genes. Clinton's view is that "Each human life is unique, born of a miracle that reaches beyond laboratory science. I believe we must respect this profound gift and resist the temptation to replicate ourselves." Bioregional writer and neo-Luddite Kirkpatrick Sale says that "if cloning of human embryos is possible...it will happen." He points to "the technological imperative that is inevitable in a culture built on the myth of human power and the cult of progress." To support this assertion, he quotes two of the developers of the atomic bomb: "When

you see something that is technically sweet you go ahead and do it" (Robert Oppenheimer) and "Technological possibilities are irresistible to man If man can go to the moon, he will. If he can control the climate, he will" (John von Neumann). (v8,#1)

Kolata, Gina, "Tough tactics in One Battle over Animals in the Lab," New York Times, March 24, 1998, B13, B14. Ingrid Newkirk of People for the Ethical Treatment of Animals charges that scientists at Huntington Life Sciences have broken beagles' legs and ripped organs from conscious, squirming animals while testing drugs for Colgate Palmolive. Alan Staple, Huntingdon's president, said PETA had engaged in baseless accusations, harassment, and threats. He sued the group under the Racketeering Influenced Corrupt Organizations Act. (v9,#2)

Kolb, T. E., M. R. Wagner, and W. W. Covington, "Concepts of Forest Health: Utilitarian and Ecosystem Perspectives," Journal of Forestry 92(no. 7, July 1994):10-15. Health is a metaphor for forest condition at the landscape level, borrowed from its primary use with individual organisms, and the extension is sometimes problematic. There are two main approaches: (1) Utilitarian health. The forest has few pests or pollutants, with biotic conditions for growth to meet management objectives. (2) Ecosystem health. The forest has the physical environment, biotic resources, and trophic networks to support productive forests during at least some seral stages; there is a functional equilibrium between supply and demand of essential resources (water, nutrients, light, growing space); there is a diversity of seral stages and stand structures that provide habitat for many native species and all essential ecosystem processes. Forest health needs to be scaled, from trees to ecosystems. A healthy forest will contain numerous unhealthy and dying trees. Mistletoe, a pest that makes a ponderosa pine forest unhealthy on the utilitarian definition, increases the diversity of bird species in the forest and enriches the community. The authors are in the School of Forestry, Northern Arizona University. This whole issue of the Journal of Forestry is on forest health. (v5,#4)

Kolk, Ans and van der Weij, Ewout. "Financing Environmental Policy in East Central Europe." Environmental Politics 7(no.1, Spring 1998):53- . (v10,#4)

Kolstad, Charles D. and Guzman, Rolando M. "Information and the Divergence between Willingness to Accept and Willingness to Pay." Journal of Environmental Economics and Management 38(No. 1, July 1999):66- . (v10,#4)

Kondro, Wayne, "Canadian High Court Rejects OncoMouse," Science 298(13 December 2002):2112-2113. Canada refuses to recognize patent on OncoMouse. After seventeen years of quest by Harvard University, the Canadian Supreme Court refused to grant patent permission on the OncoMouse, though some of the processes by which the animal is engineered may be patentable. Writing for the narrow majority, Justice Michel Bastarache made a philosophical argument for the ruling, which stands in contrast to that in seventeen other countries: "A complex life form such as a mouse or a chimpanzee cannot easily be characterized as 'something made by the hands of man'."

Kontturi, Osmo, "Ympäristön Tutkimus- Ja Suunnittele-ongelmien Sekä Ympäristöpolitiikan Ja -Filosofian Suhteista (Environmental Research and Planning in Relation to Environmental Politics and Philosophy)" in Ale Fennica: Journal of the Finnish Association for Landscape Ecology, vol. 7-8(1992-1993):4-19. In Finnish with English summary. Kontturi is a docent, University of Joensuu and with the Finnish Association for Landscape Ecology. (v7,#2)

Kopstein Patricia and Salinger, Jim," "The Ecocentric Challenge: Climate Change and the Jewish Tradition," Ecotheology Vol 6 (Jul 01/Jan 02):60-74. bshalom@ihug.co.nz j.salinger@niwa.cri.nz Environmental issues can be examined from an ecocentric or anthropocentric perspective. The latter approach places human, religious and financial values above the values of nature and the universe. Ecocentric perspectives stress the centrality of all ecosystems, their integration, and planetary processes

above any individual or species. Greenhouse gases in the atmosphere have increased by 50%, and are expected to double during the twenty-first century. These are expected to produce unprecedented environmental change that could threaten the integrity of planetary life and systems. Jewish religious tradition views the entire complexity of creation, and commands us not to destroy any part of God's universe. Hence modern ecological sciences and Jewish theology give us both warnings and guidelines to value, sustain, recycle and restore the natural balance. This paper provides an ecocentric integration of the latest discoveries in climate science with 4000 years of Jewish beliefs.

Kopytoff, Verne G., "In Spring, Birds Return to the Salton Sea and Die in Doves," New York Times, March 24, 1998, B 16. Contaminants could leave the Salton Sea worthless to some 380 species of birds. The Salton Sea, 150 miles from Las Angeles, was formed in 1905 and 1906 after the Colorado River burst through a levee and drained into what had been an ancient dry lake bed, 270 feet below sea level. It became a major stop on the Pacific flyway, second only to the Texas coastline in the number of bird species counted there. Now birds are dying in great numbers from epidemics and contaminants, though the links are still under study. (v9,#2)

Korfmacher, K. S., "Review of: Sarewitz, Daniel, Roger A. Pielke, Jr. and Radford Byerly, Jr., eds. Prediction: Science, Decision Making, and the Future of Nature," Society and Natural Resources 15(no.9, 2002): 853-55. (v.13,#4)

Korhonen, Jouni, "Industrial Ecology for Sustainable Development: Six Controversies in Theory Building," Environmental Values 14(2005):83-112. This article is building the theory for the scientific field of industrial ecology. For this, the industrial ecosystem (IE) concept is used. IE uses the model of sustainable ecosystems in unsustainable industrial systems for making progress towards the vision of the industrial ecosystem. Six controversies are revealed and identified as research challenges. I invite all those who are interested in industrial ecology to respond to this contribution. Korhonen is at the Research Institute for Social Sciences, University of Tampere, Finland. (EV)

Koricheva, J. and Siipi, H., "The Phenomenon of Biodiversity." In Oksanen, M., and Pietarinen, J., eds., Philosophy and Biodiversity. New York: Cambridge University Press, 2004.

Korp, M., "Book Review: What's Wrong With Plastic Trees? Artifice and Authenticity in Design. By Martin H. Krieger.," Human Ecology 31(no. 2, 2003): 325-327. (v 14, #3)

Korpela, KM; Hartig, T; Kaiser, FG; Fuhrer, U, "Restorative Experience and Self-Regulation in Favorite Places," Environment and Behavior 33(no. 4, 2001):572-589. (v.13,#1)

Korpikiewicz, H., "Wpisani w Naturę. Spojrzenie holistyczne (The Imprinted into Nature. A Holistic Outlook)", in: H. Korpikiewicz (ed.), Człowiek - Zwierzę - Cywilizacja. Aspekt humanistyczny (Human - Animal - Civilization. Humanistic aspect), ProDRUK Publishers, Poznań, 2001. (v.13,#4)

Korpikiewicz, H., Kosmiczne rytmy życia. Wstęp do kosmoekologii (Cosmic Life's Rhythms. An Introduction to Cosmoecology), Książka i Wiedza Publishers, Warsaw, 1996. (v.13,#4)

Korpikiewicz, H., "Porozumienie ze zwierzęciem. przyczynek do międzygatunkowej komunikacji niewerbalnej (Mutual Understanding with Nonhuman Animals. A Contribution to Interspecific Nonverbal Communication)", in: H. Korpikiewicz (ed.), Człowiek - Zwierzę - Cywilizacja. Aspekt humanistyczny (Human - Animal - Civilization. Humanistic aspect), ProDRUK Publishers, Poznań, 2001. (v.13,#4)

Korpimäki, Erkki, Krebs, Charles J. "Predation and Population Cycles of Small Mammals," Bioscience 46(no.10, 1996):754. A reassessment of the predation hypothesis.

Korsching, P. F., "Review of: Elder, John (ed.) The Return of the Wolf: Reflections on the Future of Wolves in the Northeast," Society and Natural Resources 14(no.9, 2001): 831-34. (v.13,#2)

Korten, David C., When Corporations Rule the World. West Hartford, CT: Kumarian Press, and San Francisco, CA: Berrett-Koehler Publishers, 1995. (v7,#1)

Korten, David C., When Corporations Rule the World. West Hartford, CT: Kumarian Press, and San Francisco, CA: Berrett-Koehler Publishers, 1995 (a co-publication). 376 pages. "Each day half a million to a million people arise as dawn reaches their part of the world, turn on their computers, and leave the real world of people, things, and nature to immerse themselves in playing the world's most lucrative computer game: the money game." "It is played like a game. But the consequences are real... - a tale of money and how its evolution as an institution is transforming human societies in ways that no one intended toward ends that are inimical to the human interest. It is a tale of the pernicious side of the market's invisible hand, of the tendency of an unrestrained market to reorient itself away from the efficient production of wealth to the extraction and concentration of wealth ... The creation of money has been delinked from the creation of value." "So powerful has this force of money become that some observers now see the hot money set becoming a sort of shadow world government--one that is irretrievably eroding the concept of the sovereign powers of a nation state" (pp.185-187).

"This is a 'must read' book--a searing indictment of an unjust international economic order, not by a wild-eyed idealistic leftwinger, but by a sober scion of the establishment with impeccable credentials. It left me devastated but also very hopeful. Something can be done to create a more just economic order." -- Archbishop Desmond M. Tutu, Nobel Peace Laureate. "Korten is an honest witness to the disastrous betrayal of common people and future generations that is being carried out by corporations, governments, and multilateral banks. He cuts through the loud rhetoric of economic growth and global economic integration to the facts of increasing poverty, inequality, and dependence. I hope that this book is widely read." --Herman E. Daly.

Chapter 21 is "The Ecological Revolution," This revolution, Korten, maintains, "will require transforming the dominant belief systems, values, and institutions of our societies--an Ecological Revolution comparable to the Copernican Revolution that ushered in the scientific-industrial era" (p. 282). Korten was formerly a faculty member of the Harvard University Graduate School of Business, afterward with the Harvard Institute for International Development, afterward Asia regional advisor on development for the U.S. Agency for International Development (USAID). (v.9,#4)

Korthals, Michiel, "Ethical Rooms for Maneuver and Their Prospects Vis-à-vis the Current Ethical Food Policies in Europe," *Journal of Agricultural and Environmental Ethics* 21(2008):249-273. I want to show that consumer concerns can be implemented in food chains by organizing ethical discussions of conflicting values that include them as participators. First, it is argued that there are several types of consumer concerns about food and agriculture that are multi-interpretable and often contradict each other or are at least difficult to reconcile without considerable loss. Second, these consumer concerns are inherently dynamic because they respond to difficult and complex societal and technological situations and developments. For example, because of the rising concern with global warming, carbon dioxide absorption of crops is now attracting public attention, which means that new requirements are being proposed for the environmentally friendly production of crops. Third, there are different types of consumers, and their choices between conflicting values differ accordingly. Consumers use different weighing models and various types of information in making their food choices. Changing food chains more in accordance with consumer concerns should at least take into account the multi-interpretable, dynamic, and pluralist features of consumer concerns, for example, in traceability schemes. In discussing usual approaches such as codes, stakeholder analysis, and assurance schemes, I conclude that these traditional approaches can be helpful. However, in cases of dynamic, pluralistic, and uncertain developments, maintaining some pre-existing evaluating scheme or some clear cut normative hierarchy,

such as codes or assurance schemes, can be disastrous in undermining new ethical desirable initiatives. Instead of considering ethical standards and targets as fixed, which is done with codes and schemes, it is more fruitful to emphasize the structure of the processes in which ethical weighing of relevant consumer concerns get shaped. The concept of "Ethical Room for Maneuver" (ERM) is constructed to specify the ethical desirable conditions under which identification and weighing of paramount values and their dilemmas can be processed. The main aims of the ERM are making room in all the links of the food chain for regulating and implementing the relevant consumer concerns by (1) balancing and negotiating, (2) supporting information systems that are relevant and communicative for various consumer groups and (3) organizing consumer involvement in the links of the food chain. The social and political context of agriculture and food production, particularly in Europe, gives ample opportunity for implementing several types of Ethical Rooms for Maneuver. Finally, I discuss several types of Ethical Rooms for Manoeuvre in the food chains that can be communicated by means of specific traceability schemes to less involved stakeholders with the potential consequence that the stakeholders will be motivated to be more involved. The author is in Applied Philosophy, Wageningen University, Wageningen, Netherlands.

Korthals, Michiel, "The Struggle Over Functional Foods: Justice and the Social Meaning of Functional Foods," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):315-324. The social and scientific debate over functional foods has two focal points: one is the issue of the reliability and trustworthiness of the claims connected with functional foods. You don't have to be a suspicious person to be skeptical vis-a-vis the rather exorbitant claims of most functional foods. They promise prevention against all kinds of illnesses and enhancement of achievements like memory and vision, without having been tested adequately. The second issue is the issue of the socio-cultural dimension of functional foods and their so called detrimental effect on the social and normative meanings of food, with possibly the effect that food in general will be treated like a medicine, with radical individualizing effects. Finally, individuals would only be allowed to eat what their gene-profile prescribes them. In this paper, it is argued that food is a non-neutral public good that contributes inherently to the identity of vulnerable individuals. It should be treated in a non-neutral, but impartial way. Therefore, politics need to intervene in food markets from a justice and ethical point of view with two aims in mind. The first aim (as an implication of justice considerations) should be to establish safety conditions, and to identify and monitor food safety standards in an objective and impartial way. Preventive medical claims of foods should be allowed on the basis of appropriate and objective testing methods. The second aim (as an implication of ethical considerations) should be to shape conditions for a cohabitation of various food styles, including that of functional foods. Moreover, the cultural and symbolic meaning of food in a pluralistic society requires that the different food styles find some modus of living and interacting together. As long as functional foods comply with safety standards and respect other food styles, they should be allowed on the market, just like any other food product. KEY WORDS: deliberative ethics, functional foods, justice. (JAEE)

Kosek, Jake. *Understories: The Political Life of Forests in Northern New Mexico*. Durham: Duke University Press, 2007. The author finds an underlying racial politics in a self-righteous environmental movement making claims of "stewardship" over natural resources that sustain indigenous people the Hispanos in the Española Valley in New Mexico, extended to marginalized blue-collar people everywhere in the U.S. West.

Koshiba, T; Parker, P; Rutherford, T; Sanford, D; Olson, R, "Japanese Automakers and the NAFTA Environment: Global Context," Environments 29(no.3, 2001):1-14. (v.13, #3)

Koshland, Jr., Daniel E., "The Case for Biodiversity," Science 264(April 29, 1994):639. Tongue-in-cheek satirical editorial by the editor-in-chief of science, that could make a useful class discussion piece. Dr. Noitall has become a defender of all life forms. "And what species are you trying to save now?" "I am becoming the defender of the unpopular little species who have a poor media image--the Mycobacterium

tuberculosis, the Salmonella typhi, the pneumococci, the syphilis spirochete, the AIDS virus, and the malaria parasite. ..." "But those are horrible pathogens that are out to kill humans. Why should you want to be on their side?" "That's typical 'speciesism,' as despicable as racism. We biodiversity people do not limit ourselves to loveable species; all God's creatures deserve to live." "How can humans relate to bacteria and viruses that are basically stupid, without a cerebral cortex and devoid of higher moral concepts?" "Stupidity is in the eye of the beholder. Bacteria survive by swimming toward nutrients that are good for them and away from toxic substances that are bad for them--a simple strategy that Homo sapiens could learn to advantage. Bacteria exchange DNA rapidly to pass drug resistance genes from one bacterium to another, a bacterial Marshall Plan. One DNA transfer provides more information than a modern high school education." They could even help us solve the overpopulation problem. (v5,#2)

Kosloff, Laura H., "Climate Change Mitigation and Sustainable Development," Natural Resources and Environment 12 (Fall 1997):93-. (v.8,#4)

Kosmicki (Końmicki), E., "Odpowiedzialność człowieka za ewolucję. Podstawowy problem etyki środowiskowej (Human Responsibility for Evolution. The Basic Problem of Environmental Ethics)", in: H. Korpikiewicz (ed.), Człowiek - Zwierzę - Cywilizacja. Aspekt humanistyczny (Human - Animal - Civilization. Humanistic aspect), ProDRUK Publishers, Poznań, 2001. (v.13,#4)

Kostecki, Dennis, "Lifestyle: In the Rainforest the Red-Eye Reigns," Ecotheology No 10 (Jan 2001):110

Kote-Nikoi, Nikoi. Beyond the New Orthodoxy: Africa's Debt and Development Crisis in Retrospect. Brookfield, VT: Ashgate, 1996. 343pp. \$76.95 cloth. A study of the political economy of debt and development in Sub-Saharan Africa. (v8,#1)

Kothari, A., Singh, N., and Suri, S., eds. People and Protected Areas: Towards Participatory Conservation in India. New Delhi: Sage Publications, 1996. 272 pages. \$ 38.00. ISBN 0-8039-9333-1. Current thinking about the role of resident peoples in the management of protected areas, with the conviction that such areas do not (always, or often) have to be "peopleless." The authors generally want to keep resident peoples in protected areas and to engage them in some form of cooperative management, holding this to meet both social justice and environmental goals. The anthology results from a workshop sponsored by the India Institute of Public Administration in 1994. Contributions are uneven in their detail and analytical quality. Kothari is a political scientist who has worked in both academic and activist circles. In the introduction Kothari finds both local problems: how to balance the rights of local communities with the protection of wildlife, and an underlying global problem. Conservation takes place in the context of a global industrial economic system. Conservationists are now active in India. "However, the conservationists and officials who brought in these important measures were a part of the same elite classes which have led India headlong towards ecological ruin" (p. 21). Antagonism between villagers and conservationists misinterprets the problem of protected areas because it neglects the social and economic reasons for ecological degradation, namely the urban industrial economy. Conservationists and local peoples are mistakenly divided against each other instead of united with each other against a common enemy. (v9,#2)

Kouneva, Penka Dinkova, Where Nature and Soul Meet, 1995, Duke University, Ph.D, thesis. 166 pages. A cantata for soprano and baritone soloists, mixed chorus and chamber orchestra. The advisor was Stephen Jaffe. The cantata addresses the relationship between humans and nature. The subject was prompted by two concerns: first, that an attitude of condescension, exploitation and senseless destruction of nature will deepen the present ecological crisis; second, that dualisms such as nature/culture, emotion/reason, matter/spirit, body/soul, historically formative in much of Western culture, result in alienation and division, and in turn, reinforce such an attitude. The underlying poetic premise of the cantata is that the human soul can be fully realized only through a new environmental ethics based on

integration and partnership with nature. The cantata is an attempt to critique, through music and poetic texts, an alienated world view, and to celebrate in song a new environmental ethic. (v.10,#1)

Kovel, Joel, "Reflections on a Dialectical Ecology," in Race, Class, and Community Identity, eds. Andrew Light and Mechthild Nagel (Amherst, NY: Humanity Books, 2000). The overwhelming contribution to the ecological crisis made by the accumulation of capital gives renewed importance to Marxism and places it in a radically new light. It will be necessary however to rethink those aspects of Marxist discourse which have alienated it from ecological movements, namely, a fetish of production and the tendency toward an instrumental view of nature. A possible resolution of this impasse may be found through the rethinking of the theory of dialectic. Once this exercise has been completed a renewed account of the relationship between Marxism and ecological movements can be completed.

Kovel, Joel, The Enemy of Nature: The End of Capitalism or the End of the World?, Fernwood Publishing Ltd, Nova Scotia, 2002. Review by David Orton at: http://home.ca.inter.net/~greenweb/Ecological_Marxism.html

Kover, T. R., and Nathan Kowalski. "On Nature, Human Identity, and Straw Men." *Environmental Ethics* 30(2008):443-444. (EE)

Kowalski, Gary, The Souls of Animals. Available for \$ 12.50 from Culture and Animals Foundation, 3509 Eden Croft Drive, Raleigh, NC 27612. (v3,#2)

Kowalski, Gary, The Bible According to Noah: Theology As If Animals Mattered (New York, USA. Lantern Books, 2001), reviewed by Marilyn Holly, Journal of Agricultural and Environmental Ethics 19(2006):203-204. Holly is in the Department of Philosophy, University of Florida, Gainesville, FL. (JAEE)

Kowalski, Nathan. "Following Human Nature." Environmental Ethics 28(2006):165-183. Any mediation of the humanity-nature divide driven by environmental concern must satisfactorily account for ecologically destructive human behavior. Holmes Rolston, III argues that human cultures should "follow nature" when interacting with nature. Yet he understands culture to necessarily degrade ecosystems, and allows that purely cultural values could legitimate the destruction of nature itself. Edward O. Wilson, meanwhile, argues that culture's evolutionary function is to fit humanity to its niche; culture necessarily follows "epigenetic rules" naturally selected for this purpose. However, because humanity cannot but follow these rules, any human behavior—even (post)modern societies' ecologically catastrophic behavior—is entirely natural. Therefore, Rolston's reconciliation is too weak and Wilson's too strong. Yet the two can be mutually modifying. Rolston's "pure" culture should follow the natural value of human nature; yet, humans must be free to disobey (at their peril) Wilson's epigenetic rules. Humanity thus becomes reconciled to nature by freely following its own nature, which is violated when the wider natural world is treated unnaturally. (EE)

Kozin, Michelle, Organic Weddings: Balancing Ecology, Style and Tradition. Gabriola Island, BC, Canada: New Society Publishers, 2003. An eco-wedding primer for green couples. Modern weddings are inherently wasteful: invitations, meals, paper goods, flowers, attire--and nobody pays any attention to the ecological footprint. But now you can. (v. 15, # 3)

Kozlowski, J., Peterson, A., eds. Towards Sustainable Ecosystem Management Through Buffer Zone Planning. Brookfield, VT: Ashgate, 1998. 150 pp. \$67.95. The potential contribution of buffer zones in professional planning and ecosystem management in the process of reversing the continuing deterioration of the natural environment. Both authors are at the University of Queensland, Australia. (v9,#2)

Kozłowski, Richard G. Bleichfeld, Howard. "Wetlands Enforcement: Lion or Lamb?" Natural Resources and Environment 10(no. 3, Winter 1996):62. (v7,#1)

Kozłowski, Stefan, W drodze do ekorozwoju (On the Way to Eco-Development), PWN, 1997. (v9,#2)

Kozłowski, S., W drodze do ekorozwoju (On the Way to Ecodevelopment), Warszawa: PWN (Polish Scientific Publishers), 1997.

Kozłowski, S., W drodze do ekorozwoju (On the Way to Ecodevelopment), Warszawa: PWN (Polish Scientific Publishers), 1997. (v.13,#1)

Kracker, Laura, "Disconnected Rivers," Landscape Ecology 21(no.1, January 2006): 153-154 (2).

Krafston-Hogue, Michael. "Toward a Christian Ecological Ethic: The Lesson of Old Testament Israel's Dialogic Relations with Land, History, and God," Christian Scholars Review 28(No.2. 1998):270-282. By drawing from Walter Brueggemann's land theology and Mikhail Bakhtin's theory of dialogism, the purpose of this essay is to enrich the project of developing a comprehensive Christian ecological ethic. (v.11,#2)

Kraft, M. E., "Leverage and Sustainable Communities: Overcoming Policy Obstacles at the Local Level," Conservation Biology 15(no.6, 2001): 1483-84. (v.13,#2)

Kraft, Michael E., and Sheldon Kamieniecki, eds. *Business and Environmental Policy: Corporate Interests in the American Political System*. Cambridge, MA: The MIT Press, 2007. Contents include: (1) "Analyzing the Role of Business in Environmental Policy" by Michael E. Kraft and Sheldon Kamieniecki, (2) "Framing ANWR: Citizens, Consumers, and the Privileged Position of Business" by Deborah Lynn Guber and Christopher J. Bosso, (3) "Business, Elections, and the Environment" by Robert J. Duffy, (4) "Deep Freeze: How Business Has Shaped the Global Warming Debate in Congress" by Judith A. Layzer, (5) "Congress and Clean Air Policy" by Gary C. Bryner, (6) "Business and the Environment: Influencing Agency Policymaking" by Scott R. Furlong, (7) "Business Interests and Information in Environmental Rulemaking" by Cary Coglianese, (8) "Business and Environmental Policy in the Federal Courts" by Paul S. Weiland, (9) "Industry's Use of the Courts" by Lettie McSpadden, (10) "Business Influence in State-Level Environmental Policy" by Barry G. Rabe and Philip A. Mundo, (11) "Local Business and Environmental Policies in Cities" by Kent E. Portney, and (12) "Conclusions: The Influence of Business on Environmental Politics and Policy" by Sheldon Kamieniecki and Michael E. Kraft.

Kraft, Steven, Steven Keffer and Sallie King. "Process Philosophy and Minimalism: Implications for Public Policy." Environmental Ethics 13(1991):23-47. Using process philosophy, especially its view of nature and its ethic, we develop a process-based environmental ethic embodying minimalism and beneficence. From this perspective, we criticize the philosophy currently underlying public policy and examine some alternative approaches based on phenomenology and ethnomethodology. We conclude that process philosophy, minus its value hierarchy, is a powerful tool capable of supporting both radical and moderate changes in environmental policy. Keffer is in the department of Zoology, King is in the department of philosophy, Kraft is in the department of Agribusiness Economics, Southern Illinois University at Carbondale, Carbondale, IL. (EE)

Krahn, Jan Pieter and Reinhard H. Schmidt. Development Finance as Institution Building: A New Approach to Poverty-Oriented Banking. Boulder, CO: Westview Press, 1994. 148 pages. \$45.00. (v5,#2)

Krajick, Kevin, "Winning the War Against Island Invaders," Science 310(2 December 2005):1410-1413. To make islands safe for rare native species, biologists are mounting increasingly complex campaigns to shoot, trap, or poison exotics. Birds, insects, rats, goats, mongooses, cats, pigs, foxes, rabbits, amphibians/reptiles. It's often working.

Krajick, Kevin, "Methuselahs in our Midst," Science 302(31 October 2003):768-769. Scientists and tree lovers are discovering old-growth trees--and clues to the past--in places where they were long thought to be lost. Often in precipice slopes and talus, and sometimes gnarled and twisted, cedars and oaks may be 500 years old; bald cypress in swamps 1700-2000 years old, white cedars in Canada 1000 years old.

Krajick, Kevin, "The Lost World of the Kihansi Toad," Science 311(3 March 2006): 1230-1232. The Kihansi spray toad lived in a biodiversity hotspot, Kihansi Gorge in Tanzania's remote Udzungwa Mountains, where a great waterfall and cascade produced a perpetual spray. The spray toad had probably the smallest range of any vertebrate, two hectares. In 2000, a hydropower dam cut off 90% of the water and the ecosystem withered. The toad has virtually disappeared, though a few survive in captivity in U.S. terraria, where they are difficult to breed and subject to parasites and diseases. The World Bank funded the dam, and made largely inept efforts to save the toad, with spray systems designed to mimic the waterfall spray, also the sprinklers were not in place when the water was cut off. Tanzania gets one third of its electricity from the dam, and Tanzanians say, "Who cares about the toad; we want our electricity." One remarked that the captive toads were flown to New York in a jet and Tanzanians could not afford to fly in such jets.

Krakowiak, J. L., (ed.), Ziemia domem człowieka (The Earth's Home of Human):

-vol.1: Współtworzenie Świadomości ekologicznej - ku federacji życia (The Co-Creation of Environmental Consciousness - Towards A Federation of Life);

-vol.2: Teoria i praktyka ochrony Środowiska w Polsce (The Theory and Practice of Environmental Protection in Poland)], Polskie Towarzystwo Uniwersalizmu, Centrum Uniwersalizmu przy Uniwersytecie Warszawskim, Polska Federacja życia (Polish Society for Universalism & Warsaw University), 1997. (v.13,#1)

Krakowiak, J. L., (ed.), Ziemia domem człowieka (The Earth's Home of Human):

-vol.1: Współtworzenie Świadomości ekologicznej - ku federacji życia (The Co-Creation of Environmental Consciousness - Towards A Federation of Life);

-vol.2: Teoria i praktyka ochrony Środowiska w Polsce (The Theory and Practice of Environmental Protection in Poland)], Polskie Towarzystwo Uniwersalizmu, Centrum Uniwersalizmu przy Uniwersytecie Warszawskim, Polska Federacja życia (Polish Society for Universalism & Warsaw University), 1997.

Krall, Florence. Ecotone: Wayfaring on the Margins. Albany: State University of New York Press, 1994. The metaphor of the biological ecotone as the boundary where the inner and outer landscapes of the woman/nature continuum meet. Using autobiographical narrative, the author walks the edges, the margins, to deepen the human/nature bonds. Krall teaches education at the University of Utah. (v6,#3)

Kramer, Randall; Van Schaik, Carel; and Johnson, Julie, eds. Last Stand: Protected Areas and the Defense of Tropical Biodiversity. New York: Oxford University Press, 1997. 240pp. \$39.95. Integrates ecological, economic and political perspectives on how best to manage tropical forests and their inhabitants, throughout the world. (v8,#1)

Kramer, Steve, "Naturalness and Restoration Ecology," From the Center: A Newsletter, The Center for Values and Social Policy, University of Colorado, Boulder. Vol. 14, no. 1, spring 1998, pages 1-3. Replies to Patrick D. Hopkins, "Value, 'Nature', and Copies of 'Nature,'" earlier in the same newsletter.

Hopkins's arguments that copies are as good as the originals in nature are unpersuasive. Natural objects and their accompanying values cannot be fully restored through human agency, even in principle, much less in practice, although restoration ecology is nevertheless a laudable goal. Nature is created through a process of evolution that is not intentional, deliberative, or teleological. Recognition that the diversity, complexity, and beauty we find in the natural world is not the result of intentional design supports and magnifies its intrinsic values. We stand in awe of a world that is beyond intentional design and construction. Kramer is in philosophy, University of Colorado, Boulder. (v9,#2)

Krasnova, Irina O., "Post-Rio Treaties: Implementation Challenges," Pace Environmental Law Review 13 (no. 1, 1995):97-110. Implementation problems are now arising with regard to many environmental treaties. Krasnova is in environmental law at the Moscow Juridical Institute, Moscow. (v8,#2)

Kraus, Clifford, "Canada to Shield 5 Million Forest Acres," New York Times, February 7, 2006. After long negotiations between the Canadian government, Native Canadian nations, environmental groups, and logging companies, a wilderness of close to five million acres, almost the size of New Jersey, is being set aside in the Great Bear Rain Forest in British Columbia. Loggers will work in another ten million acres, but must cut selectively, away from critical watersheds, bear dens, and fish spawning grounds.

Krause, Tina B., ed. Care of the Earth: An Environmental Resource Manual For Church Leaders. Chicago: Lutheran School of Theology at Chicago, 1994. 98 pages. Green Theology, Eco-action by Congregations, Worshiping in a Green Congregation, Grassroots Action. Short articles and extracts by two dozen contributors. Samples: Mike Isensee, "Who Speaks for the Owls, Trees and Human Needs: The Church and Environmental Advocacy"; H. Paul Santimire, "Healing the Protestant Mind: Beyond the Theology of Human Dominion." A bibliography is included, and lists of other resources.

Krausmann, Fridolin, "Landnutzung, Energie und industrielle Modernisierung: Eine historische Perspektive mit Blick in die Zukunft" (article in German). Land Use, Energy and Industrial Modernization: Historical aspects and implications for future development. Natur und Kultur, Vol. 1/2, 2000, pp. 44-61. Abstract: The transformation of the socio-economic energy system, with a substitution of fossil fuels by biomass during the process of industrial modernization was connected with sweeping changes in land use, the agricultural production system and socio-economic biomass metabolism. In this paper an empirical analysis of the development of the human appropriation of net primary production in Austria since the early 19th century in connection with the changes in the socioeconomic energy system is presented. This focus is of interest not only from an environmental history perspective, but also reveals important aspects about possibilities and limitations of a development towards a modern version of a society based on solar energy. (v.11,#4)

Krauss, Clifford, "Eskimos Fret as Climate Shifts and Wildlife Changes," New York Times, September 6, 2004, p. A4. Eskimos in the nation of Nunavut, north of Canada, are troubled by climate change and contaminants in their waters. Patchy fur, shrinking ice, contaminated fish, and an uncertain future. (v.14, #4)

Krauthammer, Charles, "Saving Nature, But Only for Man." Time, June 17, 1991, p. 82. "Man should accommodate only when his fate and that of nature are inextricably bound up. ... The sentimental environmentalist will call this saving nature with a totally wrong frame of mind. Exactly. A sane--a humanistic--environmentalism does it not for nature's sake but for our own."

Krebbs, Jr. R.S., "Is Friedrich Nietzsche a precursor to the holistic movement?," History of European Ideas 11(1989):701-709.

Krebs, Angelika, Ethics of Nature: Basic Concepts, Basic Arguments of the Present Debate on Animal

Ethics and Environmental Ethics. Ph.D. dissertation at the University of Frankfurt, Germany. 1993. This thesis is also the concluding report of a project on "Value Systems and Attitudes towards Nature" at the Stockholm Environment Institute, and the thesis will be published by that institute.

Krebs develops a taxonomy of arguments for the value in nature. Part A lists anthropocentric arguments: A1, the instrumental value of nature for satisfying basic human needs; A2, the instrumental value of nature for sensual human delight; A3, the aesthetic intrinsic value of beautiful and sublime nature; A4, the instrumental value nature has for relieving us of "aesthetic responsibility" by its having a form of its own; A5, the role the native landscape plays for the identity or individuality of human beings; A6, the pedagogic value of treating nature with care; and A7, the meaning of life and the intrinsic value or sacredness of the wise person who knows the meaning of life. Part B features a holistic argument, neither purely anthropocentric nor purely physiocentric, that to accord intrinsic value to nature is to further the good life of persons, since humans are part of nature. Part C lists five physiocentric arguments that give reasons why we should respect the good of nature for its own sake: C1, the value of sentient nature; C2, the intrinsic value of teleological nature; C3, respect for life; C4, a higher order of values of or in nature; C5, a theological order of value.

In a critical section, Krebs finds that all anthropocentric arguments are good arguments. The holistic argument (Part B) and all the physiocentric arguments (Part C) are bad arguments, except for C1, C2, and C3 when restricted to certain animals. Except for animal nature, the rest of nature lacks moral or absolute intrinsic value. There is nothing we owe to nonanimal nature itself. Krebs is now Associate Professor at the Faculty of Philosophy, University of Frankfurt, Germany. (v4,#3)

Krebs, Angelika, ed. Naturethik. Grundtexte der gegenwärtigen tier- und ökoethischen Diskussion (Ethics of Nature: Fundamental Texts Discussing Contemporary Animal and Ecological Ethics). Frankfurt: Suhrkamp. April 1997. 400 pages. ISBN 3-518-28862-8. This reader brings together basic readings on the intrinsic value of nature both from the English-speaking and the German-speaking discussion. By translating ten influential English papers it makes them available to a wider German-speaking audience. By including seven important German texts, it attempts to overcome the somewhat imperialistic influence that the English-speaking ethics of nature tends to exert in international philosophical circles. This anthology is only the second systematic reader in German on the ethics of nature, the first having been Dieter Birnbacher's Ökologie und Ethik (Stuttgart, 1980, with articles by Fraser-Darling, Tribe, Rock, Birnbacher, Feinberg, Spaemann, and Passmore). The book has two sections. In the first section on animal ethics Peter Singer, Tom Regan and Ursula Wolf argue for the moral status of animals, while Raymond Frey, Jürgen Habermas and Ernst Tugendhat argue against it. The second section on environmental ethics has Paul Taylor, Stephen Clark, Hans Jonas, Arne Naess, J. Baird Callicott and Holmes Rolston on the "pro" side, and William Frankena, Bernard Williams, Martin Seel, Friedrich Kambartel and Angelika Krebs on the "contra" side. (v8,#1)

Krebs, Angelika, "Haben wir moralische Pflichten gegenüber Tieren?" (Do We Have Moral Duties to Animals?), Deutsche Zeitschrift für Philosophie (Berlin) 41:(1993)6, 995-1008. Subsections: The nature-ethics debate in general; The pathocentric argument in nature-ethics; four objections to the pathocentric argument: (1) The rationalist argument, (2) The formal ethical argument, (3) The "First comes eating, then animals" argument, (4) The "policing nature" argument. Krebs is in philosophy at the Johann Wolfgang Goethe-Universität, Frankfurt/Main. (v5,#1)

Krebs, Angelika, Ethics of Nature: A Map. Berlin/New York: Walter de Gruyter. Perspectives of Analytical Philosophy. 1999. 176 pages. paperback: US\$ 36.00, DM 58,-. ISBN 3-11-015830-2, hardcover: US\$ 96,00, DM 148,-. ISBN 3-11-015829-9. An inquiry into the value of nature: Is nature's value only instrumental value for human beings or does nature also have intrinsic value? It answers this question, first, by clarifying basic concepts such as "nature," "intrinsic value," and "epistemic" versus "moral" anthropocentrism. Second, it develops a critical taxonomy or "map" of thirteen arguments for the conservation of nature and defends the moral intrinsic value of sentient animals, but not of nonsentient

nature. The book refers to an extensive range of publications, in the English and German languages, and also draws on texts, philosophical and literary, that lie outside the recent professional controversies. An effort is made to frame the arguments in a concise, simple, and unladen language. Moral philosopher Bernard Williams of Oxford provides a guest foreword. Krebs is in the faculty of philosophy, University of Frankfurt, Germany. (v.10,#1)

Krebs, Angelika, Ethics of Nature. New York, Berlin: Walter de Gruyter, 1999. With a foreword by Bernard Williams. 162 pages. Paper. In English. The ethics of nature is an inquiry into the value of nature. Is nature's only value instrumental for humans, or does nature also have intrinsic value? Can anthropocentrism be defended or must we move to a physiocentric moral position?

Contents:

Part I. Basic Concepts. Nature. Ethics. Anthropocentrism and Physiocentrism. Pathocentrism: All sentient beings have moral status. Biocentrism: All living beings have moral status. Radical physiocentrism: All of nature has moral status.

Part II. Seven anthropocentric arguments for the value of nature. 1. The basic needs argument. 2. The aisthesis argument: nature is the source of many pleasant sensations and feelings. 3. The aesthetic contemplation argument. 4. The natural design argument. 5. The heimat argument: sense of native inhabited place. 6. The pedagogic argument: human virtues encountering nature. 7. The meaning of life and true joy of living argument.

Part III. A hermaphroditic argument for the value of nature: holistic thinking opposing dualism.

Part IV. Five physiocentric arguments for the value of nature. 1. The pathocentric argument. 2. The teleological argument. 3. The reverence for life argument. 4. The following nature argument. 5. The theological argument.

Between anthropocentrism as instrumental value for nature and physiocentrism as absolute value for nature lie enlightened anthropocentrism and extensionist physiocentrism. Enlightened anthropocentrism accords nature various kinds of eudaemonic intrinsic value, aesthetic intrinsic value, heimat value and sacredness. Extensionalist physiocentrism extends elements of human moral nature, notably respect for the well-being of others, to nature.

The ethics of nature should not be anthropocentric in the instrumentally-truncated sense but neither should it be anthropocentric in the extensional sense. Rather, it should be moderately physiocentric, more precisely, pathocentric. The ethics of nature must, however, remain anthropocentric in the epistemic sense. Those who press for a radical change, a paradigm shift, in our moral attitude toward nature, and brand anthropocentrism as the source of all ecological evil in the world are therefore wrong. We ought to orient our conduct toward nature based on the good of those beings, animal and human, who have a subjective good, who now live, and who will in the future live on Earth.

Krebs is in philosophy at the University of Frankfurt, Frankfurt am Main, Germany. This work expands her 1993 dissertation at the University of Frankfurt, also work at Oxford University and the University of California, Berkeley. (v.10,#2)

Krebs, Angelika, "Discourse Ethics and Nature," Environmental Values 6(1997):269-280. ABSTRACT: The question this paper examines is whether or not discourse ethics is an environmentally attractive moral theory. The answer reached is: no. For firstly, nature has nothing to gain from the discourse ethical shift from monological moral reflection to discourse, as nature cannot partake in discourse. And secondly, nature (even sentient animal nature) has no socio-personal integrity, which, according to discourse ethics, it is the function of morality to protect. Discourse ethics is a thoroughly anthropocentric moral theory. Faculty of Philosophy, University of Frankfurt, Dantestrasse 4-6, 60054 Frankfurt am Main, Germany. (EV)

Krebs, Angelika. "Ökologische Ethik I: Grundlagen und Grundbegriffe." In Angewandete Ethik, pp. 346-85. Ed. Julian Nida-Rümelin. Stuttgart, 1996. (Reprinted in Naturethik, ed. Angelika Krebs

[Frankfurt, 1997], pp. 337-79.) This article presents a critical taxonomy of arguments for the conservation of nature. Six physiocentric and seven anthropocentric arguments are distinguished. The six physiocentric arguments are: pathocentric (sentience-centered), teleological, reverence-for-life, naturam-sequi, theological, and holistic. Krebs argues that only the first is valid. The seven anthropocentric arguments are: basic-needs, aisthesis, aesthetic-contemplation, natural-design, "Heimat," pedagogic, and the meaning of life. All seven, Krebs contends, are valid. Next, Krebs proposes a position that can be described as a rich anthropocentrism in which nature has both instrumental and intrinsic (aesthetic) value, and in which sentient nature has intrinsic moral value (that is, pathocentrism). (v8,#3)

Krech, Shepard, The Ecological Indian: Myth and History. New York: W. W. Norton, 1999. 352 pages. The ecological Indian is more myth than history. (v.11,#3)

Krech, Shepard, III. The Ecological Indian: Myth and History. Reviewed by David Rothenberg. Environmental Ethics 22(2000):425-429, generally favorably. Reviewed by Vine Deloria in Worldviews 4(2000):283-293, a quite critical review, itself not unproblematic.

Kreger, J., "Ecology and Black Student Opinion." Journal of Environmental Education 4(1973):30-34.

Kremer, Michael, and Rachel Glennerster, Review of "Strong Medicine: Creating Incentives for Pharmaceutical Research on Neglected Diseases (Princeton, NJ: Princeton University Press, 2004). Reviewed by Amitrajeet A. Batabyal. Journal of Agricultural and Environmental Ethics 18(2005):415-417. (JAEE)

Krieg, Eric, "Race and Environmental Justice in Buffalo, NY: A ZIP Code and Historical Analysis of Ecological Hazards," Society and Natural Resources 18(no.3, March 2005):199-213(15).

Krimsky, Sheldon, Biotechnics and Society. New York: Praeger, 1991. Krimsky concludes with what he calls a critical school of technology assessment with seven relevant criteria: (1) ecological impacts, (2) health effects, (3) ethical soundness, (4) economic productivity, (5) distributive justice, (6) social needs, and (7) market demand. A technology assessment index, resulting from evaluation by such criteria, is applied to sample cases of pending biotechnology, such as bovine growth hormone and herbicide resistant-plants (crop plants that survive, while weeds are killed). Krimsky is at Tufts University. (v7,#1)

Krimsky, Sheldon and Roger P. Wrubel. Agricultural Biotechnology and the Environment: Science Policy and Social Issues. Review by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1999):66-67. (JAEE)

Krimsky, Sheldon and Peter Shorett, eds., *Rights and Liberties in the Biotech Age. Why We Need a Genetic Bill of Rights* (New York: Rowman and Littlefield, 2005). Reviewed by Richard P. Haynes in Journal of Agricultural and Environmental Ethics 21(2008):401-407.

Krimsky, Sheldon, and Wrubel, Roger, Agricultural Biotechnology and the Environment: Science, Policy and Social Issues. Urbana, IL: University of Illinois Press, 1996. 294 pages. (v9,#2)

Krimsky, Sheldon, Wrubel, Roger P. Agricultural Biotechnology and the Environment: Science Policy and Social Issues. Urbana: University of Illinois Press, 1996). 294pp., Index. Price: Cloth, \$47.50, Paper, \$18.95.

Reviewed by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1998):66-67.

Krimsky, Sheldon. "Biotechnology Safety," Environment 39(no.5, 1997):27. Two recent reports on the

regulation of biotechnology show too little concern about the harm novel organisms could do to the environment and human health. (v8,#2)

Krishna, Ravi Srinivas. Review of Susanna Horning Priest, A Grain of Truth: The Media, the Public and Biotechnology, Organization and Environment, 16, (No. 2, 2003): 263-65. Ravi Srinivas Krishna is visiting scholar at the Law School, Indiana University, Bloomington, researching on biodiversity and intellectual property rights.

Krishnamurti, J., On Nature and the Environment. San Francisco: HarperSanFrancisco. 1991. 112 pages. \$ 8.95 paper. Thirty four rather brief selections from the work of Krishnamurti, who died in 1986 at the age of ninety. Sensitive descriptions of nature but rather little reflection on nature from the perspective of the ecological crisis. Nature supports and sustains us and we ought to protect it, but we are so increasingly concerned with our own little selves that we are out of touch with nature. All of our personal, social, political, economic, and environmental pains and problems are caused by our spiritually confused selves and can only be ameliorated by spiritually changing ourselves. (v4,#3)

Krishnan, Rajaram, Jonathan M. Harris, and Neva R. Goodwin, eds., A Survey of Ecological Economics. Washington, DC: Island Press, 1995. 384 pages. Several dozen short articles and extracts: historical perspectives; definition, scope, and interdisciplinary issues; theoretical frameworks and techniques; energy and resource flow analysis; accounting and evaluation; international economic relations, development, and the environment; ethical and institutional issues in ecological economics; The authors are with the Global Development and Environment Institute at Tufts University. (v6,#4)

Krishnaswamy, Ajit. "Sustainable Development and Community Forest Management in Bihar, India." Society & Natural Resources 8 (no. 4, July 1995):339- . (v6,#3)

Kristensen, Thorkil, and Johan Peter Paludan, eds., The Earth's Fragile Ecosystems: Perspectives on Global Change. IFIAS Research Series, Vol. 4. Boulder, CO: Westview Press, 1988. \$ 30. (v1,#2)

Kristiansen, Roald E., "Arctic Ecotheology," Ecotheology No 9 (July 2000):8-26.

Kristiansen, Roald E., "Worldviews and Ultimate Values in Ecology: A Further Contribution to Ecological Anthropology," Ultimate Reality and Meaning 18(no. 3, 1995):176-191. The task is clear but complex: to develop worldviews and value systems that might improve our chances for ecological survival and a meaningful future development for all life on earth within a global biotic community. One step toward accomplishing this task might be to seek to rediscover the significance of the worldviews and the ultimate values of traditional cultures. We cannot copy or simply take over their worldviews, but we can learn from the ways they perceive their unity with all living beings, and we can learn from the ways they are able to adapt to present life conditions, and from the ways such cultures seek to transform the world so that the human presence will continue to exist for generations along with other forms of life in the biotic community. Kristiansen is at Finnmark College, Follums, Alta Norway.

Kritzinger, JJ 1991. The ecological crisis. Mission, development and ecology. Missionalia 19:1, 4-19. (Africa)

Kritzinger, JJ 1992. Mission and the liberation of creation: A critical dialogue with M.L. Daneel. Missionalia 20:2, 99-115.

Kritzinger, JJ 1992. Bewaring van die omgewing. In: De Villiers, DE & Kitching, D (red): Derdegeel vir môre. Die NG Kerk voor die uitdagings van 'n nuwe tyd, 46-52. Kaapstad: Tafelberg Uitgewers. (Africa)

Kritzinger, JJ 1994. Theology and the contemporary tension between development and conservation. In: Mouton, J & Lategan, BC (eds): The relevance of theology for the 1990's, 485-500. Pretoria: Human Sciences Research Council. (Africa)

Kritzinger, JNJ 1993. Becoming rooted in the soil: elements of a theology of land. In: Balia, D (ed): Perspectives in theology and mission from South Africa. New York: Mellen University Press, 176-185. (Africa)

Krkosek, Martin, Jennifer S. Ford, Alexandra Morton, Subhash Lele, Ransom A. Myers, and Mark E. Lewis. "Declining Wild Salmon Populations in Relation to Parasites from Farm Salmon." *Science* Vol. 318, no. 5857 (14 December 2007): 1772-75. Rather than benefitting wild fish, industrial farming of salmon may contribute to decline in ocean fisheries and ecosystems from parasites spreading from the farmed salmon into wild populations. Salmon farms can cause parasite outbreaks that erode the capacity of a coastal ecosystem to support wild salmon populations.

Krogman, N., "Review of: Peterson, Richard B. Conversations in the Rainforest: Culture, Values and the Environment in Central Africa," Society and Natural Resources 15(no.2, 2002): 196-98. (v.13,#2)

Kroll, Andrew J., and Barry, Dwight, "Integrating Conservation and Community in Colorado's San Juan Mountains," Wild Earth, Fall 1997, pp. 81-87. The possibilities of keeping the San Juan Mountains wild, including the restoration of big predators, such as wolves and grizzly bears, coupled with local ranching communities on the lower slopes and valleys, coupled with a growing recreational and ranchette trend. Kroll is an apprentice ecologist and Barry a conservation biologist focussing on the southwestern United States. (v9,#1)

Krolzik, Udo. Umweltkrise-Folge des Christentums? Reviewed in Environmental Ethics 3(1981):377-79.

Kromm, David E., White, Stephen E. "Local Groundwater Management Effectiveness in the Colorado and Kansas Ogallala Region," Natural Resources Journal 35(no.2, Sprg.1995):275- . (v6,#4)

Kronlid, David 2005, Miljöetik i praktiken -- åtta fall ur svensk miljö- och utvecklingshistoria (Practical Environmental Ethics: Eight Cases from Swedish Environment-and Development History), Studentlitteratur, Lund. In Swedish. Practical environmental ethics; a methodological approach that starts with specific cases. Practical environmental ethics is not an alternative to theoretical and applied environmental ethics, rather it is a complement for different descriptive, normative and meta ethical analyses. Catch-and-release fishing. A witch trail and execution of about 70 men and women in the mid-north of Sweden in 1675, and ecofeminism. Nuclear power plant waste storage in the community of Mar on the east coast north east of Stockholm. The first GMO labelled food in Sweden. The heavy rains on Tjernobyl and global environmental ethics. An eco-village near Uppsala as a sustainable neighbourhood. A fishing trip in the mid-north of Sweden. A trial between Swedish railway workers working with pesticides and the railway company. Contact: david.kronlid@ilu.uu.se

Kronlid, David, 2003, Ecofeminism and Environmental Ethics. An Analysis of Ecofeminist Ethical Theory, Uppsala Studies in Social Ethics 28, Elanders Gotab, Stockholm. A Ph.D. dissertation, Uppsala University.

Krueger, Frederick W., "Christian Ecology in the Soviet Union," Firmament, vol. 2, no. 4, Winter 1991. (v2,#1)

Krueger, Jonathan, "What's to Become of Trade in Hazardous Wastes?: The Basel Convention One Decade Later," Environment 41(no. 9, Nov 01 1999):10- . A controversial ban on the export of

hazardous wastes to developing countries highlights the need for more environmentally sound management of such wastes and less hazardous waste generation overall. (v10,#4)

Kruger, Jeff, "Historic Trees," American Spirit, May-June 2004, pages 27-43. Nice photos and text about historic U.S. trees, some remaining that were one large stately landmarks in early American history. Thirteen trees at Mount Vernon were planted by George Washington. (v. 15, # 3)

Krupar, J, Book Review: "Brian Czech and Paul R. Krausman, The Endangered Species Act: History, Conservation Biology and Public Policy," Environmental History 7(no.2, 2002):325- . (v.13, #3)

Krupnick, G. A. and Johnkress, W., "Hotspots and Ecoregions: a Test of Conservation Priorities Using Taxonomic Data," Biodiversity and Conservation 12(no. 11, 2003): 2237-2253.

Krupnick, Gary A., and W. John Kress, eds., *Plant Conservation: A Natural History Approach*. Chicago: University of Chicago Press, 2005. Issues affecting the conservation of botanical diversity, tropical and subtropical habitats, oceanic islands, differences in taxonomic groups, causes of plant extinctions, habitat fragmentation, exotic species, climate change, coral reefs. The editors are curators in the Department of Botany at the Smithsonian Institution's National Museum of Natural History.

Kruse, Kristian. "Risk Proponents Often Inappropriately Compare Voluntary Risks to Involuntary Risks." Pages 13-22 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Kruuk, Hans, Hunter and Hunted: The Relationship between Carnivores and People. Cambridge: Cambridge University Press, 2002. The complicated story of humans and carnivores: furs, medicine, man-eaters, sheep-killers, and their wild beauty. How we respond to them and why, and what difference this makes for conservation. Kruuk is at the Centre for Ecology and Hydrology, Banchory, UK. (v.13, #3)

Kubasek, Nancy, Silverman, Gary. Environmental Law, 2/E. Upper Saddle River, NJ: Prentice Hall Business Publishing, 1997. 292 pp. This second edition continues to introduce students to the system through which the U. S. as a nation attempts to preserve and protect the different aspects of the natural environment. The legal system and process in general, specific environmental laws, and the scientific background necessary to understand each law. Both authors are at Bowling Green State University. (v7,#4)

Kube, Hanno, "Private Property in Natural Resources and The Public Weal In German Law--Latent Similarities to the Public Trust Doctrine," Natural Resources Journal 37(No.4 1997):857-. (v.10,#2)

Kubota, Yasuhiro; Katsuda, Kenji; Kikuzawa, Kihachiro, "Secondary succession and effects of clear-logging on diversity in the subtropical forests on Okinawa Island, southern Japan," Biodiversity and Conservation 14(no.4, April 2005):879-901(23).

Kuchar, Catharine Brockman. "An Expansion in the Recognition of Rights: Where Will Nature Find Its Place?" Master of Theological Studies thesis, Emory University, Candler School of Theology, Atlanta, GA, 1996. The basic assumption of this thesis is underscored in the idea that the notion of "human rights" has been expanded over history, from the Magna Carta, the Bill of Rights, the Nineteenth Amendment to the U.S. Constitution, and so on. Working from Roderick Nash's work, *The Rights of Nature: A History of Environmental Ethics*, a next logical step in history might seem to be an expansion toward the environment. Unlike Nash and other advocates of the rights of nature, however, the argument is made that the fundamental understanding of "rights" is inappropriate when looking for a way to protect

the environment. Such talk cannot be transposed to the natural world. Three alternative, value-based approaches to placing "moral boundaries" around the environment are humanistic, naturalistic, and theocentric value. In humanistic values, based on relation to human welfare, the inherent values of nature become lost. Naturalistic value is guided by intrinsic value, but this approach fails to recognize the special role and enormous responsibility of humans in the equation. Theocentric value moves the measure of value from humankind and/or the natural world to God. The best hope for nature is found in the affirmation of its dignity and in an overdue understanding of our own special role as stewards on this planet. Thesis advisors were Jon Gunnemann and Richard Bondi. Address: Catharine Brockman Kuchar, 510 Valley Brook Crossing, Decatur, GA 30033. (v7, #3)

Kucher, M, "Review of: Sing C. Chew, World Ecological Degradation: Accumulation, Urbanization, and Deforestation 3000 B.C. A.D. 2000," Environmental History 7(no.4, 2002): 693-694.

Kwiatkowska, Teresa and Issa, Jorge (eds). Los Caminos De La Etica Ambiental II. Published by Plaza Y Valdes, Conacyt, Mexico, 2003. 270 pp. The second volume of the first Spanish language textbook in environmental ethics. Includes:

-Etica ambiental de la virtud - Philip Cafaro

-Suspirando por la naturaleza: Reflexiones sobre la etica ambiental de la virtud - T.Kwiatkowska.

-Walden - Henry David Thoreau.

-El mundo real que nos circunda - Rachel Carson

Thoreau, Leopold y Carson: Hacia una etica ambiental de la virtud - Philip Cafaro 45-61.

-Valores de la naturaleza - Stephan R. Kellert

-El giro pragmatico en etica ambiental - Jorge Issa

-Mas alla del valor intrinseco: El pragmatismo en la etica ambiental - Anthony Weston

-Por que no soy no-antropocentrista: Callicot y el fracaso - Bryan G. Norton

-Pragmatismo en etica ambiental: Democracia, pluralismo, administracion - Ben A. Minteer y Robert E. Manning

-Integridad: un proyecto o una ilusion? - Teresa Kwiatkowska y Ricardo Lopez Wilchis

-De Aldo Leopold al Proyecto de las Areas Silvestres: la etica de la integridad - Laura Westra-La integridad ecologica y los objetivos de Proyecto de Integridad Global - Laura Westra, Peter Miller, James R. Karr, William E. Rees y Robert E. Ulanowicz

-Integridad: un proyecto o una ilusion? - Teresa Kwiatkowska y Ricardo Lopez Wilchis

-De Aldo Leopold al Proyecto de las Areas Silvestres: la etica de la integridad - Laura Westra

-La integridad ecologica y los objetivos de Proyecto de Integridad Global - Laura Westra, Peter Miller, James R. Karr, William E. Rees y Robert E. Ulanowicz

-Restauracion ecologica: limitaciones academicas y tecnicas - Teresa Kwiatkowska y Ricardo Lopez Wilchis

-Falsificando la naturaleza - Robert Elliot

-La gran mentira: la restauracion humana de la naturaleza - Eric M. Katz

-Restauracion ecologica y la cultura de la naturaleza: una perspectiva pragmatica - Andrew Light

Kuhn, Scott, "Regulation of Pollutants: Federal, State, and Local," Ecology Law Quarterly 25(No.4, 1999):647-. Expanding public participation is essential to environmental justice and the democratic decisionmaking process. (v.10,#2)

Kukuev, Yuri A., Krankina, Olga N., Harmon, Mark E. "The Forest Inventory System in Russia: A Wealth of Data for Western Researchers," Journal of Forestry 95(no.9, 1997):15. (v8,#3)

Kula, Erhun, Review of Spash, Clive, Economics of Natural Resources and the Environment. Environmental Values 3(1994):86-87. (EV)

Kultgen, John. Review of Environmental Ethics for Engineers. By Alastair S. Gunn and P. Aarne

Vesilind. Environmental Ethics 10(1988):177-79.

Kultgen, John. "Saving You for Real People." Environmental Ethics 4(1982):59-67. I criticize John Tallmadge's attempt to derive an environmental ethic from Buber's suggestion that we can enter into "I-Thou" relations with nature. "I-Thou" relations flourish only with beings who enter into dialogue with us, viz. human beings, and we can value other natural kinds without anthropomorphizing them. Kultgen is in the department of philosophy, University of Missouri, Columbus, MO. (EE)

Kumagai, Y., Carroll, M. S. and Cohn, P., "Coping with Interface Wildfire as a Human Event: Lessons from the Disaster/Hazards Literature," Journal of Forestry 102(no. 6, 2004): 28-35(5). (v.14, #4)

Kumagai, Yoshitaka; Carroll, Matthew S; Cohn, Patricia, "Coping with Interface Wildfire as a Human Event: Lessons from the Disaster/Hazards Literature", Journal of Forestry 102(no.6, September 2004):28-32(5).

Kumar, Ramesh C. "On Optimal Capacity Expansion for Domestic Processing of an Exhaustible, Natural Resource," Journal of Environmental Economics and Management 32(1997):154.

Kummer, Katharina. Transboundary Movements of Hazardous Wastes at the Interface of Environment and Trade. Geneva: United Nations Environmental Program - Environment and Trade, # 7, 1994. 93 pp. Topics covered include the international transfer and regulation of the transfer of hazardous wastes; environmentally sound management of hazardous wastes and sustainable industrial activity; and reconciling environmental and economic aims in the context of hazardous waste management. (v8,#2)

Kung (Küng), Hans, and Schmidt, Helmut, eds., A Global Ethic and Global Responsibilities: Two Declarations. London: SCM Press, 1998. 1998 is the fiftieth anniversary of the UN Universal Declaration of Human Rights, here reprinted, but the authors contend that this needs to be supplemented by the Universal Declaration of Human Responsibilities, here printed, with discussion. Küng, a Roman Catholic theologian, is president of the Global Ethic Foundation. Schmidt is a former Chancellor of the Federal Republic of Germany. (v.9,#3)

Kung, Hans, A Global Ethic for Global Politics and Economics. New York: Oxford University Press, 1998. 336 pages. Arguing against both an amoral realpolitik and an immoral resurgence of laissez faire economics, Küng defines a comprehensive ethic founded on the bedrock of mutual respect and humane treatment of all beings that would encompass the ecological, legal, technological, and social patterns that are reshaping civilization. If we are going to have a global economy, a global technology, a global media, Küng argues we must also have a global ethic to which all nations, and peoples of the most varied backgrounds and beliefs, can commit themselves. Küng is a well known Roman Catholic theologian. (v.9,#4)

Küng, Hans, Global Responsibility: In Search of a New World Ethic. Crossroad/Continuum, 1991. 180 pages, 1991. \$18.95. A famous Roman Catholic theologian makes a bold new proposal for planetary morality, on which rests, he claims, the fate of the Earth. (v2,#3)

Küng, Hans, ed., Yes to a Global Ethic: Voices from Religion and Politics. New York: Continuum, 1996. 320 pages. \$16.95. Leading world figures in politics, culture, and religion urging a new global awareness and a new ethical consensus. (v7,#2)

Küng, Hans. A Global Ethic for Global Politics and Economics. London: SCM Press, 1997. 352pp. £14.95. A vision of a better world order, and ways in which this vision might be put into practice in politics and economics. Global politics and economics need a basic ethical orientation that is binding on

all, and this is not so remote from reality that it will always remain a dream. (v8,#1)

Kunin, William, Gaston, Kevin, eds. The Biology of Rarity: Causes and Consequences of Rare-common Differences. Washington, D.C.: Smithsonian Institution Press, 1997. 296 pp. \$99.95. Documented patterns of differences in rare species in terms of their body size, dispersal, reproduction, etc. and the methodological difficulties plaguing their interpretation. The causes and consequences of rare-common differences and an analysis of the processes responsible for the creation and maintenance of interspecific differences more generally. (v8,#3)

Kunkel, H. O. & Thompson, Paul B., "Interest and Values in National Nutrition Policy in the United States", Journal of Agricultural Ethics 1(1988):241-246. This paper examines the case of nutrition policy in the United States, which has been both at the interface between agriculture and medicine and the object of serious discord concerned with the strength and validity of the scientific evidence and the responsibility for action. Our analysis suggests that the tension between libertarian and utilitarian social values of scientists is at least as important as disagreements relative to validity and strengths of the scientific evidence. Kunkel and Thompson are in animal science, philosophy, and agricultural economics at Texas A & M University, College Station.

Kuo, Frances E., and William C. Sullivan, "Environment and Crime in the Inner City: Does Vegetation Reduce Crime?" Environment and Behavior 33(no. 3, May 2001):343-367. Although vegetation has been positively linked to fear of crime and crime in a number of settings, recent findings in urban residential areas have hinted at a possible negative relationship. Residents living in "greener" surroundings report lower levels of fear, fewer incivilities, and less aggressive and violent behavior. This study uses police crime reports to examine the relationship between vegetation and crime in an inner city neighborhood. Crime rates for 98 apartment buildings with varying levels of nearby vegetation were compared. Results indicate that the greener a buildings surroundings were, the fewer crimes reported. This pattern held for both violent crimes and violent crimes. The authors are at the Human Research Laboratory, University of Illinois, Urbana-Champaign. For further articles on the same and related topics:
<https://webs.aces.uiuc.edu/herl/pubs.html>

Kuo, Frances E., and William C. Sullivan, "Aggression and Violence in the Inner City: Effects of the Environment via Mental Fatigue," Environment and Behavior 33(no. 4, July 2001):543-571. Investigates whether contact with nature mitigates mental fatigue, and reduces aggression and violent behavior. Compares 145 urban public housing residents with various levels of nearby nature (trees and grass). Residents living in relatively barren buildings reported more aggression and violence than did their counterparts in greener buildings.

Kupsala, Saara, Joan Dunayer, Speciesism, Environmental Values 15(2006):255-257.
Dunayer, Joan, Review of: Speciesism, Environmental Values 15(2006):255-257.

Kurien, C. T. "A Third World Perspective." In Faith and Science in an Unjust World: Report of the World Council of Churches' Conference on Faith, Science and the Future; Massachusetts Institute of Technology, Cambridge U.S.A., 12-24 July 1979, edited by Roger L. Shinn and Paul Abrecht, Vol. 1, 220-225. Geneva: World Council of Churches, 1980.

Kurien, John. "Resistance to Multinationals in Indian Waters," The Ecologist 25(no.2/3, Mar. 1995):115-. Attempts to open up India's fisheries to foreign industrial fishing fleets has met with fierce resistance from local fishers who have forced the government to think again; The historical background; the threat to fish stocks; resistance and change. (v6,#4)

Kurlantzick, J, "Taking Multinationals to Court: How the Alien Tort Act Promotes Human Rights," World Policy Journal 21(no.1, 2004):60-67. (v. 15, # 3)

Kursar, Thomas A., Catherina C. Caballero-George, Todd L. Capson, Luis Cubilla-Rios, William H. Gerwick, Mahabir P. Gupta, Alicia Ibañez, Roger G. Linington, Kerry L. Mcphail, Eduardo Ortega-Barría, Luz I. Romero, Pablo N. Solis, and Phyllis D. Coley. "Securing Economic Benefits and Promoting Conservation through Bioprospecting." *BioScience* Vol. 56, no. 12 (2006): 1005-12. Bioprospecting has frequently been cited as a sustainable use of biodiversity. Nevertheless, the level of bioprospecting in biodiversity-rich tropical regions falls below its potential with the result that bioprospecting has produced only limited economic benefits. We present a bioprospecting program that, in addition to promoting drug discovery, provides economic benefits to and promotes conservation in Panama through the sustainable use of biodiversity. The program was initiated using insights from 20 years of nonapplied ecological research to enhance the likelihood of finding treatments for human disease. Samples are not sent abroad; rather, most of the research is carried out in Panamanian laboratories. Panama has received immediate benefits for the use of its biodiversity in the form of research funding derived from sources outside Panama, training for young Panamanian scientists, and enhanced laboratory infrastructure. Over the long term, discoveries derived from bioprospecting may help to establish research-based industries in Panama.

Kurttila, M; Pukkala, T, "Combining holding-level economic goals with spatial landscape-level goals in the planning of multiple ownership forestry," Landscape Ecology 18(no.5, 2003):529-541. (v.14, #4)

Kusel, Jonathan, Kocher, Susan, and Schuster, Ervin, "Effects of Displacement and Outsourcing on Woods Workers and their Families.," Society & Natural Resources 13 (No. 2, Mar 01 2000): 115- . (v.11,#2)

Kushner, Thomasine. "Interpretations of Life and Prohibitions against Killing." Environmental Ethics 3(1981):147-54. While Eastern and Western cultures agree that life is sacred, and that morality demands its protection, they differ sharply as to how the term life is to be interpreted, and therefore what prohibitions against killing should entail. I examine some of these conflicting perspectives, explore life as an ambiguous term, and suggest a reinterpretation of the concept, which permits moral rules against killing to be applied more rationally. Kushner is at the School of Medicine, University of Miami, Miami, FL. (EE)

Kutner, Laurie A, and Rafael Mares. Environmental Discrimination: An Annotated Bibliography. Council of Planning Librarians Bibliography Series, Issue # 306, 1995. \$24.00. Available from Justice Booksellers, Washington, DC, 20009. 202/332-5324. (v6,#1)

Kutsch, Werner L., et al., "Environmental Indication: A Field Test of an Ecosystem Approach to Quantify Biological Self-Organization," Ecosystems 4(2002):49-66. An ecosystem approach to examine the degree of biological self-organization at the ecosystem level. The study is rooted in the concept of ecosystem integrity, and influential idea at the interface of ecological and environmental debate that has acquired a number of different meanings. Among other interpretations it can be viewed as a guiding principle for sustainable land use that aims at long-term protection of ecological life-support systems. Effective use of any

interpretation of this concept requires a theoretically consistent and applicable set of indicators. The authors are with the Ökologiezentrum der Christian-Albrechts-Universität zu Kiel, Germany. Article in English. (v.13, #3)

Kutting, Gabriela, Gauci, Gotthard. "International Environmental Policy on Air Pollution from Ships", Environmental Politics 5(no.2, 1996):345. (v7,#4)

Kutty, Krishnan, "India: A Wildlands and Recreation Overview," International Journal of Wilderness 3(no. 1, 1997):6-7. India is home to about one third of the known life forms of the world. In colonial India, all forests, wildlife, and other natural resources were the property of the crown. Since independence, there has been meaningful involvement of rural people in the stewardship of wildland, natural, and reforested areas. There were 45 national parks in 1960; there are 450 today. The only areas similar to the American concept of wilderness are in the Himalayas, increasingly visited both by internationals and Indians, often with adverse environmental impact. Kutty is from Bangalore, and runs the National Outdoor Leadership School (NOLS) program in India. (v8,#2)

Kutz, Myer, ed. *Environmentally Conscious Transportation*. Hoboken, NJ: Wiley, 2008. Contents include: (1) "The Economic and Environmental Footprints of Transportation" by Lester B. Lave and Michael W. Griffin, (2) "Public Transportation and the Environment" by Michael D. Meyer, (3) "Transportation and Air Quality" by Mohan M. Venigalla, (4) "The Social Cost of Motor-Vehicle Use in the U.S." by Mark A. Dulucchi, (5) "Traffic Congestion Management" by Nagui M. Rouphail, (6) "Electric and Hybrid Vehicle Design and Performance" by Andrew Burke, (7) "Hydraulic Hybrid Vehicles" by Amin M. Motlagh, Mohammad Abuhaiba, Mohammad H. Elahinia, and Walter Olson, (8) "Biofuels for Transportation" by Aaron Smith, Cesar Granda, and Mark Holtzapple, (9) "Life Cycle Assessment as a Tool for Sustainable Transportation Infrastructure" by Gerardo W. Flintsch, (10) "Pavement and Bridge Management and Maintenance" by Sue McNeil, and (11) "Impacts of the Aviation Sector on the Environment" by Victoria Williams.

Kvakkestad, Valborg, Frøydis Gillund, Kamilla Anette Kjølberg and Arild Vatn, "Scientists' Perspectives on the Deliberate Release of GM Crops," *Environmental Values* 16(2007): 79-104. In this paper we analyse scientists' perspectives on the release of genetically modified (GM) crops into the environment, and the relationship between their perspectives and the context that they work within, e.g. their place of employment (university or industry), funding of their research (public or industry) and their disciplinary background (ecology, molecular biology or conventional plant breeding). We employed Q-methodology to examine these issues. Two distinct factors were identified by interviewing 62 scientists. These two factors included 92 per cent of the sample. Scientists in factor 1 had a moderately negative attitude to GM crops and emphasised the uncertainty and ignorance involved, while scientists in factor 2 had a positive attitude to GM crops and emphasised that GM crops are useful and do not represent any unique risks compared to conventional crops. Funding had a significant effect on the perspective held by the scientists in this study. No ecologists were associated with factor 2, while all the scientists employed in the GM-industry were associated with this factor. The strong effects of training and funding might justify certain institutional changes concerning how we organise science and how we make public decisions when new technologies are to be evaluated. Policy makers should encourage more interdisciplinary training and research and they should make sure that representatives of different disciplines are involved in public decisions on new technologies. The authors are at the Norwegian University of Life Sciences, Ås, Norway.

Kvaloy, Sigmund. "Norway Vs. the EU: 38 Years of Beating the Odds." The Ecologist 29(no. 3, May

1999):206- . (v.11,#1)

Kverndokk, Snorre. "Tradeable CO2 Emission Permits: Initial Distribution as a Justice Problem." Environmental Values 4(1995):129-148. One characteristic of tradeable emission permits is that efficiency and justice considerations can be separated. While Pareto optimality is an accepted efficiency principle, there is not a consensus on a 'best' equity principle. In this article, conventional justice principles are used to evaluate alternative allocation rules for tradeable CO2 permits, and a distribution proportional to population is recommended. Arguments against the population rule are discussed, especially those pertaining to political feasibility. While justice and political feasibility may indeed contrast, it still may be possible to emphasise the population rule in the future. KEYWORDS: Global warming, tradeable emission permits, justice principles, political, feasibility. Kverndokk is in statistics research, Oslo. (EV)

Kwame, Safo, ed., Readings in African Philosophy: An Akan Collection. Lanham, MD: University Press of America, 1995. (v6,#3)

KwaZulu Conservation Trust, "An African Dilemma: Conservation Must Be Balanced by Human Needs," Financial Mail (South Africa), November 23, 1990, pp. 57-75. A sensitive study of the tradeoffs between wildlife conservation and the needs of the poor, largely blacks, in South Africa. Focuses on KwaZulu, the land of the Zulu, a self-governing yet non-independent state made up of fragmented chunks of the province of Natal, carved out by the vagaries of colonial and subsequent apartheid politics. This is also a region of spectacular wildlife, with some of the principal designated conservation areas in South Africa. The blacks, although often on their own original lands, have been marginalized from white society, have seriously overpopulated, and do not always make intelligent use of their own lands (for example their large numbers of cows used as status symbols). Many examples are given of how blacks can derive income and sustainable harvest from reserved lands, with continuing populations of wildlife. In this region, more than elsewhere in South Africa, blacks have been incorporated into the professional personnel of wildlife management. A good contact on these matters is Wayne Elliott, P. O. Box 145, Melmoth 3835, South Africa, who is a white South African employed as a professional wildlife manager by the black KwaZulu government. (v2,#1)

Kwiatkowska-Szatscheider, Teresa. "From the Mexican Chiapas Crisis: A Different Perspective for Environmental Ethics." Environmental Ethics 19(1997):267-278. The social unrest in Chiapas, a southern Mexican state, revealed the complexity of cultural and natural issues behind the idealized Western version of indigenous ecological ethics and its apparently universal perspective. In accordance with the conventional interpretation of traditional native beliefs, they are often pictured as alternative perspectives arising from challenges to the scientific worldview. In this paper, I point toward a more comprehensive account of human-environmental relation rooted in the particular type of social and natural conditions. I also discuss changes of place, changes of identity related to changes of place, and respective changes in modes of environmental sustainability. I conclude that modernization endangers two fundamental ethical insights: "openness" to the environment and respect for nonhuman living beings. Kwiatkowska-Szatscheider is in philosophy at the Universidad Autonoma Metropolitana-Iztapalapa in Mexico. (EE)

Kwiatkowska, Teresa, and Wilchis, Ricardo López, eds. Ingeniería Genética y Ambiental (Genetic and Environmental Engineering: Philosophical and Social Problems of Biotechnology) Plaza y Valdez, Mexico 2000. This is a collection that takes up some of the challenges of recent biotechnology development regarding human being and the environment. Kwiatkowska teaches philosophy at the Universidad Autonoma Metropolitana-Iztapalapa, Mexico.

I. El reto de la ingeniería genética (The challenge of genetic engineering -Francisco Pinon, "Las incógnitas del hombre y los sueños y recreaciones del espíritu científico: una reflexión filosófica (The

unknown of human being and the dreams and recreations of the spirit of science: a philosophical reflection)"

-Daryl Koehn, "Etica de los bionegocios, de la tecnologia y de la ingenieria genetica (The ethics of biobusiness, technology and genetic engineering)"

-Camilo Jose Cela Conde, "Patente de genes: ¿de que hablamos cuando hablamos de patentar algo? (Patenting genes: what do we talk about when we talk about patenting something?)"

-Rodolfo Vazquez, "Justificacion liberal de la clonacion (Liberal justificacion of clonning)"

-Celso Vargas, "Organismos geneticamente modificados: la perspectiva etica (Genetically modified organisms: an ethical perspective)"

-Gustavo Viniegra Gonzalez, "La bioetica y la biotecnologia (Bioethics and biotechnology)"

-Jorge Martinez Contreras, "Los retos eticos de la ingenieria genetica (The ethical challenges of genetic engineering)"

-Florencia Luna, "Desafios eticos en los ensayos clinicos en paises en desarrollo (Ethical problems in clinical tests in developing countries)"

II. Conservacion y restauracion edologicas (Conservation and Restoration Ecological)

-Francisco Pedroche, "Biodiversidad. Divino tesoro! (Biodiversity. Divine treasure!"

-Teresa Kwiatkowska, Ricardo Lopez Wilchis, "Crear o recrear: algunas reflexiones en torno a la restauracion ecologica (Create or recreate: some thoughts on ecological restoration)"

-Ricardo Rossi, Francisco Messardo, "Implicaciones ecologicas y sociales de la bioingenieria: un analisis desde sur de Latinoamerica (Social and ecologicas implications of bioengineering: an analysis from the south of Latin America)"

-Andrew Light, "Restauracion ecologica y la reproduccion del arte (Ecological restoration and art reproduction)"

-Sven Arntzen, "Haciendole bien a la naturaleza? Ecofilosofia y la etica de la restauracion ecologica (Doing good to nature? Eco-philosophy and the ethics of ecological restoration)"

-Baird Callicott, "Normas con sustento cientifico para la restauracion ecologica (Scientific norms for ecological restoration)"

-Witold Jacorzynski, Desde preservacionismo hasta la revolucion verde y la ecologia profunda (From preservation to green revolution and deep ecology) (v.11,#2, expanded)

Kwiatkowska, Teresa, and Issa, Jorge, eds., Los caminos de la ética ambiental (The ways of environmental ethics). Mexico City: Plaza y Valdez, S.A. de C.V., 1998. ISBN 968-856-587-3. The first anthology in environmental ethics in Spanish. Contains:

Prefacio (Introduction) by T. Kwiatkowska & Jorge Issa

Part One: Philosophy and the conservation of nature

1. Metaphysical approach (Enfoque metafisico)

Introduction by J. Issa

Arne Naess: Deep Ecology

2. Aesthetic approach (Las razones esteticas)

Introduction by E. Hargrove & T. Kwiatkowska

Eugene Hargrove. Ontological Argument

3. Ecological Approach (Un alegato ecologico)

Introduction by T. Kwiatkowska

Aldo Leopold, The Land Ethic

4. Ethics & nature (Etica y naturaleza)

Introduction by Ricardo Rossi

J. Baird Callicott, In Search of Environmental Ethics

Part Two: Environmental ethics proposals (Aproximaciones a la etica ambiental)

1. Traditional humanism (Vindicacion del humanismo tradicional)

Introduction by T. Kwiatkowska

John Passmore, Man's Responsibility for Nature, chapter 1.

2. Animal liberation (En defensa de los animales)

Introduction by Alejandro Herrera

Peter Singer, *The Value of Life*

Tom Regan, *Animal Rights*

3. Biocentrism (Un enfoque biocentrico)

Introduction by Jorge Issa

Paul Taylor, *Respect for Nature*

4. Toward ecosystem ethics (Hacia una etica para el ecosistema)

Introduction by Jorge Issa

Holmes Rolston III, *Environmental Ethics, Values in and Duties to the Natural World.*

Kwiatkowska and Issa both teach philosophy at the Universidad Autonoma Metropolitana-Iztapalapa, Mexico City. (v9,#1)

Kwiatkowska, Teresa, and Wilchis, Ricardo Lopez, "Critical Reflections on the 'Ethics of Integrity' (Reflexiones criticas sobre la 'etica de la integridad') Contactos no.27, May-June 1998. The article revises the use of some ecological concepts like ecosystem and biodiversity within the ethical environment. It deals as well with the concept of nature preservation with little or no human influence. The modern understanding of environmental conservation implies the management of natural resources defined as a design of ecosystems for the mutual benefit of humans and nature. The integrated approach that includes human society and natural systems permits the attainment of social goals and evolutionary potential of natural ecosystems. (v.9,#3)

Kwiatkowska, Teresa, and Ricardo Lopez Wilchis, "Etica ambiental e ingenieria genetica (Genetic Engineering and Environmental Ethics," Ludus Vitalis, vol. IX, 2002, no. 161-17. Web page: www.ludusvitalis.mx. Both authors are in the Philosophy Department, Universidad Autonoma Metropolitana-Iztapalapa, Mexico. (v.13,#2)

Kwiatkowska, Teresa, ed. Humanismo y naturaleza (Humanism and Nature), Plaza y Valdez, UAM-I, Mexico, 1999, 232 pp, ISBN: 968-856-672-1. Contains the following:

--Francisco Pinon G., "Los origenes de la eticidad. Hombre, Naturaleza y universo en la filosofia griega. (The origins of the ethicity. Human being, Nature and the Universe in Greek philosophy)"

--Blanca Garcia M., "Un bestiario de Indias: los grabados de Prodigios (The Bestiary of Indies: the pictures of Prodigies)"

--Teresa Kwiatkowska, "Nueva armonia: cultura y naturaleza en la prosa de F. Schiller (New Harmony: culture and nature in the prose of F. Schiller)"

--Leonardo Tyrtania, "Ecologia de la mente (Ecology of mind)"

--Jorge Martinez C., "Ecologia y evolucion (Ecology and Evolution)"

--Miguel Angel Sobrino, "Ecologia y bioetica (Ecology and Bioethics)"

--Juan Maria Parent J., "Defensa del ambiente: algunas referencias eticas (Defending the environment: some ethical reflexions)"

--Jorge Issa, "Razon de ser de la etica ambiental, (The reason to be of nvironmental ethics)" --Teresa Kwiatkowska, Jorge Issa, "Etica ambiental, ecologia y naturaleza (Environmetal ethics, ecology and nature)"

--Ricardo Lopez Wilchis, "Pasado, presente y futuro de la etica ambiental (Past, present and future of the environmental ethics)" (v.10,#1)

Kwik, Jessica, "Gardens Overhead," Alternatives 26 (No. 3, 2000 Summer): 16- . Rooftop culture sprouts in North American cities. (v.11,#4)

Kwok, Pui-Lan, Christology for an Ecological Age. New York: Cassell/Continuum, 1999. 170 pages. \$ 20.00. Reinterpreting Christology from a postcolonial, multifait, and ecofeminist perspective, the

challenging issues are anthropocentrism, Christian imperialism, and the myth of Christian uniqueness. Pui-Lan offers a constructive presentation of three approaches for proclaiming Christ for an ecological age: organic models of Christ, Jesus as the wisdom of God, and Jesus as the epiphany of God. Kwok is a Chinese Christian. (v.9,#4)

Kysar, DA, "Some realism about environmental skepticism: The Implications of Bjorn Lomborg's The Skeptical Environmentalist for Environmental Law and Policy," Ecology Law Quarterly 30(no.2, 2003):223-278. (v.14, #4)

Laarman, Jan, "2050: A Scenario for People and Forests," Journal Of Forestry 98 (No. 2, 2000, Feb 01): 4- . Two retired foresters in the year 2050 recall how events and trends during the preceding 50 years transformed forestry and its practitioners. (v.11,#2)

LaBastille, Anne. "Too Late for the Giant Grebe", Wild Earth 6(no.3, 1996):63. (v7,#4)

LaBelle, Judith M. "The Idea of the Countryside," Environments 24(no.3, 1997):1. (v8,#3)

LaBossiere, Michael, "Body and Environment." Environmental Ethics 16(1994):411-418. My thesis is the biconditional that it is morally wrong to pollute human bodies if and only if it is morally wrong to pollute the environment. The argument for each conditional is by analogy: pollution of one type is analogous to pollution of the other type in morally relevant respects. I argue that the truth of the biconditional makes it difficult to maintain that it is morally wrong to pollute human bodies without maintaining that it is morally wrong to pollute the environment and conversely. LaBossiere is with the Dept. of Visual Arts, Humanities, and Theatre, Florida Agricultural and Mechanical University, Tallahassee. (EE)

Lacey, Henry B. "New Approach or Business as Usual: Protection of Aquatic Ecosystems Under the Clinton Administration's Westside Forests Plan." Journal of Environmental Law and Litigation 10, no.2 (1995): 309. (v7, #3)

Lacey, Hugh, Values and Objectivity in Science: The Current Controversy about Transgenic Crops. Lanham, MD: Rowman and Littlefield, 2005. Transgenic agriculture as a case study in social values and their role in science.

Lacey, Mark, "President's Decree Protects Thousands of Acres in West," New York Times (1/12/00). Clinton Creates More New National Monuments. In January, U.S. President Bill Clinton designated 1,500 square miles along the North rim of the Grand Canyon the Grand Canyon Parashant National Monument. Although opposed by Arizona Governor Jane Hull and the state's seven Republican congressmen, 80 percent of state's residents supported his action. In April, the president created a new 335,000 acre national monument in California to protect remaining old-growth Sequoia forests. Clinton has now set aside more land as national monuments than any president except for Jimmy Carter (who designated vast expanses of lands in Alaska as monuments). (v.11,#1)

Lach, D; List, P; Steel, B; Shindler, B, "Advocacy and Credibility of Ecological Scientists in Resource Decisionmaking: A Regional Study", Bioscience 53(no.2, 2003):170-178.

LaChance, Albert J. and John Carroll, eds. Embracing Earth: Catholic Approaches to Ecology. Maryknoll, NY: Orbis Books, 1994. 280 pages. \$18.95 paper. Contemporary Catholic writers explore that Christian view of nature, the human place in it, and the need to respond to the planetary crisis. (v6,#1)

Lachapelle, P. R., McCool, S. F. and Patterson, M. E., "Barriers To Effective Natural Resource Planning

in a 'Messy' World," Society and Natural Resources 16(no. 6, 2003): 473-490.

Lachapelle, Paul; McCool, Stephen F., "Exploring the Concept of "Ownership" in Natural Resource Planning," Society and Natural Resources 18(no.3, March 2005):279-285(7).

LaChapelle, Delores, Sacred Land, Sacred Sex: Rapture of the Deep. Durango, CO: Kivaki Press, 1992. 384 pages. 2nd edition, the first was published in 1988. Said to be the first and only complete manual on experiential deep ecology, written by a woman who has advocated it for 30 years. (v4,#1) Reviewed in Environmental Ethics 15(1993):275-78.

LaChapelle, Delores, Deep Powder--40 Years of Ecstatic Skiing, Avalanches, and Earth Wisdom. Durango, CO: Kivaki Press, 1993. \$ 6.95. Deep ecology mixed with deep powder skiing. When skiing, nature is in control, guiding the visitor along the most thrilling courses. Our sense of self, an individual, separate from all others and the earth, prevents us from experiencing and enjoying our senses of the moment. Freedom is finding one's place in nature. LaChapelle is the other of several previous books, including Earth Wisdom. (v4,#3)

LaChapelle, Dolores, Sacred Land, Sacred Sex, Rapture of the Deep: Concerning Deep Ecology---and Celebrating Life. Silverton: Finn Hill Arts, 1988. Pp. 383. A far-ranging work of deep ecology that analyzes the "uprooting" of human life and the strategies necessary for recovering our past in an essential interconnection with the land and with nature. This interdisciplinary work defies an easy academic classification; it shows us the connections between all major fields of study and life in the natural and human community. (Katz, Bibl # 2)

LaChapelle, Dolores. Review of In the Absence of the Sacred. By Jerry Mander. Environmental Ethics 14(1992):373-76.

Lachman, Steven Frederic. Review of Aidan Davison. Technology and the Contested Meanings of Sustainability. Environmental Ethics 25(2003):329-332. (EE)

Lackey, R.T. "Science, Scientists, and Policy Advocacy." *Conservation Biology* Vol. 21, no. 1 (2007): 12-17. Terms such as "degradation," "good," and "healthy" convey values. There is no objective definition of ecosystem health, so any chosen baseline reveals preferences and worldview. These will covertly suggest policy preferences. But advocating policy should be avoided. Stated conflicts of interest will reveal these hidden agendas.

Lackey, Robert T., "Seven Pillars of Ecosystem Management," The Environmental Professional 17, no. 4 (1995): (in press). The seven pillars are: 1) the continuing evolution of social values and priorities; 2) place-based, necessitating clearly defined boundaries; 3) achievement of social benefits; 4) ecosystemic stress factors; 5) biodiversity, which may or may not be a factor; 6) "sustainability," if used as a concept in management, needs to be clearly defined; and 7) scientific information is important but only one element in decision-making, which is fundamentally one of public or private choice. (v6,#2)

Lackey, Robert T., "Ecosystem Health, Biological Diversity, and Sustainable Development: Research That Makes a Difference," Renewable Resources Journal (1995) (in press). Addressing important policy problems and being reasonably likely to be achievable scientifically are the criteria for selecting research. Research especially needed today is: 1) credible procedures to determine ecosystem health, 2) scientific bases for legislation regarding biodiversity and endangered species, and 3) a clear understanding regarding the interrelationship of ecosystem stability, biodiversity, and such external stress as habitat alteration (including development) and harvesting biotic resources. (v6,#2)

Lackey, Robert T., "Ecological Risk Assessment," Fisheries 19, no. 9 (September 1994): 14-18. Risk assessment is used by the scientific elite as a tool to impose their values on the public in the guise of scientific objectivity. The affluent drive the decision-making process of managing and protecting ecological resources. Ecosystem "health" is a strictly anthropocentric notion, and risk assessment will likely be perceived as a form of ecological triage. Lackey is deputy director of the EPA's Environmental Research Laboratory in Corvallis, OR, USA, and holds a courtesy professorship in wildlife and fisheries at Oregon State University. This paper, nor the ones that follow, do not reflect EPA policy positions. (v6,#2)

Lackey, Robert T. "Science, Scientists, and Policy Advocacy." *Conservation Biology* Vol. 21, no. 1 (2007): 12-17. "To scientists, I say get involved, but play the appropriate role. If you choose to advocate your personal policy preferences, make it clear to everyone involved that you have stepped out of a scientific role and into the role of policy advocate."

Lackey, RT, "Values, Policy, and Ecosystem Health," Bioscience 51(no. 6, 2001):437-444. (v.13,#1)

Lacy, John C. "The Historic Origins of the U.S. Mining Laws and Proposals for Change," Natural Resources & Environment 10(no.1, Summer 1995):13- . (v6,#4)

Lacy, Mark. Review of Capitalism, Democracy and Ecology: Departing from Marx. By Timothy W. Luke. Environmental Ethics 22(2000):323-324.

Lacy, MJ, "Deconstructing Risk Society," Environmental Politics 11(no.4, 2002): 42-62.

Ladkin, Donna, "Does 'Restoration' Necessarily Imply the Domination of Nature?" Environmental Values 14(2005):203-219. 'Restoration' is a contested term holding important implications for public policy decisions in the areas of land development and use. A number of environmental philosophers including Eric Katz and Robert Elliott have argued against 'restoration', on the principle that human efforts can never restore natural landscapes to their pre-disrupted value, and that the assumption of our ability to do so implies 'domination'. This paper argues that restoration attempts should not be dismissed 'out of hand', and can be conducted outside of a 'dominator logic' provided four criteria are enacted: 1) humans see their role as co-creators working alongside nature, 2) the aim of restoration is seen to be increase of land health and bio-diversity 3) there is a commitment to learning from the land and 4) the land's own 'projects' (Plumwood) are taken into account. Ladkin is in the Centre for Leadership Studies, University of Exeter, UK. (EV)

LaDuke, Winona, "The Seventh Generation: Rethinking the Constitution," Wild Earth 9 (No. 4, Wint 1999): 21- . (v.11,#2)

LaFarge, T; Livengood, K; Hays, HE; Thayer, AJ, "Intensively Managed Forest Plantations," Journal of Forestry 103 (no. 4, June 2005): 161-162.

Laferriere, E, "Review of: Val Plumwood, Environmental Culture: The Ecological Crisis of Reason," Environmental Politics 11(no.4, 2002): 133-134.

Laferrière, Joseph E., "Humanism and the Environment," Religious Humanism 25 (no. 3, Summer, 1991):117-124. Humanists recognize that we are not alone on this planet; we must share the earth with our neighbors. Unlike Christianity, humanism accepts that this world is the only one we will ever know. Nature is everything. This being so, we must take care of the environment, for the present and for the future. Laferrière is professor and director of the herbarium at Washington State University, Pullman. (v3,#1)

Lafferty, Barbara A. Review of Donald A. Fuller, "Sustainable Marketing: Managerial-Ecological Issues", Organization and Environment, 15, (No. 4, 2002): 504-507. Lafferty is an assistant professor of marketing at the University of South Florida.

Lafferty, Mike, "Bugsicles," Polar Times, January 2005, p. 9. The tiny Antarctic midge, Belgica antarctica, spends 22 of its 24 month life cycle encased in ice and with most of its own interior frozen. And when the ice melts, it dries out and looks dead, black and wrinkled, something like a quarter inch raisin. Yet this is the continent's largest land animal. (Biologists count the penguin as a marine animal.) Small in size, this is a super-bug, because it can take almost anything that nature throws at it, super-cold, super-dry, super-salty water, or fresh water, and super acidic to super alkaline conditions. The midge exemplifies life in extremes. Story first appeared in the Columbus Dispatch, September 21, 2004.

Lafferty, William M., Meadowcroft, James, (eds). Democracy and the Environment. Review by Robyn Eckersley, Environmental Values 7:(1998):482.

Lafferty, William M. "The Politics of Sustainable Development: Global Norms for National Implementation", Environmental Politics 5(no.2, 1996):185. (v7,#4)

Lafferty, William M., Meadowcroft, James, eds. Democracy and the Environment: Problems and Prospects. Cheltenham, U.K. & Brookfield, U.S.: Edward Elgar, 1996. 276 pp. Contains:

--Lafferty, William M. and Meadowcroft, James, "Democracy and the Environment: Congruence and Conflict--Preliminary Reflections," pages 1-17.

--Paehlke, Robert, "Environmental Challenges to Democratic Practice," pages 18-38.

--Witherspoon, Sharon, "Democracy, the Environment and Public Opinion in Western Europe," pages 39-70.

--Janicke, Martin, "Democracy as a Condition for Environmental Policy Success: The Importance of Non-Institutional Factors," pages 71-85.

--Taylor, Bob Pepperman, "Democracy and Environmental Ethics," pages 86-107.

--Dryzek, John S., "Strategies of Ecological Democratization," pages 108-123.

--Dobson, Andrew, "Representative Democracy and the Environment," pages 124-139.

--Oriordan (O'Riordan), Timothy, "Democracy and the Sustainability Transition," pages 140-156.

--Achterberg, Wouter, "Sustainability and Associative Democracy," pages 157-174.

--Glasbergen, Pieter, "Learning to Manage the Environment," pages 175-193.

--Fiorino, Daniel J., "Environmental Policy and the Participation Gap," pages 194-212.

--Baker, Susan, "Environmental Policy in the European Union: Institutional Dilemmas and Democratic Practice," pages 213-233.

--Bichsel, Anne, "NGOs as Agents of Public Accountability and Democratization in Intergovernmental Forums" pages 234-255.

--Lafferty, William M. and Meadowcroft, James, "Democracy and the Environment: Prospects for Greater Congruence," pages 256-272.

Lafferty is in political science, University of Oslo. Meadowcroft is at the Oxford Centre for Environment, Ethics and Society. (v.10,#3)

Lafferty, WM; Hovden, E, "Environmental Policy Integration: Towards an Analytical Framework," Environmental Politics 12(no.3, 2003):1-22. (v.14, #4)

LaFollette (LaFollette), Hugh, Niall Shanks. Brute Science: Dilemmas of Animal Experimentation. Review by Keith Burgess-Jackson, Ethics and the Environment 4(1999):115-122. (E&E)

LaFollette, H. and Shanks, N., Brute Science: The Dilemmas of Animal Experimentation. London:

Routledge, 1996.

LaFollette, Hugh, ed., Ethics in Practice: An Anthology. Cambridge, MA: Blackwell Publishers, 1997. 703 pages. Large anthology, many contributions written especially for this anthology; others previously published are revised with general readers in mind. Sections on euthanasia, abortion, family and friends, sexuality, virtues, drugs, free speech, sexual and racial discrimination, affirmative action, punishment, economic justice. One section is on animals: Peter Singer, "All Animals are Equal"; Michael Allen Fox, "The Moral Community"; R. G. Frey, "Moral Standing, the Value of Lives, and Speciesism"; Tom Regan, "The Case for Animal Rights"; and John P. Gluck, "Learning to See the Animals Again." One section is on "World Hunger and International Justice," and includes Holmes Rolston, III, "Feeding People versus Saving Nature?". The final section is on environment: Aldo Leopold, "The Land Ethic"; James P. Sterba, "Reconciling Anthropocentric and Nonanthropocentric Environmental Ethics"; Karen P. Warren, "The Power and the Promise of Ecological Feminism"; J. Baird Callicott, "Animal Liberation: A Triangular Affair." LaFollette teaches philosophy at East Tennessee State University. (v7,#4)

LaFollette, Hugh, ed., The Oxford Handbook of Practical Ethics. New York: Oxford University Press, 2003. Contains:

-Frey, R. G., "Animals"

-Shrader-Frechette, Kristin, "Environmental Ethics."

LaFranchi (La Franchi), Howard. "Keeping 'Em Down on the Amazon." The Christian Science Monitor 89.83 (26 March 1997): 9.

LaFranchi, Howard. "Sprouting of Young Party May Yield Earth-Friendlier Mexico." The Christian Science Monitor 89 (11 July 1997): 1, 6. Green party wins its first ever seats in Congress. (v8,#2)

LaFranchi, Howard. "The Vast and Varied Beauty of Mexico's Chiapas." The Christian Science Monitor, vol. 88, 2 Oct. 1996, p. 12.

LaFranchi, Howard. "Tradition in Turmoil: Dutch Agriculture Evolves." The Christian Science Monitor, 6 July 1994, pp. 7, 14. Dutch farmers are among the world's most efficient. Tougher environmental rules are causing small farmers to quit. Only 4 percent of the population, farmers utilize two-thirds of the land and export \$15 billion of their \$21 billion production. (v5,#2)

LaFranchi, Howard. "Chilean Can't See The Native Forests For the Woodships." The Christian Science Monitor, vol. 89. 8 Jan. 1997, p. 6.

LaFranchi, Howard. "How Broccoli Might Stem Mexican Migration." The Christian Science Monitor, vol. 89, 21, Jan. 1997, pp. 1, 7.

LaFreniere, Gilbert F., "Rousseau and the European Roots of Environmentalism." Environmental History Review 14:4 (1990): 41-72. Discussion of Rousseau's influence on American environmentalism, primarily through Emerson and Thoreau, Wordsworth and Muir. (Katz, Bibl # 2)

LaFreniere, Gilbert F., "Rousseau and the European Roots of Environmentalism," Environmental History Review 14(no 4, Winter 1990):41-72. "Jean-Jacques Rousseau particularly deserves recognition by environmentalists for a complex view of man's relation to nature which greatly influenced the Romantic viewpoint." LaFreniere teaches environmental studies at Willamette University, Salem, Oregon. (v2,#1)

Lai, Karyn L. "Conceptual Foundations for Environmental Ethics: A Daoist Perspective." Environmental Ethics 25(2003):247-266. and plausible account of environmental holism. Dao refers to the totality of

particulars, including the relations that hold between them, and the respective roles and functions of each within the whole. De refers to the distinctiveness of each particular, realized meaningfully only within the context of its interdependence with others, and its situatedness within the whole. Together, dao and de provide support for an ethical holism that avoids sacrificing individuals for the sake of the whole. The integrity and stability of the whole are important not because the whole is an end-in-itself but because those conditions assist in preserving the well-being of the constituent parts. In other words, the ethical holism supported in the Daodejing does not present individuals and wholes in mutually exclusive terms, but sees them in symbiotic relation, allowing for events to be mutually beneficial, or mutually obstructive, to both. In addition, two other Daoist concepts, wuwei (non-action) and ziran (spontaneity), provide further support for this construction of holism. If the distinctiveness of particular individuals is valued, then unilateral or reductive norms which obliterate such individuality are inappropriate. In this regard, the methodology of wuwei allows for the idea of individuals developing spontaneously in relation to others. According to this view of holism, individuals manifest and realize their integrity in relation to others in the environmental context, achieving an outcome that is maximally co-possible within those limits, rather than one that is maximally beneficial only for particular individuals. (EE)

Lai Pinchao and Lin Hongxing. *Ecological Concerns and the Dialogue between Confucianism and Christianity*. Beijing: Religion Culture Press, 2006.

Laidler, Liz, and Laidler, Keith, China's Threatened Wildlife. London: Blandford, 1996. Distributed in U.S. by New York: Sterling Publishers. ISBN 0-7137-2372-6. (v.8,#4)

Laitos, Jan G. and Carr, Thomas A. "The Transformation on Public Lands." Ecology Law Quarterly 26(no. 2, 1999):140- . (v10,#4)

Lakoff, George, and Johnson, Mark, Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought. New York: Basic Books, 1999. (v.11,#1)

Lakoff, George, and Johnson, Mark, Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought. New York: Basic Books, 1999. (v10,#4)

Lal, R., Miller, F. P., & Logan, T. J., "Are Intensive Agricultural Practices Environmentally and Ethically Sound?", Journal of Agricultural Ethics 1(1988):193-210. Soil is fragile and nonrenewable but the most basic of natural resources. It has a capacity to tolerate continuous use but only with proper management. Improper soil management and indiscriminate use of chemicals have contributed to some severe global environmental issues. The policy and moral aspects of these issues are discussed. Lal, Miller, Logan are in agronomy at Ohio State University, Columbus.

Laland, Keven N., Brown, Culum, and Krause, Jens, "Learning in fishes: from three-second memory to culture," Fish and Fisheries 4 (2003):199-202. "Gone (or at least obsolete) is the image of fish as drudging and dim-witted pea-brains, driven largely by `instinct,' with what little behavioral flexibility they possess being severely hampered by an infamous `three-second memory'." "Now fish are regarded as steeped in social intelligence, pursuing Machiavellian strategies of manipulation, punishment and reconciliation, exhibiting stable cultural traditions, and co-operating to inspect predators and catch food." "Although it may seem extraordinary to those comfortably used to pre-judging animal intelligence on the basis of brain volume, in some cognitive domains, fishes can even be favourably compared to non-human primates." Laland is in biology, University of St. Andrews, Scotland. Brown is in biology at the University of Edinburgh. Krause is in biology at the University of Leeds, UK. In a study led by physiologist Lynne Sneddon, researchers found 58 receptors on the head of a trout that are sensitive to pain, despite the conclusions of previous studies that fish lacked pain receptors, or nociceptors. Forthcoming in Proceedings of the Royal Society. (v.14, #4)

LaLiberte, AS; Ripple, WJ, "Wildlife Encounters by Lewis and Clark: A Spatial Analysis of Interactions between Native Americans and Wildlife," Bioscience 53(no.10, 2003):994-1003. (v.14, #4)

LaMay, Craig L. and Everette E. Dennis, eds., Media and the Environment. Covelo, CA: Island Press, 1991. 220 pages. \$ 31.95 cloth, \$ 17.95 paper. Advocacy vs. objectivity in environmental reporting. Does "newsworthiness" distort environmental reporting? Do complex ecological, political, economic, and social issues have to be oversimplified for the media? Articles by journalists and others, including Jim Detjen, Philadelphia Inquirer reporter and president of the Society of Environmental Journalists. (v2,#3)

Lamb, David, Peter D. Erskine, and John A. Parrotta, "Restoration of Degraded Tropical Forest Landscapes," Science 320 (9 December 1005): 1628-1632. The current scale of deforestation in tropical regions underscores the urgent need for interventions to restore biodiversity, ecological functioning and the supply of goods and services previously used by rural poor communities. Traditional timber plantations have made only minor contributions to fulfilling most of these other objectives. New approaches to reforestation with great potential are now emerging. Lamb and Erskine are with the Rainforest Cooperative Research Center and School of Integrative Biology, University of Queensland, Brisbane, Australia.

Lamb, David. "Animal Rights and Liberation Movements." Environmental Ethics 4(1982):215-33. I examine Singer's analogy between human liberation movements and animal liberation movements. Two lines of criticism of animal liberation are rejected: (1) that animal liberation is not as serious as human liberation since humans have interests which override those of animals; (2) that the concept of animal liberation blurs distinctions between what is appropriate for humans and what is appropriate for animals. As an alternative I offer a distinction between reform movements and liberation movements, arguing that while Singer meets the criterion for the former, a higher degree of autonomy and communicative competence is necessary for the latter. In the final section, objections to the possibility of an autonomous animal liberation movement are met by rejecting assumptions concerning the illogicality of interspecies communication. Lamb is in the department of philosophy, University of Manchester, Manchester, England, UK. (EE)

Lamb, David. Review of Ethics and Animals. Edited by Harlan B. Miller and William H. Williams. Environmental Ethics 6(1984):373-76.

Lamb, Kara Lee, From Philosophy to Policy: Is There a Missing Link in Environmental Ethics?, M.A. thesis, Colorado State University, summer 1998. Environmental ethics is often thought to restrict permissible environmental activities by introducing various duties, responsibilities, and prohibitions with which environmental policy and the public must comply. Rather, environmental ethics can and ought enlighten policy by providing a more adequate philosophical grounding in value for legislation. The National Environmental Policy Act (NEPA), though it requires an Environmental Impact Statement, leaves deeper value questions untouched, and leaves agencies with conflicting goals often at cross purposes. Environmental ethics can clarify these value questions. Despite its many insights, however, environmental ethics itself contains conceptual conflicts which reduce its capacity effectively to link with environmental policy. Three proposals for making environmental ethics more effective are based on the work of Val Plumwood, Paul Taylor, and Holmes Rolston. Lamb has a position with the U. S. Bureau of Reclamation interpreting environmental policy to the public and overseeing the public participation process in evaluating that policy. (v9,#2)

Lamb, Kara L., "The Problem of Defining Nature First: A Philosophical Critique of Environmental Ethics," The Social Science Journal 33 (no. 4, 1996):475-486. Before we can decide about the proper

ways to conserve nature, we need an accurate idea of what nature is. Subjectivists vs. objectivists, anthropocentrists vs. biocentrists, conservationists vs. preservationists are at odds over what they value in nature because they perceive and conceive nature differently. Some suggestions for solutions, based on the work of Val Plumwood and Holmes Rolston, involving an analysis of how to pass from what nature is to what ought to be in nature. Lamb is a graduate student at Colorado State University. (v.7,#4)

Lambeck, Robert J. "Focal Species: A Multi-Species Umbrella for Nature Conservation," Conservation Biology 11(no.4, 1997):849. (v8,#3)

Lambert, Dean P. "Crop Diversity and Fallow Management in a Tropical Deciduous Forest Shifting Cultivation System," Human Ecology 24(1996): 427. (v8,#1)

Lambert, Richard J., "Rethinking Productivity: The Perspective of the Earth as the Primary Corporation," Population and Environment: A Journal of Interdisciplinary Studies 13(1992): 193-208. Ten guiding principles to guide an ecological consciousness, with each of these used to reinterpret the primary locus of productivity as Earth. Lambert is with Productivity Breakthrough, Inc., in Scarsdale, NY. (v3,#4)

Lambert, Richard. "The Earth: The Business of the Future--From EGO Energy to ECO Energy." Population and Environment 19, no. 1 (1997): 95-107. Two distinctions are offered that together provide a new form of reference for bonding the human and the Earth: (1) the difference between the emerging domain of ego energy and the yet to be discovered domain of eco energy; and (2) the difference between looking-at and seeing. These two sets of distinctions are then sounded, like echo chambers, against ten guiding ecological statements. The result is a "turn-around perspective": a different vision to be operationalized in individual, community, and business lives. Now seeing clearly, people can respond with eco energy worth of commitment to "the Earth: the Business of the Future." (v8,#3)

Lampmann, Jane. "Argentina Side Trips Open Door to Wonder and Adventure." Christian Science Monitor 89 (18 July 1997): 13. (v8,#3)

Lancaster, Carol, Aid to Africa: So Much to Do, So Little Done. Chicago: University of Chicago Press, 1999. 303 pages. Aid has rarely helped and has sometimes damaged the capacity of the Africans to govern their own affairs. In more than one African country, "the accountability of the government to its people ... gradually [was] replaced by accountability to its major donors." Aid has helped to destroy what fragile reciprocity may have existed between African states and their citizens. Agencies often misdiagnosed problems, had difficulty designing programs that addressed the local political environment, and failed to coordinate their efforts effectively. Lancaster is director of the Master of Science in Foreign Service Program at Georgetown University and was an administrator of USAID. (v.11,#1)

Land, Richard and Louis Moore, eds., The Earth Is the Lord's: Christians and the Environment. Nashville: Broadman Press, 1992. Essays from the Southern Baptist Christian Life Seminar (v5,#1)

Landay, Jonathan S. "Organic Farmers to Washington: Regulate Us." The Christian Science Monitor, vol. 89, 30 Dec. 1996, p. 3.

Landay, Jonathan S. "Explosive Debate Over New Ways to Test US Nuclear Stockpile." The Christian Science Monitor, vol. 89, 15 January 1997, pp. 1-9.

Landes, George. "Creation and Liberation." In Creation in the Old Testament edited by Bernhard W. Anderson, 135-151. Philadelphia: Fortress Press, 1984. (Reprinted from Union Seminary Quarterly Review 33 (Winter 1978):79-89.)

Landman, Willem A. "Moral Standing, Value and Environmental Ethics." South African Journal of

Philosophy 14 (# 1, February 1995): 9-19. How should an environmental ethic be grounded? An answer involves a commitment to a criterion of moral standing and its application, and a wider commitment to a taxonomy of the senses of "value" that inform our relationship with nature. I begin by mapping the different environmental philosophies in order to contextualize my argument. After an analysis of the concept of moral standing I analyze why being a person is a sufficient condition of moral standing. I defend sentience as a condition of moral standing that is not only sufficient but also necessary, and I set out the taxonomy of the senses of "value" that informs a sentience-based environmental ethics. I reject life as a criterion of moral standing and the value commitments of a life-based environmental ethic. I end with some remarks that a sentience-based environmental ethic might be inadequate if we should lose our aesthetic and spiritual sense. Landman is in philosophy at the University of the Western Cape, Private Bag X17, Bellville 7535, Republic of South Africa. (v6,#1)

Landres, Peter, Shannon Meyer, and Matthews, Sue, "The Wilderness Act and Fish Stocking: An Overview of Legislation, Judicial Interpretation, and Agency Implementation," Ecosystems 4(2002)287-295. Many high-elevation lakes in designated wilderness areas are stocked with native and non-native fish to provide recreational opportunities, sometimes in waters that originally had no fish. There is a long-standing controversy about the extent to which this compromises other wilderness values. Landres and Meyer are with the Aldo Leopold Wilderness Research Institute, Rocky Mountain Research Station, USDA Forest Service, Missoula, MT); Matthews is with the Arthur Carhart National Wilderness Training Center, US Fish and Wildlife Service, Missoula, MT. This issue of Ecosystems is a theme issue on fish stocking impacts to mountain lake ecosystems.

Landscape and Urban Planning invites both subscriptions and papers. This is an international journal of landscape ecology, landscape planning, and landscape design. They ask for papers in environmental psychology, conservation biology, and ethical and policy issues posed by nature and human use of land. The editor-in-chief is J. E. Rodiek, College of Architecture, Texas A & M University, College Station, TX 77843-3137. The publisher is Elsevier Science. (v8,#1)

Landweber, Laura, and Dobson, Andrew P., eds., Genetics and the Extinction of Species: DNA and the Conservation of Biodiversity. Princeton, NJ: Princeton University Press, 1999. 192 pages. \$ 20, paper. Contributors analyze why the burgeoning field of conservation biology must rely on the insights of population geneticists. New insights into how populations have evolved in response to past selection pressures provides a broad new understanding of the genetic structure of natural populations. Ways to measure biodiversity. Benefits and drawbacks of captive breeding. The editors are in biology at Princeton University. (v.11,#1)

Landweber, Laura, and Dobson, Andrew P., eds., Genetics and the Extinction of Species: DNA and the Conservation of Biodiversity. Princeton, NJ: Princeton University Press, 1999. 192 pages. \$ 20, paper. Contributors analyze why the burgeoning field of conservation biology must rely on the insights of population geneticists. New insights into how populations have evolved in response to past selection pressures provides a broad new understanding of the genetic structure of natural populations. Ways to measure biodiversity. Benefits and drawbacks of captive breeding. The editors are in biology at Princeton University. (v10,#4)

Lane, Belden, The Solace of Fierce Landscapes: Exploring Desert and Mountain Spirituality. New York: Oxford University Press, 1998. 282 pages. Especially the desert wilderness. The ways the wilderness reveals, in part paradoxically by concealing, the love of a God who seems most silent, most absent in the waste places. 1. Connecting spirituality and the environment. Purgation: Emptiness in a Geography of Abandonment. Mythic Landscape: Grace and the Grotesque / Reflection on a Spirituality of Brokenness. 2. Places on the Edge: Wild Terrain and the Spiritual Life. Mythic Landscape: Fierce Back-Country and the Indifference of God. 3. Prayer Without Language in the Mystical Tradition / Knowing God as

"Inaccessible Mountain" -- "Marvelous Desert." Mythic Landscape: Stalking the Snow Leopard / A Reflection on Work. 4. Mythic Landscape: Dragons of the Ordinary / The Discomfort of Common Grace. The Sinai Image in the History of Western Monotheism. Mythic Landscape: Encounter at Ghost Ranch. 5. Sinai and Tabor: Mountain Symbolism in the Christian Tradition. Mythic Landscape: Imaginary Mountains, Invisible Lands. Transformation as the Fruit of Indifference. Mythic Landscape: Transformation at Upper Moss Creek. 6. Desert Catechesis: The Landscape and Theology of Early Christian Monasticism. Mythic Landscape: Desert Terror and the Playfulness of God. 7. Attentiveness, Indifference, and Love: The Countercultural Spirituality of the Desert Christians. Mythic Landscape: Scratchings on the Wall of a Desert Cell. Rediscovering Christ in the Desert. Lane teaches theological studies at St. Louis University, St. Louis, Missouri. (v.9,#3)

Lane, Belden C., Landscapes of the Sacred: Geography and Narrative in American Spirituality. New York: Paulist Press, 1988. 237 pages. The way particular groups of Americans have found religious meaning in the places where they lived. Meaning and place in American spirituality. 1. Axioms for the Study of Sacred Place. Mythic Landscapes: The Ordinary Mask of the Holy. 2. Seeking a Sacred Center: Places and Themes in Native American Spirituality. Mythic Landscapes: The Mountain That Was God. 3. Baroque Spirituality in New Spain and New France. Mythic Landscapes: The Desert Imagination of Edward Abbey. 4. The Puritan Reading of the New England Landscape. Mythic Landscapes: Galesville, Wisconsin: Locus Mirabilis. 5. The Correspondence of Spiritual and Material Worlds in Shaker Spirituality. Mythic Landscapes: Liminal Places in the Evangelical Revival. 6. Precarity and Permanence: Dorothy Day and the Catholic Worker Sense of Place. Epilogue: Confronting the Study of Sacred Place in American Spirituality. Lane is in theological studies and American studies at St. Louis University. (v.9,#3)

Lane, Belden C., "Open the Kingdom for a Cottonwood Tree," Christian Century 114(no. 30, October 29, 1997):979-983. " Trees should be included in the community of the sacred, and even in the communion of saints. ... We must extend justice to the creatures that sustain human life, using their products with gratitude and respect. Appreciation for these gifts entails an ethical reappraisal of logging practices and reforestation plans, including the rejection of clear-cutting policies and 'salvage logging.' Particular respect must be given to trees in old-growth forests, where species diversity remains at high risk." Lane teaches theological studies at St. Louis University, St. Louis, Missouri. (v.8,#4)

Lane, John and Thurmond, Gerald, eds. The Woods Stretched for Miles: New Nature Writing from the South. Athens, GA: University of Georgia Press, 1999. 256 pp. \$40 cloth, \$16.95 paper. Essays about southern landscapes and nature from eighteen writers with geographic or ancestral ties to the region. (v.10,#1)

Lane, M. B., "Buying Back and Caring for Country: Institutional Arrangements and Possibilities for Indigenous Lands Management in Australia," Society and Natural Resources 15(no.9, 2002): 827-46. (v.13,#4)

Lane, MB; McDonald, G, "Towards a general model of forest management through time: evidence from Australia, USA, and Canada," Land Use Policy 19(no.3, 2002): 193-206.

Lang, Berel. "Earthquake Prediction: Testing the Ground." Environmental Ethics 5(1983):3-19. The occurrence of earthquakes is usually ignored or discounted as an environmental issue, but the environmental relevance of the science of earthquake prediction is demonstrable. The social consequences of such predictions, when they are accurate, and even (once a general pattern of accuracy has been achieved) when they fail, have implications of such varied environmental issues as land-use control, building codes, social and economic costs (for predictions made when no earthquake occurs or for failures to predict earthquakes which do occur). Lay members of the public are more directly

involved in programs of earthquake prediction than in almost all other instances of scientific prediction, if only because the scientific findings require public participation in order to have any effect at all. Attention must be paid, accordingly, to the effect of specific public and social values on the practice of earthquake prediction--ranging from such broadly based ones as conceptions of the general relation between man and nature to narrower ones like the cost-benefit analysis of a program of earthquake prediction itself. Because of the close connection between the efficacy of earthquake prediction and public attitudes, moreover, certain questions concerning the social character of "normal" science and the deprofessionalization of scientific institutions are highlighted in this context. Lang is in the department of philosophy, University of Colorado, Boulder, CO. (EE)

Lang, Erin R., "Applying Ethics to Engineering," Journal of Professional Issues in Engineering Education and Practice 129(no. 3, 2003):134-136. Features environmental ethics in civil engineering. "This theory of treating animals and the environment with moral consideration was one of the great evolutions impacting the civil engineering profession over the past decades." The American Society of Civil Engineers sponsors an annual student essay contest. In 2003 the theme was ethics in engineering over the past 150 years. This was one of five prize winning student essays. Lang is a student in civil engineering at the University of Pittsburgh at Johnstown.

Lang, Graeme, "Forests, Floods and the Environmental state in China", Organization and Environment, 15, (No. 2, 2002): 109-30. Deforestation continues in developing countries, despite predictions of ruinous consequences in the 21st century. The state is a poor protector of the environment in most of these countries but is the only agency able to deal with many of the causes of deforestation. This article focuses on the most striking example of state action against deforestation among the developing countries of the world during the past two decades – the ban on logging by the central government of China following the massive floods in 1998. River floods are more devastating in China than anywhere else in the world. This case provides a good opportunity to study state responses to environmental crisis. It illuminates the conditions under which central governments can act forcefully to conserve natural resources in the face of the determination of regional and local actors and authorities to exploit their resources intensively in the drive for economic development. Lang is an associate professor of sociology in the Department of Applied Social Studies at City University of Hong Kong. (v.13, #3)

Lang, Reg and Sue Hendler, "Environmental Ethics: Ethics and Professional Planners," in Don MacNiven, ed., Moral Expertise: Studies in Practical and Professional Ethics (London: Routledge, 1990). With attention to the conflicts between planners and developers, focused on the Ontario Professional Planners Institute. Lang is professor of environmental studies, York University, Toronto. Hendler is in the school of urban and regional planning, Queens University, Kingston, Ontario. (v2,#1)

Lang, Tim and Hines, Colin, The New Protectionism: Protecting the Future Against Free Trade. London: Earthscan, 1995. 184 pages. The authors challenge free trade, claiming that, far from its promised benefits, what free trade actually produces is an ever larger gulf between the world's rich and the world's poor, combined with a growing environmental crisis. A better approach is a New Protectionism, not in defense of elitist interests at the national level (as did old protectionism), but in pursuit of the three E's: social and global equity, a sane economy, and a sustainable environment. (v9,#2)

Lang, Tim, and Hines, Colin. The New Protectionism: Protecting the Future against Free Trade. Review by J. Quentin Merritt, Environmental Values 7(1998):120.

Lang, Tim, and Hines, Colin. The New Protectionism: Protecting the Future against Free Trade: (London: Earthscan, 1993). Reviewed by Tim Cooper in Environmental Values 4(1995):81-82. (EV)

Langan, Fred, "In Canada, Farmers Find It Pays to Grow Crops the Organic Way," The Christian Science

Monitor 86 (2 August 1994): 9. (v5,#3)

Langford, Dale J., et al (8 others), "Social Modulation of Pain as Evidence for Empathy in Mice," Science 312(30 June 2006):1967-1970. Mice observing a cagemate in pain seem to empathize when the cagemate is given a noxious stimulus. They develop a "writhing test." With commentary, Miller, Greg, "Signs of Empathy Seen in Mice," Science 312(30 June 2006):1860-1861, and photo of "commiserating mice." With letter of concern by Ernest Gwynn Jordan, "Mice, Pain, and Empathy," Science 314 (13 October 2006):253, asking whether when ethical scientists see mice commiserating with each other in pain, it isn't time to stop the experiment. The Miller commentary starts: "Empathy is one of the nobler human attributes." Jordan asks: "Must I conclude that it is absent or suppressed in some scientists?" With reply by Jeffrey S. Mogil, one of the authors of the paper, that it is better for mice to suffer than people, and their research might reduce human suffering by learning how commiseration can reduce pain in humans, and that they choose to test with the least pain possible to remain effective in the experiment. So: On with the experiments. The authors are in psychology, McGill University, Montreal.

Langford, Dale J., et al, "Social Modulation of Pain as Evidence for Empathy in Mice," Science 312(30 June 2006):1967-1970. Mice are found to exhibit enhanced pain sensitivity when they see a familiar fellow cagemate experience pain, but not when the other mouse is a stranger. For example, they hop off a heated area of the cage floor faster. There is "emotional contagion," a primitive kind of empathy that does not require understanding what others are experiencing. The information may be transmitted in part through chemical signals, but seems mostly transmitted by vision. Langford and his research team are in psychology, in a center for research on pain, at McGill University, Canada.

Langhelle, Oluf, and Ornulf Seippel, "Norsk miljøfilosofi, en basis for en alternativ ideologi: Sigmund Kvaloy Satereng," Tidsskrift for Alternativ Framtid (The Norwegian) Journal for an Alternative Future, no. 2, 1993. One in a series of philosophically relevant articles presenting profiles in Norwegian environmental philosophy, this one presenting and discussing Satereng's ecophilosophical platform, with a response by Satereng in the subsequent issue. Satereng is a farmer-writer-lecturer in Norway who has developed a variety of deep ecology drawing on Mumford, Bergson, Whitehead, and Naess, a strong critic of the industrial growth society. Langhelle and Seippel are research fellows at the Alternative Futures Project, Oslo. (v5,#4)

Langhelle, Oluf, and Ornulf Seippel, "Norsk miljøfilosofi, en basis for en alternativ ideologi: Arne Naess" Tidsskrift for Alternativ Framtid (The Norwegian) Journal for an Alternative Future, no. 3, 1993. An analysis of Arne Naess's deep ecological platform. (v5,#4)

Langhelle, Oluf. "Sustainable Development and Social Justice: Expanding the Rawlsian Framework of Global Justice." Environmental Values 9(2000):295-323. ABSTRACT: This article makes two arguments. First, that social justice constitutes an inherent part of the conception of sustainable development that the World Commission on Environment and Development outlined in *Our Common Future* (1987). The primary goal of the Commission was to reconcile physical sustainability, need satisfaction and equal opportunities, within and between generations. Sustainable development is what defines this reconciliation. Second, it is argued that this conception of sustainable development is broadly compatible with liberal theories of justice. Sustainable development, however, goes beyond liberal theories of justice in many respects. It is based on three assumptions, which are for the most part ignored in liberal theories: an accelerating ecological interdependence, historical inequality in past resource use, and the 'growth of limits'. These assumptions create a conflict between intra - and intergenerational justice, which is ignored in liberal theories, but which sustainable development tries to solve. It does so by imposing duties on developed countries that goes beyond liberal demands, and by abandoning the focus 'solely on protection' that dominates non-anthropocentric approaches to environmental sustainability. Keywords: Biological diversity, climate change, global justice, sustainable development. Oluf Langhelle is at RF - Rogaland Research, P.O. Box 2503 Ullandhaug, 4091 Stavanger, Norway.

(EV)

Langholz, J. A. and Lassoie, J. P., "Perils and Promise of Privately Owned Protected Areas," Bioscience 51(no.12, 2001): 1079-85. (v.13,#2)

Langley, Gil, ed., Animal Experimentation: The Consensus Changes. London: Routledge, 1989; sold in U. S. by Chapman and Hall, an imprint of Routledge, Chapman, and Hall, 1989. Ten essays, mostly British but also American and Australian. (v1,#4)

Langmead, Ross, "Ecojustice Principles: Challenges for the Evangelical Perspective," Ecotheology No 5/6 (Jul 98 / Jan 99):162-172.

Langpickvance (Lang-Pickvance), Katy, Manning, Nick, Pickvance, Chris, eds. Environmental and Housing Movements: Grassroots Experience in Hungary, Russia, and Estonia. Brookfield, Vt.: Ashgate, 1997. A detailed comparative picture of environmental and housing movements in Hungary, Russia, and Estonia over the period 1991-1994. (v8,#2)

Langston, N, "Review of: Christopher J. Huggard and Arthur R. Gomez, eds., Forests Under Fire: A Century of Ecosystem Mismanagement in the Southwest", Environmental History 8(no.1, 2003):150.

Langton, Marcia, "What Do We Mean by Wilderness? Wilderness and Terra Nullius in Australian Art." The Sydney Papers, (The Sydney Institute) 8(no. 1, 1996):10-31. (v.9,#3)

Lanier-Graham, Susan D., The Ecology of War: Environmental Impacts of Weaponry and Warfare. New York: Walker and Company, 1993. Effects of battles on the landscape, and also the peacetime aspects of war, such as weapons testing, waste disposal. Lanier-Graham teaches at Colorado Northwestern Community College in Craig, Colorado. (v4,#3)

Lankard, A., and W. McLaughlin, "Marketing an Environmental Issue: A Case Study of The Wilderness Society's Core Messages to Promote National Forest Conservation from 1964 to 2000," Society and Natural Resources 16(no. 5, 2003): 415-434. (v 14, #3)

Lankford, Bruce and Franks, Tom, "The Sustainable Coexistence of Wetlands and Rice Irrigation: A Case Study From Tanzania," The Journal of Environment and Development 9 (No. 2, 2000 Jun 01): 119- . (v.11,#4)

Lanz, TJ, "Review of: Peter Boomgaard, Frontiers of Fear: Tigers and People in the Malay World, 1600-1950," Environmental History 7(no.4, 2002): 691.

Lanza, Robert P., Dresser, Betsy L., and Damiani, Philip, "Cloning Noah's Ark," Scientific American 283 (no. 5, November, 2000): 84-89. A humble Iowa cow is slated to give birth to the first cloned endangered species, a gaur, an ox-like animal now rare in India and listed by IUCN as endangered. The cloned Gaur bull is to be named Noah, in commemoration of the world's first endangered species project. Biotechnology, some biologists claim, might offer the best way to keep some endangered species from disappearing from the planet. One could also wonder if this might not launch another round of the "faking nature" debate. Lanza and Damiani are with Advanced Cell Technology, Worcester, MA, and are conservationists. Dresser is in research at the Audubon Institute Center for Research of Endangered Species, New Orleans. (v.11,#4)

Lapintie, Kimmo, ed. Paradise Lost: Rationality, Freedom, and Ecology in the City. Housing & Environment, No 2. University of Tampere, Department of Social Policy and Social Work, 1996. Lapintie, an architect and philosopher, and also leader of the Ecopolis project, discusses the meaning

of the introduction of the ecological terminology and paradigm in planning discourse, and the establishment of the sustainable development ideology in planning methodology. He argues that the basic problem of both ecology and ecological planning is that they heavily lean on traditional paternalistic attitudes. Finnish Academy. "Ecopolis" is a multidisciplinary research project sponsored by the Finnish Academy. Email lapintie@arc.tut.fi. v7, # 3)

Lapintie, Kimmo, and Aspegren, Marjo, eds. Ecopolis Papers: Housing and Environment, No 1. University of Tampere, Department of Social Policy and Social Work, 1996. In this collection of papers, the researchers of the Ecological City (Ecopolis) Project introduce different levels of problematic in ecological planning and research. Finnish Academy. "Ecopolis" is a multidisciplinary research project sponsored by the Finnish Academy. Email lapintie@arc.tut.fi. (v7, #3)

Laporte, Nadine T., Jared A. Stabach, Robert Grosch, Tiffany S. Lin, and Scott J. Goetz. "Expansion of Industrial Logging in Central Africa." *Science* Vol. 316, no. 5830 (8 June 2007): 1451. Central Africa's dense humid forests have long been regarded as among the most pristine on Earth, but in recent decades industrial logging has become the most extensive form of land use in the region.

Lappé, Frances Moore, Collins, Joseph, and Rosset, Peter, World Hunger: Twelve Myths, 2nd ed. New York: Grove Press, 1999. \$ 11.00. The twelve myths:

1. Not enough food to go around.
2. Nature's to blame for famine.
3. Too many people.
4. The environment vs. more food?
5. The green revolution is the answer.
6. We need large farms.
7. The free market can end world hunger.
8. Free trade is the answer.
9. Too hungry to fight for their rights.
10. More U.S. aid will help the hungry.
11. We benefit from their poverty.
12. Curtail freedom to end hunger? (v.10,#1)

Lappé, Frances Moore, and Joseph Collins. Food First: Beyond the Myth of Scarcity. Reviewed in Environmental Ethics 1(1979):279-82.

Lariviere, S., Jolicoeur, H., and Crete, M., "Status and conservation of the gray wolf (*Canis lupus*) in wildlife reserves of Quebec," Biological Conservation 94 (No. 1, 2000): 143- . (v.11,#4)

Larkin, Lucy, "Turning: Face-to-face with Limobius mixtus," Ecotheology Vol 7 (No. 1, July 2002):45-59. This article elaborates on the themes of creativity, compassion and new forms of relating in regard to human encounters with nature. The example of an endangered weevil, Limobius mixtus, is put forward to argue that the loss of biodiversity results in the diminishment of God. Emmanuel Levinas' use of the image of 'the face' that comes from 'height', Martin Buber's philosophy of 'I and Thou' and feminist theological writing on the breakdown of relationship are all employed in the weaving of a theological tapestry. Sin is defined as the failure to observe one of the 'least', such as the weevil. Our motives in desiring repaired relationships with nature are additionally scrutinised. It is suggested that to be creative, compassionate and to desire right relationships with nature promote a dynamic which ultimately preserves the life of God.

Larrere (Larrère), Catherine, Les Philosophies de l'environnement. Review by Peter A. Gunter, Environmental Ethics 20(1998):329-24.

Larrere (Larrère), Catherine, and Larrère, Raphaël. Du bon usage de la nature: Pour une philosophie de l'environnement. Review by Peter A. Gunter, Environmental Ethics 20(1998):329-24.

Larrere (Larrère), Catherine. Les philosophies de l'environnement. Review by Axel Gosseries, Ethics and the Environment 3(1998):111-115.

Larrere (Larrère), Catherine, and Larrère, Raphaël. Du bon usage de la nature. Pour une philosophie de l'environnement. Review by Axel Gosseries, Ethics and the Environment 3(1998):111-115.

Larrere, Catherine, "Ethics, Politics, Science, and the Environment: Concerning the Natural Contract." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Larrère, Catherine, Les philosophies de l'environnement (Philosophies of the Environment). Paris, Presses universitaires de France, 1997. 124 pages. An overview of largely American environmental philosophy, with discussions of intrinsic value, the land ethic, animal ethics, wilderness and pluralism. Larrère depicts the American environmental debate as involving two opposed tendencies, the search for abstract universal laws (Moralität), and the effort to ground environmental values in the concept of community (Sittlichkeit). The first is an expanded Kantianism, and also found in the animal rights movement. The second is developed in Leopold's land ethics. Catherine Larrère is a philosophy professor and head of the philosophy department at the Université Michel de Montaigne, Bordeaux III, in France. Reviewed by Pete A. Y. Gunter in Environmental Ethics 20(1998):329-334. A good review summarizing her argument is Axel Gosseries, "Environmental Philosophy Debate," Ethics and the Environment 3(1998):111-115. The best introduction in French to environmental philosophy. (v8,#3)

Larrère, Catherine, and Larrère, Raphael, eds., La crise environnementale (The Environmental Crisis). Paris: Éditions de l'INRA (Institut National de la Recherche Agronomique), 1997. For sale: INRA Editions, Route de St Cyr, 78026 Versailles-Cédex France. (v8,#3)

Larrère, Catherine and Raphaël Larrère, Du bon usage de la nature. Pour une philosophie de l'environnement (On the Good Use of Nature: Toward a Philosophy of the Environment). Paris. Aubier, 1997. 355 pages. Much longer than the preceding survey, covering the history of Western philosophy and concluding with the authors' proposal for a plausible and workable environmental ethic. A classical (Greek) view of nature recommended that humans learn from the norms of nature and accept natural limits. The modern world makes nature a realm of passive mechanical interactions, valueless, with humans outside and over nature. The authors, in a third, postmodern view, inscribe humans in nature but not in a privileged position. "Good use today should be ecocentric" (p. 19). Against Luc Ferry, The New Ecological Order, the authors argue that "to face the environmental crisis we do not need only an ethics of responsibility towards future generations but also a new idea, or scientific, ecocentered vision of nature." Shows that environmental ethics is alive and well in France, and also introduces French and European contributions to the debate with which English-speaking philosophers may not be familiar. Catherine Larrère teaches philosophy at the Université Michel de Montaigne, Bordeaux III, in France. Raphaël Larrère an agronomy engineer and director of research at the Institut National de la Recherche Agronomique (INRA). Reviewed by Pete A. Y. Gunter in Environmental Ethics 20(1998):329-344. (v8,#3)

Larrère, Catherine, "La nature est-elle aimable? (Is Nature Loveable)," La Mazarine, Editions du Treize Mars, 12 boulevard Péreire, 75017 Paris, no. 1, automne 1997. The answer depends upon which nature is in question. The article distinguishes between a nature-artefact, that we are responsible for, and a

processual nature, that we can love. (v8,#3)

Larrère, Catherine, "La forêt est-elle un objet philosophique?" in La Forêt, les Savoirs et les Citoyens, Editions de l'ANCR/Agence nationale de création rurale. Co Mars 1995, Editions ANCR, 73124 Chalon-sur-Saône cedex. With Descartes, and Rousseau and Heidegger as well, the forest in philosophy is a place one has to go out of. The forest is a metaphor of method, of spatial orientation. This attitude that "one should go out of the forest" becomes a philosophical motto that furthers the modern separation between humans and nature. (v8,#3)

Larrère, Catherine. Review of Sitter-Liver, Beat and Beatrix, eds., Culture within Nature/Culture dans la nature. Environmental Ethics 19(1997):433-435. (EE)

Larsen, David R., Shifley, Stephen R., England, Kristine. "Ten Guidelines for Ecosystem Researchers: Lessons from Missouri," Journal of Forestry 95(no.4, 1997):4. (v8,#2)

Larsen, FW; Rahbek, C, "Influence of scale on conservation priority setting--a test on African mammals", Biodiversity and Conservation 12(no.3, 2003):599-614.

Larsen, Randy, Environmental Virtue Ethics: Nature as Polis. M. A. thesis at Colorado State University, Spring 1996. Virtue ethics, developing the Aristotelian tradition, has promise for environmental ethics, although Aristotle's list of virtues needs to be supplemented with environmental ones. "Tenacity" can serve environmentalists, avoiding extremes of "apathy" and "obsession," finding a balance between the existential experience of nature and advocacy for environmental conservation. John Muir is an example of a successful holder of this environmental virtue. Larsen is currently the host on a radio talk show, "Ecotalk," on station KZFR serving the area around Chico, California. He teaches in a community college there. (v6,#4)

Larson, Brendon M. H. "The Social Resonance of Competitive and Progressive Evolutionary Metaphors." BioScience Vol. 56, no. 12 (2006): 997-1004. Metaphors of competition and progress have played a key role in the scientific conception and public understanding of evolution. These scientific and public aspects have been in continual tension, however, since these metaphors have been broadly interpreted in the social realm despite scientists' attempts to isolate their meaning. To examine how this occurs, I conducted a Web survey of evolutionary biologists (Society for the Study of Evolution), evolutionary psychologists (Human Behavior and Evolution Society), biology teachers (National Association of Biology Teachers), and members of a Teilhardian spiritual organization (Foundation for Conscious Evolution) (N = 3D 1892 respondents). Respondents were asked to evaluate the scientific and social dimensions of 18 evolutionary statements with metaphorical elements, including arms race, complexity, cooperation, drift, intelligent design, progress, selfish gene, sperm competition, and struggle for survival. The responses generally confirmed the demise of a progressive view of evolution, whereas competitive metaphors remained popular even though respondents indicated that they had a negative social resonance. The survey reveals how biological metaphors retain connections to everyday understanding, which has implications for teaching biology and for thinking about how biologists may unwittingly endorse particular social policies with their metaphors.

Laschefski, K; Freris, N, "Saving the wood from the trees Is tropical timber certification the saviour of the rainforests," Ecologist 31(no. 6, 2001):40-43. (v.13,#1)

Lash, Jonathan, "Towards a Sustainable Future," Natural Resources and Environment 12 (Fall 1997):83-. (v.8,#4)

Lassonde, Louise. Coping with Population Challenges. Covelo, CA: Island Press, 1997. 224 pp. \$61.50

cloth, \$26.50 paper. This volume examines the Programme of Action adopted at the 1994 ICPD in Cairo in light of the challenges of past and present demographic change and their implications for action. (v8,#2)

Latour, Bruno, Politics of Nature: How to Bring the Sciences into Democracy. Cambridge, MA: Harvard University Press, 2004. Latour, the controversial deconstructor (social reconstructor) of science now constructs his environmental ethics, or at least, environmental policy. Latour's argument, as usual, is complex and idiosyncratic. The dichotomy between nature and society, between the world and our representations of it, is false. There is no separation between science and nature, for nature is itself a concept that results from certain kinds of scientific and social framings. So, for that matter, are science and society. These concepts are interdependent and must be understood collectively. There is a real world, but it is not "out there."

To address ecological damage and destruction, we have first to acknowledge and then reject the false separations we have heretofore accepted. That means most environmental movements have been wrong. "Under the pretext of protecting nature, the ecology movements have also retained the conception of nature that makes their political struggles hopeless. Because 'nature' is made ... precisely to eviscerate politics, one cannot claim to retain it even while tossing it into the public debate." Latour proposes replacing this bifurcated world with a collective based on civil collaboration between humans and nonhumans.

Meanwhile Latour seems also to hold that in this collective collaboration, nonhumans have to be considered equally with humans. We must extend Kant's categorical imperative to treat the nonhuman world as ends rather than means. We have to take seriously the needs, interests, desires of nonhumans. But just how we know these nonhuman values "out there" without constructing them is left unclear. Reviewed by Naomi Oreskes, "A Call for a Collective," Science 305(27 August 2004):1241-1242. (v.14, #4)

Latour, Bruno, "To Modernise or Ecologise? That Is the Question." In Braun, Bruce, and Noel Castree, eds., Remaking Nature: Nature at the Millennium. London: Routledge, 1998. (v.14, #4)

Latour, Bruno, We Have Never Been Modern. Cambridge: Harvard University Press, 1993. 157 pages. paper. Only the modern West has conceptually separated culture from nature; no other cultures have ever done so. That is, in fact, the defining characteristic of modernity: "it believes in the total separation of humans and nonhumans" (p. 37). "Our own mythology consists in imagining ourselves as radically different" (p. 114). At the same time we in the West construct massive "hybrids" of culture and nature--the ozone hole, global warming, deforestation--and are unable to recognize the root of the problem because our ideology, driving science, technology, and politics, separates humans from nature when in fact they must and do entwine. In achieving this separation, "no one has ever been modern. Modernity has never begun. There has never been a modern world" (p. 47) "It behooves us to ... become once more what we have never ceased to be: amoderns" (p. 90). The answer is not in being postmodern, but in being amodern (p. 131). This will retain "the premoderns' inability to differentiate durably between the networks and the pure poles of Nature and Society" (p. 133). Pure culture does not exist, nor does pure nature, nor is anything singular. "There are only natures-cultures" (p. 104). Latour is a sociologist at Ecole Nationale Supérieure des Mines, Paris, and at the University of California, San Diego. (v7,#2)

Lauber, T. B. , Knuth, B. A. , and Deshler, J. D., "Educating Citizens About Controversial Issues: The Case of Suburban Goose Management," Society and Natural Resources 17(no.7, 2002): 581-98. (v.13,#4)

Lauber, V, "The Austrian Greens after the 2002 Elections," Environmental Politics 12(no.3, 2003):139-144. (v.14, #4)

Lauerman, John F., "Animal Research," Harvard Magazine 101 (no. 1, 1999):48-57. Mice and medicine:

The rights of humans and animals. A report from the laboratories and the animal-rights community. Some spokesmen: "You could also say that you couldn't have settled the South without slavery. Would you still do it that way today? Just because something seemed acceptable at the time is not to say that we should do it in our time" - Neal Barnard. "It is very easy to say that it is wrong to cause the death of another living animal. The difficulty comes in saying, 'I understand what I'm doing is causing the death of a limited number of animals. But I'm making a judgment that the results will justify doing the study.'" - Norman Letvin. (v.9,#4)

Laurance, W. F. "Catastrophic Declines of Australian Rainforest Frogs: Is Unusual Weather Responsible?" Biological Conservation 77, no.2 (1996): 203. (v7, #3)

Laurance, William F., et al, "Biomass Collapse in Amazonian Forest Fragments," Science 278(7 November 1997):1117-1118. With commentary: Williams, Nigel, "Rain Forest Fragments Fare Poorly," Science 278(7 November, 1998):1016. In one of the longest studies, isolated fragments of rain forest suffer greatly around their edges, losing considerable amounts of biomass and species. (v.9,#4)

Laurance, William F. "Tropical Forest Remnants: Ecology, Management and Conservation of Fragmented Communities." Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Lautensach, Alexander K. Environmental Ethics for the Future. A thesis submitted for the degree of Doctor of Philosophy at the University of Otago, Dunedin, New Zealand, September 2003. ABSTRACT: Over the last few decades mounting evidence has suggested that the Earth is facing an environmental crisis unprecedented in its scale and causation. The crisis threatens the continued well-being of humanity as well as much of the biodiversity of the planet. It is largely caused by unsustainable behaviour of Homo sapiens. Underlying human behaviour are beliefs, values and structural constraints that shape people's concepts of progress. The emerging global culture manifests a particular concept of progress that is based on harmful beliefs and largely counterproductive values. Within that value base, the counterproductive influences tend to arise from anthropocentric values and assumptions, which are incompatible with sustainable living. The most effective approach to accomplish a cultural change of such magnitude is through educational reform. This thesis provides an educational blueprint for changing those anthropocentric values and assumptions and to introduce a moral shift towards ecocentrism. A large-scale reform at many levels of current educational practice is required to ensure that learners acquire the moral, scientific, interpretive and emancipatory knowledge to build a sustainable future for humanity and its home.

Lautensach, Alexander K., "The Values of Ecologists," Environmental Values 14(2005): 241-250. The popular stereotype of ecologists appears somewhat at odds with the ideal of the objective, detached, morally disinterested researcher. Ecologists tend to subscribe to this ideal, as do most natural scientists. This puts the stereotype into question. To what extent and in what respects can ecologists be regarded as motivated by environmentalist values? What other values might contribute to their motivations? The answers to those questions have bearing on how policy makers perceive the input they receive from ecologists and it has long-term implications for the funding of ecological research. To obtain some answers I analysed over fifty randomly selected publications of ecologists for explicit and implicit value statements. The analysis revealed an abundance of value statements. However, no bias was evident towards a conservationist or ecocentric environmental ethic such as suggested by the stereotype. I will suggest some explanations and ramifications of these results that take into account the ecologist's professional situation. Lautensach is in biology, University of Auckland, New Zealand. (EV)

Lautenschlager, R. A. "Identify the Specifics: A Biopolitical Approach for Establishing Research Priorities." Journal of Forestry 94, no.4 (1996): :31. (v7, #3)

Lautenschlager, R.A., "Globally Sustainable Forestry?," Journal of Forestry 104 (no.3, March 2006): 164-164 (1).

Laviolette, Patrick, Review of: Szerszynski, Bronislaw. Wallace Heim, and Claire Waterton, eds., Nature Performed: Environment, Culture and Performance. Oxford: Blackwell Publishing, 2003. Environmental Values 15(2005):536-539.

Law in the New Age of Biotechnology. Environmental Law Centre, 201, 10350-124 St., Edmonton, Alberta T5N 3V9, Canada. Canadian \$ 42.75. (v4,#1)

Lawler, Andrew, "Stormy Forecast for Climate Science," Science 305(20 August 2004):1094-1097. Climate researchers are facing a confused and perilous future, much of it surrounding NASA's Earth Observing System. Weather forecasters and climate forecasters often need different data; different government agencies are involved, such as, in the U.S., NASA and NOAA. The work is fragmented and underfunded. International cooperation for global data is even more fragmented and underfunded. And climate scientists claim their work is more important for national and global security (more long-term threat to humans) than is the military or terrorist threat. (v. 15, # 3)

Lawrence, A. B., and Rushen, J., eds., Stereotypic Animal Behaviour: Fundamentals and Applications to Welfare. Wallingford, Oxon, UK: CAB International, 1993.

Lawrence, Patrick L. "Integrated Coastal Zone Management and the Great Lakes," Land Use Policy 14(no.2, 1997):119.

Lawrence, R. D., The White Puma (New York: Henry Holt). Canadian naturalist R. D. Lawrence, who once spent ten months tracking and observing a puma, has written a novel told largely from the point of view of a puma in the wilds of British Columbia and bearing an important environmental and political message. The story follows the life of an unnamed puma, born with a pure white coat, from birth through a life of persecution by humans. His mother and young litter mate are killed by hunters. Wealthy European hunters lust after his pelt and will pay thousands of dollars for a chance to shoot him. The puma learns to fear and then to hunt his human adversaries. The White Puma reminds the wise species that there are other intelligent and worthwhile beings to consider. (v1,#2)

Lawton, J., "Are Species Useful?," Oikos 62(1991):3-4.

Lawton, John H. and Robert M. May, eds., Extinction Rates. Oxford: Oxford University Press, 1995. pp. 248. \$ 23. A wide-ranging introduction to the qualitative and quantitative methods required to make predictions about extinction. (v8,#2)

Lawton, John H., "Conservation Biology: Where Next?" Society for Conservation Biology Newsletter 9 (no. 4, 2002):1-2. "Finally, the biggest challenge of all is that we live in a world in which the gap between the minority of 'haves' and the majority of 'have nots' is growing ever wider. We live in a desperately unfair, unequal world. Effective conservation is impossible in the face of grinding human poverty on the one hand, and blinding human greed on the other. More effective conservation of Earth's biological riches will not happen without sustainable development, the stabilization of the global population, and social justice, for all nations." Lawton is Chief Executive, Natural Environment Research Council, UK, and at Imperial College, London. (v.13,#4)

Layard, Antonia, Review of Gary Francione, Animals, Property and the Law. Environmental Values 7(1998):118.

Layfield, David. Marxism and Environmental Crises. Suffolk, UK: Arena Books, 2008. Layfield claims

that capitalism is a unique social form predicated on the contradiction of infinite expansion in a finite world. He argues that contemporary developments of Marxism allow for us to understand why capitalism has produced today's environmental crises, and Marxism offers the most effective way for greens to engage with material social production and political economy.

Layne, Christopher, "Rethinking American Grand Strategy: Hegemony or Balance of Power in the Twenty-First Century," World Policy Journal 15(no.2, 1998), p.8. (v.9,#4)

Lazaroff, Leon. "Pushing Frontiers of Oil Exploration: Drillers Going Off Deep End in Gulf." The Christian Science Monitor, July 6, 1995, pp. 1, 18. (v6,#2)

Lazarus, Richard J., *The Making of Environmental Law* (Chicago: University of Chicago Press, 2004). Reviewed by Richard P. Haynes in *Journal of Agricultural and Environmental Ethics* 21(2008):613-616.

Lazdinis, M. e. a., "Forest Sector Concerns in the Baltic States: Implications for an Expanded European Union," Society and Natural Resources 18(no. 9, October 2005): 839-848.

Le Aiguo. *Daoism Ecology*. Social Science Documents Press, 2006.

Lea, David R., "Melanesian Axiology, Communal Land Tenure, and the Prospect of Sustainable Development Within Papua New Guinea", Journal of Agricultural and Environmental Ethics 6(1993):89-102. It is the contention of this paper that some progress in alleviating the social and environmental problems which are beginning to face Papua New Guinea can be achieved by supporting traditional Melanesian values through maintaining the customary system of communal land tenure. In accordance with this aim I will proceed to contrast certain Western attitudes towards "individual freedom", "self-interested behavior", "individual and communal interests" and "private ownership" with attitudes and values expressed in the traditional Melanesian approach. I will describe how the emergence of a cash economy and the attachment to Western gadgetry and products have effected injury to the environment and undermined values which have previously maintained Melanesian social cohesion. Lea is in psychology and philosophy at the University of Papua New Guinea, Papua New Guinea.

Lea, John P., "Tourism Development Ethics in the Third World," Annals of Tourism Research 20(1993):701-715. The origins of ethical concern about tourism development in the Third World are traced in both the sociology of development and the environmental ethics literature. New secular and religious writings single out the traveller and the tourism industry as objects of ethical concern. Lea attempts a preliminary overview of the growing "responsible tourism" and travel ethics literature and explores the significance of anti-tourism activity in the Indian State of Goa. He suggests a three-part grouping into Third World development ethics, tourism industry ethics, and personal travel ethics. "It is certain that tourism ethics in general and environmental ethics in particular will become an important subdiscipline within tourism studies in the near future." Lea teaches architecture at the University of Sydney, Australia. (v5,#4)

Leach, M., Mearns, R. The Lie of the Land. Review by David Thomas, Environmental Values 7:(1998):481.

Leach, William D., "Public Involvement in USDA Forest Service Policymaking: A Literature Review,"

Journal of Forestry 104 (no.1, January/February 2006): 43-49 (7).

Leahy, Michael P. T., Against Liberation: Putting Animals in Perspective. London and New York: Routledge, 1991. 273 pages. Concern for the rights of animals is based on a series of fundamental misconceptions about the basic nature of animals, which tend to identify them rationally, emotionally, and morally far too closely with ourselves. Leahy is in philosophy at the University of Kent. (v4,#3)

Leakey, Richard and Roger Lewin, The Sixth Extinction: Patterns of Life and the Future of Humankind. New York: Doubleday, 1995. (v6,#4)

Leal, Donald, R. "Community-Run Fisheries: Avoiding the Tragedy of the Commons." Bozeman, MT: PERC Policy Series, No. PS-7, September 1996. (Address: 502 South 19th Ave, Suite 211, Bozeman, MY 59715 USA. Phone 406/587-9591. Fax 406/586-7555). Fish populations in many coastal areas of the United States and Canada continue to decline, despite government regulations. Communities who mainstay is fishing appear powerless to control the tragedy of destructive overfishing. But such as tragedy of the commons is not inevitable, and there are many communities that have effectively protected their fishing territories and preserved fish for the future. Fishing areas can be protected from overfishing with minimal government involvement. Leal is the coauthor with Terry L. Anderson of Free Market Environmentalism. (v7, #3)

Lear, L, "Review of: Barbara T. Gates, ed., In Nature's Name: An Anthology of Women's Writing and Illustration, 1780-1930; and Lorraine Anderson and Thomas S. Edwards, eds., At Home on This Earth: Two Centuries of U.S. Women's Nature Writing" Environmental History 8(no.1, 2003):157-159.

Lear, Linda, Rachel Carson: Witness for Nature. New York: Henry Holt, 1997. 640 pages. \$ 35. Carson died in 1964, aged 57, and one of the most famous people in America, but her personal life is little known. She was employed full-time at the U.S. Fish and Wildlife service, but had heavy family responsibilities--her mother, her sister, her nieces, and, ultimately, her grandnephew, whom she adopted--all the while trying to find a few hours for her work, driven by her sense of the importance of her subject--first the sea, and then life itself. She was ill throughout the writing of Silent Spring. Carson prospered in adverse circumstances; she also changed the circumstances of everyone who came after her. "For Carson, nature writing and popular science writing were vehicles of human redemption." Lear teaches at George Washington University. (v8,#3)

Lear, Linda J., Rachel Carson: Witness for Nature. New York: Henry Holt, 1997. \$ 35. Big, definitive biography, 634 pages. (v9,#2)

Lear, Linda, Rachel Carson: Witness for Nature. 1997. New York: Henry Holt and Company, 1997. 634 pp. \$17.95, paper. \$35.00, cloth. The first comprehensive biography of the great naturalist. Two themes recur repeatedly: (1) the hurdles she had to overcome as a woman in the masculine worlds of science, government and the professions. Carson pursued and ultimately abandoned work towards a Ph.D. in biology. (2) Her tenacity as a writer, culminating in Carson's struggle to write Silent Spring, and the political firestorm the book ignited. Despicable attempts by chemical and agribusiness interests to slander Carson and discredit her work. She pressed her cause in the face of family tragedy and failing health, one of the heroic stories in conservation history. See also:

--Carson, Rachel, Lost Woods: The Discovered Writing of Rachel Carson. Beacon Press, Boston, 1998. 267 pp. \$ 24.00. (v10,#4)

Leary, Neil, Cecelia Conde, Anthony Nyong, and Juan Pulhin, eds. Climate Change and Vulnerability. London: Earthscan Publications, 2008. The authors in this anthology discuss who is vulnerable to climate change, the nature of their vulnerability, and the causes of their vulnerability for parts of the world that have been poorly researched until now. Contents include: (1) "For whom the bell tolls: Vulnerabilities in

a changing climate” by Neil Leary, James Adejuwom, Wilma Bailey, Vincente Barros, P. Baltima, Rubén M. Caffera, Suppakorn Chinvano, Cecilia Conde, Alain De Comarmond, Alex De Sherbinin, Tom Downing, Hallie Eakin, Anthony Nyong, Maggie Opondo, Balgis Osman-Elasha, Rolph Payet, Florencia Pulhin, Juan Pulhin, Janaka Ratnisiri, El-Amin Sanjak, Graham von Maltitz, Mónica Webbe, Yongyuan Yin, and Gina Ziervogel, (2) “Vulnerability of southern Africa biodiversity to climate change” by Graham P. von Maltitz and Robert J. Scholes, (3) “Forest responses to changing rainfall in the Philippines” by Rodel Lasco, Florencia Pulhin, Rex Victor O. Cruz, Juan Pulhin, Sheila Roy, and Patricia Sanchez, (4) “Vulnerability of Mongolia’s pastoralists to climate extremes and changes” by Punsalma Batima, Luvsan Natsagdorj, and Nyamsurengyn Batnasan, (5) “Resource system vulnerability to climate stresses in the Heihe river basin of western China” by Yongyuan Yin, Nicholas Clinton, Bin Luo, and Liangchung Song, (6) “Storm surges, rising seas and flood risks in metropolitan Buenos Aires” by Vincente Barros, Angel Menéndez, Claudia Natenzon, Roberto Kokot, Jorge Codignotto, Mariano Re, Pablo Bronstein, Inés Camilloni, Sebastián Ludeuña, Diego Riós, and Silvia González, (7) “Climate and water quality in the estuarine and coastal fisheries of the Río de la Plata” by Gustavo J. Nagy, Mario Bidegain, Rubén M. Caffera, Frederico Blixen, Graciela Ferrari, Juan J. Lagomarsino, Cesar H. López, Walter Norbis, Alvaro Ponce, Maria C. Presentado, Valentina Pshennikov, Karina Sans, and Gustavo Sención, (8) “Climate change and the tourist dependent economy of the Seychelles” by Rolph Antoine Payet, (9) “Household food security and climate change: Comparisons from Nigeria, Sudan, South Africa and Mexico” by Gina Ziervogel, Anthony Nyong, Balgis Osman-Elasha, Cecilia Conde, Sergio Cortés, and Tom Downing, (10) “Vulnerability in Nigeria: A national-level assessment” by James D. Adejuwon, (11) “Vulnerability in the Suhelian zone of northern Nigeria: A household-level assessment” by Anthony Nyong, Daniel Dabi, Adebawale Adepetu, Abou Berthe, and Vincent Ihemegbulem, (12) “Livelihoods and drought in Sudan” by Balgis Osman-Elasha and El-Amin Sanjak, (13) “Social vulnerability of farmers in Mexico and Argentina” by Hallie Eakin, Mónica Webbe, Cristian Ávila, Gerardo Sánchez Torres, and Luis A. Bojórquez-Tapia, (14) “Climatic threat spaces in Mexico and Argentina” by Cecilia Conde, Marta Vinocur, Carlos Gay, Roberto Seiler, and Francisco Estrada, (15) “Climate variability and extremes in the Pantabangan-Carranglan watershed of the Philippines: An assessment of vulnerability” by Juan M. Pulhin, Rose Jane J. Peras, Rex Victor O. Cruz, Rodel D. Lasco, Florencia B. Pulhin, and Maricel A. Tapia, (16) “Climate risks and rice-farming in the lower Mekong river basin” by Suppakorn Chinvano, Somkhith Boulidam, Thavone Inthavong, Soulideth Souvannalath, Boontium Lersupavithnapa, Vichien Kerdsuk, and Nguyen Thi Hien Thuan, (17) “Vulnerability of Sri Lankan tea plantations to climate change” by Janaka Ratnasiri, Aruliah Anandacoomaraswamy, Madawala Wijeratne, Senaka Basnayake, Asoka Jayakody, and Lalith Amarathunga, (18) “Vulnerability to human-induced highland malaria in East Africa” by Shem O. Wandiga, Maggie Opondo, Daniel Olaga, Andrew Githeko, Faith Githui, Michael Marshall, Time Downs, Alfred Opere, Pius Z. Yanda, Richard Kangalawe, Robert Kabumbuli, Edward Kirumira, James Kathuri, Eugene Apindi, Lydia Olaka, Laban Ogallo, Paul Mugambi, Rehema Sigalla, Rabinah Nanyunja, Timothy Baguma, and Pius Achola, and (19) “Vulnerability to dengue fever in Jamaica” by Charmaine Heslop-Thomas, Wilma Bailey, Dharmaratne Amarakoon, Anthony Chen, Samuel Rawlins, Dave D. Chadee, Rainaldo Crosbourne, Albert Owina, Karen Polson, Cassandra Rhoden, Roxanne Stennett, and Michael Taylor.

Leary, Neil, Cecilia Conde, Anthony Nyong, and Juan Pulhin, eds. *Climate Change and Vulnerability*. London: Earthscan Publications, 2008. The authors in this anthology discuss who is vulnerable to climate change, the nature of their vulnerability, and the causes of their vulnerability for parts of the world that have been poorly researched until now. Contents include: (1) “For whom the bell tolls: Vulnerabilities in a changing climate” by Neil Leary, James Adejuwom, Wilma Bailey, Vincente Barros, P. Baltima, Rubén M. Caffera, Suppakorn Chinvano, Cecilia Conde, Alain De Comarmond, Alex De Sherbinin, Tom Downing, Hallie Eakin, Anthony Nyong, Maggie Opondo, Balgis Osman-Elasha, Rolph Payet, Florencia Pulhin, Juan Pulhin, Janaka Ratnisiri, El-Amin Sanjak, Graham von Maltitz, Mónica Webbe, Yongyuan Yin, and Gina Ziervogel, (2) “Vulnerability of southern Africa biodiversity to climate change” by Graham P. von Maltitz and Robert J. Scholes, (3) “Forest responses to changing rainfall in the Philippines” by

Rodel Lasco, Florencia Pulhin, Rex Victor O. Cruz, Juan Pulhin, Sheila Roy, and Patricia Sanchez, (4) “Vulnerability of Mongolia’s pastoralists to climate extremes and changes” by Punsalmaa Batima, Luvsan Natsagdorj, and Nyamsurengyn Batnasan, (5) “Resource system vulnerability to climate stresses in the Heihe river basin of western China” by Yongyuan Yin, Nicholas Clinton, Bin Luo, and Liangchung Song, (6) “Storm surges, rising seas and flood risks in metropolitan Buenos Aires” by Vincente Barros, Angel Menéndez, Claudia Natenzon, Roberto Kokot, Jorge Codignotto, Mariano Re, Pablo Bronstein, Inés Camilloni, Sebastián Ludeña, Diego Riós, and Silvia González, (7) “Climate and water quality in the estuarine and coastal fisheries of the Río de la Plata” by Gustavo J. Nagy, Mario Bidegain, Rubén M. Caffera, Frederico Blixen, Graciela Ferrari, Juan J. Lagomarsino, Cesar H. López, Walter Norbis, Alvaro Ponce, Maria C. Presentado, Valentina Pshennikov, Karina Sans, and Gustavo Sención, (8) “Climate change and the tourist dependent economy of the Seychelles” by Rolph Antoine Payet, (9) “Household food security and climate change: Comparisons from Nigeria, Sudan, South Africa and Mexico” by Gina Ziervogel, Anthony Nyong, Balgis Osman-Elasha, Cecilia Conde, Sergio Cortés, and Tom Downing, (10) “Vulnerability in Nigeria: A national-level assessment” by James D. Adejuwon, (11) “Vulnerability in the Suhelian zone of northern Nigeria: A household-level assessment” by Anthony Nyong, Daniel Dabi, Adebawale Adepetu, Abou Berthe, and Vincent Ihemegbulem, (12) “Livelihoods and drought in Sudan” by Balgis Osman-Elasha and El-Amin Sanjak, (13) “Social vulnerability of farmers in Mexico and Argentina” by Hallie Eakin, Mónica Webbe, Cristian Ávila, Gerardo Sánchez Torres, and Luis A. Bojórquez-Tapia, (14) “Climatic threat spaces in Mexico and Argentina” by Cecilia Conde, Marta Vinocur, Carlos Gay, Roberto Seiler, and Francisco Estrada, (15) “Climate variability and extremes in the Pantabangan-Carranglan watershed of the Philippines: An assessment of vulnerability” by Juan M. Pulhin, Rose Jane J. Peras, Rex Victor O. Cruz, Rodel D. Lasco, Florencia B. Pulhin, and Maricel A. Tapia, (16) “Climate risks and rice-farming in the lower Mekong river basin” by Suppakorn Chivanno, Somkhith Bouldidam, Thavone Inthavong, Soulideth Souvannalath, Boontium Lersupavithnapa, Vichien Kerdsuk, and Nguyen Thi Hien Thuan, (17) “Vulnerability of Sri Lankan tea plantations to climate change” by Janaka Ratnasiri, Aruliah Anandacoomaraswamy, Madawala Wijeratne, Senaka Basnayake, Asoka Jayakody, and Lalith Amarathunga, (18) “Vulnerability to human-induced highland malaria in East Africa” by Shem O. Wandiga, Maggie Opondo, Daniel Olaga, Andrew Githeko, Faith Githui, Michael Marshall, Time Downs, Alfred Opere, Pius Z. Yanda, Richard Kangalawe, Robert Kabumbuli, Edward Kirumira, James Kathuri, Eugene Apindi, Lydia Olaka, Laban Ogallo, Paul Mugambi, Rehema Sigalla, Rabinah Nanyunja, Timothy Baguma, and Pius Achola, and (19) “Vulnerability to dengue fever in Jamaica” by Charmaine Heslop-Thomas, Wilma Bailey, Dharmaratne Amarakoon, Anthony Chen, Samuel Rawlins, Dave D. Chadee, Rainaldo Crosbourne, Albert Owina, Karen Polson, Cassandra Rhoden, Roxanne Stennett, and Michael Taylor.

Leatherman, Courtney. “The Poverty Question.” *Nature Conservancy Magazine* Vol. 58, no. 1 (2008): 42-51. Reducing poverty is at the top of the world’s development agenda. Five conservationists discuss what that means for environmental conservation. For example, Kent H. Redford, who directs the Wildlife Conservation Society Institute, says: “Conservation organizations are bailing out on their responsibility to the natural world and taking on poverty, not as a strategy but as an objective. I think that’s a dangerous move—particularly dangerous for the natural world, which has so few defenses. This is a dangerous infatuation on the part of conservation organizations because we know so little about the topic and because for at least 60 years there have been hundreds of billions [of dollars] devoted to this, and poverty is only increasing. As a result, if we take our meager funds and throw them in this much larger pool, not only will we probably make little difference because we’re innocent players, but we will also be reallocating those funds away from the conservation of nature” (p. 50).

Leax, John, *Standing Ground: A Personal Story of Faith and Environmentalism*. Grand Rapids, MI: Zondervan, 1991. 127 pages. \$ 7.99. A personal account of one man's stand against the building of a nuclear dump near his home. The moral conflicts, fears, angers, and questions Leax faced as he came to terms with the responsibilities of being a steward of the earth. (v6,#4)

LeBlanc (Le Blanc), Jill, "A Mystical Response to Disvalue in Nature," Philosophy Today 45(2001):254-265. Holmes Rolston's account of disvalues in nature is too rationalized; it does not speak to the distress of the individual pained by the stresses of nature. For this one needs a mystical, experiential response, which involves loving all things and doing all one can to alleviate such disvalue in the world. Le Blanc is at McMaster University, Hamilton, Ontario. (v.13,#2)

LeBlanc, Jill. "Eco-Thomism." Environmental Ethics 21(1999):293-306. St. Thomas Aquinas is generally seen as having an anthropocentric and instrumentalist view of nature, in which the rational human is the point of the universe for which all else was created. I argue that, to the contrary, his metaphysics is consistent with a holistic ecophilosophy. His views that natural things have intrinsic value and that the world is an organic unity in which diversity is itself a value requiring respect for being and life in all their manifestations. (EE)

LeBreton (Le Breton), Binka. A Land to Die For. Atlanta: Clarity Press, 1997. 151pp. \$12.95. Recouping the events surrounding the assassination of Padre Josimo, a black priest internationally recognized for his role in the struggle of impoverished squatters for land, LeBreton captures the grass roots view of the turbulent social fabric of rural Brazil--large landowners, wealthy speculators, politicians, pistoleiros, peasants, and on both sides, the Catholic Church, torn between ancient ritual and contemporary liberation theology, heeding the cries of the poor and calling for justice. Le Breton is a British journalist who lives with her husband in an isolated area of southeastern Brazil. (v8,#3)

Leclerc, Jacques; DesGranges, Jean-Luc, "Exploratory multiscale analysis of the fish assemblages and habitats of the lower St. Lawrence River, Quebec, Canada," Biodiversity and Conservation 14(no.5, May 2005):1153-1174(22).

Leddy, Thomas. "A Defense of Arts-Based Appreciation of Nature." Environmental Ethics 27 (2005):299-315. In a pluralist and pragmatist view of aesthetic appreciation of nature, nature is validly appreciated through various cultural media including science, technology, mythology, and, in particular, the arts. Those who attack arts-based appreciation mainly think about the arts of the nineteenth century: traditional landscape painting and sculptures on pedestals. When we turn to art since the 1970s, for example, earth art, this picture changes. Allen Carlson's attack on postmodernist and pluralist models of aesthetic appreciation does not pose significant problems for an arts-based approach, for he makes a major concession to non-scientific culture-based approaches when he allows mythological descriptions. If mythology can be taken into consideration when appreciating the natural environment, then the arts should be as well. The aesthetic object in environmental aesthetics is emergent from, and upon, the interaction of the experiencing subject(s) and the appreciated environment, the limits of which are set by the experiencing subject(s). These limits need not be narrowly science-based. (EE)

Ledoux, Arthur O., "A Green Augustine: On Learning to Love Nature Well," Theology and Science 3 (no. 3, 2005): 331-344. Augustine of Hippo has expressed a vision of beauty in nature that could, if better known, encourage traditional Christians and secular ecologists to affirm the ground they have in common. For Augustine the ideal would be to see nature as God sees it, feeling deeply both its beauty and its impermanence, loving nature without clinging to it. With such clear seeing would come love and the motivation for sustained and skillful action. Ledoux is in philosophy, Center for Augustinian Study and Legacy, Merrimack College, North Andover, MA.

Leduc, Thomothy B., "Approaching a Climatic Research Ettiquette," Ethics and the Environment 12(no. 2, 2007):45-70. This paper examines the way in which climate change's complexity calls forth dialogue on various cross-cultural dimensions which resonate with its multi-dimensional reality. While the IPCC science and the Kyoto Protocol approach this inclusiveness, they ultimately limit the range of voices

heard due to the continuation of cultural assumptions that are intertwined with many environmental issues. Following the Earth Charter as an alternative model of cross-cultural dialogue that can inform a methodological approach of climate change, this analysis suggests that a more inclusive sharing can offer a way of attending to limiting assumptions as a means to creating viable regional and global responses. This climatic research etiquette is clarified through focusing upon the continued dominance of economic scarcity and its religious precursor, original sin, in contemporary environmental thought. Leduc is a Ph.D. candidate, Faculty of Environmental Studies, York University, Toronto.

Lee, Charles. "The Integrity of Justice: Evidence of Environmental Racism" Sojourners (February/March 1990): 22-25.

Lee, Donald C. "Some Ethical Decision Criteria with Regard to Procreation." Environmental Ethics 1(1979):65-69. A response to Daniel Callahan's claim that although population growth has been a longstanding value it now poses a threat to human beings as well as to ecosystemic health. With particular attention to the rank ordering of freedom and the right to procreate. One does not have a right to procreate to unlimited procreation that threatens the very survival of the species. Lee is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)

Lee, Donald C. "Toward a Marxian Ecological Ethic: A Response to Two Critics." Environmental Ethics 4(1982):339-43. To the claim that Marx has no concept of human nature after 1845 and is not prescriptive, I reply that his work only makes sense in the light of his definition of the human being as creator and producer of himself through his own productive activity; otherwise, there is no reason that labor should "naturally" belong to the laborer, since other animals live from each other's labor and exploitation is natural. Marx's rejection of exploitation is an ethical principle. On the other hand, I attack the narrow human chauvinism of Marxists which lacks environmental consciousness and concern for other species; I label it "eco-imperialism." Marx had several important insights, but his work in general was not always free of the limitations of his age; I try to point to those insights most instructive in our time with regard to the problems of environment. Lee is in the department of philosophy, University of New Mexico, Albuquerque, NM. (EE)

Lee, Donald C. Review of Science and the Revenge of Nature. By C. Fred Alford. Environmental Ethics 9(1987):185-87.

Lee, Donald C. "Government, Justice, and Procreation." Environmental Ethics 4(1982):94-96. (EE)

Lee, Donald C. "On the Marxian View of the Relationship between Man and Nature." Environmental Ethics 2(1980):3-16. Marx holds that mankind has developed from nature and in mutual interaction with nature: nature is not an "other" but is man's body. Capitalism is a necessary stage in mankind's historical development of the mastery of nature, but it regards nature as an "other" to be exploited. Thus, a further historical development is necessary: the overcoming of the dichotomy between man as subject and nature as object. Capitalism bases its concept of wealth on unnecessary production rather than on socially useful production and on the maximization of true leisure and free and creative activity for all. It creates excess pollution and depletes nonrenewable resources as a result of this wasteful, exploitative, unnecessary production. A Marxian solution to environmental problems involves the replacement of capitalism with a rational humane, environmentally unalienated social order. Unfortunately, the actual practice of Marxism has not generally been in accord with its own theory. Such rational, humane social orders have not yet been instituted, but they must be soon. We must take one aspect of Marx's ideas to its logical conclusion: Marxist practice has been, at best, homocentric, but now it must overcome that limitation and truly see nature as our "body." Marxism must become ecologically aware; mankind must become the steward of its "body": the ecosystem upon which it depends and which now depends upon it for its health (homeostasis). Lee is in the department of philosophy, University of New Mexico, Albuquerque, NM.

(EE)

Lee, Donald, "A Hierarchical Ethical Theory Based on the Ecological Perspective" Philosophical Inquiry 8, nos. 1-2 (Winter-Spring 1986):111-123). Argues that we need a theory which prescribes different levels of value for different kinds of entities. (Katz, Bibl # 1)

Lee, James C. and Brian R. Kesser. "Razorback Sucker Management and the Right to Die." Environmental Ethics 28(2006):333-334. (EE)

Lee, K., "Review of: David Wilkinson, Environment and Law," Environmental Politics 11(no.4, 2002): 149.

Lee, K., "Review of: Brian Czech and Paul R. Krausman, The Endangered Species Act: History, Conservation, Biology and Public Policy," Environmental Politics 12(no. 1, 2003): 265-266. (v 14, #3)

Lee, Kai N., Compass and Gyroscope: Integrating Science and Politics for the Environment. Washington: Island Press, 1993. 290 pages. \$ 25.00 hardcover. Rigorous science can be the compass and practical politics can be the gyroscope. Uses the Columbia River Basin in the Pacific Northwest as a case study. "Sustainable development is not a goal, not a condition likely to be attained on earth as we know it. Rather it is more like freedom or justice, a direction in which we strive." (v4,#3)

Lee, Kai N., "Sustainability, Concept and Practice Of," Encyclopedia of Biodiversity 5: 553-568. Biodiversity is dependent on sustainable utilization of the natural world by humans, and the conservation of biodiversity may well be essential to the durability of the human species. Is a sustainable economy possible? Recent scientific appraisals suggest that it is but that a transition toward sustainability will require significant social, political, and technological changes during the next two generations. This is also the time period in which human population seems likely to level off; hence, it is possible to think of a sustainability transition on the timescale of the demographic transition drawing to a close during the twenty-first century. (v.11,#4)

Lee, Keekok, Holland, Alan, and McNeill, Desmond, eds., Global Sustainable Development. Edinburgh: Edinburgh University Press. Explores some of the complexities surrounding sustainable development in terms of the concept itself as well as at the level of implementation and policy. Challenges facing those who wish to invoke the notion both in their thinking and their planning, whether in the developing South or the developed North. The contributors, coming from different parts of the world, from very different backgrounds and disciplines bring their own distinctive perspective to bear on the issues they have respectively identified as relevant and crucial. Lee and Holland are at the University of Lancaster. McNeill is at the University of Oslo. (v.11,#3)

Lee, Keekok, "An Animal: What is it?," Environmental Values 6(1997):393-410. ABSTRACT: This paper will argue that posing the question what is an animal? is neither irrelevant nor futile. By looking more closely at four conceptions of what is an animal as held implicitly by the general public, by certain philosophers of animal liberation, by apologists for zoos and by the community of zoologists, it will attempt to show that the first three are partial and decontextualised. On the other hand, the zoological account is obviously more comprehensive, and it will be argued that, if suitably teased out, it involves a properly contextualised conception set against the notions of species, habitat, ecosystem and of evolutionary processes in the past (as well as the future). Such a rounder and more historical characterisation will transcend the usual polarisation between so-called individualism and holism in environmental philosophy. The transcendence of this perceived dichotomy is shown also to have practical implications for environmental policy-making with regard to issues like biodiversity and the saving of animals from extinction. Department of Philosophy University of Manchester, Manchester, UK. (EV)

Lee, Keekok, "The Source and Locus of Intrinsic Value," Environmental Ethics 18(1996):297-308. In the

literature of environmental philosophy, the single most potent argument that has been made against the claim that nature may possess intrinsic value in any objective sense is the Humean thesis of projectivism and its associated view that human consciousness is the source of all values. Theorists, in one way or another, have to face up to this challenge. For instance, J. Baird Callicott upholds this Humean foundation to modern Western philosophy. However, by distinguishing between the source and locus of value, he makes it possible to argue that nature is the locus of intrinsic value without at the same time compromising the thesis that human consciousness is the source of all values. On the other hand, Holmes Rolston, III, another eminent environmental philosopher, criticizes the distinction as well as challenges the Humean foundation itself. In this article, I attempt to resolve the disagreement between Callicott and Rolston over this particular distinction, thereby doing justice to the insights which each theorist, undoubtedly, has brought to bear on the issue of intrinsic value, at least as far as individual organisms is concerned. However, I am also critical of both for having failed to draw out the full implications behind certain crucial distinctions that should be made about the notion of intrinsic value itself. Lee is in philosophy, University of Manchester, UK. (EE)

Lee, Keekok, The Natural and the Artefactual: The Implications of Deep Science and Deep Technology for Environmental Philosophy. Lanham, MD: Lexington Books (Rowman & Littlefield), 1999. Pages 288. ISBN 0-7391-0061-0. \$35.00 cloth. Focuses on ontology in the ongoing debates in environmental philosophy, by making the distinction between the natural and the artefactual. Argues that the crisis facing our kind of industrial civilisation is not so much ecological as ontological in character. Science and technology are dynamic; while extant or older technologies are indeed polluting, newer ones or those on the horizon would be increasingly less so.

Technological fixes, however, of this kind mask the true nature of the reality facing us--the sunrise technologies (like biotechnology), are nature-replacing, rather than nature-saving technologies. The price we are being asked to pay for a cleaner environment via such technologies will be the elimination of nature as the ontological other. In other words, our science and our technology increasingly allow us to systematically transform the natural to become the artefactual--the ultimate outcome would be a narcissistic civilisation where nearly everything around us is nothing but the product of human intentions, designs and ends. What we admire then would no longer be nature's creativity and ingenuity but our own human creativity and ingenuity.

In order to grasp the radical powers of today's technologies and those in the near future, one must also grasp the complex relationships between science and technology in the past and in modern times. These may be explored in turn in the relationships between the history and philosophy of science on the one hand and the history and philosophy of technology on the other.

Lee challenges one of the central assumptions of contemporary environmentalism: that if we could reduce or eliminate pollution, we could "save" the planet without unduly disrupting our modern, industrialized societies. Lee argues instead that the process of modernization, with its attendant emphasis on technological innovation, has fundamentally transformed "nature" into just another man-made "artefact." Ultimately, what needs to be determined is whether nature has value above and beyond human considerations, aesthetic, spiritual, or biological. Provocative, a revolutionary attempt to reconfigure environmental ethics, positing the existence of two separate ontological categories - the "natural" and the "artefactual." Natural entities, whether they are organisms or inert mater, are "morally considerable" because they possess the ontological value of independence, whereas artefacts are created by humans expressly to serve their interest and ends.

Contents:

--Chapter: 1. Worldviews: Modern and Pre-modern Modernity; The Old Philosophy and the Old Science; The New Science and Its Method, includes Modern Science and the History of Technology: Transforming the Natural to Become the Artefactual.

2. Modern Technology, the Philosophy of Technology, and the Philosophy of Science.

Chapter 3: Independence, Human Design and Artefactivity, including the Natural: Different Senses of 'Nature' and the End of Nature?

Chapter 4: Technology: Threats to the Natural, Extant Technology and the Less Radical Threat to the Natural, including the Humanization of Nature, and the Naturalization of Humanity.

Chapter 5: Ontology and Axiology, Abiotic Nature and Intrinsic Value.

Appendix 2: Is Nature a Mere Social Construct?

Lee, formerly at the University of Manchester, is now a researcher at the University of Lancaster, UK. Reviewed by Y.S. Lo. Environmental Values 9(2000):254.

Lee, Keekok. "Beauty for Ever?" Environmental Values 4(1995):213-225. This paper is not primarily about the philosophy of beauty with regard to landscape evaluation. Neither is it basically about the place of aesthetics in environmental philosophy. Rather, its aim is to argue that while aesthetics has a clear role to play, it cannot form the basis of an adequate environmental philosophy without presupposing that natural processes and their products have no role to play independent of the human evaluation of them in terms of their beauty. The limitations, especially of a subjective aesthetics, are brought out through examining the decision of the National Trust in the Lake District to restore Yew Tree Tarn, thereby 'to ensure its beauty will be permanent'. But should a landscape (an ecosystem for that matter) be 'frozen' against natural changes in order that its beauty be preserved 'permanently'? If not, what counter principle(s) can one invoke to argue against such a philosophy of management or at least to limit such intervention in its name? The National Trust is committed 'to preserving the beauty and unique character of the Lake District'. Its unique character includes its geological formations which make the area beautiful. But geological processes are dynamic. Should their products necessarily be subordinated to aesthetic considerations? If so, are they not in danger of being treated like a work of art, an artefact which we, humans, are entitled to preserve against change? In a conflict between the requirement of conserving beauty of the landscape on the one hand and natural processes at work which might undermine that beauty on the other, should aesthetic considerations always have priority? However, the restoration of Yew Tree Tarn as opposed to the failure in Yosemite to intervene to prevent one of its lakes from drying out are merely used as handy examples to lead into such theoretical exploration which should, most certainly, not be interpreted as a general indictment of the overall management policies of the National Trust on the one hand, or endorsement of those of the Yosemite National Park on the other. KEYWORDS: natural beauty, geological, processes, products, subjective aesthetics, nature as a work of art. Lee is at the Centre for Philosophy and Environment, University of Manchester. (EV)

Lee, Keekok. "Instrumentalism and the Last Person Argument." Environmental Ethics 15(1993):333-44. The last person, or people, argument (LPA) is often assumed to be a potent weapon against a purely instrumental attitude toward nature, for it is said to imply the permissible destruction of nature under certain circumstances. I distinguish between three types of instrumentalism--strong instrumentalism (I) and two forms of weak instrumentalism: (IIa), which includes the psychological and aesthetic use of nature, and (IIb), which focuses on the public service use of nature--and examine them in terms of two scenarios, the apres moi, le deluge and the "ultimate humanization of nature" scenarios. With regard to the first, I show that LPA is irrelevant to all the three versions of instrumentalism. With regard to the second scenario, I show that even though it is redundant insofar as (I) is concerned and irrelevant insofar as (IIa) is concerned, it is, surprisingly, effective against (IIb), despite the fact that as a form of weak instrumentalism it is not the target of LPA. In addition, I examine the implications of LPA for the three variants when it is applied to the preservation rather than the destruction of nature and conclude that LPA is effective against (I) and (IIb), but not as effective against (IIa), which can recognize a permission, though not a duty, to save nature. Lee is in the department of philosophy, University of Manchester, Manchester, U.K. (EE)

Lee, Keekok. Social Philosophy and Ecological Scarcity (London and New York: Routledge, 1989). Lee, a philosopher at the University of Manchester, intends this work as the first systematic study of the implications of ecological scarcity for social philosophy. She finds neither of the two major competing social philosophies (capitalism and Marxist socialism) to be adequate, but recognition of the ecological

crisis should lead to a frugal mode of socialism which makes fewer, rather than more demands on the absolutely scarce ecological resources. (v1,#2)

Lee, M., and R. Hall, "Puppet Show: The EU Is Nothing but a Rubber Stamping Exercise for the Corporations and their Lobby Groups," Ecologist 33 (5, 2003): 36-37. (v 14, #3)

Lee, Maria, Review of: Jane Holder, Environmental Assessment: The Regulation of Decision Making, Environmental Values 15(2006):129-132.

Lee, Martha F., Earth First! Environmental Apocalypse. Syracuse, NY: Syracuse University Press, 1994. 224 pages. Paper, \$ 16.95. "The beliefs and strategies of the radical underground environmental movement Earth First! ... the apocalyptic doctrine of the group, an extremism which has often led them to indulge in some spectacular, dangerous, and often illegal activities."

Lee, N., "Book Review: Confronting Consumption by Thomas Princen, Michael Maniates, and Ken Conca (Eds.)," Journal of Environment and Development 12(no. 2, 2003): 268-271. (v 14, #3)

Lee, So-Young. "Korean Environmental Thought and Practice: A Case Study of the Indramang Community." *Environmental Ethics* 30(2008):115-134. Eastern philosophy, including Korean thought, is opposed to the dominant Western perspectives, especially dualism. Korean Dong-hak life ecology equates the human being with God and nature and holds that there is a circular interrelationship between them. It is based on Daoism which stresses the unity of the universe and Buddhism which contains an anthropocosmic world view. The key ideas involving Korean green concerns are Dong-hak ecology, ecological Daoism, and Buddhist ecological philosophy. These ideas have been translated into practice in the Indramang Community. (EE)

Lee, Stuart; Roth, Wolff-Michael, "Community-Level Controversy Over a Natural Resource: Toward a More Democratic Science in Society," Society and Natural Resources 19 (no.5, May-June 2006): 429-445 (17).

Lee, Wendy A., On Discerning the Value in Domesticated Nature, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Lee, Wendy Lynne, "On Ecology and Aesthetic Experience: A Feminist Theory of Value and Praxis," Ethics and the Environment 11(2006):21-41. My aim is to develop a feminist theory of value-an axiology-which unites two notions that seem to have little in common for a theorizing whose ultimate goal is justice-driven emancipatory action, namely, the ecological and the aesthetic. In this union lies the potential for a critical feminist political praxis capable of appreciating not only the value of human life, but those relationships upon which human and nonhuman life depend. A vital component of this praxis is, I argue, the potential for an aesthetic experience whose value is exemplified in those actions that tend to foster respect for biodiversity and ecological stability. Lee is in philosophy, Bloomsburg University of Pennsylvania. (Eth&Env)

Lee-Lampshire, Wendy, "Anthropomorphism Without Anthropocentrism: A Wittgensteinian Ecofeminist Alternative to Deep Ecology," Ethics and the Environment 1(no.2, 1996):91-102. While articulating a philosophy of ecology which reconciles deep ecology with ecofeminism may be a laudable project, it remains at best unclear whether this attempt will be successful. I argue that one recent attempt, Carol Bigwood's feminized deep ecology, fails in that, despite disclaimers, it reproduces important elements of some deep ecologist's essentializing discourse which ecofeminists argue are responsible for the identification with and dual oppression of women and nature. I then propose an alternative model for

conceiving and describing human and nonhuman nature modeled on Wittgenstein's remarks concerning anthropomorphizing which I argue is immune to this criticism. Lee-Lampshire teaches philosophy at Bloomsburg University of Pennsylvania. (E&E)

Lees-Haley, Paul R. "Manipulation of Perception in Mass Tort Litigation," Natural Resources & Environment 12(no.1,1997):64. (v8,#3)

Leeson, S., "The Need for Growth Promoting Compounds in Poultry Meat Production", Journal of Agricultural and Environmental Ethics 4(1991):89ff. Modern strains of broiler chicken are capable of achieving a 2.4 kg liveweight at 42d of age. This extremely fast growth is accomplished in part by balanced diets containing pharmaceutical growth promoting compounds. Over the last few years, a number of ethical questions have arisen regarding the use of such compounds. Such fast growth rate is accompanied by reduced bird welfare related to morbidity and mortality of a proportion of the birds. In two trials we have shown that acceptable growth rate can be achieved in diets without these compounds, and that economics of production are not adversely affected. It is concluded that future management programs for broiler chickens should consider a tempering of growth rate and that this could lead to improved bird well-being.

Leff, Enrique. Green Production: Toward an Environmental Rationality. New York: Guilford Publications, 1995. 168 pages. Paperback \$16.95. Part of the Democracy and Ecology series published in conjunction with "Capitalism, Nature, Socialism: A Journal of Socialist Ecology."

Leggett, Christopher G., and Bockstael, Nancy E., "Evidence of the Effects of Water Quality on Residential Land Prices," Journal Of Environmental Economics And Management 39 (No. 2, Mar 01 2000): 121- . (v.11,#2)

Lehman, Donna. What on Earth Can You Do? Making Your Church a Creation Awareness Center. Scottdale, PA; Waterloo, ON: Herald Press/Mennonite Publishing House, 1993. 192 pages. \$9.95, \$12.95 Canada; paper. Directed toward congregations, this book offers practical ways small groups or individuals can get involved and make a difference. (v5,#2)

Lehman, Hugh, Clark, E. Ann, and Weise, Stephan F., "Clarifying the Definition of Sustainable Agriculture", Journal of Agricultural and Environmental Ethics 6(1993):127-144. A number of distinct definitions of sustainable agriculture have been proposed. In this paper we criticize two such definitions, primarily for conflating sustainability with other objectives such as economic viability and ecological integrity. Finally, we propose and defend a definition which avoids our objections to the other definitions. Lehman is in philosophy at the University of Guelph, Ontario. Clark and Weise are in crop science at the University of Guelph, Ontario.

Lehman, Hugh, Review of Cynthia Rosenzweig, Daniel Hillel, Climate Change and the Global Harvest: Potential Impacts of the Greenhouse Effect on Agriculture. Oxford: Oxford University Press, 1998. 324 pp., Index. Journal of Agricultural and Environmental Ethics 11(1998):71-74.

Lehman, Hugh, Review of Marcel Dol, Soermini Kasanmoentalib, Susanne Lijmbch, Esteban Rivas, Ruud van den Bos, Animal Consciousness and Animal Ethics: Perspectives from the Netherlands. Assen: Van Gorcum, 1997. 249 pp. Paperback Dfl. 59.90/ US \$ 33.00. Journal of Agricultural and Environmental Ethics 11(1998):68-71.

Lehman, Hugh Review of Pluhar, Evelyn B., Beyond Prejudice: The Moral Significance of Human and Non-human Animals. Journal of Agricultural and Environmental Ethics 9(1996):187. (JAEE)

Lehman, Hugh, Review of Thompson, Paul B., The Spirit of the Soil: Agriculture and Environmental

Ethics. Journal of Agricultural and Environmental Ethics 9(1996):89. (JAEE)

Lehman, Hugh, Review of John Leslie, The End of the World: The Science and Ethics of Human Extinction. Journal of Agricultural and Environmental Ethics 11(1998):63-65.

Lehman, Hugh, "Are Value Judgments Inherent in Scientific Assessment?", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. This paper is divided into three parts. In Part I, I discuss the view of Bernard Rollin on the question posed in the title of the paper. To reply to the position taken by Rollin a critic would need to make a distinction between value commitments made in the social context within which people do science from possible value commitments of science itself. Since investigating that distinction would take us far afield, in Part II, I make and defend an assumption concerning scientific method. If there are value commitments of science itself, we should be able to indicate what they are by reference to our description of scientific method. In Part III, I argue that value commitments do enter into the application of scientific method at each stage and so are indeed inherent in science itself. Further, I shall suggest here that conflicts concerning the nature of scientific method reflect, in part, conflicts among scientists and other people with regard to what values can be considered to be values of science itself. As part of this discussion I will also call attention to the grain of partial truth which is reflected in scientists' claims that science is value free. Lehman is in the Department of Philosophy, University of Guelph, Guelph, Ontario Canada N1G 2W1.

Lehman, Hugh, "On the Moral Acceptability of Killing Animals", Journal of Agricultural Ethics 1(1988):155-162. In this paper we argue that, even if we grant the basic assumptions of a "rights view" (killing of animals if they are innocent threats or shields or are in a "lifeboat situation"), a good deal of killing of animals for food and scientific research continues to be morally acceptable. Lehman is in philosophy at the University of Guelph, Ontario.

Lehman, Hugh, Review of: Letourneau, Deborah K., and Burrows, Beth Elpern, (eds.), Genetically Engineered Organisms: Assessing Environmental and Human Health Effects. Journal of Agricultural and Environmental Ethics 16(2003):91-93. (JAEE)

Lehman, Hugh & Hurnick, Frank, Editorial: "Technology and Choice in Agriculture", Journal of Agricultural Ethics 1(1988):163-166.

Lehman, Hugh, Review of Rollin, Bernard E. The Frankenstein Syndrome: Ethical and Social Issues in the Genetic Engineering of Animals. Journal of Agricultural and Environmental Ethics 10(1997):84-87. (JAEE)

Lehman, Hugh, Review of Sheldon Krimsky and Roger P. Wrubel, Agricultural Biotechnology and the Environment: Science Policy and Social Issues. Urbana: University of Illinois Press, 1996). 294pp., Index. Price: Cloth, \$47.50, Paper, \$18.95. Journal of Agricultural and Environmental Ethics 11(1998):66-67.

Lehman, Hugh, Review of Ben Mepharn, ed., Food Ethics, New York: Routledge, 1996. pp. 178, Index. Price Hb: \$49.95 (Can Hb \$69.95); Pb: \$17.95 (Can Pb \$24.95). Journal of Agricultural and Environmental Ethics 10(1997/1998):203-205.

Lehman, Hugh, Rationality and Ethics in Agriculture. Reviewed by Freeman Boyd. Journal of Agricultural and Environmental Ethics 10(1997):89-92. (JAEE)

Lehman, Hugh, Review of: Value Assumptions in Risk Assessment: A Case Study of the Alachlor Controversy by Conrad G. Brunck, Lawrence Haworth and Brenda Lee. Journal of Agricultural and

Environmental Ethics 5(1992):110f.

Lehman, Hugh, Review of Food Animal Well-Being 1993, Bill R. Baumgardt and H. Glenn Gray, eds., Journal of Agricultural and Environmental Ethics 7(1994):125.

Lehman, Hugh, Rationality and Ethics in Agriculture. Reviewed by Evelyn Pluhar. Journal of Agricultural and Environmental Ethics 9(1996):181-186. (JAEE)

Lehman, Hugh. Review of Sheldon Krimsky and Roger P. Wrubel, Agricultural Biotechnology and the Environment: Science Policy and Social Issues. Journal of Agricultural and Environmental Ethics 11(1999):66-67. (JAEE)

Lehman, Hugh. Review of Marcel Dol, Soemini Kasanmoentalib, Susanne Lijmbch, Esteban Rivas, Ruud van den Bos, Animal Consciousness and Animal Ethics: Perspectives from the Netherlands. Journal of Agricultural and Environmental Ethics 11(1999):68-71.

Lehman, Hugh. Review of John Leslie, The End of the World: The Science and Ethics of Human Extinction. Journal of Agricultural and Environmental Ethics 11(1999):63-65. (JAEE)

Lehman, Hugh. A Review of Christian Meyer, Animal Welfare Legislation in Canada and Germany: A Comparison. Journal of Agricultural and Environmental Ethics 11(1999):150-151. (JAEE)

Lehman, Hugh. Review of: Bailey, Britt, and Lappe, Marc, (eds.), Engineering the Farm: Ethical and Social Aspects of Agricultural Biotechnology. Journal of Agricultural and Environmental Ethics 16(2003):513-516. (JAEE)

Lehman, Hugh. Review of Cynthia Rosenzweig, and Daniel Hillel. Climate Change and the Global Harvest: Potential Impacts of the Greenhouse Effect on Agriculture. Journal of Agricultural and Environmental Ethics 11(1999):71-74.

Lehman, Scott Privatizing Public Lands. New York: Oxford University Press, 1995. 240 pages. \$45. The federal government retains roughly a quarter of the U.S. lands, and managing them is often expensive and contentious. A solution, some argue, is privatization. A free market directs privately-owned resources to their most productive uses. Lehman argues that there is no sense of "productivity" for which it is true that greater productivity is both desirable and a likely consequence of privatizing public lands or "marketing" their management. Lehman is in philosophy at the University of Connecticut. (v6,#1)

Lehmann, Scott. Review of Why Preserve Natural Variety? By Bryan G. Norton. Environmental Ethics 10(1988):275-78.

Lehmann, Scott. "Do Wildernesses Have Rights?" Environmental Ethics 3(1981):129-46. Although preservationists sometimes allege a right of wild areas to remain wild, their arguments do not warrant the ascription of such a right. It is hard to see how any argument to this conclusion could be persuasive, for (1) X having a right to Y requires that depriving X of Y injure X (other things being equal), and (2) the only X we have reason to think can be injured is an X which possesses consciousness. On the other hand, rights are problematic creatures, and the individualistic moral view they presuppose does not accord well with the holistic perspective of many preservationists. While it might be possible to develop this perspective into a moral theory that gives wilderness intrinsic value, there seems a greater need for clarifying the policy implications of accepted moral principles. Lehmann is in the department of philosophy, University of Connecticut, Storrs, CT. (EE)

Lehner, Peter H. "Voluntary Controls in the Proposed Clean Water Amendments of 1995: Reality or

Rhetoric," Journal of Environmental Law & Practice 3(no.3, Nov. 1995):25- . Is the shift to voluntary controls a camouflaged shift to no safeguards?

Lehocky, Daniel. Review of The Limits of Altruism. By Garrett Hardin. Environmental Ethics 1(1979):83-88.

Lehr, Jay, ed., Rational Readings on Environmental Issues. New York: Van Nostrand Reinhold, 1992. (v4,#1)

Lei, FM; Qu, YH; Tang, QQ; An, SC, "Priorities for the conservation of avian biodiversity in China based on the distribution patterns of endemic bird genera," Biodiversity and Conservation 12(no.12, 2003):2487-2501. (v.14, #4)

Lei, FM; Qu, YH; Lu, JL; Liu, Y; Yin, ZH, "Conservation on diversity and distribution patterns of endemic birds in China," Biodiversity and Conservation 12(no.2, 2003): 239-254.

Lei, Yi, "Shengceng shengtai xue: yizhong jijin di huanjing zhuyi (Deep Ecology: A Radical Environmentalism)," Zi Ran Bian Lun Fa Yet Jiu (Studies in Dialectics of Nature) 15(no. 2, February, 1999):51-55. ISSN 1000-8934. With discussion of Arne Naess, Bill Devall and George Sessions, Richard Sylvan and David Bennett, Michael Zimmerman, and Warwick Fox. (China). (v.10,#1)

Lei Yi, Ecological Ethics, Sanxi People's Press, 2001, Chapters: ethical requirements in the new era; moral extension; radical environmentalism; values and rights of nature; basic principles of ecological ethics; ethics in ecological practice. Professor Lei is at the Humanity School, Tsinghua University.

Lei Yi, A Studies of Deep Ecology thoughts, Tsinghua Uni. Press, 2001. Chapters: the thoughts of ecological movements: from shallow to deep; the theory of deep ecology and its development; the historical roots of deep ecology; the practice of deep ecology; Valuation, debates and implication.

Lei Yi. *On the Values and Ethics of Rivers*. Zhengzhou: Yellow River Press, 2007.

Lei Yi. *A Study of Deep Ecology*. Beijing: Tsinghua University Press, 2000.

Lein, James K. Environmental Decision Making: An Information Technology Approach. Malden, MA: Blackwell Science, Inc., 1997. 288pp. \$49.95. The aim of this book is to help decision makers find their way through the wide array of new technologies and often overwhelming amount of data now available, and to show them how to use this data for problem solving and management. (v8,#1)

Lein, Yehezkel, "Disputed Waters: Israel's Responsibility for the Water Shortage in the Occupied Territories," Ecotheology No 9 (July 2000):68-83.

Leiserowitz, Anthony A., and Lisa O. Fernandez. *Toward a New Consciousness: Values to Sustain Human and Natural Communities*. New Haven: Yale School of Forestry and Environmental Studies, 2008. From the book: "Many of our deepest thinkers and many of those most familiar with the scale of the challenges we face have concluded that the changes needed to sustain human beings and natural communities can only be achieved in the context of the rise of a new consciousness. For some, it is a spiritual awakening—a transformation of the human heart. For others it is a more intellectual process of coming to see the world anew and deeply embracing the emerging ethic of the environment and the old ethic of what it means to love thy neighbor as thyself. But for all it involves major cultural change and a reorientation of what society values and prizes most highly."

Leiss, William, The Domination of Nature. Montreal: McGill-Queen's University Press, 1994. Paper, \$19.95. 1994 reprint of a book first published 23 years ago, in 1972, here unaltered, and something of a classic in the field. The global predicament can only be understood in terms of the most deeply rooted attitude that drives Western civilization: the idea of the domination of nature. Leiss holds the Research Chair in Environmental Policy, School of Policy Studies, Queen's University. (v6,#2)

Leisz, Stephen, Gage, James, "Suggestions for Development and Conservation Research Needs in Madagascar", Society and Natural Resources, 9(No.1, 1996):97- . (v7,#1)

Leith, James A., Roy A. Price, and John H. Spencer, eds., Planet Earth: Problems and Prospects. McGill-Queen's University Press. A compendium of papers from a 1991 conference at Queen's University. (v6,#4)

Lekan, Thomas, "Regionalism and the Politics of Landscape Preservation in the Third Reich," Environmental History, 4(no. 3, July 01 1999):384- . (v10,#4)

Lekan, Todd, "Integrating Justice and Care in Animal Ethics," Journal of Applied Philosophy 21(no.2, August 2004):183-195(13). (v. 15, # 3)

Lemaire, Ton Filosofie van het landschap [in Dutch: Philosophy of the landscape], Baarn: Ambo 1970. An influential study into the evolution of the European experience of the landscape as seen in the history of landscape-paintings. Often reprinted in the Netherlands, this book has dominated the field of environmental aesthetics there for 2 decades.

Lemaire is an influential philosopher in the Dutch debate regarding the place of man in nature. Formerly at Nijmegen University, he now lives in the countryside in France.

Lembke, Janet, Looking for Eagles: Reflections of a Classical Naturalist. New York: Lyons and Burford, 1990. \$ 19.95. The author spent several decades translating Greek and Latin poetry and now lives with her retired chief-petty-officer husband on the banks of North Carolina's lower Neuse River. There she roams the wilds and wetlands, taking as her chief mentors Aristotle, Pliny the Elder, and other classical natural historians. Ancient eyes observed and variously interpreted the same natural phenomena that offer themselves to our inspection, and asked some of the same questions. (v1,#4)

Lemco, Jonathan, ed., Tensions at the Border: Energy and Environmental Concern in Canada and the United States. New York: Praeger, 1992. Climate change, acid rain, global warming, The Great Lakes, water and hydroelectric exports, hazardous wastes as international problems between the U.S. and Canada. Lemco is Senior Fellow at the National Planning Association and associated with Johns Hopkins University. (v3,#3)

Lemke, D, "African Lessons for International Relations Research," World Politics 56(no.1, 2003):114-138. (v. 15, # 3)

Lemley, Brad, "The New Ice Age," Discover, September 2002, pp. 35-41. Yes, the Earth is warming, but melting fresh water from ice may shift the Gulf Stream and make Europe much colder, also New England. Studies from the Woods Hole, Massachusetts, oceanographers.

Lemonick, Michael D., "Sharks under Attack," Time, August 11, 1977, pp. 59-64. We're killing them, 30-100 million a year, and lots of other fish, much faster than they can reproduce. Are they doomed to extinction? Much of the catch is wasted. (v8,#3)

Lemonick, Michael D., "A Terrible Beauty," Time, December 12, 1994. Cover story. An obsessive focus on show-ring looks is crippling, sometimes fatally, America's purebred dogs. Fashionable form has been

separated from natural function, and these dogs are a genetic mess. Decades of bad breeding have saddled a quarter of America's purebreds with hereditary illnesses that cripple and even kill; the nation's canine establishment is much to blame. (The following article leaves one wondering whether we treat professional football players much better). (v5,#4)

Lemonick, Michael D. "Winged Victory." Time, 11 July 1994, p. 53. One of several accounts of the removal of the bald eagle from the endangered list. The Endangered Species Act of 1973 is up for renewal in Congress, and some conservation groups have argued that the proposed changes in the act would not have saved the bald eagle. (v5,#2)

Lemons, J. and D. Brown, eds. Sustainable Development: Science, Ethics and Public Policy. Reviewed by John M. Gowdy. Environmental Values 8(1999):403. (EV)

Lemons, J.; Westra, L.; and Goodland, R., eds. Ecological Sustainability and Integrity: Concepts and Approaches. Dordrecht: Kluwer Academic Publishers, 1998. ISBN 0-7923-4909-1. Chapters by L. Caldwell, K. Shrader-Frechette, J. Baird Callicott and K. Mumford, D. Pimentel, J. Lemons, J. Sterba, P. Miller, R. Goodland, L. Westra, and others. (v.8,#4)

Lemons, John, "Cooperation and Stability as a Basis for Environmental Ethics." Environmental Ethics 3(1981):219-30. Philosophers and ecologists have proposed that ecological principles such as cooperation and ecosystem stability serve as a basis for environmental ethics. Requisite to understanding whether a cooperation based environmental ethic can be taken as an unqualified good is knowledge of the role of cooperation in the context of other interactions between species (e.g., competition), and the significance of such interactions to ecosystem stability. Further, since the key ecological concept of stability has been ambiguously defined, the various definitions need to be understood so that use of scientific information in philosophical discussion is accurate and consistent. Lemons is at Environmental Studies, New England College, Henniker, NH. (EE)

Lemons, John, ed., Readings from the Environmental Professional. Three volumes: I. National Environmental Policy Act. II. Natural Resources. III. Risk Assessment. Cambridge, MA: Blackwell Science, 1995. \$ 24.95 each. Each volume is a collection of the most interesting, lively, and topical articles that have appeared in the journal The Environmental Professional. Typically about three dozen papers. The Natural Resources volume, for example, contains the exchange between J. Baird Callicott, "The Wilderness Idea Revisited: The Sustainable Development Alternative," and Holmes Rolston, "The Wilderness Idea Reaffirmed," and also Kristin S. Shrader-Frechette and Earl D. McCoy, "Ecology and Environmental Problem-Solving," also David Orr, "What Is Education For?" Lemons has been editor of The Environmental Professional, and teaches biology at the University of New England. (v6,#4)

Lemons, John, and Brown, Donald A., Sustainable Development: Science, Ethics and Public Policy. Dordrecht: Kluwer Academic Press, 1995. Contains: Brown, Donald A., "The Role of Law in Sustainable Development and Environmental Protection Decisionmaking," pp. 64-76. (v8,#3)

Lemons, John, ed. Scientific Uncertainty and Environmental Problem Solving. Malden, MA: Blackwell Science, Inc., 1996. 512 pp. \$80. Four major classes of uncertainty are addressed: framing uncertainty, modeling uncertainty, statistical uncertainty, and decision-theoretical uncertainty. Contributors give specific guidelines for decision making within existing limitations. (v8,#1)

Lemons, John, "The Need to Integrate Values into Environmental Curricula," Environmental Management 13(no. 2, 1989):133-147. Many environmental problems are controversial because of conflicting values and there is no consensus as to which values should have precedence. Environmental managers must have a full understanding of such values and the principles of ethics that can be used in

decision making. Unfortunately, the integration of values into curricula has often not been explicit or comprehensive. University-trained environmental managers do not possess the knowledge, skills, and methods necessary for more ethically based decisions. Specific curricula are analyzed. Environmental programs should more fully include teaching about values and ethics. Lemons is in the Division of Life Sciences, University of New England and is editor of The Environmental Professional. (v2,#1)

Lemons, John, Donald A. Brown, and Gary E. Varner. "Congress, Consistency, and Environmental Law." Environmental Ethics 12(1990):311-27. In passing the National Environmental Policy Act of 1969 (NEPA), Congress committed the nation to an ethical principle of living in "productive and enjoyable harmony" with the natural environment. Thus understood, NEPA can be given either (1) a technology-forcing interpretation or (2) an intelligent decision-making interpretation. We argue that in its subsequent decision to site a high-level nuclear waste repository at Yucca Mountain, Nevada, Congress acted inconsistently with this principle under either interpretation. We conclude that for the foreseeable future, the only way to handle the nation's nuclear wastes consistent with the environmental goal enunciated in NEPA is to leave them in temporary surface storage facilities, prohibit the licensing of any new nuclear power plants, and take all appropriate steps to reduce the nuclear weapons industry. Lemons is at the Dept. of Life Sciences, University of New England, Biddeford, ME. Brown is in the department of Environmental Resources, Harrisburg, PA. Varner is at the Philosophy Dept., Texas A & M, College Station, TX. (EE)

Lemons, John, Donald A. Brown, and Gary Varner, "Congress, Consistency, and Environmental Law: Nuclear Waste at Yucca Mountain, Nevada," Environmental Ethics 12(1990):311-327. Discusses the moral implications of the National Environmental Policy Act of 1969 (NEPA) and shows how Congress acted inconsistently in the selection of Yucca Mountain as a nuclear waste disposal site. The argument assumes that Congress had an ethical principle in mind when NEPA was created. (Katz, Bibl # 2)

Lemons, John, Laura Westra and Robert Goodland, eds. Ecological Sustainability and Integrity: Concepts and Approaches. Dordrecht: Kluwer Academic Publishers, 1998, 315pp. Reviewed by Rob Tinch. Environmental Values 9(2000):394.

Lemons, John. "Atmospheric Carbon Dioxide: Environmental Ethics and Environmental Facts." Environmental Ethics 5(1983):21-32. Environmental philosophers often assume that we lack metaethical concepts and normative criteria for environmental decisions, but that we have all the facts we need from the environmental sciences. This is contested in the case of our obligation to future generations as affected by current decisions regarding increased fossil fuel use, decisions which affect both the immediate and long-range future, and which must be made deliberately or by default before we know the long-term effects of increased carbon dioxide in the atmosphere. Some suggestions are offered about decision making in the absence of sufficient factual information. Lemons is at the Dept. of Biology and Ecology, Deep Springs College, California. (EE)

Lemons, John. "A Reply to 'On Reading Environmental Ethics.'" Environmental Ethics 7(1985):185-88. (EE)

Lemons, John. Review of Faucheux and O'Connor, Valuation for Sustainable Development: Methods and Policy Indicators. Environmental Values 9(2000):118.

Lemons, John. "Shrader-Frechette's Schemata for Scientific Research: Implications for Environmental Professionals." The Environmental Professional 17 (no. 1, 1995):72- . (v6,#1)

Lemons, John. "A Reply to 'From Aldo Leopold to the Wildlands Project.'" Environmental Ethics 24(2002):441-442. (EE)

Lenkowa (Le¹/₂kowa), A., Oskalpowana Ziemia (The Scalped Earth), Wiedza Powszechna Publishers, 1971 (3rd edition); the book (first published in 1961) is supposed to be of equal educational value to *Silent Spring* by R. Carson. (v.13,#4)

Lenman, James. "Preverences in their Place." Environmental Values 9(2000):431-451. ABSTRACT: In at least some of their forms, Cost-Benefit techniques for the evaluation of environmental projects and policies treat the preferences of citizens as the sole determinants of the value of outcomes. There are two salient ways in which this supposition might be defended. The first is metaethical and appeals to considerations about how we must understand talk of environmental and other values. The second is political and appeals to considerations about democratic legitimacy and the proper aims of public policy. Metaethical considerations, I argue, are something of a red herring here. Roughly subjectivist understandings of our talk of values may be appealingly metaphysically unassuming, but in their most plausible formulations they do not support a view of preferences as the sole determinants of value. Political considerations, on the other hand, are to be taken very seriously. They offer, however, no straightforward rationale for any crudely preferentialist measure of social value. Findings obtained from the use of cost-benefit techniques might sometimes have a legitimate role as an input into, but not as a substitute for, political deliberation. Questions about the scope and limits of such legitimacy are properly addressed in political and not in metaethical terms.

KEYWORDS: Ethics, social philosophy, value, preference, cost-benefit analysis. Lenman is in the Department of Philosophy, University of Glasgow, Glasgow G12 8QQ, UK. (EV)

Lennard, Jeremy. "Flood of Protests Blocks Columbia Dam Project." The Christian Science Monitor, vol. 89, 3 Jan. 1997, p. 6.

Leon, Warren, and Brower, Michael, The Consumer's Guide to Effective Environmental Choices: Practical Advice from the Union of Concerned Scientists. Pittsburgh: Three Rivers Press (Carnegie Mellon University), 1999. 304 pages. \$ 15, paper. Forget about paper versus plastic bags, cloth versus disposable diapers, paper cups versus ceramics; none of this makes any serious environmental impact. There are other, much more important things to feel guilty about. Worrying about the trivial things distracts us from the four big culprits: cars, meat, home appliances, and climate control. They have the greatest impact on environmental quality. You are kidding yourself if you drive your Land Rover to the grocery store and worry about buying disposable cups. A study prepared by the Union of Concerned Scientists, among the greenest of U.S. environmental groups. (v.10,#1)

Leonard, Liam, "Environmentalism in Ireland: Ecological Modernisation versus Populist Rural Sentiment," Environmental Values 16(2007): 463-483. The recent phase of economic growth in the Republic of Ireland has led to an increase in industrial and infrastructural development across the island. One offshoot of this accelerated growth has been a rise in community based environmental movements, as environmentalists and concerned communities have come to mobilise campaigns to protect local communities and hinterlands. This paper examines the contestation of two forms of environmentalism, institutional ecomodernism versus a grassroots ecopopulism within the context of the ongoing dispute between a local community in the west of Ireland and both multinationals and the state, who are attempting to run gas pipelines from the Atlantic Corrib Field through the rural community's lands. Liam is in political science and sociology, Environmental Change Institute and SSRC, Galway, Ireland.

Leonard, Liam. *The Environmental Movement in Ireland*. Dordrecht: Springer, 2007. Leonard uses social movement theories to analyze significant ecological campaigns informed by localized communities' senses of place and rural sentiments.

Leonard, Liam. *The Environmental Movement in Ireland*. Dordrecht: Springer, 2007. Leonard uses social

movement theories to analyze significant ecological campaigns informed by localized communities' senses of place and rural sentiments.

Leopold, A. Carl. "Living with the Land Ethic." *BioScience* Vol. 54, no. 2 (2004): 149-54. The son of Aldo Leopold looks at how the land ethic has developed since his father launched it, with some reminiscences about his father. "The entry of ethical concepts into ecological thinking has provided a powerful new guiding principle.... Aldo Leopold's new paradigm of the land ethica new perspective on conservation ecology through ethical preceptshas lead to the appearance of new journals, new professional societies, and numerous new books concerned with environmental ethics." The book includes a bush diagram of some examples of bioethical concepts that have emerged from the land ethic.

Leopold, Aldo, "Means and Ends in Wild Life Management," *Environmental Ethics* 12(1990):329-332. A previously unpublished lecture of Leopold from May 1936 shows that the "land ethic" had its basis in new directions of wildlife management. Leopold wanted to emphasize the development of "aesthetic" ends because of the failure of instrumental means for duplicating natural process. The essay is followed by "A Brief Commentary" by Eugene Hargrove and J. Baird Callicott, pp. 333-337, which notes that the lecture demonstrates how early Leopold had moved away from prudential arguments for a land ethic. (Katz, Bibl # 2)

Leopold, Aldo, *The River of the Mother of God, and Other Essays by Aldo Leopold*. Madison: University of Wisconsin Press, 1991. Susan L. Flader and J. Baird Callicott have edited this collection of 59 unpublished and obscurely published pieces by Leopold, many from the Leopold archives at the University of Wisconsin. Reviewed in *The Christian Science Monitor*, April 17, 1991, p. 13. (v2,#1) (v1,#3)

Leopold, Aldo, "The Land Ethic," translated by Ye Ping, a philosopher at Northeast Forestry University. Translated into Chinese in a special issue of *Information of Ecophilosophy*, an occasional publication of the Research Office in Ecophilosophy of the Northeast Forestry University, Harbin, 1989, No. 2. (China)

Leopold, Aldo, *For the Health of the Land: Previously Unpublished Essays and Other Writings*. Edited by J. Baird Callicott and Eric T. Freyfogle. Washington, DC: Island Press, 1999. Several dozen, mostly short, pieces, excerpts, some never before published, some published in obscure places. Leopold, who died fighting a grasslands fire, left his work only partially in print. Here is Leopold, a prophet recalled from mid-century, with surprising relevance for environmental ethics at the turn of the millennium. (v10,#4)

Leopold, Aldo, *Sand County Almanac*. A Japanese translation is in press. The translator is Keichi Furuya and the publisher is Poporo Publishing Co., Ltd, Attn: Nobuo Hiratsuka, 1-36-2 Honancho Suginamita, Tokoyo, Japan. Phone 03-324-0069. (v1,#2)

Leopold, Aldo. *The Essential Leopold: Quotations and Commentaries*. Meine, Curt D., and Knight, Richard L., eds. Madison: The University of Wisconsin Press, 1999. (v10,#4)

Leopold, Aldo. *Aldo Leopold's Southwest*. Albuquerque: University of New Mexico Press, 1995. 249 pages. Selected early writings of Leopold, edited and with interpretive comments by David E. Brown and Neil B. Carmony. Earlier published as *Aldo Leopold's Wilderness* (Harrisburg, PA: Stackpole Books, 1990). (v8,#2)

Leopold, Aldo. "Means and Ends in Wild Life Management." *Environmental Ethics* 12(1990):329-32. Although research in wildlife management is repeating the history of agriculture, unlike agricultural research, which employs scientific means for economic ends, the ends of wildlife research are judged in

terms of aesthetic satisfactions as governed by "good taste." Wild animals and plants are economically valuable only in the sense that human performers and works of art are: the means are of the brain, but the ends are of the heart. Wildlife management has forged ahead of agriculture in recognizing the invisible interdependencies in the biotic community. Moreover, it has admitted its inability to replace natural equilibria and its unwillingness to do so even if it could. Because many animals do not exhibit their natural behavior under laboratory conditions, researchers are dependent on observation in the wild. The difficulties involved in isolating variables are especially clear in the study of the natural cycle. It is a problem which seems to defy the experimental method.] Leopold (1887-1948). (EE)

Leopold, Aldo. "Some Fundamentals of Conservation in the Southwest." Environmental Ethics 1(1979):131-41. Leopold first discusses the conservation of natural resources in the southwestern United States in economic terms, stressing, in particular, erosion and aridity. He then concludes his analysis with a discussion of the moral issues involved, developing his general position within the context of P.D. Ouspensky's early philosophy of organism. (EE)

Leopold, Luna B., "Ethos, Equity, and the Water Resource," Environment, March 1990, pp.16-20, 37-42. An address given February 15, 1990, the Abel Wolman Distinguished Lecture, sponsored by the Water Science and Technology Board of the U. S. National Academy of Sciences, in Washington. "The proliferation of public agencies dealing with water has led to a dissassociation of their policies, their procedures, and their outlook from the operational health of the hydrologic system." "It is deplorable that the government agency most responsible for managing water in water-short regions continues to be so insensistive to the hydrologic continuum and to equity among claimants." "The resource establishment, especially in the field of water, is stuck on the shoals of special interests, a lack of long-term perspective, and a shortage of public-minded leadership." (v1,#3)

Lequesne (LeQuesne), Carole. Reforming World Trade: The Social and Environmental Issues. Atlantic Highlands, NJ: Humanities Press, 1996. The impact of rapid trade liberalization on the livelihoods of poor communities and ways to protect their rights. (v7,#1)

LeQuire, Stan L., ed., The Best Preaching on Earth: Sermons on Caring for Creation. Valley Forge, PA: Judson Press, 1996. 221 pages. (v8,#2)

Lercher Aaron, "Are There Any Environmental Rights?" *Environmental Values* 16(2007):355-368. This paper extends the argument in H.L.A. Hart's 'Are there any natural rights?' to argue that there is an environmental moral right against pollution. This right is composed of a right against negligent, reckless or intentional risk imposition, together with the liberty to act in a way that does not negligently, recklessly or intentionally impose risks on others. This right is understood as overrideable or prima facie, and this paper does not claim that this right is the only basis of moral judgment in the cases it considers. The hypothesis that there is a right against pollution does, however, explain some moral reasoning about pollution that otherwise is difficult to explain. Lercher is at Louisiana State University, Baton Rouge, LA.

Lercher, Aaron. "Liberty of Ecological Conscience." Environmental Ethics 28(2006):315-322. Our concern for nonhuman nature can be justified in terms of a human right to liberty of ecological conscience. This right is analogous to the right to religious liberty, and is equally worthy of recognition as that fundamental liberty. The liberty of ecological conscience, like religious liberty, is a negative right against interference. Each ecological conscience supports a claim to protection of the parts of nonhuman nature that are current or potential sites of its active pursuit of natural value. If we acknowledge the fallibility of each conscience in its pursuit of genuine natural value, a policy of indefinitely extensive conservation can be justified. Destruction of an object of current or potential natural value is like destroying a church, mosque, temple, or other holy place. This justification for environmental

conservation is analogous to the standard justification for individual negative rights, as upheld by the liberal tradition of Locke, Mill, and Rawls. (EE)

Lercher, Aaron. "Is Anyone to Blame for Pollution?" Environmental Ethics 26(2004):403-410. By making use of a distinction between "making something happen" and "allowing it to happen," a polluting act can be defined as making something happen with widely scattered externalized costs. Not all polluting acts are blameworthy, but we can investigate which polluting acts are sufficiently badly performed as to be blameworthy. This definition of polluting act permits us to justify the belief we often have that behavior concerning pollution may be blameworthy, even when we do not know whether the behavior caused harm. (EE)

Lerner, Steve. Eco-Pioneers: Practical Visionaries Solving Today's Environmental Problems. Cambridge, MA: MIT Press, 1997. 440 pp. \$25. Lerner provides case studies of eco-pioneers who are exploring sustainable ways to log forests, grow food, save plant species, run cattle, build houses, clean up cities, redesign rural communities, generate power, conserve water, protect rivers and wildlife, treat hazardous waste, reuse materials and reduce both waste and consumption. (v.9,#4) Reviewed by Philip Cafaro, Conservation Biology 14(2000):328

LeRoux (Le Roux), PJ (ed) 1987. Environment conservation: why and how? Pretoria: University of South Africa. (Africa)

LeRoux (Le Roux), C 1992. Die omgewing. Die Kerkbode 19 Junie 1992. Spesiale Bylae. I-IV. (Africa)

LeRoux (Le Roux), CJP. Christuslof laat lig op God se aarde val (Kol 1:12-20). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 237-256. (Africa)

Leshy, JD, "Mining Law Reform Redux, Once More," Natural Resources Journal 42(no.3, 2002): 461-490.

Leshy, John D., "Challenges to Environmental Law", Environmental Law, 25(No.4, 1995):967- . Leshy is the Solicitor of the United States Department of the Interior. Pointing to current efforts by Congressional Republicans to weaken many existing environmental laws, Leshy emphasizes the urgent need for continued scholarship and public service in the fields of environmental and natural resources law.

Leshy, John D., "Water and Wilderness/Law and Politics," Land and Water Law Review (University of Wyoming, College of Law) 33 (no. 2, 1988):389-417. Excellent article summarizing what is and what is not at stake in the current controversy over water rights that go with wilderness designation. Although opponents of water rights for wilderness have been noisy, in fact existing water rights holders have little at stake, since wilderness water rights "are for the most part rights to in-stream, non-consumptive use, which means that they actually preserve flows for diversion and consumptive use below the federal reservation." Wilderness water rights are also typically junior, since they date from the wilderness designation. Wilderness advocates have achieved signal victories in convincing the nation that significant tracts of federal land ought to be set aside and preserved in their natural condition "as embodying an ethical expression by our culture about itself and its relationship to our natural heritage." Opponents of wilderness water rights can often successfully delay new wilderness designations, since Congress dislikes tampering with the status quo in water law. On the other hand Congress and the federal courts have regularly insisted that designation of federal lands implies reservation of water adequate for the purposes of the designation. Opponents of wilderness water rights may find their strategies successful in short term only to lose credibility in the long term, given how little is really at stake and the considerable popularity of wilderness. "Wilderness is ... the driving engine in federal land management policy just about every

place roadless areas exist." Lesly is professor of law, Arizona State University. (v1,#4)

Leslie, D, Book Review: "Le Heron, R., Murphy, L., Forer, P. and Goldstone, M., editors Explorations in human geography: encountering place," Progress in Human Geography 26(no.3, 2002):421- . (v.13, #3)

Leslie, John, "The End is More Nigh," Times Higher Education Supplement, February 16, 1966, page 15. "If you view the certainty of global warming, the likelihood of nuclear war and the possibility of grey goo calamity from the perspective of the doomsday argument, nobody should bet on humanity's long-term survival." "I believe that humans may have little more than a half chance of surviving the next 500 years. Inclined at first to say that the risk of Doom within five centuries was only about 5 per cent, I found myself changing this to 40 percent. I reached this conclusion after considering the various dangers facing us in the light of what has come to be known as the 'doomsday argument,' which has made me much less optimistic about the future of humankind."

Leslie, John, The End of the World: the Science and Ethics of Human Extinction. London and New York: Routledge, 1996. ISBN 0-415-14043-9. 310 pages. Hardback, 310 pages; \$23 US, \$29.95 Can, £16.99. Of all humans so far, roughly 10% are alive with you and me. If human extinction occurred soon, our position in population history would have been fairly ordinary. But if humankind survived at least a few more centuries, perhaps colonizing the galaxy, we could be among the earliest 0.001% of all humans--a point crucial to a "doomsday argument" originated by the cosmologist Brandon Carter. People who accept the argument will re-estimate the threats to humankind. These include asteroid impacts; nuclear, chemical and biological warfare; ozone layer destruction; greenhouse warming, possibly of a runaway kind; overpopulation; poisoning of the environment; new diseases; computers replacing humans entirely; disasters from genetic engineering or from nanotechnology; and perhaps even destruction of the galaxy through a "vacuum metastability upset" initiated by physicists. As well as discussing all this, The End of the World asks why it should worry us. Is anything ever better than anything else, as a genuine fact? Are lives almost never worth living, or do only miserable ones really matter? Could nuclear revenge be appropriate although it did no good? And when people of future generations are mere possibilities, what right have they to be born? Leslie is a well known philosopher and cosmologist at the University of Guelph. (v7,#1)

Leslie, John. The End of the World: The Science and Ethics of Human Extinction. Reviewed by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1998):63-65.

Leslie, John. The End of the World: The Science and Ethics of Human Extinction. Review by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1999):63-65. (JAEE)

Lester, James P., ed., Environmental Politics and Policy: Theories and Evidence (Durham, N. C.: Duke University Press, 1989). Twelve essays on the conservation and environmental movements, public opinion, interest groups, party politics, congress, the federal bureaucracy, the courts as these enter into environmental policy. Also chapters on international environmental politics and alternative views of the environmental problematic. (v1,#3)

Lester, Rita, Review of Dieter T. Hessel, ed., Theology for Earth Community: A Field Guide, Environmental Ethics 20(1998):195-98.

Lester, Rita, Review of Rosemary Radford Ruether, Women Healing Earth: Third World Women on Ecology, Feminism, and Religion. Environmental Ethics 20(1998):195-98.

Lester, Rita. Review of: Dieter T. Hessel, ed., Theology for Earth Community: A Field Guide. Women Healing Earth: Third World Women on Ecology, Feminism, and Religion. Edited by Rosemary Radford Ruether. Environmental Ethics 20(1998):195-98.

Letcher Andy, "Lifestyle: 'If You Go Down to the Woods Today...': Spirituality and the Eco-Protest Lifestyle," Ecotheology Vol 7 (No. 1, July 2002):88-90. Emerging from the anti-road protests which marked the 1990s, Eco-Paganism is a collective term for the diverse set of de-traditionalised, but Pagan-like, spiritualities found within road-protest culture. Whilst the actions, and direct-action, of protesters may not always appear outwardly to be religious, many protesters are motivated by their religious convictions such as the paramount belief in the sanctity of nature. The protest lifestyle, involving an immersion in nature through living outdoors and sleeping in treehouses, reinforces these convictions. These sentiments, and the anguish felt by practitioners as they engage in environmental struggle, find expression through spontaneous rituals. This article provides an over-view of the protest lifestyle, suggesting ways in which it informs Eco-Pagan religiosity. An example of a typical ad-hoc religious ritual is provided.

Letourneau, Deborah K., and Burrows, Beth Elpern, (eds.), Genetically Engineered Organisms: Assessing Environmental and Human Health Effects. Reviewed by Lehman, Hugh. Journal of Agricultural and Environmental Ethics 16(2003):91-93. (JAEE)

LeVasseur, Todd J., "From fall to redemption," *Journal of Agricultural and Environmental Ethics* 21(2008):597-606. Reviews of:

-N. Sorensen, H Willer, and Yusasefi-Menzler, eds., *The World of Organic Agriculture: Statistics and Emerging Trends* (London: Earthscan, 2008).

-C. J. Adams, and J. Donovan, eds., *The Feminist Care Tradition in Animal Ethics* (New York: Columbia University Press, 2007).

-J. Gregory, *Of Victorians and Vegetarians: The Vegetarian Movement in Nineteenth-Century Britain* (New York: Tauris Academic Studies, 2007).

-Sale, K., *After Eden: The Evolution of Human Dominance* (Durham, NC: Duke University Press, 2006).

Leverson, Roy, Enjoying Moths. London: T & AD Poyser, 2001. Yes, moths, not butterflies. Well illustrated, British moths, but anyone interested in enjoying moths in the wild will find this book worthwhile. (v.13,#1)

Levett, Roger, Review of T. Beaumont, The End of the Yellowbrick Road, Environmental Values 7(1998):496.

Levi, Daniel, Kocher, Sara. "The Spotted Owl Controversy and the Sustainability of Rural Communities in the Pacific Northwest," Environment and Behavior 27(no.5, Sept.1995):631- .

Levidow, Les, "Regulating BT Maize in the United States and Europe: A Scientific-Cultural Comparison," Environment 41(no. 10, Dec 01 1999):10- . Cultural factors play a large role in determining how societies regulate genetically modified crops. (v10,#4)

Levin, P. S. et al, "Indirect Effects of Feral Horses on Estuarine Communities," Conservation Biology 16(no.5, 2002): 1364-71. (v.13,#4)

Levin, SA, "Self Organization and the Emergence of Complexity in Ecological Systems," BioScience 55 (no. 12, December 2005): 1075-1079. What explains the remarkable regularities in distribution and abundance of species, size distributions of organisms, or patterns of nutrient use? How does the biosphere maintain exactly the right conditions necessary for life as we know it? Gaia theory postulates that the biota regulates conditions at levels it needs for survival, but evolutionary biologists reject this explanation because it lacks a mechanistic basis. Similarly, the notion of self organized criticality fails to recognize the importance of the heterogeneity and modularity of ecological systems. Ecosystems are complex adaptive systems, in which pattern emerges from, and feeds back to affect, the actions of

adaptive individual agents, and in which cooperation and multicellularity can develop and provide the regulation of local environments, and indeed impose regularity at higher levels.

Levin, Simon, editor-in-chief, Encyclopedia of Biodiversity. San Diego: Academic Press, 2001. The Encyclopedia of Biodiversity is a comprehensive study of the topic of diversity in the natural world, contained within the covers of a single unified work. It consists of five volumes and includes 313 separate full-length articles by leading international authors, from "Acid Rain and Deposition" through "Zoos and Zoological Parks." Many articles focus on particular taxonomic groups: "Arachnids," "Fungi," "Hymenoptera," "Salmon." Others focus on important biological concepts or areas of study: "Dispersal Biogeography," "The Concept of the Ecosystem," "Mass Extinctions," "Methods of Taxonomy." Still others focus on management issues: "Ex Situ, In Situ Conservation," "Insecticide Resistance," "Logged Forests," "Soil Conservation." In his foreword, E.O. Wilson writes: "The articles in the Encyclopedia of Biodiversity are unusually eclectic, yet organized by a set of easily articulated goals. They are the following: to carry the systematics and biogeography of the world fauna and flora toward completion; map the hotspots where conservation will save the most biodiversity; orient studies of natural history to understand and save threatened species; advance ecosystem studies and biogeography to create the needed principles of community assembly and maintenance; acquire the knowledge of resource use, economics, and polity to advance conservation programs based on sustainability; and enrich the ethic of global conservation in terms persuasive to all."

Many articles should be of interest to environmental ethicists, including the following: (see separate bibliographic listings for each.)

- "Aesthetic Factors," Gordon Orians.
- "Agriculture, Sustainable," G. Philip Robertson and Richard R. Harwood.
- "Conservation Biology, Discipline Of," Andrew P. Dobson and Jon Paul Rodriguez.
- "Conservation Movement, Historical," Curt Meine.
- "Ecological Footprint, Concept Of," William Rees.
- "Economic Growth and the Environment," Karl--Goran Maler.
- "Economic Value of Biodiversity, Overview," Partha Dasgupta.
- "Environmental Ethics," Richard Primack and Philip Cafaro.
- "Ethical Issues in Biodiversity Protection," Philip Cafaro and Richard Primack.
- "Human Effects on Ecosystems, Overview," Paul Ehrlich and Claire Kremen.
- "Land--Use Issues," John Marzluff and Nathalie Hamel.
- "Population Stabilization, Human," Alene Gelbard.
- "Property Rights and Biodiversity," Susan Hanna.
- "Religious Traditions and Biodiversity," Fikret Berkes.
- "Restoration of Biodiversity, Overview," Joy B. Zedler et al.
- "Stewardship, Concept Of," Peter Alpert.
- "Sustainability, Concept and Practice Of," Kai N. Lee.
- "Traditional Conservation Practices," Carl Folke and Johan Colding.
- "Wildlife Management," David Saltz.

(v.11,#4)

Levin, Simon A., "Complex Adaptive Systems: Exploring the Known, the Unknown and the Unknowable," Bulletin of the American Mathematical Society 40 (no. 1, 2003): 3-19. Complex adaptive systems, such as evolutionary ecosystems, and also human societies, including markets, can sometimes be described with statistical mathematics in the trends, though the detail is unpredictable. In biology, a major problem is the widespread scales, from the molecular to global. Biologists know most about selection operating on individuals, but complex systems transcend individuals. Even with individuals, biologists do not know what mutations will take place. Levin is in ecology and evolution at Princeton University.

Levin, Simon Asher, Encyclopedia of Biodiversity (San Diego: Academic Press [Harcourt], 2001), 5 volumes. (v.13,#1)

Levin Simon, Fragile Dominion: Complexity and the Commons. Reading, MA: Helix (Perseus), 1999. 264 pages. \$ 27 paper. A tour through the current intellectual landscape of ecology and environmental science. Six fundamental questions (Chapter 3): (1) What patterns exist in nature? (2) What are the relative roles of historical accident versus environmental determinism? Answers: Depends on temporal and spatial scale. (3) How do ecosystems assemble themselves? Often no answers are available, but the answers that are indicate trouble ahead with invasive species. (4) How Does evolution Shape these ecological assemblages? (5) What is the relation between an ecosystem's structure and how it functions? (5) Does evolution favor resilient systems? Answers require a look at self-organized criticality, edge of chaos, fractal landscapes, and more. Other chapters: Chapter 4: Patterns in Nature. Chapter 5: Ecological Assembly. Chapter 9: Where do we go from here? Complexity and the commons. We can hold on to our best human qualities only through a scientifically-informed stewardship of the biosphere. Levin teaches biology at Princeton University and is a well known ecologist. Reviewed by Robert May, "How the Biosphere is Organized," Science 286(1999):2091. (v10,#4)

Levine, George, Darwin Loves You: Natural Selection and the Re-enchantment of the World. Princeton: Princeton University Press, 2006. Levine wants a new bumper sticker: Darwin Loves You. Darwin saw how a world from which he had banished transcendence is still lovable and enchanted; Levine invites readers to see the Darwinian world that way too. Levine is in English, Rutgers University.

Levine, James H., "Leslie Salt Co. v. United States: The Ninth Circuit Revisits Federal Jurisdiction over Isolated Wetlands", Tulane Environmental Law Journal, 9(No.1, 1995):167- . (v7,#1)

Levine, JM; Dantonio, CM, "Forecasting Biological Invasions with Increasing International Trade", Conservation Biology 17(no.1, 2003):322-326.

Levine, Judith. *Not Buying It: My Year Without Shopping*. New York: Free Press, 2006. A couple that for a year bought only necessities, with much reflecting over what these necessities were.

Levine, Michael P., "Pantheism, Ethics, and Ecology." Environmental Values 3(1994):121-138. Pantheism is a metaphysical and religious position. Broadly defined it is the view that (1) "God is everything and everything is God...the world is either identical with God or in some way a self-expression of his nature" (H.P. Owen). Similarly, it is the view that (2) everything that exists constitutes a 'unity' and this all-inclusive unity is in some sense divine (A. MacIntyre). I begin with an account of what the pantheist's ethical position is formally likely to be. I then discuss the relationship between pantheism and ecology in the context of the search for the metaphysical and ethical foundations for an ecological ethic. It is claimed that it is no accident that pantheism is often looked to for such foundations. KEYWORDS: ecology, environment, ethics, pantheism, Spinoza. Levine is in philosophy at the University of Western Australia. (EV)

Levins, Richard and Richard Lewontin. The Dialectical Biologist. Reviewed in Environmental Ethics 10(1988):279-84.

Levit, George S., Wolfgang E. Krumbein, and Reiner Grübel. "Space and Time in the Works of V. I. Vernadsky." Environmental Ethics 22(2000):377-396. The main objective of this paper is to introduce the space-time concept of V. I. Vernadsky and to show the importance of this concept for understanding the biosphere theory of Vernadsky. A central issue is the principle of dissymmetry, which was proposed by Louis Pasteur and further developed by Pierre Curie and Vernadsky. The dissymmetry principle, applied both to the spatial and temporal properties of living matter, makes it possible to demonstrate the unified

nature of space and time. At the same time, this principle shows the difference between the spatial-temporal properties of living matter and those of the inert environment. Living matter as opposed to the inert environment is an important part of the Weltanschauung of Vernadsky and is connected with all basic statements of his theoretical system. (EE)

Levitus, S., et al, "Warming of the World Ocean," Science 287(2000):2225-2229; Kerr, Richard A., "Globe's 'Missing Warning' Found in the Ocean," Science 287(2000):2126-2127. Earth's Missing Warming Found in the Ocean. Greenhouse skeptics have claimed that there is not as much global warming as most models predict, and modelers have long held that this warming is in the oceans, but not had adequate data on ocean warming. A recent study integrates previously scattered data on ocean temperature profiles, and finds the missing warming. Half the warming occurs above 300 meters, but half is below. This also leads to predictions that global warming, though perhaps taking place more slowly than predicted, will be in the high ranges of prediction. (v.11,#1)

Levy, Sanford S. "The Biophilia Hypothesis and Anthropocentric Environmentalism." Environmental Ethics 25(2003):227-246. Much anthropocentric environmental argument is limited by a narrow conception of how humans can benefit from nature. E. O. Wilson defends a more robust anthropocentric environmentalism based on a broader understanding of these benefits. At the center of his argument is the biophilia hypothesis according to which humans have an evolutionarily crafted, aesthetic and spiritual affinity for nature. However, the "biophilia hypothesis" covers a variety of claims, some modest and some more extreme. Insofar as we have significant evidence for biophilia, it favors modest versions which do not support a particularly robust anthropocentric environmental ethic. A significantly more robust environmental ethic requires the most extreme version of the biophilia hypothesis, for which there is the least evidence. (EE)

Levy, Sharon, "Rekindling Native Fires," BioScience 55(no.4, April 2005):303-308(6).

Lewandrowski, Jan and Ingram, Kevin. "Policy Considerations for Increasing Compatibilities between Agriculture and Wildlife." Natural Resources Journal 39(No. 2, Spring 1999):229- . (v10,#4)

Lewin, R., "Damage to tropical forests, or why were there so many kinds of animals?" Science 234(1986):149-150.

Lewis, Bernard, What Went Wrong? Western Impact and Middle Eastern Response Reviewed by Batabyal, Amitrajeet A. Journal of Agricultural and Environmental Ethics 16(2003):416-418. (JAEE)

Lewis, C., "Review of: Steven Rosendale, Ed. The Greening of Literary Scholarship: Literature, theory, and the Environment," Environmental History 8(no. 3, 2003): 503-504.

Lewis, Dale M., Alpert, Peter. "Trophy Hunting and Wildlife Conservation in Zambia," Conservation Biology 11(no.1, 1997):59. Trophy hunting is generating significant benefits for residents of game management areas in Zambia, and how these benefits might be enhanced. With attention to CAMPFIRE. (v8,#2)

Lewis, Dale, Gilson B. Kaweche, and Ackim Mwenya, "Wildlife Conservation Outside Protected Areas--Lessons from an Experiment in Zambia," Conservation Biology 4(1990):171-180. An experiment project that sought to halt the drastic loss of elephants and rhinos to poaching in and around protected areas in the Luangwa Valley. The project involved local residents outside national parks in wildlife protection and management activities, sustained yield uses of wildlife, and recycling revenue into community development. The authors are in wildlife conservation in Zambia. (Africa)

Lewis, J. G., "The Applicant Is No Gentleman Women in the Forest Service," Journal of Forestry 103(no.

5, July/August 2005): 259-263.

Lewis, J. and Sheppard, S., "Ancient Values, New Challenges: Indigenous Spiritual Perceptions of Landscapes and Forest Management," Society and Natural Resources 18(no. 10, November/December 2005): 907-920.

Lewis, Martin, W., "Radical Environmental Philosophy and the Assault on Reason," pp. 209-230. The resentment of science embedded in fashionable ecomania must subvert or misdirect serious and necessary environmental initiatives. Lewis is the author of Green Delusions. In Gross, Paul R., Levitt, Norman, and Lewis, Martin W., eds., The Flight from Science and Reason. New York: New York Academy of Sciences, 1996. Distributed by Johns Hopkins University Press. (v9,#2)

Lewis, Martin, Review of Dobson, Andrew, Green Delusions: An Environmentalist Critique of Radical Environmentalism. Environmental Values 3(1994):81-82. (EV)

Lewis, Martin, Green Delusions, Reviewed by David Orr in Environmental Ethics 16(1994):329-332.

Lewis, Martin W., Green Delusions: An Environmentalist Critique of Radical Environmentalism. Durham, NC: Duke University Press, 1992. 288 pages, cloth. "Eco-radicalism tells us that we must dismantle our technological and economic system, and ultimately our entire civilization. Once we do so, the rifts between humanity and nature will purportedly heal automatically. I disagree. What I believe we must do is disengage humanity from nature by cleaving to, but carefully guiding, the path of technological progress. It is for the environmental community to decide which alternative offers the best hope for ecological salvation" (p. 251, concluding paragraph). Many of the most devoted and strident "greens," those who propose a radical environmentalism, unwittingly espouse an ill-conceived doctrine that has devastating implications for the global ecosystem. Lewis distinguishes the main variants of eco-extremism, exposes the fallacies upon which such views ultimately flounder, and demonstrates that the policies advocated by their proponents would, if enacted, result in unequivocal ecological catastrophe. The agenda proposed by eco-extremists, based on local economic self-sufficiency, a shunning of market exchange, and a general retreat from advanced technology would require a thoroughgoing reinvention of all social and economic forms. That has the potential for monumental disruption and complete political alienation, an undermining of the very foundations on which a new and ecologically sane economic order must be built. Lewis advocates moving forward into the solar age, an age that will require more investment in our technological infrastructure and well as the retention of a globally integrated economy. Lewis, once himself a radical environmentalist (p. 80), now advocates what he calls a "Promethean environmentalism" (p. 16, p. 250, etc.). In order to advance the reforms needed to change our present course, environmentalism must avoid divisive radical philosophies and try to create a broad-ranging consensus. Lewis is Assistant Professor of Geography at George Washington University. (v3,#3)

Lewis, Michael, ed. *American Wilderness: A New History*. Oxford: Oxford University Press, 2007. In this anthology, fourteen historians provide a nuanced look at how and where wilderness has been protected and preserved by Americans in the past and today. Beginning with indigenous peoples and the first contact between Europeans and the New World and ending with the debates over the Alaskan wilderness at the end of the twentieth century, this anthology focuses on events, people, and themes in the history of the United States and its wild landscapes.

Lewis, Peter M. "Economic Reform and Political Transition in Africa: The Quest for a Politics of Development," World Politics 49(no.1, 1996):92.

Ley, D, "Forgetting postmodernism? Recuperating a social history of local knowledge," Progress in Human Geography 27(no.5, 2003):537-560. (v.14, #4)

Li Chongzhen, Hu Shuiqing, "Three errors of ecological ethics studies", Journal of Hunan Uni. 2003(1)

Li Hong-Bin. "The Rationality of 'Necessary Harm' as an Ecological Ethics Norm." *Studies in Ethics* No. 6 (2007): 59-63.

Li Peichao, Reconciliation of Nature and Humanism: The New Perspective of Ecological Ethics, Hunan People's Publishing House, 2001. chapters: the history of ecological ethics; the social and theoretical condition of extending the perspective of ecological ethics; the new characteristics of ecological ethics; the relevance of Chinese traditional culture with ecological ethics; ecological ethics and China's modernization. Professor Li is at the Institute of Ethics, Hunan Normal University.

Li Peichao, "Defending the legitimacy of environmental ethics", Ethic and Civilization, 2001(3).

Li Peichao. *The Subversion of Ethical Extensionism: A Study of Western Environmental Ethical Thoughts*. Changsha: Hunan Normal University Press, 2004.

Li Peichao. "The Justice Dimension of Environmental Ethics." *Morality and Civilization*, No. 5 (2005): 53-59.

Li Shiyan, and He Youchun. "A Discussion on the Ecological Logic of Ethics: Environmental Ethics and Scientific-technological Ethics from the Perspective of Process Philosophy." *Journal of Nanjing Forestry University* No. 3 (2005): 21-24.

Li Shuwen, "The Morality of Eco-civilization and Sustainable Development," Dongyue Luncong (The Forum of Dongyue) 4(1999):83-86. In Chinese. (v.11,#1)

Li, W., Z. Wang, and Tang, H. Designing the Core Zone in a Biosphere Reserve Based on Suitable Habitats: Yancheng Biosphere Reserve and the Red Crowned Crane (Grus japonensis). Biological Conservation 90(No. 3, 1999):167- . (v10,#4)

Li, W., Z. Wang, and Tang, H. "Designing the Buffer Zone of a Nature Reserve: A Case Study in Yancheng Biosphere Reserve China. Biological Conservation 90(No. 3, 1999):159- . (v10,#4)

Li Xiongyi, "Eco-ethic and The Sustainable Development of Society," Tanshu (Inquiry) 1(1999):69-71. In Chinese. (v.11,#1)

Li Xiuyan. "Explaining the Ecological Ethics in the Dimension of Faith." *Studies in Dialectics of Nature* No. 5 (2007): 32-36.

Li Yalin, "The logical prerequisite of environmental ethics", Journal of Sichuan Uni. 2002(1)

Li Yalin, "The philosophical foundation of environmental ethics", Journal of Sichuan Uni. 2003(1)

Liao Xiaoping, "Eco-ethic, intergenerational ethic and sustainable development", Ethic and Civilization, 2002(3)

Librova, Hana. "The Disparate Roots of Voluntary Modesty." Environmental Values 8(1999):369-380. ABSTRACT: The effective solution of environmental problems calls for changes in levels of consumption. Sociologists have described moderation in households of high socio-economic status in affluent countries, and also a type of modesty which cannot be a response to the experience of abundance.

However, its essence is not the way of life of a traditional community. Sustainable living based on self-restraint could be considered to be a symptom of the summit of cultural evolution to date. Nevertheless, historical experience warns us against making too much of contemporary cases of moderation. KEYWORDS: voluntary modesty, international sociological comparison. Hana Librova, Department of Environmental Studies Masaryk University Gorkeho 7, 602 00 Brno, Czech Republic (EV)

Liddle, Michael, Recreation Ecology: The Ecological Impact of Outdoor Recreation and Ecotourism. London: Chapman and Hall, 1997. Ecological impacts of outdoor recreation, featuring the science more than the management. For the management, see Hammitt, William, and Cole, David, Wildland Recreation: Ecology and Management. (v.11,#4)

Lieben, Ivan J. "Political Influences on USFWS Listing Decisions Under the ESA: Time to Rethink Priorities," Environmental Law 27(no.4, 1997):1323- . How political and economic pressures have modified USFWS listing decisions under the ESA, in direct contradiction to the statute's plain language. Lieben recommends modifications to USFWS listing regulations, which would reduce the likelihood of the Service considering political factors in future decisions and place more emphasis on the ecosystem significance of a candidate species. (v9,#2)

Lieberman, Joseph. "Meeting the Most Serious Environmental Issue." The Christian Science Monitor 89.104 (24 April 1997): 19.

Liebow, E, Book Review: Unhealthy Places The Ecology of Risk in the Urban Landscape. By Kevin Fitzpatrick and Mark LaGory. Routledge, New York, 2000. Human Ecology 30(no.1, 2002):142-145. (v.13, #3)

Lien, Marianne Elisabeth and Ramond Anthony, "Ethics and the Politics of Food," *Journal of Agricultural and Environmental Ethics* 20(2007): 413-417. Introduction to a theme issue.

Lienhoop, Nele and Douglas C. MacMillan, "Contingent Valuation: Comparing Participant Performance in Group-Based Approaches and Personal Interviews," *Environmental Values* 16(2007): 209-232. This paper reports a Contingent Valuation application to estimate the non-market costs and benefits of hydro scheme developments in an Icelandic wilderness area. A deliberative group-based approach, called Market Stall, is compared to a control group consisting of conventional in-person interviews, in order to investigate flaws of Contingent Valuation, such as poor validity and protest responses. Perceived property rights suggested the use of willingness-to-accept in compensation for wilderness loss and willingness-to-pay for hydro scheme benefits. The study is novel as it applies participant behaviour observation to gain insights into the shortcomings of conventional data collection modes. Main drawbacks with in-person interviews were found to be low motivation, standardised information and time pressure which hindered individuals from carefully considering their preferences. Market Stall performed better in the study: welfare estimates were more easily explained by socio-economic variables, the non-response rate was lower, and respondents were more engaged. Our research findings also suggest that participant behaviour can be used to supplement conventional validity tests. Lienhoop is at the Helmholtz Centre for Environmental Research, Leipzig, Germany. MacMillan is in anthropology, University of Kent, Canterbury, UK.

Light, A. and J.M. Smith, eds. Philosophy and Geography 1: Space, Place and Environmental Ethics. Reviewed by Jacqui Burgess. Environmental Values 8(1999):526. (EV)

Light, Andrew, "Contemporary Environmental Ethics: From Metaethics to Public Philosophy," Metaphilosophy 33(no. 4, 2002):426-449. In the past thirty years environmental ethics has emerged as one of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books

testify to its growing importance inside and outside philosophical circles. But with all this scholarly output, it is arguably the case that environmental ethics is not living up to its promise of providing a philosophical contribution to the resolution of environmental problems. This article surveys the current state of the field and offers an alternative path for the future development of environmental ethics toward a more publicly engaged model of applied philosophy. Light is in the Applied Philosophy Group, New York University.

Light, Andrew, "Are all Anthropocentrists Against Nature?" Rethinking Marxism, 11 (No. 4, 1999): 93-102. Consideration and critique of Steven Vogel's Against Nature (SUNY, 1998). Argues that Vogel's description of the environmental implications of the work of the Frankfurt School is excellent but may be criticized for its treatment of broader forms of anthropocentrism and for overlooking the implications of the agents/patients distinction when considering the possibility of representing the welfare of nonhumans. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, "Which Side Are You On?: A Rejoinder to Murray Bookchin," Capitalism, Nature, Socialism 4 (No. 2, June 1993): 113-120. Rejoinder to a reply by Bookchin to the author's "Rereading Bookchin and Marcuse as Environmental Materialists."

Light, Andrew, ed., Social Ecology after Bookchin. New York: The Guilford Press, 1998. 401 pages. \$ 20.00 paper. For close to four decades, Murray Bookchin's ecoanarchist theory of social ecology, one of the most controversial in the field, has challenged philosophers and activists working to link environmental concerns with the desire for a free and egalitarian society. Eleven contributors believe that Bookchin needs his critics and contemplate what next. Reassessing ecological ethics, combining social ecology and feminism, building decentralized communities, evaluating new technology, relating theory to activism, and improving social ecology through interactions with other left traditions. Light is in philosophy at State University of New York, Binghamton. (v.10,#2)

Light, Andrew, "Environmental Pragmatism as Philosophy or Metaphilosophy: On the Weston-Katz Debate," in Environmental Pragmatism, ed. A. Light and E. Katz (London: Routledge Press, 1996), pp. 325-338. Looks at the debate Environmental Ethics between Anthony Weston and Eric Katz (vols. 7:4, 9:3, and 10:3) on the issue of environmental pragmatism. Argues that given a distinction between two different pragmatist approaches to environmental ethics, both Katz and Weston are pragmatists. Compares the views of both scholars to that of J. Baird Callicott who is deemed not a pragmatist in either sense. (v7,#1)

Light, Andrew and Eric Katz, eds. Environmental Pragmatism. Reviewed by Peter S. Wenz. Environmental Ethics 19(1997):327-330. (EE)

Light, Andrew, and Smith, Jonathan M., eds. Philosophy and Geography III: Philosophies of Place. Lanham, Maryland: Rowman and Littlefield, 1998. 309 pp. Contents include:

- Malpas, Jeff, "Finding Place: Spatiality, Locality, and Subjectivity."
- Dickinson, James, "In Its Place: Site and Meaning in Richard Serra's Public Sculpture."
- Mandoki, Katya, "Sites of Symbolic Density: A Relativistic Approach to Experienced Space."
- Schnell, Izhak, "Transformations in the Myth of the Inner Valleys as a Zionist Place."
- Norton, Bryan, and Hannon, Bruce, "Democracy and Sense of Place Values in Environmental Policy."
- Howard, Ian, "From the Inside Out: The Farm as Place."
- Glidden, David, "Commonplaces."
- Wasserman, David, Womersley, Mick, and Gottlieb, Sara, "Can a Sense of Place Be reserved?"
- Caragata, Lea, "New Meanings of Place: The Place of the Poor and the Loss of Place as a Center of Mediation."

- Brey, Philip, "Space-Shaping Technologies and the Geographical Disembedding of Place."
- Maskit, Jonathan, "Something Wild? Deleuze and Guattari and the Impossibility of Wilderness."
- Light, Andrew and Jonathan M. Smith, eds. Philosophy and Geography III: Philosophies of Place. Lanham, MD: Rowman and Littlefield Publisher, 1999. \$68.00. The significance of place shifts and, some think, diminishes. But a growing literature testifies to the persistence of place as an incorrigible aspect of human experience, identity, and morality. Contents:
- Smith, Jonathan M., Light, Andrew, and Roberts, David, "Introduction: Philosophies and Geographies of Place."
- Malpas, Jeff, "Finding Place: Spatiality, Locality, and Subjectivity."
- Dickinson, James, "In Its Place: Site and Meaning in Richard Serra's Public Sculpture."
- Mandoki, Katya, "Sites of Symbolic Density: A Relativistic Approach to Experienced Space."
- Light, Andrew, and Katz, Eric, eds. Environmental Pragmatism. New York: Routledge, 1996. 352 pp. Notes. Index. \$65.00 cloth; \$19.95 paper. By applying classical American pragmatist thought to the environment, this anthology defines and develops the pragmatic approach (methodology or strategy). The approach is more a method of inquiry and problem-solving than a position (or theory). Generally, the search for a single comprehensive theory is rejected in favor of conceptual pluralism, on the grounds that commitment to a theory can (and often) hinders problem-solving and policy formulation, adoption, and implementation. The volume is likely to become the classic statement of the pragmatist environmental approach. Contributors include such important pragmatists as Bryan Norton, Anthony Weston, and Larry Hickman (the Director of the Dewey Center at Southern Illinois University). Light is in the Department of Philosophy at the University of Montana. Katz is in Philosophy at New Jersey Institute of Technology.
- Contributions to the volume are:
- Light, Andrew, and Katz, Eric. "Introduction: Environmental Pragmatism and Environmental Ethics as Contested Terrain." Pages 1-20.
- Part One: Environmental Thought and Classical American Philosophy
- Parker, Kelly A. "Pragmatism and Environmental Thought." Pages 21-37.
- Rosenthal, Sandra B., and Buchholz, Rogene A. "How Pragmatism Is an Environmental Ethic." Pages 38-49.
- Hickman, Larry A. "Nature as Culture: John Dewey's Pragmatic Naturalism." Pages 50-72.
- Santas, Ari. "The Environmental Value in G. H. Mead's Cosmology." Pages 73-83.
- Norton, Bryan G. "The Constancy of Leopold's Land Ethic." Pages 84-102.
- Part Two: Pragmatist Theory and Environmental Philosophy
- Norton, Bryan G. "Integration or Reduction: Two Approaches to Environmental Values." Pages 105-38.
- Weston, Anthony. "Before Environmental Ethics." Pages 139-60.
- Light, Andrew. "Compatibilism in Political Ecology." Pages 161-84.
- Part Three: Pragmatist Approaches to Environmental Problem
- Thompson, Paul B. "Pragmatism and Policy: The Case of Water." Pages 187-208.
- Schiappa, Edward. "Towards a Pragmatic Approach to Definition: 'Wetlands' and the Politics of Meaning." Pages 209-31.
- Castle, Emery N. "A Pluralistic, Pragmatic and Evolutionary Approach to Natural Resource Management." Pages 231-50.
- Rothenberg, David. "Laws of Nature vs. Laws of Respect: Non-violence in Practice in Norway." Pages 251-65.
- Varner, Gary E.; Gilbertz, Susan J.; and Peterson, Tarla Rai. "Teaching Environmental Ethics as a Method of Conflict Management." Pages 266-82.
- Part Four: Environmental Pragmatism: An Exchange
- Weston, Anthony. "Beyond Intrinsic Value: Pragmatism in Environmental Ethics." Pages 285-306.
- Katz, Eric. "Searching for Intrinsic Value: Pragmatism and Despair in Environmental Ethics." Pages 307-18.
- Weston, Anthony, and Katz, Eric. "Unfair to Swamps: A Reply to Katz; Unfair to Foundations: A

Reply to Weston." Pages 319-24.

--Light, Andrew. "Environmental Pragmatism as Philosophy or Metaphilosophy? On the Weston-Katz Debate." Pages 325-38. (v8,#1)

Light, Andrew, "Deep Socialism?: An Interview with Arne Naess," CNS: Journal of Socialist Ecology, Vol. 8, No. 1, March 1997, pp. 69-85. Focuses on the social ecology-deep ecology debate, the deep ecology-ecofeminism debate, Naess's views on the relationship between theory and practice (which suggest they are largely pragmatic) and whether Naess likes the slavish devotion of some of his followers. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, "Is Wilderness a Natural Kind?" Society for Philosophy and Geography Newsletter 1 (no. 1, Dec. 1994): 2-3. "'Wilderness' is a term whose reference is historically dependent on the social context in which it is used and may be too culturally loaded to represent anything of foundational moral significance." Light amply wishes to conserve the areas we call wilderness, but is uncertain about the term. Light is a philosopher at the University of Alberta. A brief rejoinder follows, "Varieties of Wilderness: A Rejoinder," by Jonathan M. Smith (p. 4). (v6,#4)

Light, Andrew, "Elegy for a Garden: Thoughts on an Urban Environmental Ethic," Philosophical Writings 14 (2000): 41-47. Narrative piece about the importance of working out an environmental ethic for urban environments illustrated by a description of the fight in New York City over preservation of community gardens. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew and Rolston, Holmes III, eds., Environmental Ethics: An Anthology. Cambridge, MA: Blackwell Publishers, 2002. 40 classic and new papers in environmental ethics organized for classroom use. Section headings include, "What is Environmental Ethics?: An Introduction," "Who Counts in an Environmental Ethics? Animals? Plants? Ecosystems?," "Is Nature Intrinsically Valuable?," "Is There One Environmental Ethic? Monism versus Pluralism," "Reframing Environmental Ethics: What Alternatives Exist?" (with subsections on Deep Ecology, Ecofeminism and Environmental Pragmatism), "Focusing on Central Issues: Sustaining, Restoring, Preserving Nature" (with subsections on sustainability, restoration ecology and wilderness preservation), and "What on Earth Do We Want? Human Social Issues and Environmental Values." An introduction to environmental ethics by Clare Palmer is especially helpful. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. Rolston is in Philosophy at Colorado State University. (v.13,#2)

Light, Andrew, "Symposium: Eric Katz's Nature as Subject" Ethics and the Environment 7(no. 1, 2002):102-146. Includes:

-Hettinger, Ned, "The problem of finding a positive role for humans in the natural world," pp. 109-123

-Ouderkerk, Wayne, "Katz's problematic dualism and its `seismic' effects on his theory," pp. 124-137

-Katz, Eric, "Understanding moral limits in the duality of artifacts and nature: A reply to critics," pp. 138-146. (E&E)

Light, Andrew, "Elegy for a Garden: Thoughts on an Urban Environmental Ethic," Philosophical Writings, Volume 14 (2000): 41-47.

Light, Andrew, Higgs, Eric S., "The Politics of Ecological Restoration," Environmental Ethics 18(1996):227-247.

Discussion of ecological restoration in environmental ethics has tended to center on issues about the nature and character of the values that may or may not be produced by restored landscapes. In this paper we shift the philosophical discussion to another set of issues: the social and political context in which

restorations are performed. We offer first an evaluation of the political issues in the practice of restoration in general and second an assessment of the political context into which restoration is being put. By means of a comparative examination of these two areas of inquiry, we provide a foundation for a critical assessment of the politics

of
restorat
ion
based
on the
politics
in
restorat
ion.
Light is
in
philoso
phy at
the
Univers
ity of
Montan
a.
Higgs
is in
anthrop
ology
and
sociolo
gy at
the
Univers
ity of
Alberta.
(EE)

Light, Andrew, "What is an Ecological Identity?," Environmental Politics 9 (No. 4, 2000): 59-81. Is environmentalism a form of identity politics like feminism, race based politics, and other political orientations at the core of the new social movements? This paper argues that it can be, but that this claim to political identity has only been clearly available so far to a narrow set of environmentalists, most notably deep ecologists and essentialist ecofeminists. But if it is plausible that broader forms of environmentalism can represent a political identity, then a set of political objections to the content of environmentalism become much more salient than they might at first appear. After attempting a thorough assessment of the possible interpretations of an environmental identity politics, I look at the political problems that follow. If environmentalists decide to articulate their environmentalism as a kind of 'ecological identity', and it is surely an open question as to whether they should, then this identity will encounter some serious hurdles that deserve attention. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew and Alan Rudy, "Social Ecology and Social Labor: A Consideration and Critique of Murray Bookchin," Capitalism, Nature, Socialism, June 1995, pp 75-106. The first comprehensive critique of social ecology from an ecological socialist perspective. The first part of the paper summarizes the basic social and political ground of Bookchin's theories; the second part argues that the absence of the category of social labor ultimately undermines the transformative potential of social ecology. (v7,#1)

Light, Andrew, "An Environmental Ethic for Ecological Socialists?" Capitalism, Nature, Socialism 9(no.

3, September 1998):20-24. Introduction to a symposium on Steven Vogel's Against Nature: The Concept of Nature in Critical Theory (SUNY Press, 1998). Includes contributions by Lorenzo Simpson, Alan Rudy, David Maccauley and Vogel. (v.10,#3)

Light, Andrew, and Eric Katz, eds., Environmental Pragmatism. London and New York: Routledge Press, 1996. 352 pages. Contents: "Introduction: Environmental Pragmatism and Environmental Ethics as Contested Terrain," Andrew Light and Eric Katz; "Pragmatism and Environmental Thought," Kelly A. Parker; "How Pragmatism is an Environmental Ethic," Sandra B. Rosenthal and Rogene A. Buchholz; "Nature as Culture: John Dewey's Pragmatic Naturalism," Larry A. Hickman; "The Environmental Value in G. H. Mead's Cosmology," Ari Santos; "The Constancy of Leopold's Land Ethic," Bryan Norton; "Integration or Reduction: Two Approaches to Environmental Values," Bryan Norton; "Before Environmental Ethics," Anthony Weston; "Compatibilism in Political Ecology," Andrew Light; "Pragmatism and Policy: The Case of Water," Paul B. Thompson; "Towards a Pragmatic Approach to Definition: Wetlands and the Politics of Meaning," Edward Schiappa; "A Pluralistic, Pragmatic and Evolutionary Approach to Natural Resource Management," Emery N. Castle; "Laws of Nature vs. Laws of Respect: Non-Violence in Practice in Norway," David Rothenberg; "Teaching Environmental Ethics as a Method of Conflict Management," Gary E. Varner, Susan J. Gilbertz, and Tarla Rai Peterson; "Beyond Intrinsic Value: Pragmatism in Environmental Ethics," Anthony Weston; "Searching for Intrinsic Value: Pragmatism and Despair in Environmental Ethics," Eric Katz; "Unfair to Swamps: A Reply to Katz--Unfair to Foundations?: A Reply to Weston," Anthony Weston and Eric Katz; "Environmental Pragmatism as Philosophy or Metaphilosophy?: On the Weston-Katz Debate," Andrew Light.

The first comprehensive presentation of environmental pragmatism as a new approach. Environmental pragmatism argues that theoretical debates are hindering the ability of the environmental movement to forge agreement on basic policy imperatives. This new direction advocates a serious (though not theoretical) inquiry into the practical merits of moral pluralism, using the methodology of classical American pragmatist thought. (v7,#1)

Light, Andrew, "Urban Wilderness," Wild Ideas, ed. David Rothenberg (Minneapolis: University of Minnesota Press, 1995), pp. 195-211. Short version reprinted as "Whither Classical Wilderness?," in The Trumpeter, March 1995. Distinguishes between two historical conceptions of the idea of wilderness--classical and romantic--and argues that the idea of the classical wilderness has been transferred to descriptions of urban spaces. Discusses the notions of wilderness of the Puritans, Upton Sinclair, and Mike Davis (writing about Los Angeles). (v7,#1)

Light, Andrew, "Boys in the Woods: Urban Wilderness in American Cinema," in The Nature of Cities: Ecocriticism and Urban Environments, ed. Michael Bennett and David Teague (Tucson: University of Arizona Press, 1999). This paper furthers the author's earlier arguments concerning the use of the metaphor of wilderness to describe inner cities (see Light's "Urban Wilderness," in Wild Ideas, ed. David Rothenberg, University of Minnesota Press, 1995) by tracking the malicious representation of the city as an urban wilderness in recent American cinema. The article closes with a look at the more hopeful appeals to an urban wilderness in portrayals of the inner city by African-American film makers like John Singleton and the Hughes brothers. The point of this analysis is to serve a normative critique of the description of racial minorities as the inhabitants of an urban wilderness; a continuation of the legacy of the depiction of racial others and nature itself as uncivilized and thus unworthy of equal moral consideration. (v.11,#1)

Light, Andrew and Jonathan Smith. Environmental Ethics and Philosophy and Geography II: The Production of Public Space. Reviewed by Christopher J. Preston. Environmental Ethics 22(2000):215-218.

Light, Andrew and Jonathan Smith. Philosophy and Geography I: Space, Place, and Environmental

Ethics. Reviewed by Christopher J. Preston. Environmental Ethics 22(2000):215-218.

Light, Andrew, and Jonathan M. Smith, eds. Philosophy and Geography I: Space, Place, and Environmental Ethics. Lanham, MD: Rowman & Littlefield Publishers, 1997. 283pp. \$22.95 paper, \$57.50 cloth. The first of an annual volume. Light is in philosophy at the University of Montana and Smith in geography, Texas A&M University. The intersections of philosophy and geography on the issue of environmental ethics, environmental law, natural value, and conceptions of nature. Contents:

--Light, Andrew and Jonathan M. Smith, "Introduction: Geography, Philosophy, and the Environment" (pp. 1-13)

--Burch, Robert, "On the Ethical Determination of Geography: A Kantian Prolegomenon" (pp. 15-47)

--Katz, Eric, "Nature's Presence: Reflections on Healing and Domination" (pp. 49-61)

--Trachenberg, Zev, "The Takings Clause and the Meaning of Land" (pp. 63-90) --Westcoat, Jr., James L., "Muslim Contributions to Geography and Environmental Ethics" (pp. 91-116)

--Clark, John, "The Dialectical Social Geography of Elisée Reclus" (pp. 117-142)

--Spash, Clive L. and Adam M. Clayton "The Maintenance of Natural Capital: Motivations and Methods" (pp. 143-173)

--Paden, Roger, "Wilderness Management" (pp. 175-187)

--Steelwater, Eliza, "Mead and Heidegger: The Ethics and Theory of Space, Place, & Environment" (pp. 189-207)

--King, Roger, "Critical Reflections on Biocentric Environmental Ethics" (pp. 209-230).

--Gandy, Matthew, "Ecology, Modernity, and the Intellectual Legacy of the Frankfurt School" (pp. 321-254)

--Booth, Annie L., "Critical Questions in Environmental Philosophy" (pp. 255-273).

Forthcoming volumes in this series are: II. Public Space (October 1997); III. The Meaning of Place (submissions solicited); IV: Aesthetics of Everyday Life (submissions solicited). (v8,#1)

Light, Andrew and Ben Shippen, Jr., "Is Environmental Quality a Public Good?" Working Paper, Eco-Research Chair, Environmental Risk Management, University of Alberta, Edmonton, Alberta, Canada. Environmental protection, like police protection, is something which we want to be provided equally as a public good. The legal standards should not be lower in one place than another. But solutions to environmental pollution based on economic incentives that trade pollution rights do not have equal results and allow different regions of the country to be treated unequally. This is like allowing, as a matter of policy, more crimes in one part of a city as long as few are committed in another part. Light is in philosophy at the University of Alberta, Shippen in economics at Florida State University. (v6,#4)

Light, Andrew, "Environmental Pragmatism and Valuation in Nature," Human Ecology: Crossing Boundaries, ed. Scott D. Wright et al, (Fort Collins, CO: Society for Human Ecology, 1993), pp. 23-30. The first published version of the author's work on environmental pragmatism. Includes a discussion of environmental pedagogy (especially the work of David Orr) as a form of environmental pragmatism. (v7,#1)

Light, Andrew, "Three Questions on Hyperreality," Research in Philosophy and Technology, vol 15, 1995. A response to Albert Borgmann's "The Nature of Reality and the Reality of Nature," in Soulé and Lease, eds., Reinventing Nature? (Island Press, 1995). Argues that Borgmann's position on the social construction of nature leads to several puzzles which follow from his attempt to integrate postmodernism and environmental philosophy. (v7,#1)

Light, Andrew, "Contemporary Environmental Ethics: From Metaethics to Public Philosophy," Metaphilosophy 33 (No. 3, 2002). In the past 30 years environmental ethics has emerged as one of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to its growing importance inside and outside philosophical circles. But with all of this scholarly output, it is

arguably the case that environmental ethics is not living up to its promise of providing a philosophical contribution to the resolution of environmental problems. This article surveys the current state of the field and offers an alternative path for its future development toward a more publicly engaged model of applied philosophy. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, Katz, Eric, eds., Environmental Pragmatism. Reviewed by Norman S. Care. Ethics and the Environment 2(1997):199-202. (E&E)

Light, Andrew and Shippen, Ben S. Jr., "Should Environmental Quality be a Publicly Provided Good?", Organization and Environment, 16, (No. 2, 2003): 232-42. Light is an assistant professor of environmental philosophy and the director of the Environmental Conservation Education Program at New York University. Ben S. Shippen Jr. was an assistant professor of economics at Mercer University, Macon, Georgia before becoming a research economist at ERS Group.

Light, Andrew, "Restoring Ecological Citizenship," in Democracy and the Claims of Nature, ed. B. Minter and B. P. Taylor (Lanham, MD: Rowman & Littlefield, 2002). Argues that if we take seriously the value of public participation in restoration then we need to understand participation as democratic participation. Claims that this notion of democratic participation is best understood as a form of environmental citizenship (along a republican model of citizenship). Argues against an identity model of participation and uses the debate in restoration over prairie burning to illustrate the difference between the citizenship and identity models. Concludes with a brief account of how these claims could be put into a legal and policy framework. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew and de-Shalit, Avner, eds., Moral and Political Reasoning in Environmental Practice. Cambridge, MA: The MIT Press, 2002. 12 new papers relating the problem of environmental ethics and political philosophy to environmental practice. Divided into a general theoretical section on the problem of overcoming theory and practice divide, a section discussing new philosophical tools for improving practices and policies and a third section of case studies. Papers originated at the combined ISEE/Society for Applied Philosophy Meeting at Oxford University in July 1999.

Introduction offers a critique of Callicott's claims about environmental philosophy itself being the most radical version of environmental activism. Contents:

- "Environmental Ethics - Whose Philosophy? Which Practice?", Andrew Light and Avner de-Shalit;
- "Political Theory and the Environment: Nurturing a Sustainable Relationship," Michael Freeden
- "Intuition, Reason, and Environmental Argument," Mathew Humphrey,
- "The Justice of Environmental Justice: Reconciling Equity, Recognition, and Participation in a Political Movement," David Schlosberg,
- "Constitutional Environmental Rights: A Case for Political Analysis," Tim Hayward,
- "Trusteeship: A Practical Option for Realizing our Obligations To Future Generations?," William Griffith,
- "Ecological Utilisation Space: Operationalizing Sustainability," Finn Arler,
- "The Environmental Ethics Case for Crop Biotechnology: Putting Science Back into Environmental Practice," Paul B. Thompson,
- "Yew Trees, Butterflies, Rotting Boots and Washing Lines: The Importance of Narrative," Alan Holland and John O'Neill,
- "The Role of Cases in Moral Reasoning: What Environmental Ethics Can Learn from Biomedical Ethics," Robert Hood,
- "Grab Bag Ethics and Policymaking for Leaded Gasoline: A Pragmatist's View," Vivian E. Thomson,
- "Animals, Power and Ethics: The Case of Fox Hunting," Clare Palmer and Francis O'Gorman,
- "Ethics, Politics, Biodiversity: A View From the South," Niraja Gopal Jayal.

Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. de-Shalit is in

Political Science, Hebrew University of Jerusalem.

Light, Andrew, "The Role of Technology in Environmental Questions: Martin Buber and Deep Ecology as Answers to Technological Consciousness," Research in Philosophy and Technology, Vol. 12, 1992, pp. 83-104. When viewed as responses to the imposition of forms of technological domination over nature, the views of the deep ecologists (especially Naess) are remarkably similar to the onto-theology of Martin Buber. Suggests that ultimately Buber's approach to topic is even more radical than Naess's. (v7,#1)

Light, Andrew, "Technology, Democracy, and Environmentalism: On Feenberg's Questioning Technology," Ends and Means: Journal of Philosophy, Technology and Society, 4 (No. 2, 2000): 7-17. Offers a critique of the environmental implications of Andrew Feenberg's work in Questioning Technology (Routledge, 1999). Light rejects Feenberg's claim of the importance of the Ehrlich-Commoner debate in the development of environmental thought and questions the role of the relationship between democratically controlled technology and democratic environmental practices. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew, "Restauración Ecológica y Reproducción del Arte," in Ingeniería Genética Y Ambiental: Problemas filosóficos y sociales de la biotecnología, ed. T. Kwiatkowska and R. L. Wilchis (Mexico City: Plaza y Valdez, 2000), pp. 209-219. ("Ecological Restoration and Art Reproduction") Robert Elliot's "Faking Nature," represents one of the strongest philosophical rejections of the ground of restoration ecology ever offered. Here, and in a succession of papers defending the original essay, Elliot argued that ecological restoration was akin to art forgery. Just as a copied art work could not reproduce the value of the original, restored nature could not reproduce the value of nature. I reject Elliot's art forgery analogy, and argue that his paper provides grounds for distinguishing between two forms of restoration that must be given separate normative consideration: (1) malicious restorations, those undertaken as a means of justifying harm to nature, and (2) benevolent restorations, or, those which are akin to art restorations and which cannot serve as justifications for the conditions which would warrant their engagement. This argument will require an investigation of Mark Sagoff's arguments concerning the normative status of art restorations. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew, "Materialists, Ontologists, and Environmental Pragmatists," Social Theory and Practice 21 (No. 2, Summer 1995): 315-333. Expanded version reprinted as "Compatibilism in Political Ecology," in Environmental Pragmatism, ed. A. Light and E. Katz, (London: Routledge, 1996), pp. 161-184. A strategy for resolving competing claims within environmental political theory, focusing on debates between two kinds of theorists: ontologists--such as deep ecologists--and materialists--such as Murray Bookchin and the social ecologists. The urgency of the ecological crisis requires a form of metatheoretical compatibilism between the opposing theories. The argument is derived from a selective and critical reading of Rorty's neo-pragmatism concerning the distinction between public and private practice. (v7,#1)

Light, Andrew, "Hegemony and Democracy: How the Inherent Politics in Restoration Informs the Politics of Restoration," Restoration and Management Notes 12 (No. 2, Winter 1995):140-144. Argues that ecological restoration contains an inherent political dimension which consists in the potential it always has to serve as the ground for public participation in the human-nature community. (v7,#1)

Light, Andrew, "Reconsidering Bookchin and Marcuse as Environmental Materialists: Toward an Evolving Social Ecology," in Social Ecology after Bookchin, ed. A. Light (New York: Guilford, 1998), pp. 343-383. Entirely reworks and supercedes Light's early paper on Bookchin and Marcuse published in 1993 in Capitalism, Nature, Socialism. Argues that if Bookchin and Marcuse can be read as environmental materialists then Marcuse's work may shed light on how social ecology can be reconciled

with deep ecology. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, "Contemporary Environmental Ethics: From Metaethics to Public Philosophy," Metaphilosophy, 33 (No. 4, July 2002), pp. 426-449. In the past 30 years environmental ethics has emerged as one of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to its growing importance inside and outside philosophical circles. But with all of this scholarly output, it is arguably the case that environmental ethics is not living up to its promise of providing a philosophical contribution to the resolution of environmental problems. This article surveys the current state of the field and offers an alternative path for its future development toward a more publicly engaged model of applied philosophy. The article includes a substantial section criticizing previous attempts to link environmental ethics and environmental policy, especially the work by nonanthropocentrists on the problem of preservation of the Brazilian rainforest. (v.13, #3)

Light, Andrew, "Rereading Bookchin and Marcuse as Environmental Materialists," Capitalism, Nature, Socialism, 4 (No. 1, March 1993): 69-98. Translated and republished as "Il Materialismo Ambientale Bookchin e Marcuse a Confronto," Capitalismo, Natura, Socialismo, issue 10, February 1994, pp. 110-139. Argues that Bookchin's critique of the Frankfurt School in general and Herbert Marcuse in particular is flawed, since an examination of both Bookchin and Marcuse reveals that they are both "environmental materialists."

Light, Andrew, ed., Ecosystem Health (Blackwell Science), vol. 4, no. 3, September 1998, theme issue: "Environmental Ethics and Environmental Risk Management." Includes:

--Light, Andrew, "Environmental Ethics and Environmental Risk: Expanding the Scope of Ecosystem Health" An argument for why environmental pragmatism can be used as a bridge between environmental ethics and environmental risk management. Includes a critique of the debate on the merits of pragmatism in this journal between Kristin Shrader-Frechette, Baird Callicott, and Bryan Norton.

--Hood, Robert, "The Very Idea of Ecosystem Health"

--Tal, Alon, "Beyond the Rhetoric of Premeditated Murder: Towards A Rational and Compassionate Environmentalist Perspective About The Ethics of Risk Assessment"

--Boetzkes, Elisabeth, "Gender, Risk, and Scientific Proceduralism."

Light, Andrew, Nature, Class, and the Built World: Philosophical Essays between Political Ecology and Critical Technology, 1996, University of California, Riverside, Ph.D. thesis in philosophy. 295 pages. Philosophical disagreements on environmental questions can sometimes be set aside in order to achieve compatible strategies to work toward improving environmental conditions. As part of this strategy, pragmatists call for abandoning the existing prejudices of environmental philosophy, in particular nonanthropocentrism and commitments to moral monism. The social ecology-deep ecology divide in political ecology, and the debate between monists and pluralists in environmental ethics. Both debates are used to advance the pragmatist position. The privatization of environmental regulations, and restoration ecology. Questions concerning urban space and political identity. Technology and built space have traditionally been ignored by environmental philosophers. Space and place are integral to an environmental philosophy tempered by pragmatic concerns. The advisor was Bernd Magnus. (v.10,#1)

Light, Andrew, "Taking Environmental Ethics Public," in Environmental Ethics: What Really Matters? What Really Works?, ed. D. Schmidtz and E. Willott (Oxford: Oxford University Press, 2001), pp. 556-566. The pragmatist critique of environmental ethics has argued that the field has largely failed in offering a set of moral foundations to improving environmental policies or for motivating agents to embrace more supportive environmental practices. If this critique is taken seriously then a reassessment

is needed of how to encompasses both a traditional philosophical task involving an investigation into the value of nature, and a second public task involving the articulation of arguments which will be morally motivating concerning environmental protection. This chapter overviews the case for a demarcation of these tasks and makes a claim about their relative importance in relation to each other in the context of a methodological form of environmental pragmatism (as opposed to a more purely philosophical application of the work of particular pragmatists to environmental questions). The result is a form of environmental pragmatism that a nonpragmatist could embrace in environmental ethics. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew, "Environmental Ethics and Environmental Risk: Expanding the Scope of Ecosystem Health," Ecosystem Health, Vol. 4, No. 3, September 1998, pp. 147-151 (double pages). Introduction to a symposium on environmental ethics and environmental risk assessment. Argues that the ethical implications of risk management are to be best understood within the context of ecosystem health. Especially important in order to cease thinking about environmental risk assessment and management solely in terms of human health issues and instead broaden its scope to cover human health in relation to the environment. Includes a discussion of an exchange in the same journal between Bryan Norton, Baird Callicott and Kristin Shrader-Frechette on the role of pragmatism in understanding ecosystem health. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, "Borgmann's Unzeitgemässe Betrachtungen: On the Pre-Political Conditions of Politics of Place," in Technology and the Good Life?, ed., E. Higgs, A. Light, and D. Strong (Chicago: University of Chicago Press, 2000), pp. 106-125. Offers a defense against the claim that Albert Borgmann's work in philosophy of technology is politically conservative. Argues that Borgmann's work is culturally conservative and does not contain an explicit or formal political philosophy. Instead, Borgmann's work is best understood politically as offering pre-political conditions for how we should understand the normative value of places. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew, "'Place Authenticity as Ontology or Psychological State?" Philosophy and Geography, 5 (No. 2, 2002), pp. 204-210. This article responds to Eric Katz's "The Authenticity of Place in Culture and Nature: Thoughts on the Holocaust in the Spanish Synagogue of Venice," in the same issue of the journal. Light argues that Katz's attempt to extend his work on authenticity in ecological restoration to the cultural experience of place confuses a psychological with a metaphysical account of authenticity. The piece concludes with an appeal for an aesthetic understanding of the importance of place in environmental philosophy. (v.13, #3)

Light, Andrew, "On the Irreplaceability of Place," Worldviews: Environment, Culture, Religion 2(1998):179-184. Analysis of a puzzle concerning Christoph Rehmann-Sutter and the irreplaceability of place. If places are designated as valuable in part because they are irreplaceable, and if any human can appreciate any place, then how can humans ever be part of a place if they are ultimately substitutable as agents who appreciate places? Two possible answers: Two kinds of bioregionalism, liberal bioregionalism and communitarian bioregionalism are identified. Liberal bioregionalism, recommended for the present, avoids the irreplaceability problem by jettisoning the need to focus on the special qualities of a particular place. Communitarian bioregionalism might be a goal down the road. Light is in philosophy and environmental studies, Binghamton University, SUNY. (v.10,#2)

Light, Andrew, "Moral Progress Amid Technological Change," Journal of Speculative Philosophy 15 (No. 3, 2001): 195-201. Response to John Lachs's "Both Better Off and Better," in same issue which argues that increasing affluence has led to moral progress. Light claims that Lachs errs in not considering the combined environmental consequences and consequences to future generations of increases in individual welfare. Examples discussed include trade-

offs between advantages of owning cars and contributions to greenhouse gases and sustainable agriculture. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew, "Restoration, the Value of Participation, and the Risks of Professionalization," in Restoring Nature: Perspectives from the Social Sciences and Humanities, ed. P. Gobster and B. Hull (Washington, D.C.: Island Press, 2000), pp. 163-181. Efforts to professionalize restoration include the regulation of restoration projects, the certification of restoration volunteers, and the creation and accreditation of restoration degree programs. By increasing the expertise and authority of restorationists, professionalization offers a potential mechanism to reduce the conflict that seems inherent in many restoration projects. However, professionalization may have significant costs. Professionalism will likely close the content of the language of restoration by controlling how concepts, terms, and practices of restoration are defined and delimited. This control may make restoration less participatory and degrade the unique democratic potential of restoration projects. I address these issues using as an example the conflict created by the numerous restorations known collectively as the Chicago Wilderness project. The first section expands on and supercedes the discussion of the democratic values implicit in acts of restoration discussed in Light's 1996 article with Eric Higgs, "The Politics of Ecological Restoration," in Environmental Ethics. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew, "Ecological Restoration and the Culture of Nature: A Pragmatic Perspective," in Restoring Nature: Perspectives from the Social Sciences and Humanities, ed. P. Gobster and B. Hull (Washington, D.C.: Island Press, 2000), pp. 49-70. Most environmental philosophers have failed to understand the theoretical and practical importance of ecological restoration. This failure is primarily due to the mistaken impression that ecological restoration is only an attempt to restore nature itself, rather than an effort to restore an important part of the human relationship with non-human nature. I first discuss the possibility of transforming environmental philosophy into a more pragmatic discipline, better suited to contributing to the formation of sound environmental policies, including ecological restoration. In particular, I advocate an alternative philosophical approach to the kind of work on the value of ecological restoration raised by Eric Katz and other philosophers who claim that restored nature can never reproduce the actual value of nature. Here, I will make this contrast more explicit and go on to further argue that Katz's views in particular are not sufficiently sensitive to the values at work in the variety of projects falling within the category of ecological restoration. A richer description of the ethical implications of restoration will identify a large part of its value in the revitalization of the human culture of nature. Short versions reprinted as "Restoration or Domination?: A Reply to Katz," in Environmental Restoration: Ethics, Theory, and Practice, ed. William Throop (Amherst, NY: Humanity Books (Prometheus), 2000), pp. 95-111, and in Environmental Ethics: What Really Matters? What Really Works?, eds. D. Schmidt and E. Willott (Oxford: Oxford University Press, 2001), pp. 178-187. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew, "The Urban Blind Spot in Environmental Ethics," Environmental Politics 10 (No. 1, 2001): 7-35. In the past 30 years environmental ethics and political ecology have emerged as two of the most vibrant and exciting areas of applied philosophy. Several journals and hundreds of books testify to their growing importance inside and outside philosophical circles. But surprisingly very little has ever been said, in particular, by environmental ethicists about cities, and what has been written is largely negative. This paper offers an explanation for why the urban environment has been ignored in environmental ethics (with a focus on examples found in Holmes Rolston's work), second, provides a series of ecological and social arguments for why urban issues cannot be overlooked in a complete environmental ethic, and finally, offers an example of the sorts of issues that an expanded environmental ethic, inclusive of urban environments, would need to focus on. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#1)

Light, Andrew, "Public Goods, Future Generations, and Environmental Quality," in Not for Sale: In Defense of Public Goods, ed. A. Anton, M. Fisk, and N. Holmstrom (San Francisco: Westview Press, 2000), pp. 209-226. Environmental quality ought to be preserved as an inviolate publicly provided good. After analyzing the relationship between publicly provided goods (such as fire or police protection) and "pure public goods," I argue that the requirements for the delivery of publicly provided goods are parasitic on the definition of pure public goods, creating a normative burden on those who would advocate the privatization of their delivery or maintenance. Using this claim it is argued that a publicly provided good cannot be privatized if it would result in inequality in the distribution of the good, or diminish the quality of the good. Identification of this argumentative burden on privation efforts is strengthened by a claim that publicly provided goods represent a community's articulation of a suggestion that such goods fulfill commonly held needs. I argue that environmental quality is just such a good. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. (v.13,#2)

Light, Andrew and Roberts, David, "Toward New Foundations in Philosophy of Technology: Mitcham and Wittgenstein on Descriptions," Research in Philosophy and Technology 19 (2000): 125-147. Over the last twenty-five years, philosophy of technology has become a recognizable sub-discipline in the Americas and Europe. There are journals, societies, and international meetings devoted to the subject. But the field suffers from the lack of a common ground on which to base questions that might define it as a philosophical discipline, central questions whose resolution will drive the discipline forward. Certainly there are many views now on the social effects of technology and how we are to evaluate those effects, but the field nonetheless lacks a critical intradisciplinary discussion of those competing views of the kind that characterizes most philosophical sub-fields such as environmental ethics. After reviewing the general state of the field, we turn to an analysis of the work of Carl Mitcham, one philosopher of technology who has focused on a more descriptive approach to identifying the subject of his philosophical endeavors. We then sketch an alternative descriptive approach to Mitcham's grounded in Wittgenstein's descriptive strategies, in part to articulate our own account of improving the descriptive base of the field and in part to show how one form of descriptivism (ours) can critically interact with another (Mitcham's). Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu. Roberts completed an M.A. in philosophy at the University of Montana. (v.13,#1)

Light, Andrew, "Bookchin as/and Social Ecology," in Social Ecology after Bookchin, ed. A. Light (New York: Guilford, 1998), pp. 1-23. A personal account of what went wrong with the development of social ecology and with the social ecology-deep ecology debate. Argues that the later debate, in particular, was largely pointless. Light is in the Applied Philosophy Group at New York University, andrew.light@nyu.edu.

Light, Andrew, and de-Shalit, Avner, eds., Moral and Political Reasoning in Environmental Practice. Cambridge, MA: The MIT Press, 2003. Reviewed by Markku Oksanen in Environmental Values 14(2005):271-274.

Light, Andrew, and Aurora Wallace, "Not Out of the Woods: Preserving the Human in Environmental Architecture," Environmental Values 14(2005):3-20. The North American environmental movement has historically sought to redress the depletion and degradation of natural resources that has been the legacy of the industrial revolution. Predominant in this approach has been the preservation of wilderness, conservation of species biodiversity and the restoration of natural ecosystems. While the results of such activity have often been commendable, several scholars have pointed out that the environmental movement has inherited an unfortunate bias against urban environments, and consequently, a blind spot to ways in which densely populated built spaces can serve to enhance rather than degrade efforts to achieve

sustainability. After exploring this concern we argue that environmental architecture can serve as a counter-balance to this bias, focused, as it is, on the ways in which the construction and organisation of built spaces for humans can help or hinder the pursuit of environmental priorities. But if environmental architecture is to take this role then it must be understood in a broader context, one which does not exclude other moral, political and aesthetic values in the production of human environments. We will highlight several examples of how environmental architecture has combined success and failure at taking a broader view of environmental questions, with a specific focus on one green skyscraper that may be good for the natural environment but not necessarily for the human environment of the city. Light is in the Applied Philosophy Group, New York University, New York, NY. Wallace is in the Department of Culture and Communication, New York University, New York, NY. (EV)

Light, Andrew, "Letter from Bali: A Tragic Truth," *International Society for Environmental Ethics Newsletter* 19, no. 1, Winter 2008, pp. 11-14. Report from the United Nations Conference on Climate Change, Bali, Indonesia. Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

Light, Andrew. "Clarifying the Public/Private Distinction." *Environmental Ethics* 20(1998):223-24.

Light, Andrew. "Materialists, Ontologists, and Environmental Pragmatists." *Social Theory and Practice* 21 (no. 2, Summer 1995): 315-33. (v6,#4)

Light, Andrew. "On Hand's End: Contextualizing the Problem of Nature and Technology." *Research in Philosophy and Technology* 15 (1995): 165. (v7, #3)

Light, Andrew. "Callicott and Naess on Pluralism." *Inquiry* 39, no. 2 (June 1996): 273-94. The monism-pluralism debate in environmental ethics, first, as it has most recently been advanced by J. Baird Callicott in his "Moral Monism in Environmental Ethics Defended," *Journal of Philosophical Research* 19 (1994). Light assesses Callicott's claim that his communitarianism (combined with a limited intertheoretic pluralism) is sufficient to get the advantages of pluralism advocated by, among others, Stone, Weston, Brennan, Varner, and Hargrove. The author argues that Callicott's claims get us no further in taking up what could be the more important question in the monism-pluralism debate: how do we achieve a compatibilism among ethical theories which will inform better environmental practices? The paper argues, further, that Arne Naess, whose work has heretofore been excluded from the mainstream discussion of this issue, has all along understood the heart of the monism-pluralism question. All involved in the monism-pluralism debate would do well to look at what Naess has to say. (v7, #3)

Lighthall, David R., and Kopecky, Steven, "Confronting the Problem of Backyard Burning: The Case for a National Ban," *Society & Natural Resources* 13 (No. 2, Mar 01 2000): 157- . (v.11,#2)

Lijmbach, Susanne, Review of: Peterson, Anna L., *Being Human. Ethics, Environment, and Our Place in the World*. *Journal of Agricultural and Environmental Ethics* 16(2003):409-415. (JAEE)

Lijmbach, Susanne. Review of: Stefanovic, Ingrid Leman, *Safeguarding our Common Future. Rethinking Sustainable Development*. *Journal of Agricultural and Environmental Ethics* 16(2003):209-217. (JAEE)

Likens, G., ed., *Long-term Studies in Ecology--Approaches and Alternatives*. New York: Springer-Verlag, 1989. Contains D. Tilman, "Ecological Experimentation: Strengths and Conceptual Problems." pp. 136-157, an overview of long-term ecological research, of which there is very little. Most ecological research projects last only a few years, far too short a time to take account of the great variation in natural systems. (v8,#3)

Lilburne, Geoffrey, "Ecotheology in Search of a Context: Land's Edge in Patrick White's Voss," Ecotheology Vol 6 (Jul 01/Jan 02):152-166. geofl@nsw.uca.org.au This article reflects the ways in which contexts can be rendered for ecotheological work, on the assumption that ecotheology and contextual theology are inextricably linked. To be taken up into theological reflection, contexts require both mapping and creation. The dialectic of artistic images is explored in a popular religious song and Patrick White's novel, Voss in such a way as to propose methodological directions for ecotheological work in Australia and beyond.

Lilburne, Geoffrey R., A Sense of Place: A Christian Theology of the Land (Nashville, TN: Abingdon, 1989). 139 pages. \$ 10.95. Chapters: 1. From the secular city to a theology of the land. 2. The centrality of the land in aboriginal and Hebrew religion. 3. Shattering the territorial chrysalis: from the exile to the Christian scriptures. 4. The poetics of space: place and space in the Western tradition. 5. The Christification of holy space: incarnation and the land. 6. Defining incarnational praxis. An Australian theologian draws from the culture and literature of his native Australia to offer a vision of ecological responsibility that is biblical, practical, and poetic. Lilburne is now professor of theology at the United Theological Seminary in Dayton, Ohio. (v1,#4)

Limbaugh, Ronald H., "Stickeen and the Moral Education of John Muir," Environmental History Review, vol. 15, no. 1, spring 1991. Stickeen was a dog who crossed a dangerous Alaskan glacier with Muir; Muir's account is interpreted as a classic commentary on the rights of animals and their place in nature. Limbaugh is professor of history at the University of the Pacific and a Muir authority. (v2,#2)

Lime, David W., ed., Managing America's Enduring Wilderness Resource. Proceedings from the September 1989 conference in Minneapolis and northern Minnesota. 118 papers, 700 pages, \$ 32.50. Order from University of Minnesota, Distribution Center, Coffrey Hall, 1420 Eckles Avenue, St. Paul, MN 55108. (v1,#2)

Limerick, PN, "Forestry and Modern Environmentalism: Ending the Cold War," Journal of Forestry 100(no.8, 2002): 46-51.

Lin, Albert C. "Application of the Continuing Violations Doctrine to Environmental Law", Ecology Law Quarterly 23(no.4, 1996):723.

Lin, Albert C. "Participants' Experiences with Habitat Conservation Plans and Suggestions for Streamlining the Process." Ecology Law Quarterly 23(1996).

Lin, G., and S. Ho, "China's Land Resources and Land - Use Change: Insights from the 1996 Land Survey," Land Use Policy 20(no. 2, 2003): 87-107. (v 14, #3)

Lincoln, R.J., Boxshall, G.A., Clark, P.F. A Dictionary of Ecology, Evolution and Systematics (second edition). New York: Cambridge University Press, 1997. 350pp. \$51.96. Over 11,000 entries, providing a working dictionary for students, teachers, researchers and anyone having an interest within the broad arena of biodiversity studies. (v8,#3)

Lind, Christopher. Something's Wrong Somewhere: Globalization, Community and the Moral Economy of the Farm Crisis. (Halifax, N.S.: Fernwood Publishing, 1995). Reviewed by Thomas Imhoff in Journal of Agricultural and Environmental Ethics 8(1995):199. (JAEE)

Lindberg, David C., "Early Christian Attitudes toward Nature." Pages 47-56 in Gary R. Ferngren, ed, Science and Religion: A Historical Introduction (Baltimore: Johns Hopkins University Press, 2002). These attitudes are often depicted as being anti-rationalist and anti-scientific, by selective quotation from

Tertullian (c. 160-c. 220 A.D). In fact, these attitudes were a great deal more complicated and more interesting. Lindberg is in history and philosophy of science University of Wisconsin at Madison. (v. 15, # 3)

Lindbladh, M., Niklasson, M. and Nilsson, S. G., "Long-Time Record of Fire and Open Canopy in a High Biodiversity forest in Southeast Sweden," Biological Conservation 114(no. 2, 2003): 231-243.

Lindell, C; Smith, M, "Nesting bird species in sun coffee, pasture, and understory forest in southern Costa Rica", Biodiversity and Conservation 12(no.3, 2003):423-440.

Lindemayer, David B., and Joern Fisher. *Habitat Fragmentation and Landscape Change: An Ecological and Conservation Synthesis*. Washington, DC: Island Press, 2006. This is an up-to-date overview of habitat loss, subdivision, isolation, and degradation that is accessible to non-specialists.

Linden, Eugene, "Burned by Warming," Time, March 14, 1994. Big losses from violent storms make insurers take global change seriously. The insurance business is first in line to be affected by climate change; it could bankrupt the \$ 1.41 trillion industry. Europe's insurance giants have already begun to lobby governments to take action. One big concern is the loss of the sand barriers that protect insured property along the coasts. With 50% of the U.S. population living within 50 miles of a coastline, sea level is now at the highest mark in the past 5,000 years and is rising as much as ten times as fast as before. (v5,#1)

Linden, Eugene, "The Road to Disaster," Time, Oct. 16, 2000, vol. 156, no. 16, pp. 96-98. Paving the last 435 miles of BR-163, connecting Cuiaba with the TransAmazon highway, could open up the Pantanal to uncontrolled development, over half a million square miles in a region especially prone to burning. (v.11,#4)

Linden, Eugene, "Can Animals Think?" cover story in Time, March 22, 1993. After years of debate, ingenious new studies of dolphins, apes, and other brainy beasts are convincing many scientists that the answer is yes. Dolphins, chimps, parrots, sea lions, dogs. Why intelligence evolved. "If the notion that animals might actually think poses a problem, it is an ethical one. The great philosophers, such as Descartes, used their belief that animals cannot think as a justification for arguing that they do not have moral rights. It is one thing to treat animals as mere resources if they are presumed to be little more than living robots, but it is entirely different if they are recognized as fellow sentient beings. Working out the moral implications makes a perfect puzzle for a large-brained, highly social species like our own." (v4,#1)

Linden, Eugene, "Tigers on the Brink," Time, March 28, 1994. The cover story. Once considered a success story, tigers are again sliding toward extinction. This time the world's nations may not be able to save the great cats. Populations have declined 95% in this century; the two main factors are loss of habitat and a ferocious black market in body parts, especially bones and other parts used in traditional medicine and folklore in China, Taiwan, and Korea. A tragic story of human stupidity driving these majestic animals to extinction. (v5,#1)

Linden, Eugene. "Global Fever." Time, July 8, 1996, pp. 56-57. Climate change threatens more than megastorms, floods, and droughts. The real peril may be disease. Bugs, germs, and other pests may thrive. (v7, #3)

Linder, Douglas O., "New Directions for Preservation Law: Creating an Environment Worth Experiencing," Environmental Law 20(1990):49-81. (v7,#2)

Lindholm, J. and Barr, B., "Comparison of Marine and Terrestrial Protected Areas under Federal Jurisdiction in the United States," Conservation Biology 15(no.5, 2001): 1441-44.

Lindquist, A., "Job's Plight Revisited: The Necessity Defense and the Endangered Species Act," Environmental Law 33(no. 2, 2002): 449-482. (v 14, #3)

Lindzey, Andrew, Animal Theology. London, UK: SCM Press and Champaign, IL, US: University of Illinois Press, 1994. (v.10,#2)

Lindzey, Andrew, Animal Gospel: Christian Faith as If Animals Mattered, London: UK: Hodder and Stoughton and US: Louisville, KY: Westminster/John Knox Press, 1998. (v.10,#2)

Lindzey, Andrew, and Yamamoto, Dorothy, Animals on the Agenda: Questions about Animals for Theology and Ethics. London: UK: SCM Press and Champaign, IL: US: University of Illinois Press, 1998. (v.10,#2)

Lindzey, Andrew, Animal Rites: Liturgies of Animal Care. London, UK: SCM Press and in US distributed by Trinity Press International, 1999. (v.10,#2)

Lindzey, Andrew and Cohn-Sherbok, Dan, After Noah: Animals and the Liberation of Theology, London: UK: Cassells and in US distributed by Continuum, 1997. (v.10,#2)

Line, Les, "Twilight of America's Grasslands," National Wildlife 35(no. 3, April/May 1997):20-29. Of the original tall-grass prairie, in most states only one or two percent survive, and a surprising amount of habitat and biodiversity has been lost in recent years. The current plight of grassland birds is the most neglected conservation problem in America. Even on agricultural lands that once supported such birds, new agricultural practices, such as earlier and more frequent mowing, are decimating the remaining birds. (v8,#1)

Line, Les, "Peru: Epicenter of El Nino, Fears for its Wildlife," New York Times, May 19, 1998, B12. Some lean years lie ahead for seals, sea lions, penguins, and other beach dwellers if ocean waters get warmer. A severe year-long food shortage has resulted from record high water temperatures, and many animals are dying, especially the young. Some scientists predict even stronger and more frequent El Ninos. (v9,#2)

Lines, William J., Taming the Great South Land: A History of the Conquest of Nature in Australia. Athens, GA: University of Georgia Press, 1999. 384 pp. \$18.95. Australia's history from the continent's geological origins, natural development, and earliest native cultures to its present-day state of population and economic overgrowth at the expense of the fragile environmental balance. (v.10,#1)

Linge, George, "Ensuring the Full Freedom of Religion on Public Lands: Devils Tower and the Protection of Indian Sacred Sites," Boston College Environmental Affairs Law Review 27 (No. 2, Wint 2000): 307-. (v.11,#2)

Linklater, WL, "Wanted for Conservation Research: Behavioral Ecologists with a Broader Perspective", BioScience 54 (no.4, 2004): 352-360(9). Behavioral ecologists have advocated a greater role for behavioral research in conservation, and the contribution of behavioral study to conservation has increased dramatically. However, a review of the literature in the fields of behavioral ecology and conservation finds that half the articles that investigate behavior in conservation journals do not advance beyond the descriptive phase (compared with 14 percent in behavioral ecology journals) and that most articles in behavioral ecology journals (71 percent) are narrowly focused on questions about the adaptive value of behavior, whereas conservation biology journals include more diverse interests such as causative and developmental mechanisms (43 percent). Addressing this mismatch between the disciplines is the key

to improving the utility of behavioral ecology in conservation. The solution I propose is a renewed appreciation of Tinbergen's paradigm, both in behavioral ecology, where it can encourage more pluralistic research by integrating proximate and evolutionary questions, and in conservation biology, where it can structure the advance from descriptive studies of behavior to behavioral problem solving.

Linnea, Ann, Deep Water Passage: A Spiritual Journey at Midlife. Boston: Little Brown, 1995. The author takes an extended canoe trip in the Boundary Waters Canoe Area after a spiritual crisis. (v7,#1)

Linneman, J., "Book Review: Managing the Earth (the Linacre Lectures 2001) By James C. Briden and Thomas E. Downing (Eds.)," Journal of Environment and Development 12(no. 2, 2003): 266-267. (v 14, #3)

Linneman, JM, "The Grassroots of a Green Revolution: Polling America on the Environment by Deborah Lynn Guber," Journal of Environment and Development 13(no.1, 2004):101-102. (v. 15, # 3)

Lintott, Sheila. "Toward Eco-Friendly Aesthetics." Environmental Ethics 28(2006):57-76. Environmentalists can make individuals more eco-friendly by dispelling many of the myths and misconceptions about the natural world. By learning what in nature is and is not dangerous, and in what contexts the danger is real, individuals can come to aesthetically appreciate seemingly unappreciable nature. Since aesthetic attraction can be an extremely valuable tool for environmentalists, with potential beyond that of scientific education, the quest for an eco-friendly is neither unnecessary nor redundant. Rather, an eco-friendly aesthetic ought to be pursued in conjunction with other efforts to protect nature. (EE)

Linville, Mark D. "A Little Lower Than the Angels: Christian Humanism and Environmental Ethics," Christian Scholars Review 28(No.2. 1998):283-297. In contrast to Lynn White, Jr., who argues that Christianity is the most anthropocentric of the world's religions and that the West's acceptance of this humanistic approach is responsible for our ecologic crisis, Linville offers an account of human flourishing that includes environmental values and argues that a properly circumspect account of humanism provides an adequate grounding for an environmental ethic. (v.11,#2)

Linzey, A., and Cohn-Sherbok, D., Celebrating Animals in Judaism and Christianity. London: Cassells, 1997.

Linzey, Andrew, ed. Animal Rights in the World's Religions. Cassell, 1999. (v.11,#1)

Linzey, Andrew, "Pet and Companion Animals" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1955), 180-83. (v6,#2)

Linzey, Andrew, "The Moral Priority of the Weak: The Theological Basis of Animal Liberation." Pages 25-42 in The Animal Kingdom and the Kingdom of God, Occasional Paper No. 26, Centre for Theology and Public Issues, New College, University of Edinburgh, 1991. Co-published by the Church and National Committee of the Church of Scotland. ISBN 1 870126 17 3.

Linzey, Andrew, and Cohn-Sherbok, Dan, After Noah: Animals and the Liberation of Theology. London: Mobray, 1997. Also: New York: Cassell/Continuum. 156 pages. Jewish and Christian traditions have often been blamed for justifying the abuse of animals. While some theologians have been negative about animals, there are ample resources within both traditions to support an enlightened and ethical view of animals. The way we treat animals is a benchmark for the kind of society we are; our attitudes toward animals can liberate theology from an obsessive and idolatrous humanism. (v.9,#4)

Linzey, Andrew, "Unfinished Creation: The Moral and Theological Significance of the Fall," Ecotheology No 4 (Jan 1998):20-26.

Linzey, Andrew, and Tom Regan, eds. Love the Animals: Meditations and Prayers (New York: Crossroad, 1989). (v1,#1)

Linzey, Andrew, "Vegetarianism" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster 1955), 171-76. (v6,#2)

Linzey, Andrew, "The Theological Basis of Animal Rights," Christian Century, October 9, 1991. An Anglican priest criticizes humanocentric theology. (v2,#4)

Linzey, Andrew, Animal Theology (London: SCM Press, 1994 and Urbana, IL: University of Illinois Press, 1994). "The idea that the specifically animal creation should be the subject of honour and respect because it is created by God, however elementary that idea may now appear to us, is not one that has been given endorsement throughout centuries of Christian thought. Whilst it can be claimed to have some grounding in scripture, in, for example, the psalmist's sense of wonder and beauty of God's creation and in the regard that Jesus claimed even for the sparrows, these intimations have never been developed into systematic theological thought, still less full-blown doctrine." "Are we not to celebrate the life of creation with all its beauty, magnificence and complexity and therein ... to perceive signs of the grandeur of God? Is not the biblical material right to point us to the ways in which some animals at least appear to provide moral examples for our own behaviour? Is not the story of Balaam's ass a sign of how morally advanced are the beasts compared to the mindless Balaams of our world?" "Christians have so little to contribute to the contemporary debate about animals because they have failed to think theologically afresh." Linzey is at Mansfield College, Oxford. (See story above, on the new fellowship in ethics and animals there.)

Linzey, Andrew, Animal Rites: Liturgies of Animal Care. London: SCM Press, 1998. Fourteen new liturgies that are animal-friendly and animal-inclusive, affirming other sentient beings as co-creatures with humans. Linzey is on the faculty at Mansfield College, Oxford. (v.9,#3)

Linzey, Andrew. Animal Rights: A Christian Assessment of Man's Treatment of Animals. Reviewed in Environmental Ethics 2(1980):89-93.

Linzey, Andrew. *Animal Gospel*. Translator: Li Jianhui. (Beijing: Chinese Politics and Law University Press, 2005). (in Chinese)

Liou, J.-C., and N. L. Johnson, "Risks in Space from Orbiting Debris," Science 311 (20 January 2006): 340-341. Lots of space junk out there, over 9,000 pieces large enough to track, which requires a major tracking enterprise, lest these hit other satellites. And these pieces are increasingly colliding other and breaking up.

Lipietz, Alain, Towards a New Economic Order: Postfordism, Ecology, and Democracy (Cambridge, Polity Press, 1993) 2nd ed.. Reviewed by Jo Smith. Environmental Values 6(1997):239-241. (EV)

Lippke, Bruce, Fretwell, Holly L. "The Market Incentive for Biodiversity," Journal of Forestry 95(1997):4. (v8,#1)

Lipschutz, Ronnie D., with Mayer, Judith. Global Civil Society and Global Environmental Governance: The Politics of Nature from Place to Planet. Albany, New York: State University of New York Press, 1996. 320 pages. \$18.95 paperback, \$57.50 hardcover. Neither world government nor green economics

can protect the global environment. Political action through community and place-based organizations and projects and people acting together locally can have a cumulative impact on environment quality that is significant, long lasting, and widespread. (v7, #3)

Lipsey, Rick. "A Woman's Vision and Dream Turns Central Park Green." The Christian Science Monitor, vol. 89, 26 Nov. 1996, p. 13.

Lipske, Mike, "Cutting Down Canada," International Wildlife, March/April 1994. What's about to happen to vast northern forests will make tropical rain forest look like conservation zones. In Alberta, 23% of the province is under lease for eventual logging. In British Columbia, one year's cut on public lands is more than twice the harvest from all the national forests in the U.S. A new mill in Alberta, the Alberta-Pacific Mill, or Al-Pac, built for \$ 1.3 billion, consumes 120 square kilometers (about 45 square miles) of forest per year. Lipske is a former senior editor of International Wildlife. (v5,#2)

Liptak, Adam, "Saving Seeds Subjects Farmers to Suits over Patent," New York Times, Nov. 2, 2003, p. 14. In 1998, Homan McFarling, Tupelo, Mississippi, bought bags of genetically altered soybean seeds, planted a crop, and did what he has always done, saved some seeds and replanted them the next year. But Monsanto has a patent on Roundup Ready soybeans and sued him in federal court for \$ 780,000. If the court rules against him, he will be forced into bankruptcy. A Monsanto spokeswoman said that Monsanto invested hundreds of millions of dollars to develop the product, and needs to recover its investment, so that Monsanto can contribute to the next wave of products. (v.14, #4)

Lisowski, M, "Playing the Two-Level Game: US President Bush's Decision to Repudiate the Kyoto Protocol," Environmental Politics 11(no.4, 2002): 101-119.

Liss, Peter S., and Duce, Robert A., eds. The Sea Surface and Global Change. New York: Cambridge University Press, 1996. 496 pages. \$74.95 cloth. The first comprehensive review of the surface microlayer in a decade. The authors address the potential global marine impacts at the air-sea interface due to largescale atmospheric ozone depletion and industrial pollution. (v7, #3)

List, Charles J., "On the Moral Significance of a Hunting Ethic," Ethics and the Environment 3(1998):157-175. This paper challenges the claim made by critics and some defenders of hunting, that any ethical code hunters chose to follow is irrelevant to the issue of the morality of hunting. My case is made by (1) constructing a hunting code which meets certain prominent objections to their moral significance, (2) conceptually tying this code to an environmental ethic--Leopold's land ethic, and (3) tying the land ethic to a traditional moral theory--Aristotelian virtue ethics. So, the constructed code is morally significant because it is consistent with and made intelligible by a standard moral theory. List is in philosophy, Plattsburgh State University of New York, Plattsburgh, NY. (E&E)

List, Charles J. "On Angling as an Act of Cruelty." Environmental Ethics 19(1997):333-334. (EE)

List, Charles J. "Is Hunting a Right Thing?" Environmental Ethics 19(1997):405-416. I argue that sport hunting is a right thing according to Leopold's land ethic. First, I argue that what Leopold means by a "thing" ("A thing is right . . .") is not a human action, as is generally assumed, but rather a practice of conservation that is an activity connecting humans to the land. Such an "outdoor" activity emphasizes internal rewards and the achievement of excellence according to standards which at least partially define the activity. To say that hunting is a right thing is to say that the practice of sport hunting tends in the direction of the land ethic. The actions of individual hunters are judged to be ethical or not by the standards of the practice; these standards are in turn evaluated by the precepts of the land ethic. Second, I discuss how the practical standards are evaluated. I argue that the concepts of integrity, stability, and beauty, contrary to some interpretations, are not inherent values of the biotic community, but rather labels

carefully chosen by Leopold as three conduits for the ecological conscience necessary for the land ethic: the ethical, the ecological, and the aesthetic. I show that Leopold uses this model for his own evaluation of the practice of hunting as well as his evaluation of other practices of conservation. Thus, to ask about whether sport hunting is a right thing is to ask about the historical evolution of the standards of this practice and, of equal importance, about the future direction of these standards with regard to the land ethic. List is in philosophy at the State University of New York, Plattsburgh, NY. (EE)

List, Charles J. "The Virtues of Wild Leisure." Environmental Ethics 27 (2005):355-373. The land ethic of Aldo Leopold has increasingly received attention as an example of an environmental virtue ethic. However, an important remaining question is how to cultivate and transmit environmental virtues. The answer to this question can be found in the pursuit of wild leisure. The classical view of leisure primarily as articulated in Aristotle's Politics provides a good starting point for an examination of wild leisure. Leopold thought wild leisure was important and associated it with his land ethic. Leopold's view of wild leisure focused on the role of perception in ecological education and the habituation of virtue. The classical virtue of moderation when habituated by wild leisure becomes the central virtue required by an ecological conscience. Wild leisure educates just those intellectual and scientific virtues necessary for refined perception and prudence. These virtues provide connections between good citizenship and land citizenship. (EE)

List, Charles. "On the Moral Distinctiveness of Sport Hunting." Environmental Ethics 26(2004):155-169. Although controversy concerning the morality of hunting is generally focused on sport hunting, sport hunting itself is not a morally distinctive kind of hunting. The understanding of hunting in general needs to be supplemented with reference to the goods which hunting seeks. Attempts to draw a moral distinction between sport and subsistence hunting are inadequate and historically suspect. Likewise, trying to establish sport hunting as morally distinctive by emphasizing its similarities to other sports also fails. Nevertheless, there are standards accepted by hunters that support ethical judgments about hunting. Ethical hunting requires reentry into a community of nonhuman beings governed by ecology and evolution, not human constructs, the development of virtues such as tenacity, courage, moderation, and discipline, and the achievement of a heightened respect for the biotic community in which the hunt takes place. By means of such standards, we may yet be able to determine what good hunting is even though we are unable to determine whether sport hunting is good. (EE)

List, John A. and Co., Catherine Y., "The Effects of Environmental Regulations on Foreign Direct Investment," Journal Of Environmental Economics And Management 40 (No. 1, 2000 July 01): 1- . (v.11,#4)

List, Peter C., "The Evolution of Biocentered Ethics in the United States: Implications for Forest Conservation." Proceedings, Society of American Foresters, 2001 National Convention, Denver Colorado. (Bethesda, MD: Society of American Foresters, 2002), pages 223-233. (v 14, #3)

List, Peter, "Speaking out for Nature," Reflections 9 (Number 2, Spring, 2002):34-36. Encomium to Rachel Carson, whose career shows the need for scientists to speak out on behalf of nature. (v.13,#2)

List, Peter C., ed., Radical Environmentalism: Philosophy and Tactics. Belmont, CA: Wadsworth Publishing Co., 1993. 276 pages, paper. Sections on Deep Ecology (Arne Naess, Bill Devall, George Sessions), on Ecofeminism (Carolyn Merchant, Elizabeth Dodson Gray, Ynestra King, Karen J. Warren), on Social Ecology and Bioregionalism (Murray Bookchin, Jim Dodge, Kirkpatrick Sale, Judith Plant), on Radical Ecoactivism and Ecotactics (Greenpeace, Bob Hunter, Paul Watson) on the Monkey Wrench Gang (Edward Abbey), on the Sea Shepherd Society (Paul Watson), on Earth First! (Dave Foreman, Mike Roselle and the Middle Santiam Protest, George Draffan and the Cathedral Forest and Oregon Old Growth, on Redwood Summer), on Ecofeminist Activism (Pamela Philipose, Cynthia Hamilton, Chaia

Heller), on Bioregionalist Activism (Peter Berg) and Responses (Eugene Hargrove, Edward Abbey, Dave Foreman, Michael Martin. List, as editor, says, "... understanding this movement can help 'moderates' sharpen their resolve to do more about environmental problems and find solutions which will check the relentless consumption of wild nature." Peter List is professor of philosophy at Oregon State University. (v3,#4)

List, Peter C., ed., Radical Environmentalism, Reviewed by David Rothenberg in Environmental Ethics 16(1994):215-218.

List, Peter C. Review of The Seasons of Fire, Reflections on Fire in the West. By David J. Strohmaier. Environmental Ethics 28(2006):103-106. (EE)

List Peter, ed., "Environmental Advocacy by Environmental Scientists," a theme issue of Reflections, Newsletter of the Program for Ethics, Science, and Technology. Department of Philosophy, Oregon State University. Special Issue 4, April 2000. Fourteen short papers. Samples:

--Rolston, Holmes, III, "Environmental Science and Environmental Advocacy."

--Shrader-Frechette, Kristin, "Justice and Environmental Advocacy."

--Westra, Laura, "Advocacy as a Moral Obligation."

--Hollander, Rechelle E., "Toward a Model of Professional Responsibility." Quite usable with students, if you wish a unit on this issue in an environmental ethics or policy class. (v.11,#2)

List, Peter C., ed. Environmental Ethics and Forestry: A Reader. Philadelphia: Temple University Press, 2000. Paperback. 364 pages. The most comprehensive and concentrated mixture of science and conscience in forestry and philosophy anywhere available. During the last quarter century both forestry and philosophy have been rethinking their foundations; a principal focus is values carried by nature. A foreground conclusion of the contributors is that forestry needs philosophy to formulate an ethic, a background conclusion is that philosophy needs forestry to do the same. Throughout, here is ethics in practice.

Part 1: Ethical Systems in Forestry

1. THE ECONOMIC RESOURCE MODEL OF FORESTS AND FORESTRY

* Bernhard Fernow, Forest and Forestry Defined.

* Gifford Pinchot, Principles of Conservation.

* Gifford Pinchot, The Use of the National Forests.

2. JOHN MUIR ON THE PRESERVATION OF THE WILD FORESTS OF THE WEST

* John Muir, The American Forests.

3. ALDO LEOPOLD'S LAND ETHIC IN FORESTRY

* Aldo Leopold, The Land Ethic.

Part 11: Two Philosophical Issues in Forestry Ethics

4. MULTIPLE VALUES IN FORESTS

* Holmes Rolston III, Values Deep in the Woods.

* Holmes Rolston III, Aesthetic Experience in Forests.

5. THE RIGHTS OF TREES AND OTHER NATURAL OBJECTS

* Robin Attfield, The Good of Trees.

* Lawrence E. Johnson, Holistic Entities--Species.

* Lawrence E. Johnson, Ecointerests and Forest Fires.

Part III: Contemporary Forestry Ethics.

6. BASIC PRINCIPLES IN FORESTRY ETHICS

* Michael McDonald, First Principles for Professional Foresters.

* Paul M. Wood, "The Greatest Good for the Greatest Number": Is This a Good Land-Use Ethic?

* James E. Coufal, Environmental Ethics: Cogitations; and Ruminations of a Forester.

* The Ecoforestry Declaration of Interdependence.

7. CODES OF ETHICS IN FORESTRY, FISHERIES, AND WILDLIFE BIOLOGY

- * Code of Ethics for Members of the Society of American Foresters.
- * Code of Ethics and Standards for Professional Conduct for Wildlife Biologists, The Wildlife Society.
- * Code of Practices, American Fisheries Society.
- * Code of Ethics, Oregon Chapter, American Fisheries Society.
- * A Code of Ethics for Government Service.
- * The Ecoforester's Way.

8. ADOPTING A LAND ETHIC IN THE SOCIETY OF AMERICAN FORESTERS

- * James E. Coufal, The Land Ethic Question.
- * Norwin E. Linnartz, Raymond S. Craig, and M. B. Dickerman, Land Ethic Canon Recommended by Committee.
- * Holmes Rolston III and James Coufal, A Forest Ethic and Multivalue Forest Management: The Integrity of Forests and of Foresters Are Bound Together.
- * Raymond S. Craig, Further Development of a Land Ethic Canon.
- * Raymond S. Craig, Land Ethic Canon Proposal: A Report from the Task Force.

9. ADVOCATING NEW ENVIRONMENTAL ETHICS IN PUBLIC NATURAL RESOURCE AGENCIES

- * Kristin Shrader-Frechette, Ethics and Environmental Advocacy.
- * AFSEEE Vision: Strategy for Forest Service Reform.
- * Jeff DeBonis, Speaking Out: A Letter to the Chief of the U.S. Forest Service.
- * F. Dale Robertson, Chief Robertson Responds.
- * On Speaking Out: Fighting for Resource Ethics in the BLM: Whistleblower Spills Beans on North Kaibab.
- * A Combat Biologist Calls It Quits: An Interview with Al Espinosa.
- * Cheri Brooks, Enough Is Enough! A Tongass Timber Beast Puts His Foot Down.

10. ETHICAL ISSUES IN GLOBAL FORESTRY

- * James L. Bowyer, Responsible Environmentalism: The Ethical Features of Forest Harvest and Wood Use on a Global Scale.
- * Alastair S. Gunn, Environmental Ethics and Tropical Rain Forests: Should Greens Have Standing?
- * Doug Daigle, Globalization of the Timber Trade.

11. NEW FORESTRY, NEW FOREST PHILOSOPHIES

- * Alan G. McQuillan, Cabbages and Kings: The Ethics and Aesthetics of New Forestry.
- * Stephanie Kaza, Ethical Tensions in the Northern Forest.
- * Alan Drengson and Duncan Taylor, An Overview of Ecoforestry: Introduction.

EPILOGUE

- * Kathleen Dean Moore, Traveling the Logging Road, Coast Range. (v.11,#4)

Liszka, James Jakob, "The narrative ethics of Leopold's Sand County Almanac," Ethics and the Environment 8(no. 2, 2003):42-70. There is a normative argument present throughout the Sand County Almanac. In fact the shack stories may be more persuasive, with a subtlety and complexity not available in his prose "Land Ethic." This paper develops a narrative ethics methodology gleaned from rhetoric theory, and current interest in narrative ethics among literary theorists, in order to discern the normative underpinnings of the stories in Part 1. The narrative ethics approach sidesteps the need to ground the land ethic in ethical theory--which has been a reconstructive and problematic task for the philosophical interpreters of Leopold--and suggests, instead, that it emerges in Leopold's very effort to narrate his, professional, personal, and practical experience with nature. This involves examining the stories in terms of their emotional, logical and performative aspects. The result is an analysis that shows not only how these stories express normative claims, but also justify them. In the narratives, individuals are shown not merely to be means to the ecological whole, but the focus of sympathy and concern, in a manner that demands their good should also be an object of moral consideration. Liszka is in philosophy, University of Alaska, Anchorage. (E&E)

Litfin, Karen T., ed., The Greening of Sovereignty in World Politics. Cambridge: The MIT Press, 1998.

Litmanen, Tapio. "Environmental Conflict as a Social Construction: Nuclear Waste Conflicts in Finland," Society & Natural Resources 9(no.5, 1996):523. (v7,#4)

Little, C. E., "Redeeming the Geography of Hope," Natural Resources Journal 43(no. 1, 2003): 1-10.

Little, Charles E. Greenways for America. Baltimore: John Hopkins University Press, 1995. The history, the examples, and the practical methods for open-space recreation planners. Little describes dozens of greenway projects that have improved local economies, and preserved outdoor space for millions of citizens. Little is an author and journalist specializing in American life and history and the environment. (v7,#1)

Little, Charles E. The Dying of the Trees: The Pandemic in America's Forests. New York: Viking, 1995. 274 pages. \$ 22.95. In the East, along the spine of the Appalachians, the dogwood are dead and dying from a disease called anthracnose, while acid deposition is killing red spruce and balsam fir from Vermont to Virginia and the Carolinas. Soil disease is destroying the mixed mesophytic forests of West Virginia; in the upper Midwest, gypsy moths are devastating second-growth white pine. In Southern California and the Sierra Nevada, airborne pollutants are killing yellow pine and ponderosa pine; in the Rocky Mountains, spruce budworms and bark beetles have combined with a century of fires suppression to cripple the health of Douglas fir. In the Pacific Northwest, the ancient forests of Douglas fir and other old-growth species have been systematically obliterated by Forest Service timber policies. (v6,#3)

Little, Daniel, "Collective Action and the Traditional Village", Journal of Agricultural Ethics 1(1988):41-58. This article considers the dispute between "moral economy" and "rational peasant" theories of agrarian societies in application to problems of collective action. I offer an abstract model of a traditional village and assess the applicability of recent qualifications of the collective action argument to this model. Little is in philosophy and religion at Colgate University, Hamilton, NY.

Little, Daniel, Review of Nussbaum, Martha, Glover, Jonathan, eds., Women, Culture and Development: A Study of Human Capabilities. Ethics and the Environment 2(1997):91-94. (E&E)

Little, J., "Rural Geography: Rural Gender Identity and the Performance of Masculinity and Femininity in the Countryside," Progress in Human Geography 26(no.5, 2002): 665-70. (v.13,#4)

Little, J., and M. Leyshon, "Embodied Rural Geographies: Developing Research Agendas," Progress in Human Geography 27(no. 3, 2003): 257-272. (v 14, #3)

Little, Jane Braxton, "Quiet! The Sounds of Nature are Harder to Hear," Wilderness, The Wilderness Society, 1999, pages 20-25. Increasing noise pollution in national parks and wilderness areas: commercial and military airplanes, tourist flights, ATV's, helicopters, snowmobiles, jet skis, and much more. Little is a freelance writer based in Plumas Country, CA. (v.10,#2)

Little, Jo, "Otherness, representation and the cultural construction of rurality," Progress In Human Geography. 23 (No. 3, 1999): 437- . (v.11,#4)

Little, SJ; Harcourt, RG; Clevenger, AP, "Do wildlife passages act as prey-traps?," Biological Conservation 107(no.2, 2002):135-145. (v.13, #3)

Littlewood, David. Review of MacIntyre, Dependent Rational Animals. Environmental Values

9(2000):259.

Littlewood, Davide, Review of Hauskeller, Michael, *Biotechnology and the Integrity of Life: Taking Public Fears Seriously* (Aldershot: Ashgate, 2007). *Environmental Values* 17(2008):543-546.

Liu Er, "Some theoretical problems of nonanthropocentric environmental ethics", Studies and Exploration, 2002(6)

Liu Fusheng and Song Wenxin, "The Revolution of Values: The Orientation of Sustainable Development," Jinlin Daxue Shehuikexue Xuebao (Journal of Jilin University) 2(1999):58-65. In Chinese. (v.11,#1)

Liu, Guocheng, Chao Liancheng, Zhang Zhonglun and Ye Ping, Biosphere and Human Society (in Chinese). Beijing: People's Press, 1992. 4.65 yuan. 302 pages. ISBN 7-01-000807-8/B.70. Eleven chapters. Section 1 is on "Biosphere Laws." Section 2 is on "Interaction Connection between Human Society and the Biosphere." Section 3 is on "Modern Human Society Control and Adjustment, and its Developmental Trend in Harmony with the Biosphere." The authors discuss the coordinated interrelationship between humans and the biosphere, argue for ways of establishing the scientific foundations of ecophilosophy in China. This is said to be the first systematic work on the holistic interactions between human society and nature to be published in China. (China) (v3,#4)

Liu, Guocheng, et al., Shengwuquan Kexue Yilun (An Overview of Biosphere Science). Harbin: Northeast Forestry University Press, 1994. 260 pages. ISBN 7-81008-495-X. In Chinese. Biosphere science as an introduction to environmental ethics and policy in China. Liu is a philosopher at Northeast Forestry University, Harbin, China.

Liu, Jianguo, et al, "Protecting China's Biodiversity," Science 300(23 May 2003)1240-1241. China has over 30,000 species of vascular plants (behind only Brazil and Columbia) and perhaps half are endemics, including many archaic lines. China's biodiversity suffers from the explosive increase in the intensity and extent of human activities. Rangelands are severely overgrazed, wetlands are shrinking rapidly, and invasive species are increasingly a serious problem. Poaching of plants and wildlife is a problem. China has established 1,757 national and local nature reserves, about 13% of the nation's area, remarkable achievements given China's population and the pressing need for development. Most reserves are in the poorer areas. But the entire nature reserve system faces serious challenges. Liu is in fisheries and wildlife, Michigan State University, and many of the authors are Chinese.

Liu, Jianguo, and Taylor, William W., eds. Integrating Landscape Ecology into Natural Resource Management. New York: Cambridge University Press, 2002. The authors are at Michigan State University, Lansing. (v.13,#4)

Liu, Jianguo, and Jared Diamond. "Revolutionizing China's Environmental Protection." *Science* Vol. 319, no. 5859 (4 January 2008): 37-38. China's growth has created severe environmental problems that will require fundamental changes in China's administrative system and its model of economic development.

Liu, Jianguo, Thomas Dietz, Stephen R. Carpenter, Marina Alberti, Carl Folke, Emilio Moran, Alice N. Pell, Peter Deadman, Timothy Kratz, Jane Lubchenco, Elinor Ostrom, Zhiyun Ouyang, William Provencher, Charles L. Redman, Stephen H. Schneider, and William W. Taylor. "Complexity of Coupled Human and Natural Systems." *Science* Vol. 317, no. 5844 (14 September 2007): 1513-16. Integrated studies of coupled human and natural systems reveal new and complex patterns and processes not evident when studied by natural or social scientists. Six case studies from around the world show that these

couplings vary widely across space, time, and organizational units. These couplings also exhibit nonlinear dynamics with thresholds, reciprocal feedback loops, time lags, resilience, heterogeneity, and surprises. Past couplings have legacy effects on present conditions and future possibilities.

Liu, Rei, Herrington, Lee P. "The Expected Cost of Uncertainty in Geographic Data", Journal of Forestry 94(no.12, 1996):27. (v7,#4)

Liu, Shu-hsien, "Toward a New Relation Between Humanity and Nature: Reconstructing T'ien-Jen-Ho-I." Zygon 24 (1989): 457-468. Argument for a traditional Chinese principle of harmony of Heaven and humanity as the basis of a holistic metaphysics. (Katz, Bibl # 2)

Liu, Sylvia F., "American Indian Reserved Water Rights: The Federal Obligation to Protect Tribal Water Resources and Tribal Autonomy," Environmental Law 25 no. 2 (1995): 425- . A federal water policy that has historically neglected tribal sovereignty dictate a broad interpretation of the Indian reserved water rights doctrine. (v6,#2)

Liu Xiangrong. *Moral Dialogue Between Humans and Nature: The Development and Reflection of Environmental Ethics*. Changsha: Hunan Normal University, 2004.

Liu Xiaohua. "The Life Philosophy of Human Beings Synchronizing Nature and Environment Ethics." *Studies in Dialectics of Nature* No. 5 (2004): 23-26.

Liu Xiaohua. "The Possibility of Environment Ethics' Existence by Kant's Method." *Journal of Renmin University of China* No. 2 (2006): 83-89.

Liu Xiaoting. "The Future Value and Environmental Ethics." *Journal of Tsinghua University* No. 1 (2004): 26-29.

Liu Zhengming, "Ethical Reflections on Sustainable Development," Daode yu Wenming (Morality and Civilization)4 (1999):37-40. In Chinese. (v.11,#1)

Liverman, Diana M. "Vulnerability and Adaptation to Drought in Mexico." Natural Resources Journal 39(No. 1, Winter 1999):99- . (v10,#4)

Livesey, Sharon, "Organizing and Leading the Grassroots: An Interview With Lois Gibbs", Organization and Environment 16 (no. 4, December 2003).

Livesey, Sharon M and Kearins, Kate, "Transparent and Caring Corporations? A Study of Sustainability Reports by The Body Shop and Royal Dutch/Shell", Organization and Environment, 15, (No. 3, 2002): 233-58. This article analyzes sustainability values reports published by The Body Shop International and by the Royal Dutch/Shell Group. The authors show how corporate discourses expressed in these precedent-setting texts both reflect and influence sociopolitical struggle over the meanings and practices of sustainable development. Specifically, the authors examine metaphors of transparency and care used to describe corporate rationales for increasing stakeholder communication, including reporting. Drawing on distinct discursive domains of business accountancy and personal ethics and sentiment, these metaphors promise to reconstruct the interface between the firm and society. Exploring the quite different assumptions on which each of these metaphors relies and their implications for corporate practices of sustainable development, the authors consider whether sustainability values reporting and the dialogue that it claims to facilitate can promote more democratic and socially and environmentally responsive corporate decision making, even as they impose new forms of managerial control. Livesey is an associate professor of communication at Fordham University's Graduate School of Business in New York. Kearins

is a senior lecturer in strategic management at the University of Waikato, Hamilton, New Zealand. (v.13, #3)

Livingston, John A. The Fallacy of Wildlife Conservation. Reviewed in Environmental Ethics 7(1985):177-80.

Livingston, John A., "Moral Concern and the Ecosphere." Alternatives Vol. 12, no. 2 (Winter 1985):3-9. A general review of several philosophical positions or "world-views" regarding humanity and the environment: resourcism, the development ethic, and shallow and deep environmentalism. (Katz, Bibl # 1)

Livingstone, David N., "Ecology and the Environment" (and Christian thought). Pages 345-355 in Gary R. Ferngren, ed, Science and Religion: A Historical Introduction (Baltimore: Johns Hopkins University Press, 2002). The relationship between environmental thinking and Christian theology has been historically complex. Some of these connections are explored through the metaphors of the Divine Economist, Mother Nature, and the Celestial Mechanic. In the last thirty years there has been the "greening" of theology. Livingstone is in geography and intellectual history, Queen's University, Belfast. (v. 15, # 3)

Llewellyn, Daniel W., Shaffer, Gary P., Brown, Cindy. "A Decision-Support System for Prioritizing Restoration Sites on the Mississippi River Alluvial Plain", Conservation Biology 10(no.5,1996):1446.

Llewellyn, John. The Middle Voice of Ecological Conscience: (New York: St. Martins Press, 1991). Reviewed by James Hatley in Environmental Ethics 17(1995):109-111. (EE)

Lloyd, Catherine A., The Balance of Value to the Customer & the Environment for Undergrounding Overhead Lines (sponsored by Norweb), Master's Thesis, Department of Philosophy, Lancaster University, September 1990.

Lloyd, Catherine A., The Balance of Value to the Customer & the Environment for Undergrounding Overhead Lines (sponsored by Norweb), Master's Thesis, Department of Philosophy, Lancaster University, September 1990. (v7,#1)

Lloyd, Geoffrey E. R., "Greek Antiquity: The Invention of Nature." Pages 1-24 in Torrance, John, ed., The Concept of Nature. Oxford, UK: Oxford University Press, 1992.

Lloyd, Jeremy, "Redneck for Wilderness: Earth First! Cofounder Dave Foreman on Being a True Conservative," The Sun, December 2005, pp. 4-11. Interview with Dave Foreman. "Aren't people ultimately going to ask what's in it for them?" "Yes, to a certain extent, but I think we can also challenge people with questions like 'Do we have the generosity of spirit and the greatness of heart to share the earth with other species?' That appeals to something deep in us. And that's the way religions have always approached problems: by appealing to something beyond self interest. I think conservationists used to do that more. That's part of the problem with the environmental movement today." "I've been a registered Republican all my life. As a college student in the sixties I ... worked on Barry Goldwater's campaign for president. I consider myself a true conservative. But true conservatism is dead in America."

Lloyd, Jillian, "When Saving a Species Proves To Be Hard on the Animals," Christian Science Monitor, Mar 11, 1999, p. 2. Loss of two lynxes in Colorado of five released in the San Juan Mountains raises questions about reintroduction efforts. "At the heart of the dispute is a troublesome question: Is it ethical to sacrifice the lives of individual animals to the larger goal of reviving a species?" George Byrne, Colorado biologist says, "There's no cookbook on this. We're only the second place ... to do a lynx

reintroduction." A reintroduction in the Adirondack Mountains of New York failed after most of the lynx were hit by cars. A Defenders of Wildlife advocate, Nina Fascione: "Our position is very firm that it's a tragedy when an animal gets killed. But the overall good of the conservation of the species is the most important thing." See also: Bekoff, Marc, "Jinxed Lynx? Some Very Difficult Questions with Few Simple Answers," Boulder (Colorado) Daily Camera, January 24, 1999. (v.10,#1)

Lloyd, Jillian. "High Noon at Sundance Kid's Utah Resort." The Christian Science Monitor, vol. 89, 19 Feb. 1997, pp. 1, 8.

Lloyd, Jillian. "Wolves As Neighbors: Howls of Praise and Fear." The Christian Science Monitor, vol. 89, 13 Feb. 1997, p. 10.

Lloyd, Jillian. "Will Hikers Foot the Bill as Park Charges Climb?" The Christian Science Monitor, vol. 88, 17 Oct. 1996. p. 3.

Lloyd, Jillian. "150-Year-Old Land Dispute Intensifies in Colorado." The Christian Science Monitor, vol. 89, 3 March 1997, p. 4.

Lloyd, Jillian. "Yupies, Miners Do Battle in West." The Christian Science monitor, vol. 89, 28 Jan. 1997, p. 4.

Lloyd, Jillian. "New Reason for Fighting Pollution (Hint: It's on the Horizon." Christian Science Monitor 89 (7 October 1997): 1, 4. For first time for purely aesthetic reasons, the EPA has proposed regulations to help clear the air in over 150 US national parks and wilderness areas, including the Grand Canyon, Big Bend, Yellowstone, and Yosemite. (v8,#3)

Lloyd, Jillian. "Colorado's Trapping Ban Pits Old West Against New." The Christian Science Monitor, vol. 88, 8 Oct. 1996, p. 3.

Lloyd, Tracey, Review of: Ernesto Sirolli, Ripples from the Zambezi: Passion, Entrepreneurship and the Rebirth of Local Economies, Environmental Values 11(2002):245-247.

Lo, Y. S., Review of: Ouderkirk, Wayne and Jim Hill, eds., Land, Value, Community: Callicott and Environmental Philosophy. Albany: State University of New York Press. 2002. Environmental Values 13(2004):130-132. (EV)

Lo, Y.S. Review of Lee, The Natural and the Artefactual: The Implications of Deep Science and Deep Technology for Environmental Philosophy. Environmental Values 9(2000):254.

Lo, Yeuk-Sze . "Natural and Artifactual: Restored Nature as Subject." Environmental Ethics 21(1999):247-266. It has been argued that human restoration of nature is morally problematic because artificially restored natural entities are artifacts, which are ontologically different from natural entities and hence essentially devoid of the moral standing that natural entities have. I discuss the alleged assimilation of restored natural entities to artifacts, and argue that it does not follow from the ontological differences, if any, between the artifactual and the natural that the former is morally inferior to the latter. This defense against the devaluation of restored natural entities is aimed at narrowing the ethical gap between the wild and the tamed, which is often endorsed by ecocentric environmental ethics. (EE)

Loader, JA 1991. God se hemelgewelf (Ps 150). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 164-173. (Africa)

Loader, JA 1987. Image and order: Old Testament perspectives on the ecological crisis. In: Vorster, WS

(ed) 1987, 6-28. (Africa)

Loader, JA 1991. Life, wonder and responsibility: some thoughts on ecology and Christian mission. *Missionalia* 19:1, 44-56. (Africa)

Loaharanu, Paisan & Ahmed, Mainuddin, "Advantages and Disadvantage of the Use of Irradiation for Food Preservation", *Journal of Agricultural and Environmental Ethics* 4(1991):14-30. Food irradiation is a physical method of processing food (e.g. freezing, canning). It has been thoroughly researched over the last four decades and is recognized as a safe and wholesome method. It has the potential both of disinfecting dried food to reduce storage losses and disinfecting fruits and vegetables to meet quarantine requirements for export trade. Low doses of irradiation inhibit spoilage losses due to sprouting of root and tuber crops. Food-borne diseases due to contamination by pathogenic microorganisms and parasites of meat, poultry, fish, fishery products and spices are on the increase. Irradiation of these solid foods can decontaminate them of pathogenic organisms and thus provide safe food to the consumer. Irradiation can successfully replace the fumigation treatment of cocoa beans and coffee beans and disinfest dried fish, dates, dried fruits, etc. One of the most important advantages of food irradiation processing is that it is a cold process which does not significantly alter physico-chemical characters of the treated product. It can be applied to food after its final packaging. Similar to other physical processes of food processing, (e.g. canning, freezing), irradiation is a capital intensive process. Thus, adequate product volume must be made available in order to maximize the use of the facility and minimize the unit cost of treatment. Lack of harmonization of regulations among the countries which have approved irradiated foods hampers the introduction of this technique for international trade. Action at the international level has to be taken in order to remedy this situation. One of the important limitations of food irradiation processing is its slow acceptance by consumers, due inter alia to a perceived association with radioactivity. The food industry tends to be reluctant to use the technology in view of uncertainties regarding consumer acceptance of treated foods. Several market testing and consumer acceptance studies have been carried out on food irradiation in recent years. These studies showed that, if the safety and the benefits of food irradiation were properly explained, the consumers were willing to accept irradiated foods. Considering its potential role in the reduction of post-harvest losses, providing safe supply of food and overcoming quarantine barriers, food irradiation has received wider government approvals during the last decade. There is also a trend towards increased commercialization of irradiated food. Currently, there are 47 irradiation facilities in some 23 countries being used for treating foods for commercial purposes.

Lobell, David B. Marshall B. Burke, Claudia Tebaldi, Michael D. Mastrandrea, Walter P. Falcon, and Rosamond L. Naylor. "Prioritizing Climate Change Adaptation Needs for Food Security in 2030." *Science* Vol. 319, no. 5863 (1 February 2008): 607-10. Some of the most profound impacts of climate change over the next few decades will be on agricultural and food systems. South Asia and Southern Africa will suffer failures in several crops that are important to large food-insecure populations—unless investments are now made in improving agricultural adaptation to climate change. Millions of hungry people subsist on what they produce. If climate change reduces production, and populations continue to increase, there will be much more hunger. Uncertainties vary widely by crop, and priorities will greatly depend on the risk attitudes of investment institutions. The complications include rising oil prices, globalization of the grain market, biofuel demands, and rising per capita consumption in India and China. Lobell is in the Food Security and Environment Program at Stanford University. For commentary, see "Food Security Under Climate Change" by Molly E. Brown and Christopher C. Funk (*Science* Vol. 319, no. 5863 (1 February 2008): 580-81).

Lober, Douglas J. "Why Not Here? The Importance of Context, Process, and Outcome on Public Attitudes Toward Siting of Waste Facilities." *Society and Natural Resources* 9, no.4 (1996): 375. (v7, #3)

Local Environment: The International Journal of Justice and Sustainability Vol. 12, no. 6 (2007). This is a special issue on environmental justice in Canada. Contents include: (1) "Environmental Justice in

Canada” by Randolph Haluza-Delay (pp. 557-64), (2) “Where the Waters Divide: First Nations, Tainted Water and Environmental Justice in Canada” by Michael Mascarenhas (pp. 565-77), (3) “Support for First Nations’ Land Claims amongst Members of the Wilderness Preservation Movement: The Potential for an Environmental Justice Movement in British Columbia” by Joanna L. Robinson, D.B. Tindall, Erin Seldat, and Gabriela Pechlaner (pp. 579-98), (4) “Environmental Justice across the Rural Canadian Prairies: Agricultural Restructuring, Seed Production and the Farm Crisis” by Lorelei L. Hanson (pp. 599-611), (5) “Salmon Farming in First Nations’ Territories: A Case of Environmental Injustice on Canada’s West Coast” by Justin Page (pp. 613-26), (6) “Arctic Climate Impacts: Environmental Injustice in Canada and the United States” by Sarah F. Trainor, F. Stuart Chapin III, Henry P. Huntington, David C. Natcher, and Gary Kofinas (pp. 627-43), (7) “Environmental Racialization: Linking Racialization to the Environment in Canada” by Cheryl Teelucksingh (pp. 645-61), and (8) ““British Columbia is Open for Business’: Environmental Justice and Working Forest News in the *Vancouver Sun*” by Mark C.J. Stoddart (pp. 663-74).

Local Environment: The International Journal of Justice and Sustainability Vol. 12, no. 6 (2007). This is a special issue on environmental justice in Canada. Contents include: (1) “Environmental Justice in Canada” by Randolph Haluza-Delay (pp. 557-64), (2) “Where the Waters Divide: First Nations, Tainted Water and Environmental Justice in Canada” by Michael Mascarenhas (pp. 565-77), (3) “Support for First Nations’ Land Claims amongst Members of the Wilderness Preservation Movement: The Potential for an Environmental Justice Movement in British Columbia” by Joanna L. Robinson, D.B. Tindall, Erin Seldat, and Gabriela Pechlaner (pp. 579-98), (4) “Environmental Justice across the Rural Canadian Prairies: Agricultural Restructuring, Seed Production and the Farm Crisis” by Lorelei L. Hanson (pp. 599-611), (5) “Salmon Farming in First Nations’ Territories: A Case of Environmental Injustice on Canada’s West Coast” by Justin Page (pp. 613-26), (6) “Arctic Climate Impacts: Environmental Injustice in Canada and the United States” by Sarah F. Trainor, F. Stuart Chapin III, Henry P. Huntington, David C. Natcher, and Gary Kofinas (pp. 627-43), (7) “Environmental Racialization: Linking Racialization to the Environment in Canada” by Cheryl Teelucksingh (pp. 645-61), and (8) ““British Columbia is Open for Business’: Environmental Justice and Working Forest News in the *Vancouver Sun*” by Mark C.J. Stoddart (pp. 663-74).

Lockhart, C, "Controversy in Environmental Policy Decisions: Conflicting Policy Means or Rival Ends?" Science Technology and Human Values 26(no. 3, 2001):259-277. (v.13,#1)

Lockwood, J. L. et al, "A Metric for Analyzing Taxonomic Patterns of Extinction Risk," Conservation Biology 16(no.4, 2002): 1137-42. (v.13,#4)

Lockwood, Jeffrey, Grasshopper Dreaming: Reflections on Killing and Loving. Boston: Skinner House Books, 2002. The ethics of managing nature. Lockwood is an entomologist with fifteen years in grasshopper control efforts in Wyoming. Grasshopper Dreaming won the 2003 John Burroughs award for natural history writing. Lockwood is now professor of natural sciences and humanities at the University of Wyoming.

Lockwood, Jeffrey A., "Not to Harm a Fly: Our Ethical Obligations to Insects." Between the Species 4 (1988): 204-211. An argument that insects have the necessary neurological structures for consciousness and/or sentience, and thus should be morally considerable. This absurdity supplants the "stop wild predation" argument as the reductio of the animal rights position. (Katz, Bibl # 2)

Lockwood, Linda G. Review of Ecology and Our Endangered Life-Support Systems. By Eugene P. Odum. Environmental Ethics 12(1990):375-78.

Lockwood, Michael, "End Value, Evaluation, and Natural Systems," Environmental Ethics

18(1996):265-278. I develop a general framework for natural and human values based on the position that end value is constructed by persons, but not wholly referent to them, identify and analyze three hierarchically related levels of end value in relation to the functional values which support them and the held and ascribed values generated by entities possessing teleological value, use this framework to indicate the context in which economic values should be located, and assess the implications of the framework for environmental policy and future valuation work. Lockwood is at the Johnstone Centre of Parks, Recreation, and Heritage, Charles Sturt University, Australia. (EE)

Lockwood, Michael. "Humans Valuing Nature: Synthesising Insights from Philosophy, Psychology and Economics." Environmental Values 8(1999):381-401. ABSTRACT: A rational process for assessment of environmental policy options should be based on an appreciation of how humans value nature. Increased understanding of values will also contribute to the development of appropriate ways for us to relate to and manage natural areas. Over the past two decades, environmental philosophers have examined the notion that there is an intrinsic value in nature. Economists have attempted to define and measure the market and nonmarket economic values associated with decisions concerning natural areas. Psychologists have tried to assess the extent to which people believe in an intrinsic value in nature, and have also begun to work with economists to improve nonmarket valuation techniques. I briefly review the contributions made to our understanding of natural area value by environmental philosophy, psychology and economics, and develop a model that integrates insights from these disciplines. Components in the model include cognitions, held values, assigned values and various modes of value expression. I make recommendations for future validation, development and use of the model. KEYWORDS: Intrinsic value, value expression, integrated evaluation. Michael Lockwood, Johnstone Centre Charles Sturt University PO Box 789, Albury, NSW 2640, Australia. (EV)

Lodahl, Michael E., "'The Whole Creation Groans': Is There a Distinctively Wesleyan Contribution to an Environmental Ethic?" CTNS (Center for Theology and the Natural Sciences) Bulletin 18 (no. 2, 1999):10-19. Yes. A provocative Biblical passage is Romans 8.18-25, which was the text for John Wesley's 1781 sermon, "The General Deliverance," which can be a guide and touchstone for a Wesleyan environmental ethics. Lodahl is in theology at Northwest Nazarene College in Nampa, ID. (v.10,#1)

Lodge, David M., and Christopher Hamlin, eds., Religion and the New Ecology: Environmental Responsibility in a World in Flux. Notre Dame, IN: University of Notre Dame Press, 2006. An anthology bringing religion, especially Christianity, into conversation with the "new ecology" and its nature in flux, including both changes in wild nature and changes that humans introduce, contrasted (so many claim) with the old ecology that treasured a stable, pristine nature, uninterrupted by humans. Lodge is in biology, Hamlin in history, University of Notre Dame.

Lodge, DM; Shrader-Frechette, K, "Nonindigenous Species: Ecological Explanation, Environmental Ethics, and Public Policy", Conservation Biology 17(no.1, 2003):31-37.

Loeb, A. P., "Review of Peter Huber, Hard Green: Saving the Environment from the Environmentalists: A Conservative Manifesto," Environmental History 7(2002): 149-51. (v.13,#2)

Loehl, Craig. "Forest Response to Climate Change: Do Simulations Predict Unrealistic Dieback." Journal of Forestry 94, no.9 (1996): 13. (v7, #3)

Loehman, E. T. and D. M. Kilgour, eds. Designing Institutions for Environmental and Resource Management. Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 1998, 368pp. Reviewed by Peter Soderbaum. Environmental Values 9(2000):538.

Lofstedt, Ragnar E., Sjøstedt, G., eds. Environmental Aid Programmes to Eastern Europe: Area Studies

and Theoretical Applications. Brookfield, Vt.: Ashgate, 1996. 240 pp. \$67.95. This book combines a series of case studies within large theoretical sections to identify the mistakes that have been made in the field of environmental aid. It uses this to examine how these Eastern European nations can improve their environmental aid program overall. (v8,#2)

Lofstedt, Ragnar. "Sweden's Biomass Controversy: A Case Study of Communicating Policy Issues," Environment 40(no. 4, May 1998):16- . Sweden's efforts to shift to renewable sources of energy are being hampered by misunderstandings and distortions of the key issues involved. (v9,#2)

Loftin, Robert W., "The Medical Treatment of Wild Animals," Environmental Ethics 7(1985):231-239. The medical treatment of wildlife can only be justified from a perspective of animal rights individualism. Genuine environmental concern is for species and ecosystems, not individual animals. (Katz, Bibl # 1)

Loftin, Robert and Klein, Ellen, "Hunting" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster 1995), 187-90. (v6,#2)

Loftin, Robert W. "The Morality of Hunting." Environmental Ethics 6(1984):241-50. In recent years, philosophers have begun to devote serious attention to animal rights issues. Most of the attention has focused on factory farming and animal experimentation. While many of the arguments used to justify sport hunting are shown to be spurious, the paper defends sport hunting on utilitarian grounds. The loss of sport hunting would also mean the loss of a major political pressure group working for the benefit of wildlife through the preservation of habitat. Peter Singer argues that "the shooting of a duck does not lead to its replacement by another." I argue that, on the contrary, the shooting of a duck leads to the production of other ducks and other life forms that are not shot at. Loftin is at the Philosophy Dept., University of North Florida, Jacksonville, FL. (EE)

Loftin, Robert W. Review of The Rights of Nature: A History of Environmental Ethics. Environmental Ethics 12(1990):83-85.

Loftin, Robert W. "The Medical Treatment of Wild Animals." Environmental Ethics 7(1985):231-39. The medical treatment of wild animals is an accepted practice in our society. Those who take it upon themselves to treat wildlife are well-intentioned and genuinely concerned about their charges. However, the doctoring of sick animals is of extremely limited value and for the most part based on biological illiteracy. It wastes scarce resources and diverts attention from more worthwhile goals. While it is not wrong to minister to wildlife, it is not right either. The person who refuses to do so has not violated any moral duty and is not necessarily morally callous. The treatment of wildlife is based on the mistaken belief that value lies in individual wild animals rather than the entire ecosystem. The genuine concern of those who doctor wild animals should be channeled into more constructive directions. Loftin is at the Philosophy Dept., University of North Florida, Jacksonville, FL. (EE)

Loftin, Robert W., "The Morality of Hunting," Environmental Ethics 6(1984):241-250. A defense of sport hunting on utilitarian grounds. Sport hunters are interested in preserving habitats, and thus are inclined to support environmental causes. (Katz, Bibl # 1)

Loftin, Robert W. Review of The American Hunting Myth. By Ron Baker. Environmental Ethics 9(1987):87-90.

Loftin, Robert W., "Psychical Distance and the Aesthetic Appreciation of Wilderness." International Journal of Applied Philosophy 3, no. 1 (1986): 15-19. Wilderness must be approached and entered at the right "distance" for it to be appreciated, just as a work of art must be seen from the right distance. One cannot appreciate wilderness through pictures; one must enter it, illegally if necessary, to reduce psychical

distance and to gain a full wilderness experience. (Katz, Bibl # 1)

Loftin, Robert W. "Scientific Collecting." Environmental Ethics 14(1992):253-64. Scientists often collect (kill) organisms in pursuit of human knowledge. When is such killing morally permissible? I explore this question with particular reference to ornithology and against the background of animal liberation ethics and a land ethic, especially Mary Anne Warren's account that finds the two ethics complementary. I argue that the ethical theories offered provide insufficient guidance. As a step toward the resolution of this serious problem, I offer a set of criteria to determine when collecting is morally permissible. Loftin is at the Philosophy Dept., University of North Florida, Jacksonville, FL. (EE)

Loftin, Robert W. Review of The Arrogance of Humanism. By David Ehrenfeld. Environmental Ethics 3(1981):173-76.

Loftis, J. Robert. 2005. "Germ Line Enhancement of Humans and Nonhumans." Kennedy Institute of Ethics Journal 15 (1):57-76. The current difference in attitude toward germ line enhancement in humans and nonhumans is unjustified. Society should be more cautious in modifying the genes of nonhumans and more bold in thinking about modifying our own genome. I identify four classes of arguments pertaining to germ line enhancement: safety arguments, justice arguments, trust arguments, and naturalness arguments. The first three types are compelling, but do not distinguish between human and nonhuman cases. The final class of argument would justify a distinction between human and nonhuman germ line enhancement; however, this type of argument fails and, therefore, the discrepancy in attitude toward human and nonhuman germ line enhancement is unjustified. Loftis is in philosophy, St. Lawrence University.

Loftis, J. Robert, "Three Problems for the Aesthetic Foundations of Environmental Ethics," Philosophy in the Contemporary World 10 (no. 2, Fall-Winter 2003):41-50. A critical look at aesthetics as the basis for nature preservation, presenting three reasons why we should not rely on aesthetic foundations to justify the environmentalist program. First, a comparison to other kinds of aesthetic value shows that the aesthetic value of nature can provide weak reason for action at best. Second, not everything environmentalists want to protect has positive aesthetic qualities. Attempts have been made to get around this problem by developing a reformist attitude towards natural aesthetics. These approaches fail. Third, development can be as aesthetically positive as nature. If it is simply beauty we are looking for, why can't the beauty of a well-constructed dam or a magnificent skyscraper suffice? Loftis is in philosophy, University of Alabama. (v.14, #4)

Loftis, J. Robert. Review of The Aesthetics of Natural Environments. Edited by Allen Carlson and Arnold Berleant. Environmental Ethics 27 (2005):429-432.

Logan, Bernard I., "Government Expenditures on Imported Inputs and the Goals of Food Self-Sufficiency and Food Security in the Southern African Development Co-ordination Conference", Journal of Agricultural Ethics 2(1989): This study is a broad examination of the relationship between government expenditures on imported inputs and the performance of the domestic food subsector. Because much data on government spending and agricultural production in Africa are unavailable, and those in published form are of suspect validity, the study is undertaken largely as a conceptual overview. Logan is in geography at the University of Georgia, Athens. (v6,#3)

Logsdon, Gene. At Nature's Pace. Foreword by Wendell Berry. New York: Pantheon Books, 1994. 208 pp. \$23 hardbound. Formerly an editor for Farm Journal, Logsdon is an ardent defender of the small traditional farm (the farm of fifty years ago), an honor he shares with Wendell Berry. Logsdon farms thirty acres in Ohio, and has written twelve books and hundreds of articles. The small farm is not dead, he argues; rather, the future will have more farmers, not fewer. Farms will be ecologically sane and community-interdependent. The error of the past was that farmers tried to live like city folks. The Amish

have proved that farming is a decent living.

Lohman, David J., David Bickford, and Navjot S. Sodhi. "The Burning Issue." *Science* Vol. 316, no. 5823 (20 April 2007): 376. Widespread burning of using fire to clear land causes widespread air pollution in Southeast Asia. The burning is both by large scale commercial tree plantations and by numerous small farmers. Often illegal, the burning continues nonetheless, with both environmental degradation and harm to human health.

Loker, Cynthia A., Daniel J. Decker, R. Bruce Gill, Thomas D. I. Beck, and Len H. Carpenter, The Colorado Black Bear Hunting Controversy: A Case Study of Human Dimensions in Contemporary Wildlife Management. Ithaca, NY: Human Dimensions Research Unit, Cornell University, February 1994. HDRU Series No. 94-4. 56 pages. In November 1992, Colorado voters in public referendum by 2-1 banned black bear hunting in the spring, and the use of bait or dogs year round. There were four periods in the controversy, with the Colorado Wildlife Commission (a publicly appointed board) generally being inadequately sensitive to growing public concern, trying to conciliate by altering hunting season dates to reduce the kill of nursing females in the spring, while continuing to support the hunt. The Colorado Division of Wildlife made recommendations that the Wildlife Commission refused to hear. Biologists maintained that the bear population was not adversely affected by the hunt; hunters said they would not be bullied around by people who were really opposed to all hunting. The agency that was mandated to represent all citizens' interest in wildlife disproportionately represented hunter's interests, forcing citizens to take their concern to public referendum. There is also available an additional report that analyzes the views of differing segments of the voting public in this referendum. Copies from Human Dimensions Research Unit, Department of Natural Resources, Fernow Hall, Cornell University, Ithaca, NY 14853. Loker and Decker are with that unit, Gill, Beck, and Carpenter are with the Colorado Division of Wildlife. (v5,#2)

Løkke, Søren, and Per Christensen, "The Introduction of the Precautionary Principle in Danish Environmental Policy: The Case of Plant Growth Retardants," *Journal of Agricultural and Environmental Ethics* 21(2008):229-247. We investigate the Precautionary Principle (PP) in action. Precaution is a fairly new concept in environmental policy. It emerged back in the 1960s but did not consolidate until the 1980s, as it formed part of the major changes taking place in environmental policies at that time. The PP is examined in three contexts. Firstly, we look at the meaning of the concept and how it is disseminated through the media and public discourses to the political arenas of Denmark. Then we examine how the idea is adopted to the political level. Thirdly, we look briefly at the first Danish translation of the principle into a practical context, which includes translations into concrete scientific practices. It is concluded that if the PP shall be more than a simple "idea" or a frequently used "term," emphasis must be put on the transformation of the concept into concrete practices, like e.g., the alternative testing regimes that we show in the case of plant growth-retarding pesticides presented in this paper. The authors are with the Environmental Assessment and Governance Group, Department of Development and Planning, Aalborg University, Aalborg, Denmark.

Loland, S, "Sport Technologies: A Moral View," Research in Philosophy and Technology 21(no., 2001): 157-176.

Lombard, AT; Johnson, CF; Cowling, RM; Pressey, RL, "Protecting plants from elephants: botanical reserve scenarios within the Addo Elephant National Park, South Africa," Biological Conservation 102 (no. ER2, 2001):191-203. (v.13,#1)

Lombardi, Louis G. "Inherent Worth, Respect, and Rights." Environmental Ethics 5(1983):257-70. Paul W. Taylor has defended a life-centered ethics that considers the inherent worth of all living things to be the same. I examine reasons for ascribing inherent worth to all living beings, but argue that there can be

various levels of inherent worth. Differences in capacities among types of life are used to justify such levels. I argue that once levels of inherent worth are distinguished, it becomes reasonable to restrict rights to human beings. Lombardi is at the Philosophy Department, Lake Forest College, Lake Forest, IL. (EE)

Lombardi, Louis G., "Inherent Worth, Respect, and Rights," Environmental Ethics 5(1983):257-270. A further discussion of "biocentrism" based on the idea that there can be different levels of "intrinsic" or "inherent" worth, thus leading to different moral principles regarding different life forms. (Katz, Bibl # 1)

Lomborg, Bjørn, The Skeptical Environmentalist. See "Skeptical Environmentalist Labeled 'Dishonest'," Science 299 (1/17 /03):326. A Danish panel has judged Bjørn Lomborg's The Skeptical Environmentalist to be "scientifically dishonest." The Danish Research Agency's Committee on Scientific Dishonesty received numerous complaints and as a result mounted a six month investigation of the book. It concluded that Lomborg was not deliberately deceptive but that he was guilty of "systematic one-sidedness." "Lomborg is highly selective in his use of references in practically every field he covers. This is not in accord with scientific standards." The committee chair was Hans Henrik Brydensholdt, a high-court judge. One commentator said: it's "an unusually hard ruling by a committee known for being immensely difficult to convince of any wrongdoing."

Lomborg, Bjørn. The Skeptical Environmentalist: Measuring the Real State of the World. Reviewed in Environmental Ethics 25(2003):423-426. (EE)

Lomborg, Bjørn. *Cool It: The Skeptical Environmentalist's Guide to Global Warming*. New York: Alfred A. Knopf, 2007. There is also a rather different United Kingdom version published by London: Marshall Cavendish and Cyan Communications, 2007. "Global warming is happening; the consequences are important and mostly negative." Lomborg conceded he has "cooled" (moderated) some of the views he originally expressed in *The Skeptical Environmentalist* (2001). But he does take aim at overheated rhetoric on global warming. He also he finds that there may be benefits to global warming: fewer persons may die from cold winters than die from overheated summers. He argues that the most cost-effective way of dealing with global warming is to spend modest amounts to reduce global warming now and ramp up expenditures later, when global wealth is greater. Lomborg is an adjunct professor at the Copenhagen Business School. See the review "Act Now (But How?)" by William F. Ruddiman (*Science* Vol. 319, no. 5861 (18 January 2008): 285).

Lomborg, Bjørn. *Cool It: The Skeptical Environmentalist's Guide to Global Warming*. New York: Alfred A. Knopf, 2007. Cool the rhetoric, mostly, with some plans also to cool the planet. "The broader problem with the climate-change concern: once you look closely at the supporting data, the narrative falls apart" (p. 4). This is side-by-side with: "Global warming is real and man-made. It will have a serious impact on humans and the environment toward the end of this century" (p. 8).

Lomolino, Mark V., and Lawrence R. Heaney, eds., Frontiers of Biogeography: New Directions in the Geography of Nature. Sunderland, MA: Sinauer Associates, 2005. Lomolino is in environmental and forest biology, SUNY College of Environmental Science and Forestry. Heaney is curator of mammals, Field Museum, Chicago.

Long, D. Stephen, Divine Economy: Theology and the Market. London: Routledge, 2000. A critique of contemporary capitalism and an argument that it must be baptized with Christian (if not Catholic) presumptions about the moral life. There are no objective perspectives (as postmodernists argue). Competing descriptions of the world cannot be objectively demonstrated to be either true or false. Rather, each narrator attempts to "out-narrate" the others and thereby persuade the listener. Scientific rationality, especially if claimed for the contemporary worldview, economics included, is but one tradition among others and should not have authority over modes of perception embodied in other traditions. Long argues

(or at least narrates a story) that embodies concern for justice and community in economics, empowered by Christian vision, and hopes to persuade that this is a more attractive story to live by. Long teaches at Garrett-Evangelical Theological Seminary. (v.13,#2)

Longino, Helen. Review of The Death of Nature: Women, Ecology, and the Scientific Revolution. By Carolyn Merchant. Environmental Ethics 3(1981):365-69.

Longino, Helen. Review of Ecology as Politics. By André Gorz. Environmental Ethics 5(1983):189-90.

Longley P.A., "Geographical Information Systems: on modelling and representation," Progress in Human Geography 28(no.1, 1 February 2004):108-116(9). (v. 15, # 3)

Longley, Paul, "Geographical Information Systems: a renaissance of geodemographics for public service delivery," Progress in Human Geography 29(no.1, February 2005):57-63(7).

Longwood, Merle. "The Common Good: An Ethical Framework for Evaluating Environmental Issues." Theological Studies 34 (September 1973): 468-80.

Loomis, J., "How Bison and Elk Populations Impact Park Visitation: A Comparison of Results From a Survey and a Historic Visitation Regression Model," Society and Natural Resources 17(no. 10, 2004): 941-949(9). (v.14, #4)

Loomis, John B. "Do Additional Designations of Wilderness Result in Increases in Recreation Use." Society & Natural Resources 12(no. 5, July 1999):481- . (v.11,#1)

Loomis, John, and Sorg, Cindy, A Critical Summary of Empirical Estimates of the Values of Wildlife, Wilderness and General Recreation Related to National Forest Regions. Fort Collins, CO: 1982. 140 pages. In Colorado State University Library. (v.9,#4)

Loomis, John B., and Walsh, Richard G., Recreation Economic Decisions: Comparing Benefits and Costs. 2nd edition. State College, PA: Venture Publishing, 1997. A textbook and for managers of parks and recreation areas. The appropriate framework for decision-making. The unique definitions of quantity and price appropriate to outdoor recreation. Benefit-cost analysis of public reaction, so as to maximize benefits. Loomis and Walsh are in economics at Colorado State University. (v.9,#3)

Loomis, John and Sorg, Cindy, A Critical Summary of the Empirical Estimates of the Values of Wildlife, Wilderness and General Recreation Related to National Forest Regions. 140 pages. Fort Collins, CO: 1982. Copy in Colorado State University Library.

Loomis, John B., Integrated Public Lands Management: Principles and Applications to National Forests, Parks, Wildlife Refuges, and BLM Lands. 2nd ed. New York: Columbia University Press. Loomis is in resource economics at Colorado State University. (v.13,#4)

Loomis, John, "How Bison and Elk Populations Impact Park Visitation: A Comparison of Results From a Survey and a Historic Visitation Regression Model", Society and Natural Resources 17(no.10, Nov-Dec 2004):941-949(9).

Loomis, John; Miller, Julie; Gonzalez-Caban, Armando; Champ, Joseph, "Testing the Convergent Validity of Videotape Survey Administration and Phone Interviews in Contingent Valuation," Society and Natural Resources 19 (no.4, Number 4/April 2006) :367-375 (9).

Lopez, Barry, ed. *The Future of Nature: Writing on a Human Ecology from Orion Magazine*. Minneapolis: Milkweed Editions, 2007. Contents include: (1) "Rehabilitating Environmentalism" by Peter Sauer, (2) "Consent of the Governed" by Jeffrey Kaplan, (3) "Beyond Hope" by Derrick Jensen, (4) "The Union Makes Them Strong" by Laura Paskus, (5) "Got Tape?" by BK Loren, (6) "A License to Be Human: An Interview with Van Jones," (7) "Conservation Refugees" by Mark Dowie, (8) "Jeremaid for Belarus" by Hope Burwell, (9) "Moving Mountains" by Erik Reece, (10) "On Thin Ice" by Charles Wohlforth, (11) "The Black Mesa Syndrome" by Judith Nies, (12) "Faux Falls" by Ginger Strand, (13) "The Edges of the Civilized World" by Alison Hawthorne Deming, (14) "On Waste Lonely Places" by John Landretti, (15) "A Word in Favor of Rootlessness" by John Daniel, (16) "The Riddle of the Apostle Islands" by William Cronon, (17) "Beyond Ecophobia" by David Sobel, (18) "Charlotte's Webpage" by Lowell Monke, (19) "The Leadership Imperative: An Interview with Oren Lyons" by Barry Lopez, (20) "Assailed" by David James Duncan, (21) "The Rise and Fall of Naturalized History" by Robert Michael Pyle, (22) "'These Green Things': The San Francisco Garden Project" by Cathrine Sneed, (23) "Designer Genes" by Bill McKibben, (24) "The Pirates of Illiopolis" by Sandra Steingraber, (25) "Radioactive Roundtrip" by William L. Fox, (26) "Winged Mercury and the Golden Calf" by Rebecca Solnit, (27) "In the Name of Restoration" by Marybeth Holleman, (28) "The Idea of a Local Economy" by Wendell Berry, (29) "The Culture of Owning" by Eric T. Freyfogle, (30) "Listening to the Other" by Gary Paul Nabhan, and (31) "Staying Put" by Scott Russell Sanders." In the final section, each author provides commentary about her or his particular contribution.

Lopez, Barry, ed. *Home Ground: Language for an American Landscape*. San Antonio: Trinity University Press, 2006. Forty-five journalists, novelists, poets, and essayists are here invited to reflect on the names, mostly topographic features prairie, savanna, desert, forest, jackstraw timber, drumlin, esker, ceja, bog and sometimes proper names that people have given to features of the American landscape. This anthology contains more than 850 entries.

Lopez, Barry, ed. *The Future of Nature: Writing on a Human Ecology from Orion Magazine*. Minneapolis: Milkweed Editions, 2007. Contents include: (1) "Rehabilitating Environmentalism" by Peter Sauer, (2) "Consent of the Governed" by Jeffrey Kaplan, (3) "Beyond Hope" by Derrick Jensen, (4) "The Union Makes Them Strong" by Laura Paskus, (5) "Got Tape?" by BK Loren, (6) "A License to Be Human: An Interview with Van Jones," (7) "Conservation Refugees" by Mark Dowie, (8) "Jeremaid for Belarus" by Hope Burwell, (9) "Moving Mountains" by Erik Reece, (10) "On Thin Ice" by Charles Wohlforth, (11) "The Black Mesa Syndrome" by Judith Nies, (12) "Faux Falls" by Ginger Strand, (13) "The Edges of the Civilized World" by Alison Hawthorne Deming, (14) "On Waste Lonely Places" by John Landretti, (15) "A Word in Favor of Rootlessness" by John Daniel, (16) "The Riddle of the Apostle Islands" by William Cronon, (17) "Beyond Ecophobia" by David Sobel, (18) "Charlotte's Webpage" by Lowell Monke, (19) "The Leadership Imperative: An Interview with Oren Lyons" by Barry Lopez, (20) "Assailed" by David James Duncan, (21) "The Rise and Fall of Naturalized History" by Robert Michael Pyle, (22) "'These Green Things': The San Francisco Garden Project" by Cathrine Sneed, (23) "Designer Genes" by Bill McKibben, (24) "The Pirates of Illiopolis" by Sandra Steingraber, (25) "Radioactive Roundtrip" by William L. Fox, (26) "Winged Mercury and the Golden Calf" by Rebecca Solnit, (27) "In the Name of Restoration" by Marybeth Holleman, (28) "The Idea of a Local Economy" by Wendell Berry, (29) "The Culture of Owning" by Eric T. Freyfogle, (30) "Listening to the Other" by Gary Paul Nabhan, and (31) "Staying Put" by Scott Russell Sanders." In the final section, each author provides commentary about her or his particular contribution.

Lopez-Pujol, Jordi, Fu-Min Zhang, and Song Ge. "Plant Biodiversity in China: Richly Varied, Endangered, and in Need of Conservation." *Biodiversity and Conservation* Vol. 15, no. 12 (2006): 3983-4026.

Lopez, T. M., "A Look At Climate Change and the Evolution of the Kyoto Protocol," [Natural Resources](#)

Journal 43(no. 1, 2003): 285-312.

Lorbiecki, Marybeth, Aldo Leopold, A Fierce Green Fire. Helena, MT: Falcon Press, 1996. \$ 19.95. Good brief biography, with dozens of candid photos, and quotations from his work. (v9,#2)

Lord, Charles P. and Willian A. Shutkin. "Environmental Justice and the Use of History." Boston College Environmental Affairs Law Review 22 (no. 1, Fall 1994): 1-26. An analysis of two communities fighting for environmental justice reveals that a flawed or careless approach to history is often a root cause of environmental injustice. In each community, the legal system has perpetuated environmental injustice by misreading or disregarding that community's history. Communities fighting environmental injustice must vigorously prepare and proclaim their own histories and must urge courts and other decisionmakers to examine history carefully and justly. The two communities are one in inner-city South Boston and the Abenaki, a Native American tribe of northern New England. Lord and Shutkin are Visiting Scholars at Boston College Law School. (v6,#1)

Lorenzoni, Irene, Review of Jeanne X. Kasperson and Roger E. Kasperson, *The Social Contours of Risk*, vols. 1 & 2, Environmental Values 16(2007):401-404.

Lorimer, Hayden, "Cultural geography: the busyness of being 'more-than-representational'," Progress in Human Geography 29(no.1, February 2005):83-94(12).

Losin, Peter. Review of Companion to A Sand County Almanac. Edited by J. Baird Callicott. Environmental Ethics 10(1988):169-76.

Losin, Peter. Review of Aldo Leopold: The Man and His Legacy. Edited by Thomas Tanner. Environmental Ethics 10(1988):169-76.

Losonsky, Michael. Review of Philosophy and The Ecological Problem, a special issue of Filozoficky Casopis (Czechoslovakian Philosophy Journal). Environmental Ethics 13(1991):87-93.

Loudiyi, Dounia and Alison Meares. Women in Conservation: Tools for Analysis and a Framework for Action. IUCN Social Policy Service, 1993. 164 pages, \$20.00. An annotated bibliography on the roles and responsibilities of rural women in managing natural resources. Books and unpublished materials are grouped under such themes as forest conservation, water, and training. (v6,#1)

Louka, Elli, Biodiversity and Human Rights: The International Rules for the Protection of Biodiversity. Ardsley NY: Transnational Publishers, 2002. A comprehensive system for the protection of biodiversity, including human rights standards, free trade in wildlife, and regulated free access to plant genetic resources. (v.13,#4)

Louv, Richard, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. Chapel Hill, NC: Algonquin Books of Chapel Hill, 2005. And, in addition, you may save them from attention deficit disorder, since a study by researchers at the Human-Environment Research Laboratory at the University of Illinois at Urbana-Champaign shows that children as young as five show a significant reduction in the symptoms of attention deficit disorder when they engage with nature.

Love, Thomas F., "Ecological Niche Theory in Sociocultural Anthropology: A Conceptual Framework and an Application," American Ethnologist 4(no. 1, Feb. 1977):27-40. The concept of "ecological niche" is frequently employed in sociocultural anthropology, but there have been few systematic applications of it. Love examines the utility of the concept for the analysis of social interaction and change, with special reference to complex societies. In a small agricultural valley of north California, competition between

two status groups over a scarce resource--land--has led to displacement and changing patterns of resource use. "Niche" describes the aggregate outcome of underlying processes of competition on the individual level. Love is a sociologist at the University of California, Davis.

Lovelock, James, "The Greening of Science," pages 39-63 in Wakeford, Tom, Walters, Martin eds., Science for the Earth: Can Science Make the World a Better Place? New York: Wiley, 1995. "I firmly believe that science is badly in need of greening and that everyone, including the greens, need science, but not the kind of science we now have. We want science to return to natural philosophy and be once again its old familiar and welcome part of our culture. Science must abandon its genteel posturing and come down to Earth again quite literally. This is not easy task, it requires scientists to recognize that science has grown fat, lazy and corrupt and, like an obese atherosclerotic man, imagines that more rich food will cure his condition. That science should be in this condition is disastrous at this time in history, when more than ever we need firm guidance and a clear understanding of the Earth" (p. 39). Lovelock is an independent scientist, author of Gaia: A New Look at Life on Earth. (v9,#2)

Lovelock, James, The Ages of Gaia: A Biography of our Living Earth. New York: W.W. Norton, 1988. \$ 16.95. (v1,#2)

Lovelock, James Lovelock, *Gaia: A New Look at Life on Earth*. Translators: Xiao Xianjing and Fan Xiangdong. (Shanghai: Shanghai People's Press, 2007). (in Chinese)

Loverly, Robert, "Wisconsin's Acid Rain Battle: Science, "Science, Communication, and Public Policy," Environmental History Review 14(# 3, Fall 1990):21-48. (v1,#4)

Lovett, B, "A Defence of Prudential Moralism," Journal of Applied Philosophy 22 (no. 2, August 2005): 161-170.

Lovett Doust, J, et al., "Effects of land ownership and landscape-level factors on rare-species richness in natural areas of southern Ontario, Canada," Landscape Ecology 18(no.6, 2003):621-633. (v.14, #4)

Lovett, Gary M.; et al., "Forest Ecosystem Responses to Exotic Pests and Pathogens in Eastern North America," BioScience 56 (no.5, May 2006): 395-405 (11). The forests of eastern North America have been subjected to repeated introductions of exotic insect pests and pathogens over the last century, and several new pests are currently invading, or threatening to invade, the region. These pests and pathogens can have major short- and long-term impacts on forest ecosystem processes such as productivity, nutrient cycling, and support of consumer food webs. We identify six key features of the biology of exotic animal pests and the ecology of their hosts that are critical to predicting the general nature and severity of those impacts. Using three examples of introduced pests and pathogens in eastern forest ecosystems, we provide a conceptual framework for assessing potential ecosystem-scale effects.

Lovett, Jon, Review of G.R. Daily, Nature's Services. Environmental Values 7(1998):365.

Lovett, Jon. Review of Peterson and Parker, Ecological Scale: Theory and Applications. Environmental Values 9(2000):261.

Lovins, A., "The role of energy efficiency," in J. Leggett, ed., Global Warming. Oxford, UK: Oxford University Press, 1990.

Low, Mary, Celtic Christianity and Nature: The Early Irish and Hebridean Traditions. Edinburgh: University of Edinburgh Press, 1996. Also published in Northern Ireland: Belfast: The Blackstaff Press, 1996. 236 pages. £ 12.95. Love of nature is often said to be one of the characteristic features of Celtic

Christianity. Low describes how native beliefs about nature were rejected, transformed or restated as the peoples of early medieval Ireland and the Hebrides made Christianity their own. She examines the importance of the land, hills and mountains, water, trees, fire, the sun and the elements in early Christian and biblical imagery. (v.8,#4)

Low, Nicholas and Brendan Gleeson, eds., Making Urban Transport Sustainable. Basingstoke: Palgrave Macmillan, 2003. Reviewed by Tom Rye. Environmental Values 13(2004):133-135. (EV)

Low, Nicholas, and Gleeson, Brendan, Justice, Society and Nature: An Exploration of Political Ecology. London: Routledge, 1998. 257 pages. Gleeson is at Australian National University, Canberra. Sample chapters: Justice in and to the Environment; Environmental Justice: Distributing Environmental Quality; Ecological Justice: Rethinking the Biases; Justice and Nature: New Constitutions?; The Dialectic of Justice and Nature. Low is in the Faculty of Architecture, Building and Planning at the University of Melbourne. (v.9,#4)

Low, Nicholas, ed., Global Ethics and the Environment. London: Routledge, 2000. The impact of development in new industrial regions, impacts of single events such as the Chernobyl disaster on the global community, and the ethical relationship between human and non-human nature. Low is at the University of Melbourne. (v.11,#4)

Lowe, Winsor H., "The Trouble with Rivers," BioScience 56 (no.3, March 2006): 260-263 (4).

Lowenthal, D., "Review of: Donald Worster, A River Running West: The Life of John Wesley Powell," Environmental History 6(no.4, 2001): 627-28. (v.13,#2)

Lowenthal, David, "Nature and Morality from George Perkins Marsh to the Millennium," Journal of Historical Geography 26(2000):3-27. George Perkins Marsh's Man and Nature was the first comprehensive study of human impacts on the natural environment, a remarkable work. Marsh stressed unforeseen and unintended consequences, as well as the heedless greed of technological enterprise. Despite recent tendencies to belittle Marsh's insights as derivative elitist, anthropocentric, or narrowly utilitarian, he remains modern environmentalism's pre-eminent pioneer. Lowenthal is a geographer, University College, London.

Lowenthal, David, "Environmental Conflict," Research and Exploration (National Geographic) 7(no. 3, Summer, 1991):266-275. Environmental impact issues are highly acrimonious, reflecting deep differences. Fears about species extinction, the greenhouse effect, ozone layer depletion, nuclear and other contaminants lead many to question the fundamental bases of modern entrepreneurial, technological society. We inherit outworn environmental attitudes along with often worn-out environments. The adversarial tone of environmental controversy stems from mounting evidence of the human capacity to destroy or irreversibly damage the biosphere, the complexity and uncertainty of ecological impacts and their global relationships, rising suspicions that government, industry, and even science might be impotent to contain, let alone cure, biosphere destruction. The accusatory polemics, however, make it even harder to respond appropriately to impact analyses that demand action, even if incomplete and provisional. Differing from the past, meanwhile, today all disputants find the notion of the conquest of nature deplorable. Lowenthal is in Geography, University College, London, an emeritus professor. (v5,#4)

Lowi, Miriam R., "Water and Conflict in the Middle East and South Asia: Are Environmental Issues and Security Issues Linked?," The Journal Of Environment And Development 8(no. 4, Dec 01 1999):376- . (v10,#4)

Lowry, P. P. and Smith, P. P., "Closing the Gulf Between Botanists and Conservationists," Conservation Biology 17(no. 4, 2003): 1175-1176.

Loy, David, "Indra's Postmodern Net," Philosophy East and West 43 (no. 3, 1993):481-510. Indra's net, a cosmological metaphor in Buddhism, with its myriad jewels each reflecting each other, symbolizes an infinitely repeated interrelationship among all the members of the cosmos. There is no beginning, no creator, no purpose, no hierarchy, no center, no privileged point, only interpenetration and mutual identity. This has ecological ramifications that fit surprisingly well with contemporary poststructuralist philosophy critiques of self-existence and self-presence, a suspicion about the theological quest for Being, an emphasis on groundlessness, the deconstruction of any transcendental significance, the rejection of truth with a capital T. Although there are differences, there are remarkable parallels between an ancient philosophical system and one of the most provocative developments in modern thought. Buddhism has something to offer a rationalized, technologized world that is rapidly devouring what remains of its own spiritual roots. Loy is in international studies at Bunkyo University, Kyoto, Japan. (v5,#4)

Loy, David R., "The Religion of the Market," Journal of the American Academy of Religion 65(1997):275-290. The discipline of economics is less a science than the theology of the religion of the market. It's god, the Market, has become a vicious circle of ever-increasing production and consumption by pretending to offer a secular salvation. The Market is becoming the first truly world religion. Loy is in International Studies, Bunkyo University, Chigasaki, Japan. (v8,#3)

Lu, B. R. and Snow, A. A., "Gene Flow from Genetically Modified Rice and Its Environmental Consequences," Bioscience 55(no. 8, August 2005): 669-678. Within the next few years, many types of transgenic rice (*Oryza sativa*) will be ready for commercialization, including varieties with higher yields, greater tolerance of biotic and abiotic stresses, resistance to herbicides, improved nutritional quality, and novel pharmaceutical proteins. Although rice is primarily self pollinating, its transgenes are expected to disperse to nearby weedy and wild relatives through pollen mediated gene flow. Sexually compatible *Oryza* species often co occur with the crop, especially in tropical countries, but little is known about how quickly fitness enhancing transgenes will accumulate in these populations and whether this process will have any unwanted environmental consequences. For example, weedy rice could become much more difficult to manage if it acquires herbicide resistance, produces more seeds, or occurs in a wider range of habitats because of the spread of certain transgenes. Rice growing countries urgently need publicly available ecological assessments of the risks and benefits of transgenic rice before new varieties are released.

Lu Feng, "The idea of oneness with nature and its implication for eco-ethics", Academic Monthly Journal, 2002(4)

Lu Feng, and Liu Xiangrong, eds. *New Development Theory and Environmental Ethics*. Baoding: Hebei University Press, 2004.

Lu Feng. "On the Philosophical Foundations of Environmental Ethics." *Academics in China* No. 2 (2002): 98-107.

Lu Feng. "How Can Environmental Ethics Avoid Environmental Fascism." *Seeker* No. 5 (2003): 150-53.

Lu Feng. "On the Subjectivity of Nature and the Value of Nature." *Journal of Wuhan University of Science & Technology* No. 4 (2001): 99-101.

Lu Feng. "On the Challenges of Environmental Philosophy to Contemporary Western Philosophy." *Studies in Dialectics of Nature* No. 4 (2004): 93-96.

Lu, Yihe, Bojie Fu, Liding Chen, Zhiyun Ouyang, and Jianying Xu. "Resolving the Conflicts Between Biodiversity Conservation and Socioeconomic Development in China: Fuzzy Clustering Approach." *Biodiversity and Conservation*. Vol. 15, no. 8 (2006): 2813-282. This article appears in a special themed issue of the journal on human exploitation and biodiversity conservation.

Lubchenco, Jane, "Entering the Century of the Environment: A New Social Contract for Science," *Science* 279(1998):491-497. As the magnitude of human impacts on the ecological systems of the planet becomes apparent, there is increased realization of the intimate connections between these systems and human health, the economy, social justice, and national security. The concept of what constitutes "the environment" is changing rapidly. Urgent and unprecedented environmental and social changes challenge scientists to define a new social contract. This contract represents a commitment on the part of all scientists to devote their energies and talents to the most pressing problems of the day, in proportion to their importance, in exchange for public funding. The new and unmet needs of society include more comprehensive information, understanding and technologies for society to move toward a more sustainable biosphere--one which is ecologically sound, economically feasible, and socially just.

New fundamental research, faster and more effective transmission of new and existing knowledge to policy- and decision-makers, and better communication of this knowledge to the public will all be required to meet this challenge. Lubchenco's presidential address to the American Association for the Advancement of Science, February 1997, and well worth study. Implications for the use of ecology in policy, for science and advocacy, science and conscience. Lubchenco has been president of the Ecological Society of America, is an active environmentalist, and was influential in the Society's policy statement that ecological research ought be devoted neither to sustainable development nor to pure science, but to a "sustainable biosphere." She is in zoology at Oregon State University, and her election as president of the American Association for the Advancement of Science is a tribute to her impact in her field, insisting on its relevance and on scientific responsibility. (v9,#1)

Lubell, M., "Environmental Activism as Collective Action," *Environment and Behavior* 34(no.4, 2002): 431-54. (v.13,#4)

Lucardie, P, "Dutch Elections 2002-03: The Comeback of the Communitarians?," *Environmental Politics* 12(no.3, 2003):145-149. (v.14, #4)

Lucas, Julie Cook. Review of: Gates, Barbara T., ed., *In Nature's Name: An Anthology of Women's Writing and Illustration, 1780-1930*. *Environmental Values* 13(2004):412-414. (EV)

Lucas, Oliver W. R., *The Design of Forest Landscapes*. Oxford: Oxford University Press, 1991. Lucas is with the U.K. Forestry Commission. (v7,#2)

Lucas, Peter, "Valuing Birds in the Bush: For Pluralism in Environmental Risk Assessment," *Environmental Values* 11(2002):177-191. It is now widely acknowledged that social theorists can make an important contribution to our understanding of environmental risk. There is however a danger that the current ascendancy of social theory will encourage a tendency to assimilate issues around environmental risk to those at stake in entrenched debates between realist and constructivist social theorists. I begin by citing a recent example of this trend, before going on to argue that framing the issues in terms of a monism/pluralism dichotomy would make for a more informative analysis. Noting that realists and constructivists can make common cause against risk monism, I turn, in the second half of the paper, to setting out a positive case for risk pluralism. Citing some fictional examples of risk behavior, I show how different individuals might rationally adopt different perspectives on the same risk. I conclude by exploring some implications of the truth of risk pluralism for two current approaches to environmental decision-making (which I term, respectively, the "teleological-pluralistic" approach, and the "economic-monistic" approach). I argue that the importance of risk pluralism lies in its capacity to

highlight the shortcomings of the latter approach. (EV)

Lucas, Peter, This is not a Planet: Ethics and Environmentalism in the Age of the World Picture, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Lucas, Peter. "Environmental Ethics: Between Inconsequential Philosophy and Unphilosophical Consequentialism." Andrew Light and Eric Katz commend environmental pragmatism as a framework of choice for a more pluralistic, and (consequently) more practically effective environmental ethics. There is however a prima facie conflict between the promotion of pluralism and the promotion of pragmatism. I consider two different routes by which Light has attempted to resolve this conflict. Light's first strategy involves distinguishing philosophical from metaphilosophical forms of pragmatism, locating its "metatheoretically pluralist" potential in the latter. I argue that the distinction collapses, leaving the conflict unresolved. Light's second strategy involves interpreting metatheoretical pluralism as a form of practical compatibilism. I argue that metatheoretical pluralism, thus interpreted, holds no remedy for the perceived practical ineffectiveness of the field. Not only would it fail to qualify as a viable form of pluralism, but its widespread adoption would actively undermine the real work of environmental ethics: that of fostering a sense of the special significance of enlightened and principled action in defense of environmentalist ideals, in the face of the consequentialism which dominates global environmental decision making. Environmental Ethics 24(2002):353-369. (EE)

Lucas, Peter. "Teleological Presuppositions, and the 'Expectation Gap': A Response to Laura Westra." Environmental Values 9(2000):383-388. (EV)

Lucas, Peter. Review of Kennedy, Greg, *An Ontology of Trash: The Disposable and its Problematic Nature* (Albany, NY: State University of New York Press, 2007), *Environmental Values* 17(2008):550-552.

Lucas, Rebecca Garcia, Mathews, Freya, For Love of Matter: A Contemporary Panpsychism. Albany: State University of New York Press, 2003. Reviewed by in Environmental Values 14(2005):523-524.

Luccarelli, Mark. Review of Adam Rome, The Bulldozer in the Countryside: Suburban Sprawl and the Rise of Environmentalism, Organization and Environment, 16, (No. 1, 2003): 126-28. Luccarelli earned a doctorate at University of Iowa and now teaches American Studies at University of Oslo, Norway.

Luccarelli, Mark. Review of Terry Gifford, "Pastoral", Organization and Environment 14 (No. 3, September 2001) pp.369-72. Luccarelli is professor of American studies at the University of Oslo, Norway. (v.13,#2)

Luccarelli, Mark. Lewis Mumford and the Ecology Region: The Politics of Planning. New York: Guilford Publications, 1995. 230 pages. \$26.95. Both historical and theoretical perspectives, the development of Mumford's thought on regional planning, focusing on his pioneering concept of an ecologically-based region. How he attempted to turn his ideas into reality through the Regional Planning Association of America. (v7, #3)

Luccarelli, Mark. Review of Rebecca Bedell, "The Anatomy of Nature: Geology and American Landscape Painting 1825-1875", Organization and Environment 14 (No. 1, March 2002) pp.88-91. Luccarelli is professor of American studies at the University of Oslo, Norway. (v.13,#2)

Lucero, L, "The State of the Natural Resources Literature Recent Books on Growth, Public Lands, and the Environment", Natural Resources Journal 43 (no.3, 2003): 903-914.

Lucero, L; Tarlock, AD, "Water Supply and Urban Growth in New Mexico: Same Old, Same Old or a New Era?" Natural Resources Journal 43 (no.3, 2003): 803-836.

Ludwig, Donald, Ray Holborn, and Carl Waters, "Uncertainty, Resource Exploitation, and Conservation: Lessons from History," Science 260 (April 2, 1993):17, 36. Short, excellent, powerful argument that everyone interested in environmental ethics and biological conservation should read. "There are currently many plans for sustainable use or sustainable development that are founded upon scientific information and consensus. Such ideas reflect ignorance of the history of resource exploitation and misunderstanding of the possibility of achieving scientific consensus concerning resources and the environment. Although there is considerable variation in the detail, there is remarkable consistency in the history of resource exploitation: resources are inevitably overexploited, often to the point of collapse or extinction. We suggest that such consistency is due to the following common features: (i) Wealth or the prospect of wealth generates political and social power that is used to promote unlimited exploitation of resources. (ii) Scientific understanding and consensus is hampered by the lack of controls and replicates, so that each new problem involves learning about a new system. (iii) The complexity of the underlying biological and physical systems precludes a reductionist approach to management. Optimal levels of exploitation must be determined by trial and error. (iv) Large levels of natural variability mask the effects of overexploitation. Initial overexploitation is not detectable until it is severe and often irreversible." (v4,#1)

Lueck, Thomas J., and Jennifer Lee, "No Fighting the Co-op Board, Even With Talons," New York Times, December 11, 2004, p. A1, B14. A famous red tail hawk, known as Pale Male, with his nest, has been removed from an uptown Manhattan apartment building, despite nesting there since 1991. The male hawk, and several different female mates, had sired 26 chicks, 23 of which lived to fledging. Protestors included the entertainer Mary Tyler Moore, who lives in the fancy apartment building. (v.14, #4)

Lugar, Richard and Biden, Joseph. "An End to Chemical Weapons." The Christian Science Monitor, vol. 89, 28 Feb. 1997, p. 19.

Lugo, AE, "Can we manage tropical landscapes? - an answer from the Caribbean perspective," Landscape Ecology 17(no.7, 2002): 601-615.

Lugo, Ariel E. "Old-Growth Mangrove Forests in the United States," Conservation Biology 11(no.1, 1997):11. (v8,#2)

Luhmann, Niklas. Ecological Communication (Chicago: University of Chicago Press, 1989). As much social theory as environmental ethics. Understanding how society becomes aware of environmental dangers and why irrational responses tend to appear must precede any ethics of environmental responsibility. (v1,#1)

Luke, Brian. "A Critical Analysis of Hunters' Ethics." Environmental Ethics 19(1997):25-44. I analyze the "Sportsman's Code," arguing that several of its rules presuppose a respect for animals that renders hunting a prima facie wrong. I summarize the main arguments used to justify hunting and consider them in relation to the prima facie case against hunting entailed by the sportsman's code. Sport hunters, I argue, are in a paradoxical position--the more conscientiously they follow the code, the more strongly their behavior exemplifies a respect for animals that undermines the possibilities of justifying hunting altogether. I consider several responses, including embracing the paradox, renouncing the code, and renouncing hunting. Luke is in philosophy, University of Dayton, OH. (EE)

Luke, Brian. "Solidarity Across Diversity: A Pluralistic Rapprochement of Environmentalism and Animal Liberation." Social Theory and Practice 21 (no. 2, Summer 1995):177-206.

Luke, Brian. *Brutal: Manhood and the Exploitation of Animals*. Urbana: University of Chicago Press, 2007. Luke examines the gender divide over the treatment of animals by exposing the central role of masculinity in systems of animal exploitation. He synthesizes activist experience, empirical research, and philosophical analysis to develop a theory of how exploitative institutions merely support a particular construction of manhood instead of promoting human flourishing.

Luke, Timothy W., "'Deep Ecology: Living as if Nature Mattered': Devall and Sessions on Defending the Earth", Organization and Environment, 15, (No. 2, 2002): 178-86. The theory of deep ecology has had a profound effect on many environmental political movements over the past generation. While this notion was first advanced by Arne Naess in Western Europe, deep ecology found its broadest and most influential popularization, especially in North America, in the work of Bill Devall and George Sessions. Their 1985 work 'Deep Ecology: Living as if Nature Mattered', outlines their vision of deep ecology, and as an important source for anyone interested in the ethics and politics of deep ecology, is summarized and evaluated here. Luke is a university-distinguished professor of political science at Virginia Polytechnic University and State University in Blacksburg, Virginia. (v.13, #3)

Luke, Timothy W., "The Death of Environmentalism or the Advent of Public Ecology?" Organization and Environment 18 (no. 3, Sept 2005).

Luke, Timothy W. "SUVs and the Greening of Ford: Reimagining Industrial Ecology as an Environmental Corporate Strategy in Action", Organization and Environment 14 (No. 3, September 2001) pp.311-35. Ford Motor Company, in one of the more remarkable developments in business management in decades, recently began to remake their image by moves towards more ecological and sustainable practices. As this cultural critique shows, however, the continued production of SUVs, a highly profitable but possibly anti-ecological pursuit, is not the only contradiction in Ford's quest to reinvent itself as a green business leader. Its core belief (that the world can and should accommodate the desires of mobile consumers, most of whom are both auto enthusiasts and environmentalists) serves as a severely limiting condition. Ford's innovations are noteworthy, but its approach falls short of what is needed from big business to help create a more ecological society. Luke is a University Distinguished Professor of Political Science at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. (v.13,#2)

Luke, Timothy W., "Collective Action and the Eco Subpolitical: Revisiting Bill McKibben and The End of Nature," Organization and Environment 18 (no. 2, June 2005).

Luke, Timothy W. Capitalism, Democracy and Ecology: Departing from Marx. Reviewed by Mark Lacy. Environmental Ethics 22(2000):323-324.

Luke, Timothy. Ecocritique: Contesting the Politics of Nature, Economy, and Culture. Reviewed in Environmental Ethics 21(1999):209-211.

Lulka, David, " Social splinters and cross-cultural leanings: a cartographic method for examining environmental ethics," *Journal of Agricultural and Environmental Ethics* 21(2008):275-296. This paper combines the interests of geography, anthropology, and philosophy in order to examine the factors that affect environmental ethics. In particular, this paper examines some of the geographical variables that impact tribal attitudes toward bison in the contemporary world. These factors influence the position of bison within the environmental and agricultural landscape. An emphasis is placed upon networks, places, and movement in order to show how these variables redefine what is acceptable and ethical with regard to relations with nonhuman animals. In alternating fashion, the tribal networks discussed include diasporic movements, food chains, and individual life paths. In some cases, these networks distinguish tribal communities from non-tribal society while also distinguishing tribes from one another. In other instances,

these networks bring tribal and non-tribal communities into greater agreement. This cartographic ethic differs substantially from modern scientific proscriptions, which characterize ethics in universal terms. Lulka is in the Department of Geography, San Diego State University, California.

Luloff, A. E., and R. S. Krannich, Persistence and Change in Rural Communities: A Fifty Year Follow-up to Six Classic Studies. Wallingford, UK: CABI Publishing, 2002. Revisits six rural communities studied by the U.S. Department of Agriculture in the 1940's. Kansas, Iowa, New Hampshire, Georgia, New Mexico, an Amish community in Pennsylvania. With focus on the extent to which the determinants of change are inside and outside the communities. Reviewed by Rob Burton. Environmental Values 13(2004):267-269. (EV)

Lund, Vonne, Raymond Anthony, and Helena Rocklinsberg, "The Ethical Contract as a Tool in Organic Animal Husbandry," Journal of Agricultural and Environmental Ethics 17(2004):23-49. This article explores what an ethic for organic animal husbandry might look like, departing from the assumption that organic farming is substantially based ecocentric ethics. We argue that farm animals are necessary functional partners in sustainable agroecosystems. This opens up additional ways to argue for their moral standing. We suggest an ethical contract to be used as a complementary to the ecocentric framework. We expound the content of the contract and end by suggesting how to apply this contract in practice. The contract enjoins us to share the wealth created in the agroecosystem (our joint contributions) by enjoining us to care for the welfare and needs of the individual animal, and to protect them from exploitation (just as human co-workers should not be exploited). The contract makes promoting good animal welfare a necessary condition for benefiting farm animals. Animals for their part are guaranteed coverage under the contract so long as they continue to contribute to the system with products and services. Keywords: animal welfare, contract ethics, organic animal husbandry, organic farming, organic livestock production. The authors are in the Department of Animal Environment and Health, Swedish University of Agricultural Sciences, Skara, Sweden. (JAEE)

Lund, Vonne, Sven Hemlin and James White, "Natural Behavior, Animal Rights, or Making Money - A Study of Swedish Organic Farmers' View of Animal Issues," Journal of Agricultural and Environmental Ethics 17(2004):131-156. A questionnaire study was performed among Swedish organic livestock farmers to determine their view of animal welfare and, other ethical issues in animal production. The questionnaire was sent to 56.5% of the target group and the response rate was 75.6%. A principal components analysis (exploratory factor analysis) was performed to get a more manageable data set. A matrix of intercorrelations between all pairs of factors was computed. The factors were then entered into a series of multiple regression models to explain five dependent variables. Respondents were well educated and had long experience of farming. 81% were full-time farmers. They generally had a very positive attitude towards organic animal husbandry. They considered allowing animals their natural behavior a central aim, which is in accordance with organic philosophy. Farmers tended to be less approving of concepts like animal rights, dignity, and intrinsic value. When analyzing correlations between the factors, two groups of farmers emerged that were only partially correlated, representing different attitudes and behavioral dispositions. These may be interpreted as two subpopulations of organic livestock farmers in Sweden: those who saw organic farming as a lifestyle ("pioneer attitude") and entrepreneurs, who considered making money and new challenges more important. Their view of animal welfare differed. While the pioneers considered natural behavior a key issue, this was less important to the entrepreneurs, who also had a more approving attitude towards invasive operations such as castration and were more critical of the organic standards. Keywords: animal ethics, attitude, natural behavior, organic animal husbandry, organic farming, organic livestock production, questionnaire study. The authors are at the National Veterinary Institute, Oslo, Norway. (JAEE)

Lundmark, C, "Improving the Science Curriculum with Bioethics," Bioscience 52(no.10, 2002): 881- .

Lundmark, Thomas. "Principles and Instruments of German Environmental Law.

Journal of Environmental Law & Practice 4(1997):43. A systematic overview of environmental law in Germany. Emphasis is placed on the so-called principles and instruments of environmental law. (v8,#1)

Lundmark, Thomas; and McNeece, John B., III. "State and Local Government Participation in Solving Environmental Problems at the U.S.-Mexican Border." Journal of Environmental Law and Practice 3, no.2 (1995): 37. Increasingly intense environmental problems at the U.S.-Mexican border have state and local governments seeking authority to engage in cross-border solutions. (v7, #3)

Lundy, Patricia. Debt and Ecological Destruction. Brookfield, VT: Ashgate, 1997. 200pp. \$9.95 cloth. Based on original research carried out during 13 months of fieldwork in Jamaica, this book examines the damage to the social environment and ecology of the island and also identifies a new social movement of community environmental groups. Lundy is at Queen's University, Belfast, Northern Ireland. (v8,#1)

Luo Yaling. "Environmental Ethics as Ethics of Responsibility." *Morality and Civilization* No. 1 (2005): 57-61.

Luo, Yigi et al., "Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide", BioScience 54 (no. 8, 1 August 2004):731-739(9). A highly controversial issue in global biogeochemistry is the regulation of terrestrial carbon (C) sequestration by soil nitrogen (N) availability. This controversy translates into great uncertainty in predicting future global terrestrial C sequestration. We propose a new framework that centers on the concept of progressive N limitation (PNL) for studying the interactions between C and N in terrestrial ecosystems. In PNL, available soil N becomes increasingly limiting as C and N are sequestered in long-lived plant biomass and soil organic matter. Our analysis focuses on the role of PNL in regulating ecosystem responses to rising atmospheric carbon dioxide concentration, but the concept applies to any perturbation that initially causes C and N to accumulate in organic forms. This article examines conditions under which PNL may or may not constrain net primary production and C sequestration in terrestrial ecosystems. While the PNL-centered framework has the potential to explain diverse experimental results and to help researchers integrate models and data, direct tests of the PNL hypothesis remain a great challenge to the research community.

Luoma, Jon R., "Habitat Conservation Plans: Compromise or Capitulation?" Audubon 100 (no. 1, January-February 1998):36-51. Habitat Conservation Plans, sweeping regulatory arrangements, are fast becoming the new standard for ecosystem protection. In the past four years more than 400 have been approved or set in motion. But are they a great leap forward or a sellout of endangered species? Although in principle, they protect habitat and many species at the ecosystem level, and are praised as a win-win situation, in practice skeptics worry that species protection is becoming driven less by law and science, more by the backrooms deals cut between federal bureaucrats and developers and their lawyers. Especially objectionable is the Babbitt innovation of "no surprises" clauses, which locks in the agreed arrangements for a century, once the deal is struck. For all intents and purposes, landowners are absolved of any future liability under the Endangered Species Act. Critics also complain the HCP's are rushed through without adequate study, and, under these circumstances, surprises are to be expected. In a forceful letter to Congress, 167 scientists, mostly conservation biologists, complained that the "no surprises" clause "proposes a world of certainty that does not, has not, and never will exist... because we will always be surprised by ecological systems." (v.8,#4)

Luoto, M., Toivonen, T., and Heikkinen, R. K., "Prediction of Total and Rare Plant Species Richness in Agricultural Landscapes from Satellite Images and Topographic Data," Landscape Ecology 17(no.3, 2002): 195-217. (v.13,#4)

Luper, Steven, and Brown, Curtis, eds., The Moral Life, 2nd. ed. Orlando, FL: Harcourt Brace, 1999. Part VII is Interspecies Issues, mostly dealing with the status of animals. Kant, "Duties toward Animals";

Singer, from Animal Liberation; Cigman, "Interest Criterion of Standing"; Goodpaster, from "On Being Morally Conserable"; and Rollin, "Environmental Ethics and International Justice."

Luper-Foy, Stephen and Curtis Brown, The Moral Life. Chicago: Harcourt Brace Jovanovich, 1992. Section VI is "Interspecies Issues." Organized around: Rationality Criterion of Standing: Immanuel Kant, "Duties toward Animals"; Pleasure Criterion of Standing: Peter Singer, "Animal Liberation"; Interest Criterion of Standing: Ruth Cigman, "Death, Misfortune, and Species Inequality"; Life Criterion of Standing: Kenneth Goodpaster, "On Being Morally Considerable"; and Species Favoritism: Mary Midgley, "The Significance of Species." (v3,#1)

Luper-Foy, Steven. "Natural Resources, Gadgets and Artificial Life." Environmental Values 8(1999):27-54. ABSTRACT: I classify different sorts of natural resources and suggest how these resources may be acquired. I also argue that inventions, whether gadgets or artificial life forms, should not be privately owned. Gadgets and life-forms are not created (although the term "invention" suggests otherwise); they are discovered, and hence have much in common with more familiar natural resources such as sunlight that ought not to be privately owned. Nonetheless, inventors of gadgets, like discoverers of certain more familiar resources, sometimes should be granted exclusive but temporary control over their inventions as an incentive for making unknown items widely accessible KEYWORDS: Artificial life, patents, ownership, natural resources, intellectual property, justice.

Steven Luper, Department of Philosophy Trinity University San Antonio, Texas 78212, USA email: sluper@trinity.edu (EV)

Luper-Foy, Steven. "Justice and Natural Resources," Environmental Values Vol.1 No.1(1992):47-64. ABSTRACT: Justice entitles everyone in the world, including future generations, to an equitable share of the benefits of the world's natural resources. I argue that even though both Rawls and his libertarian critics seem hostile to it, this resource equity principle, suitably clarified, is a major part of an adequate strict compliance theory of global justice whether or not we take a libertarian or a Rawlsian approach. I offer a defence of the resource equity principle from both points of view. KEYWORDS: Environmental ethics, future generations, justice, natural resources. Department of Philosophy, Trinity University, San Antonio, Texas 78212.

Luther, Calvin. The Way of the Human Being. Reviewed by David Rothenberg. Environmental Ethics 22(2000):425-429.

Lutherer, L. O., and Simon, M. S., Targeted: The anatomy of an animal rights attack. Norman, OK: University of Oklahoma Press, 1992.

Lutherer, Lorenz Otto and Margaret Sheffield Simon, Targeted: The Anatomy of an Animal Rights Attack. Norman, Oklahoma: University of Oklahoma Press, 1993. Animal rights activists have broken into more than eighty research and educational institutions in the United States in the last ten years, stealing (the authors maintain) hundreds of research animals and destroying millions of dollars' worth of property. An analysis of the goals and tactics of the animal rights movement. (v4,#4)

Lutter, Randall and Shogren, Jason F., Painting the White House Green. Washington: RFF (Resources for the Future) Press, 2004. First-hand accounts of what goes on behind the scenes in key decisions about environmental standards and policy. (v. 15, # 3)

Lutts, Ralph H., The Nature Fakers: Wildlife, Science, and Sentiment. Golden, CO: Fulcrum Publishers, 1990. \$ 22.95. (v1,#4)

Lutts, Ralph H., ed., The Wild Animal Story. Philadelphia: Temple University Press, 1998. 328 pages. \$

35. An exploration of the popular genre of wild animal stories, from turn-of-the century nature writings to contemporary films and television. Queries about the meaning of what animals do and our obligation to them. The stories are placed in the context of debate about animal intelligence and purposeful behavior, nature literature and films, popular culture, animals and society, and the changing attitudes toward wildlife. Lutz is in continuing education at the University of Virginia, and is the author of The Nature Fakers: Wildlife, Science, and Sentiment. (v9,#2)

Lutz, Ernst, ed., Toward Improved Accounting for the Environment. Washington, DC: World Bank, 1993. 329 pages. A sequel to a 1989 volume by Y. F. Ahmad, E. El Serafy, and E. Lutz, Environmental Accounting for Sustainable Development. The United Nations' proposed Integrated System of Environmental and Economic Accounting, and case studies in Mexico and Papua New Guinea, and related assessments. (v6,#4)

Lutz, Ernst., ed. Toward Improved Accounting for the Environment: Washington, D.C.: World Bank, 1993). Reviewed by Giles Atkinson in Environmental Values 4(1995):276-278. (EV)

Lutz, Wolfgang, ed. The Future Population of the World: What Can We Assume Today? London: Earthscan Publications Ltd., 1996. 500pp. 50cloth, £24.95paper. An analysis of the components of population change--fertility, mortality and migration--and translates them into projections for 12 world regions. The projections by the world's leading demographers, are the first explicitly to take into account the possible environmental limits to growth. (v8,#1)

Lutzenberger, Jose, "Science, Technology, Economics, Ethics, and Environment." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Lutzenberger, José, "Ciência, Ética e Meio Ambiente" (Science, Ethics, and the Natural Environment). Pages 101-116 in Revista do Instituto de Filosofia e Ciências Humanas da Universidade Federal do Rio Grande do Sul (Review of the Institute of Philosophy and Human Sciences of the Federal University of Rio Grande do Sul, Porto Alegre, Brazil), Vol. 15, 1992. ISSN 0302-217X. By the former Secretary for the Natural Environment of Brazil, who considers himself a deep ecologist, and who was removed from office for his environmentalist policies, by a president of Brazil, since removed for corruption. (v4,#4)

Lutzenhiser, L., "The Contours of U.S. Climate Non-Policy," Society and Natural Resources 14(no. 6, 2001):511-524. (v.13,#1)

Lybecker, D., Lamb, B. L., and Ponds, P. D., "Public Attitudes and Knowledge of the Black-Tailed Prairie Dog: A Common and Controversial Species," Bioscience 52(no.7, 2002): 607-13. (v.13,#4)

Lydeard C.; Cowie RH; Ponder WF; Bogan AE; Bouchet P; Clark SA; Cummings KS; Frest TJ; Gargominy O; Herbert DG; Hershler R; Perez KE; Roth B; Seddon M; Strong EE; Thompson FG, "The Global Decline of Nonmarine Mollusks", BioScience 54 (no.4, 2004): 321-330(10). Invertebrate species represent more than 99 of animal diversity; however, they receive much less publicity and attract disproportionately minor research effort relative to vertebrates. Nonmarine mollusks (i.e., terrestrial and freshwater) are one of the most diverse and imperiled groups of animals, although not many people other than a few specialists who study the group seem to be aware of their plight. Nonmarine mollusks include a number of phylogenetically disparate lineages and species-rich assemblages that represent two molluscan classes, Bivalvia (clams and mussels) and Gastropoda (snails, slugs, and limpets). In this article we provide an overview of global nonmarine molluscan biodiversity and conservation status, including several case studies documenting the diversity and global decline of nonmarine mollusks. We conclude with a discussion of the roles that mollusks and malacologists should play in conservation,

including research, conservation management strategies, and education and outreach.

Lydeard, Charles and Mayden, Richard L., "A Diverse and Endangered Aquatic Ecosystem of the Southeast United States," Conservation Biology 9(1995):800-805. There is an extraordinarily diverse and endangered ecosystem in the United States, the rivers and streams of Alabama and adjoining states. Relative to North America as a whole, Alabama is a highlight of biotic diversity, with much of this diversity imperiled. The biodiversity crisis is not limited to tropical forests, but is right in Americans' own backyards. Lydeard and Mayden are in the Aquatic Biology Program, Department of Biological Sciences, University of Tuscaloosa, Alabama. See also Stolzenburg, William, "Sweet Home Alabama," Nature Conservancy 47(no. 4, Sept./Oct 1997):8-9.

Lyman, Howard F., "Mad Cows or Mad World?," The Animals' Agenda 16(no.4, 1996):26. The latest outbreak of mad cow disease in Britain, and the likely link to a human brain disorder, is proving that the common practice of recycling diseased animals back into the food chain is utter madness. Lyman is a rancher and feedlot operator in Montana, and directs the Eating with a Conscience campaign of the Human Society of the United States. (v7,#4)

Lyman, RL; Wolverton, S, "The Late Prehistoric-Early Historic Game Sink in the Northwestern United States," Conservation Biology 16(no.1, 2002):73-85. (v.13, #3)

Lynas, M, "Red Dust Rising", Ecologist 34 (no.1, 2004): 44-54. If you want to be convinced that global warming is happening, you need to visit China.

Lynch, B. D., "Colten, Craig E., ed. Transforming New Orleans and Its Environs: Centuries of Change." Society and Natural Resources 15(no.7, 2002): 654-55. (v.13,#4)

Lynch, Barbara Deutsch, "The Garden and the Sea: U.S. Latino Environmental Discourses and Mainstream Environmentalism," Social Problems 40(1993):108-24. Latinos see nature quite differently from mainstream environmentalists. Latino environmentalism, in which the garden metaphor is central, rejects the dichotomization of people and nature that has pervaded contemporary environmentalism. "The environment is a social construction: a product of all cultural responses to specific historical circumstances which give rise to shared sets of imagined landscapes" (p. 109). (v7,#1)

Lynch, D. L., "What Do Forest Fires Really Cost?," Journal of Forestry 102(no. 6, 2004): 42-49(8).
Mitchell, K., "Geographies of Identity: Multiculturalism Unplugged," Progress in Human Geography 28(no. 5, 2004): 641-651(11). (v.14, #4)

Lynch, Dennis L, "What Do Forest Fires Really Cost?," Journal of Forestry 102(no.6, September 2004):42-49(8).

Lynch, Kevin, Managing the Sense of a Region. Cambridge, MIT Press, 1976. 221 pages. Regional planning, environmental aspects.

Lynch, MJ; Stretesky, PB; Burns, RG, "Determinants of Environmental Law Violation Fines Against Petroleum Refineries: Race, Ethnicity, Income, and Aggregation Effects", Society and Natural Resources 17 (no.4, 2004): 343-357(15).

Lynch, Tony, Wells, David, "Non-Anthropocentrism? A Killing Objection," Environmental Values 7(1998): 151-163. To take the idea of a non-anthropocentric ethic of nature seriously is to abandon morality itself. The idea of humanity is not an optional extra for moral seriousness. Non-anthropocentric environmental ethicists mistake the kind of value non-human entities may bear. It is not moral value, but

aesthetic value. KEYWORDS: non-anthropocentrism, humanity, killing, aesthetic value. Tony Lynch is at University of New England, NSW. David Wells is at University of New England, NSW. (EV)

Lynch, Tony, "Deep Ecology as an Aesthetic Movement," Environmental Values 5(1996):147-60. Many deep ecologists call for a new ecological ethic. If this ethic is meant to be a moral ethic, then deep ecology fails. However if deep ecology is interpreted as an aesthetic movement, then it is both philosophically coherent and practically adequate. KEYWORDS: Deep ecology, morality, aesthetics, nonanthropocentrism. (EV)

Lyon, Thomas P., and John W. Maxwell, Corporate Environmentalism and Public Policy. Cambridge, UK: Cambridge University Press. Corporate environmentalism is the result of firms attempting to anticipate public policy changes and to influence the legislative process in their best interests.

Lyons, Graham, Evonne Moore and Joseph Wayne Smith, Is the End Nigh? Internationalism, Global Chaos and the Destruction of the Earth. Aldershot, Hampshire, UK: Avebury. Brookfield, VT: Ashgate Publishing Co., 1995. 283 pages. \$ 69.00. A critique of ideologies that dominate the power centers of the industrialized world and are accelerating the destruction of natural capital and the environment. The authors are at the University of Adelaide, Australia. (v7,#2)

Lyons, Jonathan, "Smuggled Orangutans: the Bangkok Six," The Animals' Agenda 15 no. 2 (March 1995): 22- . Torn from their mothers and sold to smugglers, six infant orangutans were discovered, nearly dead, in packing crates at the Bangkok airport. Two of the smugglers were apprehended and a Mexican zoo official mistook a U.S. Fish and Wildlife agent in a gorilla suit for the real deal. (v6,#2)

Lyons, Michael. "Political Self-Interest and U.S. Environmental Policy." Natural Resources Journal 39(No. 2, Spring 1999):271- . (v10,#4)

Lyons, Thomas. *Civic Agriculture: Reconnecting the Farm, Food and Community*. Lebanon NH: Tufts University Press, 2004.

Lytle, Mark Hamilton. *The Gentle Subversive: Rachel Carson, Silent Spring, and the Rise of the Environmental Movement*. New York: Oxford University Press, 2007. The DDT concern was serious and launched Carson's thinking, but Carson became and was viewed as a threat because she was making a profound critique of a worldview that locates human beings at the center of the universe and the natural world at the periphery. She was calling into question the paradigm of scientific progress that defined postwar American culture. She advanced a biocentric paradigm, where humans are one among many species that interact in an intricate ecological web. Lytle also argues that Carson's nature-centered perspective was nurtured by her Presbyterian mother who taught her to observe nature closely, to love the natural world, and to return to its natural habitat whatever specimen she brought home. As an adult Carson no longer held to the Christian faith, but resented being called an atheist. "As far as I am concerned," she wrote, "there is absolutely no conflict between a belief in evolution and a belief in God as creator."

Ma Li. "The Discourse Transformation and the Concept of Resource in Environmental Ethics." *Philosophical Research* No. 1 (2004): 58-61.

Mabogunje, A. L., "Poverty and Environmental Degradation: Challenges within the Global Economy," *Environment* 44(no.1, 2002): 8-19. (v.13,#2)

Mac All Mac's should also be searched under Mc. The computer slavishly alphabetizes them.

MacArthur, John, Review of Pearce, David, and Moran, Dominic, The Economic Value of Biodiversity. Environmental Values 5(1996):89-90. (EV)

Macauley, David, ed. Minding Nature: The Philosophers of Ecology. Reviewed by John Clark, Environmental Ethics 20(1998):199-202.

Macauley, David, ed. Minding Nature: The Philosophers of Ecology. New York: Guildford Press, 1996. 350 pages. \$18.95 pb. Articles in the book examine the connections between philosophy and ecology in Thomas Hobbes, Martin Heidegger, Ernest Bloch, Hans Jonas, Lewis Mumford, Paul Ehrlich, and Murray Bookchin. Contributors include: Frank Coleman, Joan Roelofs, Michael Zimmerman, David Abram, David Macauley, John Ely, Lawrence Vogel, Henry Blanke, Ramachandra Guha, Yaakov Garb, Andrew Feenberg, Joel Whitebook, Alan Rudy, and Andrew Light. Macauley teaches philosophy and literature classes in New York City and is completing his doctorate at the State University of New York, Stony Brook. (v7,#1)

Macauley, David. Review of Getting Back into Place: Toward a Renewed Understanding of the Place-World. By Edward S. Casey. Environmental Ethics 22(2000):219-221.

Macauley, David. Review of The Fate of Place: A Philosophical History. By Edward S. Casey. Environmental Ethics 22(2000):219-221.

MacCleery, Douglas W., American Forests: A History of Resiliency and Recovery. Durham, NC: Forest History Society, 1994 (and earlier editions). Following two centuries of decline, the area of forest land has stabilized. Today the U.S. has about the same forest areas as in 1920. The area consumed by wildfire each year has fallen 90 percent. Populations of deer, turkey, elk, pronghorns, and many other wildlife have increased dramatically. Eastern forests have staged a major comeback. Forest growth nationally has exceeded harvest since the 1940's. Recreational use of forests has increased manyfold. Dependence of the economy on wood and wood products is as great as ever. One can wonder, however, whether questions about the quality of the forests (pine plantations vs. old growth forests) still need to be addressed. MacCleery is a professional forester with the U.S. Forest service. (v6,#4)

MacCracken, Michael C., "Climate Change Discussions in Washington: A Matter of Contending Perspectives," Environmental Values 15(2006): 381-395. The scientific evidence and understanding underpinning societal responsibility for the accelerating pace of climate change has become increasingly strong over the past hundred years. Although many nations have begun to take actions that have the potential to eventually slow the pace of change, contention over the issue continues in the United States, particularly in the nation's capital. A major cause appears to arise from different interpretations of the evidence arising from different perspectives on the issue, including those of the scientific, environmental, fossil-fuel generating, technological, economic and ethical communities. In addition, the public encounters a cacophony of intermixed perspectives from the media and elected officials. While each perspective provides some useful insights, each alone contributes to inhibiting development of the national political consensus needed to responsibly address climate change. Without leadership that balances and reconciles competing perspectives, it is unlikely that a sufficient limiting of emissions will be enacted to prevent significant changes in climate that will impose increasing challenges for those in both developing and developed nations. (EV)

Macdonald, D.W. and Johnson, P.J., "Farmers and the custody of the countryside: trends in loss and conservation of non-productive habitats 1981-1998," Biological Conservation 94 (No. 1, 2000): 221- . (v.11,#4)

MacDonald, Doug. "Beer Cans, Gas Guzzlers and Green Taxes: How Using Tax Instead of Law May

Affect Environmental Policy." Alternatives 22(Jul. 1996):12. Why was the Ontario government willing to impose a green tax on beer cans, but not on gasoline?

MacDonald, E. K., "Playing by the Rules: The World Bank's Failure to Adhere to Policy in the Funding of Large-Scale Hydropower Projects," Environmental Law 31(no.4, 2001): 1011-50. (v.13,#2)

MacDonald, Gordon J., "Assessing the U.S. Environment", Environment 38(No.2, 1996):25- . The latest report of the Council on Environmental Quality serves as no better a guide to policy than its predecessors. (v7,#1)

MacDonald, Mia, "Toward Kinship `From Protest To Policy.'" The Animals' Agenda 16(Mar.1996):40. When will animal activists be able to retire the lobster and carrot costumes to the closet and start wielding real policy-making power instead? Author Mia MacDonald suggests strategies for advancing meaningful change in the political arena, while still "keeping the placards aloft and the lobster suits nearby."

MacDonald, Mia. "AHIMSA With Attitude: An Interview With Maneka Gandhi." The Animals' Agenda 16, no.1 (1996): 30. Maneka Gandhi, a member of a famous family, describes what it's like to be an animal rights advocate and environmentalist in India. "I became the Minister for Environment and found the word `environment' was misspelled on the Ministry's letterhead!". (v7, #3)

MacDonnell, Lawrence J. and Sara F. Bates, eds., Natural Resources Policy and Law: Trends and Directions. Washington: Island Press, 1993. \$ 19.95 paper. \$ 38.00 hardcover. Ten chapters, by, in addition to the editors, Clyde O. Martz, George Cameron Coggins, Richard C. Maxwell, A. Dan Tarlock, Joseph Sax, Charles F. Wilkinson, David Getches, and Richard J. Lazarus. With a special emphasis on new laws and important legal cases of the past decade. Contributions include: historical overview, public land law, mineral law, oil and gas law, water resources, public trust doctrine, environmental law, shifting paradigms. In recent years, the contributors variously argue, we have begun to appreciate the inherent worth of our land, air, water, a worth that is entirely unrelated to economic growth and development. The evolution of law and policy regarding natural resource and environmental issues over the past century reflects these ongoing changes in valuation. MacDonnell and Bates are at the Natural Resources Law Center, University of Colorado School of Law. (v4,#3)

MacDonnell, Lawrence J., From Reclamation to Sustainability: Water, Agriculture, and the Environment in the American West. Niwot,CO: University Press of Colorado, 1999. The American West viewed through the lens of its most contested resource: water. Western water resources have been developed beyond their sustainable capacity, resulting in overdevelopment, declining rural communities, dewatered streams incapable of supporting native species, and degraded water quality. Sustainable use of water depends on reducing the gap between diverted water and used water, restoring the functional integrity of water sources. MacDonnell is a water lawyer, and was the first director of the Natural Resources Law Center at the University of Colorado School of Law, Boulder. (v.10,#1)

MacDougall, A. Kent. "Humans as Cancer", Wild Earth 6(no.3, 1996):81-88. "A cancerous tumor continues to grow even as its expropriation of nutrients and disruption of vital functions causes its host to waste away. Similarly, human societies undermine their own long-term viability by depleting and fouling the environment. With civilization as with cancer, initial success begets self-defeating-excess." Various interpreters argue over whether this is metaphor or more literal, and many find the idea offensive. Lovelock, with his Gaia hypothesis, initially found the idea absurd, but has changed his mind. Various physicians and epidemiologists have supported the idea. "Whether as metaphor or hypothesis, the proposition that humans have been acting like malignant cancer cells deserves to be taken seriously." MacDougall is an award-winning professor emeritus of journalism at the University of California. (v7,#4)

MacDowell, LS, "Review of: Neil S. Forkey. Shaping the Upper Canadian Frontier: Environment, Society, and Culture in the Trent Valley; and John M. Findlay and Ken S. Coates, eds. Parallel Destinies: Canadian-American Relations West of the Rockies", Environmental History 9 (no.1, 2004): 136-137.

Mace, Georgina M., and Hudson, Elodie J. "Attitudes Toward Sustainability and Extinction," Conservation Biology 13(No.2, 1999):242-. (v.10,#2)

Mace, William M., "James J. Gibson's Ecological Approach: Perceiving What Exists," Ethics and the Environment 10(2005):195-216. The purpose of this paper is to help an audience attracted to environmental philosophy get to the core of Gibson's system in a compact form and to appreciate the necessity for an account of the environment in epistemology. I hope to show that Gibson's is a consistent and scientifically progressive account of knowing that gives the environment its due and that this is not a simple matter of fiat but a call to extended scientific investigation. I stress that Gibson's work is scientifically progressive in the sense that it has consistently opened new avenues for research. If one could be assured tomorrow that Gibson was correct and his critics wrong, the ecological psychology enterprise would not have to be shut down with nothing left to do. The goal of the enterprise, certainly for Gibson, was not to be declared a winner but to open doors for discovery. Because Gibson has developed a theory of perceiving the environment, it would be worth exploring as an important topic for environmental philosophers covering a wide range of issues. It offers an intriguing, environmentally based, grounding for epistemology. Mace is in psychology, Trinity College, Hartford, CT, and founding director of the International Society for Ecological Psychology (ISEP). (Eth&Env)

MacEachern, Dianne. Save Our Planet: 750 Everyday Ways You Can Help Clean Up the Earth, Dell, New York, 1990. \$ 9.95. (v1,#2)

Macer, Darryl R.J., Bhardwaj, Minakshi, Maekawa, Fumi, and Niimura, Yuki, "Ethical opportunities in global agriculture, fisheries, and forestry: The role for FAO," Journal of Agricultural and Environmental Ethics 16(2003):479-504. FAO (Food and Agriculture Organization) has a unique and essential role in addressing the ethical problems facing humanity and in making these problems into opportunities for practical resolution. A broad range of ethical issues in agriculture, fisheries, and forestry were identified by analysis of the literature and by interviews with FAO staff. Issues include sharing access to and preserving natural resources, introduction of new technology, conservatism over the use of genetic engineering, ethics in animal agriculture, access to information, food security, sustainable rural development, ensuring participation of all people in decision making and in receiving benefits of agriculture, reducing corruption, and involvement of private and public sectors in decision making. Rather than viewing these issues as problems, they should be viewed as opportunities for debate, learning about others' views, and resolution. The United Nations has an important role to play in how decisions are made in the global ethical debate in food and agriculture. KEY WORDS: agriculture FAO, biotechnology, environment, ethics, fisheries, United Nations. (JAEE)

Macer, Darryl, "Uncertainties About 'Painless' Animals", Bioethics, 3 (1989): 226-35. Genetic techniques are being increasingly employed to alter animals used in both medical and agricultural research, and will no doubt be extended into many applications. This paper seeks to examine whether it is possible to genetically manipulate animals so that they have an altered capacity to feel pain; whether it would be ethical to do so; and how we would regard animals that do not feel pain. The creation of "painless" animals in order to make a new class of means for human ends may alter the way we argue about the use of animals. Instead of animals possessing some sort of integrity, they can be made the longterm property of humans, not only in commercial terms, or when or how they come into existence, but in whether they are sentient animals of a new class of "painless" animals. Some would argue that this new class would possess the moral status of plants, however, many would share the author's view that this would be an unethical use of our power over nature. The difficulty is to say precisely why it is unethical.

Macer, Darryl R. J., Bioethics Is Love of Life: An Alternative Textbook. Christchurch, New Zealand: Eubios Ethics Institute, 1998. 160 pages. ISBN 0-908897-13-8. Bioethics interpreted as the love of life. "Love of life" is the simplest and most all encompassing definition of bioethics, and it is universal among all peoples of the world" (p. 1). Chapter 7 is "Love of Nature and Environmental Ethics." Environmental ethics as love of life, biophilia, loving especially the integrity of life, organismic and holist. An alternative view published in a location that might not otherwise come to your attention. Macer is a New Zealander who has spent many years teaching at the University of Tsukuba, Tsukuba, Japan, and has also been instrumental in promoting bioethics in India. A website for the Eubios Ethics Institute is:
<http://www.biol.tsukuba.ac.jp/~macer/index.html>

Macer, Darryl, "Animal Consciousness and Ethics in Asia and the Pacific," Journal of Agricultural and Environmental Ethics 10(1997/1998):249-267. ABSTRACT. The interactions between humans, animals and the environment have shaped human values and ethics, not only the genes that we are made of. The animal rights movement challenges human beings to reconsider interactions between humans and other animals, and may be connected to the environmental movement that begs us to recognize the fact that there are symbiotic relationships between humans and all other organisms. The first part of this paper looks at types of bioethics, the implications of autonomy and the value of being alive. Then the level of consciousness of these relationships are explored in survey results from Asia and the Pacific, especially in the 1993 International Bioethics Survey conducted in Australia, Hong Kong, India, Israel, Japan, New Zealand, The Philippines, Russia, Singapore and Thailand. Very few mentioned animal consciousness in the survey, but there were more biocentric comments in Australia and Japan; and more comments with the idea of harmony including humans in Thailand. Comparisons between questions and surveys will also be made, in an attempt to describe what people imagine animal consciousness to be, and whether this relates to human ethics of the relationships. KEY WORDS: Animals, Asia, consciousness, Australia, Hong Kong, India, Israel, Japan, New Zealand, The Philippines, Russia, Singapore, Thailand. (JAEE)

MacFarlane, I., An Evaluation and Prioritisation of Dispute Resolution Procedures in the Context of Sustainable Development. M.Phil. thesis at the University of Stellenbosch 1998. Promotor: Johan P. Hattingh. (v.10,#1)

MacGregor, Sherilyn, "From Care to Citizenship: Calling Ecofeminism Back to Politics," Ethics and the Environment 9(no. 1, 2004):56-84. Although there are important aspects of ecofeminist valuations of women's caring, a greater degree of skepticism than is now found in ecofeminist scholarship is in order. In this article I argue that there are political risks in celebrating women's association with caring, as both an ethic and a practice, and in reducing women's ethico-political life to care. I support this position by drawing on the work of feminist theorists who argue that the positive identification of women with caring ought to be treated cautiously for it obscures some of the negative implications of feminized care and narrows our understanding of women as political actors. I explain why I think ecofeminists would be better served by using feminist theories of citizenship to understand and interpret women's engagement in politics. MacGregor is in the Institute for Environment, Philosophy, and Public Policy at Lancaster University, UK. (E&E)

Macguire, Daniel C., and Rasmussen, Larry L., Ethics for a Small Planet: New Horizons on Population, Consumption, and Ecology. Albany: SUNY Press, 1998. 151 pages. \$ 19.00 paper. (v.10,#2)

Machan, Tibor R., Putting Humans First: Why We Are Nature's Favorite. Lanham, MD: Rowman and Littlefield, 2004. The primacy of human life in the natural world and the corresponding justice of humans making use of animals. Disputes the concept of "animal rights" and "animal liberation." Humans are very much a part of nature though not, ordinarily, of the wild. Given their nature, human beings not only can, but ought to use nature to serve their needs. Machan is emeritus in philosophy, Auburn University,

and currently teaching at Chapman University.

Machan, Tibor R., "Do Animals Have Rights?" Public Affairs Quarterly 5(April 1991): 163-173. "Animals have no rights and need no liberation. To think that they do is a category mistake." "Rights and liberty are political concepts applicable to human beings because human beings are moral agents." "There is a scale of importance in nature, and among all the various kinds of being, human beings are the most important..." "With human nature a problem arose in nature that had not been there before--basic choices had to be confronted, which other animals do not have to confront. The question, 'How should I live?' faces each human being. ... For this reason we are very different from other animals--we also do terrible, horrible, awful things to each other as well as to nature, but we can also do much, much better and achieve incredible feats nothing else in nature can come close to." "There is plainly no valid intellectual place for rights in the non-human world, the world in which moral responsibility is for all practical purposes absent." "Animals are not the sort of beings with basic rights to life, liberty and property, whereas human beings, in the main, are just such beings. Yet we know that animals can feel pain and can enjoy themselves and this must give us pause when we consider using them for our legitimate purposes. We ought to be humane, we ought to kill them and rear them and train them and hunt them in a fashion consistent with such care about them as sentient beings." Machan is in the Department of Philosophy at Auburn University. (v2,#2)

Macheta, Aleksandra, Environment and Development: Our Common Future, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.

Macheta, Aleksandra, Environment and Development: Our Common Future, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Machlis, Gary E., Force, Jo Ellen, Burch Jr., William R. "The Human Ecosystem. Part I: The Human Ecosystem as an Organizing Concept in Ecosystem Management," Society & Natural Resources 10(no.4, 1997):347. (v8,#3)

Machlis, Gary E., and Field, Donald R., eds. National Parks and Rural Development: Practice and Policy in the United States. Covelo, CA: Island Press, 2000. 296 pages. Cloth \$55. Paper \$27.50. Five case studies of rural development near national parks. Lessons, principles applied, mistakes committed, and advances made. Personal essays from leaders in parks management. (v.11,#4)

Machtans, Craig S., Villard, Marc-Andre, Hannon, Susan J. "Use of Riparian Buffer Strips as Movement Corridors by Forest Birds", Conservation Biology 10(no.5,1996):1366.

MacIntyre, Alasdair, Dependent Rational Animals. Chicago: Open Court, 2000. Dependency and vulnerability are the keys unlocking the secrets of human morality. All humans are dependent throughout life, from infancy to age. A community's care for its dependents is a fundamental measure of its moral stature. Other animals experience extended dependence, such as dolphins and gorillas, and they too exhibit the elementary moral characteristics of cooperation, mutual protection and care for the disabled. Becoming morally mature is a matter of becoming an "independent practical reasoner," (rather than a matter of psychological health, self-actualizing, identity, etc.). In mature morality we learn how to reflect both on our needs and the communal practices that meet our dependencies. We learn how to evaluate these needs, something the higher animals never master, and to adjust them in terms of the needs of others. The virtues--such as "just generosity"--are important because they sustain independent practical reasoning. (v.11,#3)

MacIntyre, Alasdair. Dependent Rational Animals. London: Gerald Duckworth Ltd, 1999, 172pp. Reviewed by David Littlewood. Environmental Values 9(2000):259.

Mack, John E., "Inventing a Psychology of Our Relationship to the Earth," in Sylvia Staub and Paula Green, eds., Psychology and Social Responsibility: Facing Global Challenges. New York: New York University Press, 1992. (v3,#3)

Mack, R.N. "Predicting the Identity and Fate of Plant Invaders: Emergent and Emerging Approaches", Biological Conservation 78(no.1/2, 1996):107.

Mackenzie, F. D., "Review of: Meinzen-Dick, Ruth Suseela, Innovation in Natural Resource Management: The Role of Property Rights and Collective Action in Developing Countries (Baltimore: Johns Hopkins University Press, 2002)," Land Use Policy 20(no. 3, 2003): 294-295.

Mackenzie, Michael. "A Note on Motivation and Future Generations." Environmental Ethics 7(1985):63-69. I examine the motivation issue in our relationship to future generations in light of a specific set of technological practices--those of Chinese hydraulic agriculture. I conclude that these practices appear to embody a "community-bonding" relationship between present and future generations and that such a relationship provides a fruitful perspective on policy. Mackenzie is a visiting fellow in the History of Science Program, Princeton University, Princeton, NJ. (China) (EE)

MacKenzie, Michael, "A Note on Motivation and Future Generations," Environmental Ethics 7(1985):63-69. A short essay, quite different from most work in this field. MacKenzie examines a specific technological achievement: hydraulic agriculture in China. This is a project that requires technological cooperation across generations; maintenance of the system does not help the present population, only future generations. (Katz, Bibl # 1)

MacKenzie, Susan Hill. Integrated Resource Planning and Management. Covelo, CA: Island Press, 1996. 240pp. \$47 cloth, \$24.95 paper. Three indepth case studies are used to explore the institutional prerequisites to the creation and implementation of ecosystem-based management plans in the context of Great Lakes water resources. (v7,#4)

Mackey, Brendan G., "Environmental Scientists, Advocacy, And The Future Of Earth," Environmental Conservation 26 (No. 4, Dec 01 1999): 245- . (v.11,#2)

Mackinnon, Barbara, Ethics: Theory and Contemporary Issues, 2nd ed. Belmont, CA: Wadsworth Publishing Co., 1998. Chapter 14 is "Environmental Ethics," and in addition to an introductory essay by MacKinnon contains reprints of Holmes Rolston, "Humans Valuing the Natural Environment" (from Chapter 1 of his Environmental Ethics); Karen Warren, "The Power and the Promise of Ecological Feminism"; and Bill Devall and George Sessions, "Deep Ecology." Chapter 15 is "Animal Rights," and in addition to an introductory essay by MacKinnon contains reprints of Peter Singer, "All Animals are Equal," and Bonnie Steinbock, "Speciesism and the Idea of Equality." MacKinnon teaches philosophy at the University of San Francisco. (v8,#3)

Mackinnon, John, with Photographs by Nigel Hicks. Wild China. Cambridge, MA: The MIT Press, 1996. 208 pp. \$40. Wild China surveys the rich biological treasures of this country. It explores reserves where the Giant Panda is not protected, alpine meadows that are a botanist's wonderland of floral species, wetlands that are home to a million birds, turtle islands, and tigers' stalking grounds. Produced in association with the World Wide Fund for Nature (v8,#1)

MacKinnon, D; Cumbers, A; Chapman, K, "Learning, innovation and regional development: a critical appraisal of recent debates," Progress in Human Geography 26(no.3, 2002):293-312. (v.13, #3)

MacKinnon, Mary Heather and Moni McIntyre, eds. Readings in Ecology and Feminist Theology. Kansas City, MO: Sheed and Ward, 1994. 360 pages. \$19.95. This anthology features key essays which have helped shape the current understanding of the essential relationship between ecology and theology. Selections offer a variety of voices which link the growing insights and concerns of ecology, science, feminism, and theology. Contributors include John Cobb, Ray Griffin, Sallie McFague, and Anne Clifford. (v6,#1)

MacLachlan, I, Review of Philo, C. and Wilbert, C., eds. Animal spaces, beastly places: new geographies of human-animal relations," Progress in Human Geography 26(no.3, 2002):426- .

Maclean, Norman, Young Men and Fire. Chicago: University of Chicago Press, 1992. 288 pages. \$ 19.95. On August 5, 1949 a crew of fifteen of US Forest Service elite airborne firefighters jumped into a remote fire in Montana. All but three were killed. This is their story, and its aftermath. For another Maclean story about Montana, see A River Runs Through It, in the media section. (v3,#4)

MacLeish, William H., The Day Before America. Boston: Houghton Mifflin, 1994. 278 pages. \$ 21.95. What the condition of the continent was before the Europeans got their hands on it. The land was changing geologically and ecologically even before the first human inhabitants from Asia arrived, some 25,000 years ago. The first inhabitants were not shy about altering whatever they could, but they were few (average density about 11 persons per 100 square kilometers) and were pikers in what they could do compared with the sophisticated ecological savagery of the Europeans who came after them. Concludes with a chapter on the "native sense" of place. (v5,#4)

MacLeod, Alexander. "Rescuing the Red Squirrel.:" The Christian Science Monitor 89.82 (8 April 1997): 14.

MacLeod, Alexander. "Rural Britons Defend Fox Hunt, 'Way of Life.'" The Christian Science Monitor 89 (14 July 1997): 6. In a rally in London, 100 thousand country folk protested proposed laws against fox hunting, claiming that city dwellers know next to nothing about rural life. (v8,#2)

MacMilan, Douglas C., "An Economic Case For Land Reform," Land Use Policy 17 (No. 1, Jan 01 2000): 49- . (v.11,#2)

MacMillan, Gordon. At the End of the Rainbow?: Gold, Land, and People in the Brazilian Amazon. New York: Columbia University Press, 1996. 199 pp. \$22 paper, \$45 cloth. A vivid account of the violent clash between forty thousand miners and the Yanamami Indians in the state of Roraima, as well as arguments that explore the perspectives of the farmers, ranchers, natives and others involved in this historic moment. (v7,#4)

Macnab, Paul. "Fisheries Resources and Marine Heritage in Newfoundland: Crisis, Conservation and Conflict", Environments 24(no. 1, 1996):106.

Macnaghten, Phil and Urry, John, Contested Natures. London and Thousand Oaks, CA: Sage Publications, 1998. \$ 26.50 paper. \$ 82.00 cloth. There is no singular "nature" out there that is the fountainhead of pure and positive values waiting to be saved. Rather, there are multiple "natures." Nature is constantly changing its significance in daily life. Nature is irreducibly contested and embedded in highly diverse and ambivalent social practices. All notions of nature are bound up with different forms of social life from which they cannot be disentangled. The apparently natural world has been produced in many ways within particular social practices. Different times, different senses, produce different and distinct spaces, from the local to the global. The authors are at Lancaster University, UK. (v.9,#3)

Macnaghten, Phil and Urry, John, Contested Natures. London: Sage, 1998. "In this book we seek to show that there is no singular 'nature' as such, only a diversity of contested natures; and that each such nature is constituted through a variety of socio-cultural processes from which such natures cannot be plausibly separated. We therefore argue against three doctrines which are widespread in current thinking about nature and the environment. ...

The first, and most important for our subsequent argument, is the claim that the environment is essentially a 'real entity', which, in and of itself and substantially separate from social practices and human experience, has the power to produce unambiguous, observable and rectifiable outcomes. This doctrine will be termed that of 'environmental realism', one aspect of which is the way that the very notion of nature has been turned into a scientifically researchable environment. ...

The second doctrine is that of 'environmental idealism'. ... This doctrine holds that the way to analyze nature and the environment is through identifying, critiquing and realising various 'values' which underpin or relate to the character, sense and quality of nature. ...

The third doctrine specifically concerns the responses of individuals and groups to nature and the environment. It is concerned to explain appropriate human motivation to engage in environmentally sustainable practices and hence the resulting environmental goods or bads. ... This doctrine we will term 'environmental instrumentalism' and is importantly linked to a marketed naturalistic model of human behavior, and its radical separation from non-human species" (pp. 1-1). "The 'social' dimensions of nature have been significantly under-examined" (p. 4).

Macnaghten is at the Centre for the Study of Environmental Change, Urry in sociology at Lancaster University, Lancaster, UK. (v.13,#1)

Macnaghten, Phil, and John Urry, Contested Natures. London: Sage Publications, 1998. Attitudes toward nature since the 17th century. There are two broad patterns: (1) the Enlightenment view, which is "nature-sceptical," with nature to be mastered, and (2) the Romantic view, which is "nature-affirming."

MacNally, R. C., Ecological Versatility and Community Ecology. New York: Cambridge University Press, 1995. 435 pages. \$ 69.95. A theory of specialist versus generalist species, the generalists having more versatility in using resources available in various ecosystems. This gives insight into community ecology and offers a conceptual framework for doing research on species of special concern. (v8,#1)

MacNeill, Jim, Pieter Winsemius, and Taizo Yakushiju, Beyond Interdependence: The Meshing of the World's Economy and the Earth's Ecology. New York: Oxford University Press, 1992. 192 pages. \$ 8.95 paper. \$ 24.95 cloth. An effort to make the recommendations of the Brundtland Report more operational. McNeill is at the Institute for Research on Public Policy in Ottawa, Winsemius and Yakushiju are at Saitama University, Japan. (v3,#3)

MacPhee, Ross D. W., ed., Extinctions in Near Time: Causes, Contexts, and Consequences. New York: Kluwer Academic/Plenum Publishers, 1999. Extinctions during the time Homo sapiens has been on Earth, the last 100,000 years or so. There have been many losses when people began to expand across areas that had never before experienced their presence. Human effects have been especially disruptive on islands, and the contributors think the human presence on continents has often been almost as bad, although climate change complicates the evidence, and fewer animals disappear where humans had longer been, Europe and Africa. Debate continues and many issues are unresolved. In the last 500 years, three-quarters of all mammal extinctions occur on islands, and most of the remainder occur in Australia. Most of the recent mammal extinctions are small mammals, in contrast with the Pleistocene extinctions, where most were large (though this may reflect bias in fossil preservation). (v.13,#1)

MacRae, R.J., Henning, J., and Hill, S.B., "Strategies to Overcome Barriers to the Development of Sustainable Agriculture in Canada: The Role of Agribusiness", Journal of Agricultural and Environmental Ethics 6(1993):21-52. Strategies to involve agribusiness in the development of sustainable agricultural systems have been limited by the lack of a comprehensive conceptual framework for identifying the most

critical supportive policies, programs and regulations. In this paper, we propose an efficiency/substitution/redesign framework to categorize strategies for modifying agribusiness practices. This framework is then used to identify a diverse range of short, medium, and long-term strategies to be pursued by governments, community groups, academics and agribusiness to support the transition. Strategies discussed include corporate greening, ethical investment, changing the legal status of the corporation, new business forms and the development of ecological economics. MacRae, Henning, and Hill are at Macdonald College of McGill University, Quebec.

Maddison, D; Bigano, A, "The amenity value of the Italian climate", Journal of Environmental Economics and Management 45(no.2, 2003):319-332.

Maddock, Ant H. and Michael J. Samways. "Planning for Biodiversity Conservation Based on the Knowledge of Biologists," Biodiversity and Conservation 9(no. 8, 2000):1153-1169. Abstract. To conserve biodiversity, complementary approaches are necessary. Besides using museum data from sightings and specimens, the knowledge of experts can also be employed. Often such valuable information is lost on retirement or death. To investigate the value of this knowledge for nature conservation planning, we sent questionnaires to 124 professional conservationists in the province of KwaZulu-Natal, South Africa. Fifty-two replies illustrated that the historical context biases our concepts of nature and the conservation of biodiversity. Despite an awareness of all the spatial scales, complexities and dynamics of nature, there is still a strong focus on large-sized animals and visibly discrete ecosystems, such as wetlands. Nevertheless, the respondents illustrated that an awareness of infrequently-seen and less well known organisms is increasing. Harnessing this expert knowledge was valuable for conservation planning, but had the weakness that many taxa and localities were neglected. Similar problems arose with data from museum specimens. However, both these approaches were synergistic and highlighted the geographical areas that need far more exploration of their biodiversity. Such information gathering is an important ethical and practical exercise for conserving biodiversity. Key words: biodiversity, concepts, conservation, nature, planning, questionnaire survey.

Maddock, Ant, Benn, Grant A., Scott-Shaw, C. Rob. "An African Conservation Agency's Perspective on Advocacy," Conservation Biology 11(no.4, 1997):831. (v8,#3)

Maddock, Ant H., and Samways, Michael J., "Planning for biodiversity conservation based on the knowledge of biologists," Biology and Conservation 9(2000):1153-1169. Maddock is with the KwaZulu-Natal Nature Conservation Service, Pietermaritzburg, KwaZulu-Natal, South Africa. Abstract. To conserve biodiversity, complementary approaches are necessary. Besides using museum data from sightings and specimens, the knowledge of experts can also be employed. Often such valuable information is lost on retirement or death. To investigate the value of this knowledge for nature conservation planning, we sent questionnaires to 124 professional conservationists in the province of KwaZulu-Natal, South Africa. Fifty-two replies illustrated that the historical context biases our concepts of nature and the conservation of biodiversity. Despite an awareness of all the spatial scales, complexities and dynamics of nature, there is still a strong focus on large-sized animals and visibly discrete ecosystems, such as wetlands. Nevertheless, the respondents illustrated that an awareness of infrequently seen and less well known organisms is increasing. Harnessing this expert knowledge was valuable for conservation planning, but had the weakness that many taxa and localities were neglected. Similar problems arose with data from museum specimens. However, both these approaches were synergistic and highlighted the geographical areas that need far more exploration of their biodiversity. Such information gathering is an important ethical and practical exercise for conserving biodiversity. Key words: biodiversity, concepts, conservation, nature, planning, questionnaire survey. Samways is at the Invertebrate Conservation Research Centre, School of Botany and Zoology, University of Natal, Pietermaritzburg, South Africa. (v.13,#1)

Madigan, Nick, "Hearst Land Settlement Leaves Bitter Feelings: Deal Will Limit Public Access to Coast," New York Times, September 20, 2004, page A13. A complex conservation deal in coastal California, San Luis Obispo County, involves State of California purchase of much of the giant holdings of the Hearst Corporation, largely undeveloped and owned by descendants of the publishing magnate William Randolph Hearst. The dispute has involved finding a middle ground between the interest of the public, which is entitled by law to access to the beach, and that of the Hearst Corporation which controls vast tracts of land from which it has the right to profit. Opponents of the deal say the State is too generous to the Hearst Corporation, which has retained the most dramatic parts of the coastline and plans to develop luxury homes on 320 acre parcels and a large hotel, "the most exclusive subdivision on the West Coast." Public use of the beaches is limited to 100 persons a day during daylight hours in one of the two most scenic areas and to 20 people at a time once a month in the other. (v.14, #4)

Madigan, Nick, "Enlisting Law Schools in Campaign for Animals," New York Times, November 27, 2004, p. A1, A 23. Bob Barker, long-time host of "The Price Is Right," has given a million dollars to each of several law schools to set up law education in animal welfare legislation, including those at Stanford, Columbia, Duke, the University of California, Los Angeles, and Harvard. An additional concern is having pet animals spayed. (v.14, #4)

Madsen, Kathrine Hauge, Holm, Preben Bach, Lassen, Jesper and Sandøe, Peter, "Ranking Genetically Modified Plants According to Familiarity," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):267-278. In public debate GMPs are often referred to as being unnatural or a violation of nature. Some people have serious moral concerns about departures from what is natural. Others are concerned about potential risks to the environment arising from the combination of hereditary material moving across natural boundaries and the limits of scientific foresight of long-term consequences. To address some of these concerns we propose that an additional element in risk assessment based on the concept of familiarity should be introduced. The objective is to facilitate transparency about uncertainties inherent in the risk assessment of the GMP. Familiarity conventionally involves data and experience relating to the plant species and the ecosystem in question. We would like to extend this concept to the molecular level of plant breeding and suggest that GMP characteristics should be compared to a reference baseline determined by conventional breeding techniques. Three GMPs are ranked according to familiarity at the plant and ecosystem level and the molecular level. The approach may help to integrate discussion of the scientific arguments and moral questions raised in the debate about GMOs by providing an operational scheme within which moral concerns are brought within the framework of science-based risk assessment. KEY WORDS: bioethics, familiarity, regulation, risk assessment, unnatural. Madsen, Lassen, and Sandøe are with the Centre for Bioethics and Risk Assessment, The Royal Veterinary and Agricultural University, Frederiksberg, Denmark. Holm is with the Danish Institute of Agricultural Sciences, Research Centre, Flakkebjerg, Denmark. (JAEE)

Madsen, Peter, "What Can Universities and Professional Schools Do to Save the Environment?" In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Madson, Chris, "A Life for Conservation" (Aldo Leopold), Wyoming Wildlife 62 (no. 1, January, 1998):14-19. Also: "Touching Wyoming," (Leopold in Wyoming) pp. 20-23; Elkhorn, Philip, "The Hunter" (Leopold as a Hunter), pp. 24-27. And excerpts from Leopold, "In His Own Words." A twenty page feature on Leopold on the 50th anniversary of his death. Madson is the editor of Wyoming Wildlife and a student of Bob McCabe's at the University of Madison. See entries under McCabe. Copies for \$ 1.50 plus postage to Wyoming Wildlife, 5400 Bishop Blvd, Cheyenne, WY 82006. (Thanks to Phil Pister and Curt Meine.)

Maehr, D. S., Land, E. D., Shindle, D. B., Bass, O. L. and Hoctor, T. S., "Florida Panther Dispersal and Conservation," Biological Conservation 106(no.2, 2002): 187-97. (v.13,#2)

Maehr, David S. The Florida Panther: Life and Death of a Vanishing Carnivore. Covelo, CA: Island Press, 1997. 320 pp. \$40 cloth, \$19.95 paper. Maehr presents the first detailed portrait of the endangered panther--its biology, natural history, and current status--and a realistic assessment of its prospects for survival. (v9,#2)

Maestas, Jeremy D., Knight, Richard L., and Gilgert, Wendell C., "Biodiversity across a Rural Land-Use Gradient," Conservation Biology 17 (No. 5, October 2003):1425-1434. Biodiversity compared in ex-urbia, ranchlands, and nature reserves. Some bird species that adjust well to humans (with bird feeders or garbage piles) may be increased in numbers in ex-urbia, but most are not. Wildlife are on ranchlands and reserves, but, surprisingly, there may be fewer invasive exotics on ranchlands than on nature reserves--possibly because nature reserves have trails with lots of people on them, who bring in the seeds. In the face of expanding ex-urbia and limited nature reserves, the authors conclude that attention to biodiversity conservation on ranchlands is quite vital. Maestas is with the U.S. Natural Resources Conservation Service, Provo, Utah. (v.14, #4)

Magdoff, F., F.H. Buttel and J.B. Foster. Hungry Profit: Agriculture, Food and Ecology. Review by D. Spaner, Journal of Agricultural and Environmental Ethics 11(1999):252-254. (JAEE)

Magel, C. R., Keyguide to information sources in animal rights. Jefferson, NC: McFarland, 1989.

Magel, Charles R., A Bibliography on Animal Rights and Related Matters. Washington, DC: University Press of America, 1981. 602 pages.

Magel, Charles R. A Bibliography of Animal Rights and Related Matters. Reviewed in Environmental Ethics 4(1982):89-91.

Magel, Charles R. Review of The Moral Status of Animals. By Stephen R. L. Clark. Environmental Ethics 2(1980):179-85.

Magel, Charles R., Keyguide to Information Sources in Animal Rights. London: Mansel Pub., 1989. Jefferson, NC: McFarland, 1989. 267 pages.

Maggitti, Phil. "The Stray Cat: Whose Life Is It, Anyway?" The Animals' Agenda 14 (no. 6, 1994): 22-. They're everywhere! They're everywhere! It's raining cats and cats. And no one seems to know for sure what to do about the situation--except to attack everyone else's solutions. A report on the state of the (dis)union among feral cat advocates. (v6,#1)

Maggitti, Phil. "Is Fur Really Dead?" The Animals' Agenda 15(no.6 Nov.1995):24. Furriers by the dozens lose their shirts. Models take off their shirts and more to demonstrate that the only skin you should wear is your own. Is this the beginning of the end for fur, or the middle of a long, cold war? Maggitti has some interesting answers. (v7,#1)

Magill, Arthur W. "Multicultural Wildland Users: A Growing Communication Challenge." The Environmental Professional 17 (no. 1, 1995): 51-. (v6,#1)

Magnuson, Jon, "Reflections of an Oregon Bow Hunter," Christian Century, March 13, 1991. The Lutheran campus pastor at the University of Washington in Seattle goes bow hunting for elk with one of the Pacific Northwest's most respected trophy bow hunters, also a churchman. Magnuson fears that "as populations become increasingly urbanized and technologically sterile, natural cycles of decay, death and

rebirth become dangerously romanticized and more remote from realities of daily life." He worries that antihunting protests have "triggered more guilt than I'd like to admit." His guide urges "the need to recognize the natural world for its own values and laws. He is a committed bow hunter because it draws him into a relationship and harmony with the natural world. You have to learn to respect the animal you hunt." After three days of immersion in the Oregon wilds, Magnuson gets a short. "I am poised with the decision whether or not to loose the arrow. A prayer now on my lips. My fingers release" "to identify myself with an ancient primordial ritual, the spilling of blood." (v2,#1)

Magnuson, Jon, "Great Lakes, Troubled Waters," Christian Century 116(no. 25, Sept. 22-29, 1999):902-905. The Great Lakes basin, populated by over 40 million people, is at the center of a collision of economic interests and environmental politics. Authorities are reluctantly acknowledging that the lakes have been polluted by economic interests, to the point of jeopardizing human health. "It's not the water of the Great Lakes we finally have to worry about. It is ourselves." Magnuson, a Lutheran pastor, is a member of the Lake Superior Binational Forum, of the International Joint Commission of Canada and the United States. (v.10,#3)

Magnusson, Magnus, and White, Graham, eds., The Nature of Scotland: Landscape, Wildlife, and People, revised ed., 1997, first edition 1991. Edinburgh: Canongate Press, 1997. Chapter 16 is "The Protection of the Land," a review of nature conservation in Scotland. (v.8,#4)

Magoc, Chris J., Yellowstone: The Creation and Selling of an American Landscape, 1870-1903. Albuquerque: University of New Mexico Press, 1999. Paper, \$ 20. The American myths and late-Victorian values behind the movement both to preserve the Yellowstone wilderness and to extract its natural resources, codifying the ultimate American landscape. (v10,#4)

Magretta, Joan, "Growth Through Global Sustainability: An Interview tih Monsanto's CEO, Robert B. Shapiro," Harvard Business Review 75(no. 1, Jan./Feb. 1997):79-88. Shapiro claims: The need for environmentally sustainable products will soon create a major strategic discontinuity for the world's enterprises. Recognition of this discontinuity is transforming Monsanto's thinking about growth. Although a closed suestem like the earth cannot support an unlimited increase of material things, it can withstand exponential growth of information. Hence two design principles have been incorporated into new product development at Monsanto: substituting information for "stuff" and replacing products with services. (v8,#1)

Maguire, Daniel C. and Rasmussen, Larry L., Ethics for a Small Planet. Albany, NY: SUNY Press, 1998. The crisis caused by the combined impact of overpopulation, overconsumption, and economic and political injustice. The authors wish to bring religious scholarship into dialogue with the world's policymakers. The world's religions will be important players in the crises relating to population and the threat of ecocide. Maguire indicts our male-dominated religions for the problems they have caused for our ecology and reproductive ethics. Rasmussen claims that Europeans packaged a form of earth-unfriendly capitalism and shipped it all over the world with missionary zeal. Maguire teaches social ethics at Marquette University. Rasmussen teaches social ethics at Union Theological Seminary, New York. (v9,#1)

Maguire, Doug, "Uneven-Aged Management: Panacea, Viable Alternative, or Component of a Grander Strategy?," Journal of Forestry 103(no.2, March 2005):73-74(2).

Maguire, Lynne A. "Making the Role of Values in Conservation Explicit: Values and Conservation Biology." Conservation Biology 10, no.3 (1996): 914. (v7, #3)

Magurran, Anne E., Measuring Biological Diversity. Malden, ME: Blackwell Publishers, 2004. Magurran

is in ecology and evolution, University of St. Andrews, Scotland. (v.14, #4)

Mahanty, S. and Russell, D., "High Stakes: Lessons from Stakeholder Groups in the Biodiversity Conservation Network," Society and Natural Resources 15(no.2, 2002): 179-88. (v.13,#2)

Maher, Neil M. *Nature's New Deal: The Civilian Conservation Corps and the Roots of the American Environmental Movement*. Oxford: Oxford University Press, 2007. Maher reconstructs the history of the CCC and argues that it was a turning point in national United States politics and the emergence of modern US environmentalism, the latter of which emerged in part as a critique of the public landscapes of campgrounds, hiking trails, motor roads, and picnic areas created by the CCC.

Maher, NM, "Review of: Daniel D. Richter, Jr. and Daniel Markewitz, Understanding Soil Change: Soil Sustainability over Millennia, Centuries, and Decades", Environmental History 8(no.1, 2003):145-146.

Mahiman, J. D., "Uncertainties in Projections of Human-Caused Climate Warming," Science 278 (21 November, 1997):1416-1417. Good summary, with as many certainties as uncertainties. Mahiman distinguishes virtually certain facts ("atmospheric abundances of greenhouse gases are increasing because of human activities"), virtually certain projections, 99 percent ("The stratosphere will continue to cool significantly as CO₂ increases"), very probable projections, 90 percent ("A doubling of atmospheric CO₂ over preindustrial levels is projected to lead to an equilibrium global warming in the range of 1.5° to 4.5°C"). Also incorrect projections ("the number of tropical storms, hurricanes, and typhoons per year will increase"). The author is at the National Oceanic and Atmospheric Administration Lab at Princeton University. (v.8,#4)

Mahler, Richard. "Political Strife Threatens Mexico's Pristine Jungles." The Christian Science Monitor, 17 May 1994, pp. 10-11. The Chiapas conflict has left the area vulnerable to development. (v5,#2)

Mahoney, Denis, "Towards a Better Press for Animals," Animal Issues (University of Sydney, Australia) 2, no. 1, 1998. (v.10,#1)

Mahoney, Timothy, "Platonic Ecology: A Response to Plumwood's Critique of Plato," Ethics and the Environment 2(1997):25-41. This is a response to Val Plumwood's critique of Plato and an overview of the way in which Plato provides a viable environmental vision. This vision sees the realm of nature as rooted in the realm of logos, and human beings as sojourners who are nonetheless integral parts of nature whose vocation is to act as mediators between the realms thereby bringing nature into even greater participation in logos. To fulfill the human vocation one must come to an awareness of the logos by purging oneself of the sham values which permeate society and distort one's understanding of reality. Mahoney is in philosophy at the University of Texas at Arlington. (E&E)

Mahr, Marcy. "A Natural Diversity "Hot Spot" in Yellowstone Country", Wild Earth 6(no.3 ,1996):33. (v7,#4)

Mahy, Brian W. J. and seven others, largely virologists and microbiologists, "The Remaining Stocks of Smallpox Virus Should Be Destroyed," Science 262(1993):1223-1224.

Mainka, Sue and Trivedi, Mander, eds., Links between Biodiversity Conservation, Livelihoods and Food Security: The Sustainable Use of Wild Species for Meat. Covelo, CA: Island Press, 2002. The global use of wild animals for meat is now the primary illegal activity in many protected areas, and growing human populations and a lack of livelihood options suggest that demand for wild meat is likely to continue to rise. Are there ways of sustaining the use of wild meat?

Mainstreaming the Environment: The World Bank Group and the Environment Since the Rio Earth Summit. Fiscal 1995. Summary. Washington, DC: The World Bank, 1995. 59 pages. How the World Bank has sought to be an active partner in implementing the Rio imperatives. The Bank has a growing loan portfolio of environmental projects, now \$ 10 billion for 137 projects in 62 countries. Obtainable from: The World Bank, 1818 H Street, N. W., Washington, DC 20433. E-mail: boons@worldbank.org

Major, DE, "Review of: Agency, Democracy, and Nature: The U.S. Environmental Movement From a Critical Theory Perspective by Robert J. Brulle," Journal of Environment and Development 11(no.4, 2002): 448-449.

Makim, A, "Resources for Security and Stability? The Politics of Regional Cooperation on the Mekong, 1957-2001," Journal of Environment and Development 11(no.1, 2002):5-52. (v.13, #3)

Malakoff, David, "Extinction on the High Seas." Science 277(1997):486-488. See under theme issue, Science, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Malakoff, David, and Stone, Richard, "Scientists Recommend Ban on North Sea Cod," Science 298(1 November 2002):939. Cod stocks in the northeast Atlantic are at historic lows, and a panel of scientists says that populations will collapse if there are not drastic reductions in fishing. But this could cost 20,000 jobs in the United Kingdom alone. It looks like it is doomsday either for the cod or for the cod fishermen. (v.13,#4)

Malakoff, David, "Congress Clears Way for Rodent Rules," Science 294(23 November 2001):1637. Animal welfare of rodents. For thirty years, the United States Department of Agriculture (USDA) has exempted mice, rats, and birds from the Animal Welfare Act. But these account for 95% of all experimental animals. The U.S. Congress has approved the start of developing rules for the use of rodents, previously blocked by biomedical research groups. The USDA has been persistently sued by animal rights groups and had agreed to draft caging and care rules. But biomedical groups had blocked this until now. Depending on how fast the USDA moves, the matter could soon be back in court. (v.13,#1)

Malakoff, David, "Plan to Import Exotic Beetle Drives Some Scientists Wild," Science 284(1999):1255. Endangered flycatcher, exotic beetle, and invasive tamarisk. Tamarisk, or saltcedar, was introduced years ago as a windbreak and to control erosion in the U.S. West and has proved an disastrous invasive, displacing riverine native plants in fifteen states. Tamarisk flourishes in the highly modified rivers that agriculture, damming, irrigation, and overgrazing in the West has created. Plans to import an exotic beetle that feeds on the tamarisk, however, have been limited because, meanwhile, the endangered willow flycatcher, deprived of its original nesting habitat, has learned to nest in the tamarisk. But the U.S. Fish and Wildlife Service, charged with both uprooting the tamarisk and preserving the flycatcher, is making limited trials of beetle introductions. (v.10,#2)

Malakoff, David, "Plan to Import Exotic Beetle Drives Some Scientists Wild," Science 284(12 May 1999):1255. Endangered species living in exotic pest. Saltcedar (Tamarix) was introduced extensively in the last century as a windbreak and to control erosion in the U. S. Western states, and has proved an ecological disaster, covering 500,000 hectares in 15 states, and crowding out native vegetation in riparian areas. A plan to use an introduced Chinese leaf beetle to control it seems promising; but, alas, the endangered willow flycatcher has learned to nest in the saltcedar. The plan has been put on hold, and subject to more extensive (and more carefully controlled) testing. (v10,#4)

Malakoff, David, "Researchers Fight Plan to Regulate Mice, Birds," Science 290(6 October 2000):23-24, also "Research Group Wins Delay in Rules," Science 290(13 October 2000):243-245. Also: McArdle,

John, "Animal Welfare Act's Changes Deserve Praise, Not Panic," Science 290(17 November 2000):1299-1300. Are mice animals? No. Yes. No, at least not in 2001. The U.S. Department of Agriculture agreed to a lawsuit settlement challenging the 30-year old ruling that mice, rats, and birds are not laboratory "animals," under the Animal Welfare Act. This exempted 95% of all experimental animals from the federal government's legal definition of "animal." Animal welfare advocates have long challenged the ruling. In 1992 a federal judge ruled that the USDA's justification for the exemption--that Congress never intended the law to apply to the three kinds of animals-- was "strained and unlikely." In September 2000, the USDA agreed to include these animals and "initiate and complete a rulemaking on the regulation of birds, rats, and mice within a reasonable time."

Biomedical research groups protested vigorously, though their protests were disregarded by the USDA and the courts. But through the request of the University of Mississippi Medical Center in Jackson to Congressman Thad Cochran (R-MS), on a rider attached to the agriculture appropriations bill, Congress voted that mice, rats, and birds will not be animals in fiscal year 2001. A recent editorial in Nature complained, "Some of the research lobby's arguments verge on the reactionary." Although currently voluntary, many research laboratory animals have included these animals in animal welfare concerns for decades. Others claim it will drive up costs unacceptably. (v.11,#4)

Malakoff, David, "Arizona Ecologist Puts Stamp on Forest Restoration Debate," Science 297(27 September 2002):2194-2196. Wally Covington, forest ecologist at Northern Arizona State University, wants to return ponderosa pine forests to their "presettlement" state, but argues that managed burning is not enough; present forests, laden with fuel from too much suppression, need to be heavily cut, as well as burned. Loggers and President Bush find this a desirable forest policy, since they can both cut and prevent fires. They keep Covington well funded. But other environmentalists are not so sure, even about the ponderosa pines in Arizona, and are quite sure that one ought not to extrapolate a "one size fits all" to policy for other kinds of forests. Summer fires in 2002 in the West have heated up this debate. (v.13,#4)

Male, T., "Potential Impact of West Nile Virus On American Avifaunas," Conservation Biology 17(no. 3, 2003): 928-930. (v 14, #3)

Malecki, Becky, Spiritual Benefits of Wilderness, a M. S. thesis completed in the Department of Human Development, Colorado State University, spring 1993, with a principal advisor Beverly Driver, United States Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins. (v4,#2)

Maler, Karl-Goran, "Economic Growth and the Environment," Encyclopedia of Biodiversity 2: 277-284. Will economic growth deteriorate or improve the environment? The general finding for many pollutants is that a country with a very low income does not have much pollution but when the scale of the economy grows, for example, as measured by GDP per capita, emissions of these pollutants will increase. However, when the income per capita is high enough, the economy will reach a turning point and pollution will decrease with further increases in per capita income. However, empirical and conceptual challenges remain. (v.11,#4)

Malhi, Yadvinder, J. Timmons Roberts, Richard A. Betts, Timothy J. Killeen, Wenhong Li, and Carlos A. Nobre. "Climate Change, Deforestation, and the Fate of the Amazon." Science Vol. 319, no. 5860 (11 January 2008): 169-72. The forest biome of Amazonia is one of Earth's greatest biological treasures and a major component of the Earth system. This century it faces the dual threats of deforestation and stress from climate change. The authors summarize some of the latest findings and thinking about these threats, explore the consequences for the forest ecosystem and its human residents, and outline options for the future of Amazonia.

Malhi, Yadvinder, J. Timmons Roberts, Richard A. Betts, Timothy J. Killeen, Wenhong Li, and Carlos A. Nobre. "Climate Change, Deforestation, and the Fate of the Amazon." Science Vol. 319, no. 5860 (11

January 2008): 169-72. The forest biome of Amazonia is one of Earth's greatest biological treasures and a major component of the Earth system. This century it faces the dual threats of deforestation and stress from climate change. The authors summarize some of the latest findings and thinking about these threats, explore the consequences for the forest ecosystem and its human residents, and outline options for the future of Amazonia.

Mallin, MA; Posey, MH; McIver, MR; Parsons, DC; Ensign, SH; Alphin, TD, "Impacts and Recovery from Multiple Hurricanes in a Piedmont-Coastal Plain River System," Bioscience 52(no.11, 2002): 999-1010.

Mallory, Chaone. "Ecofeminism and Forest Defense in Cascadia: Gender, Theory, and Radical Activism." *Capitalism, Nature, Socialism* Vol. 17, no. 1 (2006): 32-49. The article focuses on the nature of ecofeminism and its actions for the protection of forests in Western U.S. and Canada. The continued increase of forest protection movements are organized mainly by women. It must also be emphasized that local environmental struggles always take place in a global context, which always include the historical movements and intrigues of capitalism, the physical and cultural variability of the ecological region. A feminist perspective is relevant to understanding the global environmental crisis. Ecofeminism contains a constructive, prefigurative vision that attempts to transform existing power relations both intra and trans-human in ecologically sound and socially just actions. In 2006 Mallory accepted a position as Assistant Professor of Environmental Philosophy at Villanova University. She completed her doctoral degree in Environmental Science, Studies, and Policy from the University of Oregon after successfully defending her dissertation on the topic of developing ecofeminist models and methods of political and legal representation for and with the more-than-human world.

Malmsheimer R.; Floyd D., "U.S. Courts of Appeals Judges Review of Federal Natural Resource Agencies Decisions," Society and Natural Resources 17(no.6, July 2004):533-546(14). (v. 15, # 3)

Malmsheimer, RW; Keele, D; Floyd, DW, "National Forest Litigation in the US Courts of Appeals", Journal of Forestry 102 (no.2, 2004): 20-25(6).

Malnes, Raino, Valuing the Environment. Manchester, UK: Manchester University Press, 1995. Climate policy. The priority principle. Risk and hard cases. Realism and responsibility. Future people. Against ecological egalitarianism. Against the green theory of value. Malnes is in political science, University of Oslo. (v9,#1)

Malnes, Raino, Valuing the Environment. Reviewed by Clive L. Spash. Environmental Values 5(1996):270-273. (EV)

Malo, Juan E., Suarez, Francisco. "New Insights Into Pasture Diversity: the Consequences of Seed Dispersal in Herbivore Dung," Biodiversity Letters 3(1996):54.

Malone, Charles R., "Ecology, Ethics, and Professional Environmental Practice: The Yucca Mountain, Nevada, as a Case Study," The Environmental Professional 17 (no. 3, 1995): 271- . (v6,#4)

Malone, Linda A., "'Green Helmets': A Conceptual Framework for Security Council Authority in Environmental Emergencies," Michigan Journal of International Law 17(1996):515-536.

Maloof, Joan, Teaching the Trees: Lessons from the Forest. Athens: University of Georgia Press, 2005. We can never learn enough from the trees. Trees have a spiritual dimension that cannot be quantified. Parables to live by offered by a story-teller biologist. Maloof teaches biology and environmental studies at Salisbury University, Salisbury, Maryland.

Maltby, Paul, "Fundamentalist Dominion, Postmodern Ecology," *Ethics and the Environment* 13(no. 2, 2008):119-141. Christian fundamentalist dominionism is susceptible to a conventional ecological critique; that is to say, one framed in scientific-environmentalist terms of its unsustainability as a practice, given nature's finite resources and the fragility of ecosystems. Alternatively, a postmodern ecological critique has the conceptual tools to contest dominionism at the level of its *discursive* transactions, that is to say, the narrative frames and interpretive methods through which fundamentalists have constructed their understanding of the natural world. I shall suggest how postmodernism enables critical standpoints which, collectively, open a second front in an engagement with the dominionist model of humanity's relationship to nature. Paul Maltby is Professor of English at West Chester University.

Maly, Kenneth. Review of Sacred Land, Sacred Sex: Rapture of the Deep. By Dolores LaChappelle. Environmental Ethics 15(1993):275-78.

Man and Nature Center, Odense University, Denmark. This Center operated under a five year funding grant and produced many relevant publications in environmental philosophy, policy, and ethics. Its operations ended last summer (June 1997), although some of its publications, such as a Danish anthology in environmental ethics and a book by Finn Arler on Cross-Cultural Protection of the Environment, are still in press.

A list of publications is available at:

<http://hum.ou.dk/Center/Hollufgaard/>

The list and many of the publications are in both English and Danish. Hollufgaard is the name of a research and conference center adjacent to the University, where the project was located. One philosopher associated with the project was Finn Arler, who has now returned to the philosophy department at Aarhus University. His address: Institut for Filosofi, Aarhus Universitet, Ndr. Ringgade, bygn 328, DK-8000 Aarhus C, Denmark. Tel. +45 86 19 14 92. E-mail: filfa@hum.aau.dk (v.8,#4)

Man, Christopher D. "The Constitutional Rights of Nonsettling Potentially Responsible Parties in the Allocation of CERCLA Liability," Environmental Law 27 (no.2, 1997):375. Man, an associate with the Washington, D.C. office of Hunton & Williams, examines the Comprehensive Environmental Response, Compensation, and Liability Act's liability provisions and settlement process, and argues that denying nonsettling parties their right to seek further contribution from other Potentially Responsible Parties violates the Due Process Clause of the Fifth Amendment. In addition to suggesting alternatives to the current liability and settlement schemes, he suggests that nonsettling party interests should be reexamined, and posits that nonsettling parties deserve additional safeguards to protect their constitutionally guaranteed due process rights. (v8,#3)

Manahan, Stanley E. Environmental Science and Technology. Boca Raton, FL: St. Lucie Press, 1997. 672pp. \$49.95. The traditional environmental spheres of water, air, earth, and life, and the "anthrosphere" and the impact of human activities, especially technology, on the Earth. (v8,#3)

Manaster, Kenneth A., ed., Environmental Protection and Justice: Readings and Commentary in Environmental Law and Practice. Cincinnati, OH: Anderson Publishing Co., 1998. 239 pages. ISBN 0870842536. (v.9,#3)

Manca Graziadei, Antonio J.; Marini, Pasquale; and Amisano, Benedetta. "Environmental Law in Italy," Journal of Environmental Law & Practice 3(no.3, Nov. 1995):40- . Italy's environmental regulatory system covers all areas of pollution, but enforcement is inconsistent. (v6,#4)

Mand, R et al., "Providing nest boxes for hole-nesting birds - Does habitat matter?" Biodiversity and Conservation 14 (no. 8, July 2005): 1823-1840.

Mander, Jerry, Goldsmith, Edward, eds. The Case Against the Global Economy. San Francisco: Sierra Club Press, 1996. 386pp. \$28 cloth. Essays by more than forty economic, agricultural, and environment experts who argue for local production and social equity. (v7,#4)

Mander, Jerry. "How Cyber Culture Deletes Nature." The Ecologist 29(no. 3, May 1999):171-

Mander, Jerry. Review of In the Absence of the Sacred. Environmental Ethics 14(1992):373-76.

Mander, Jerry. "Technologies of Globalization," Wild Earth 7(no.1, 1997):21. (v8,#2)

Mandiberg, Susan F., "The Dilemma of Mental State in Federal Regulatory Crimes: The Environmental Example", Environmental Law, 25(No.4, 1995):1165- . Mandiberg draws upon Supreme Court case law and traditional common-law principles to suggest a framework for interpreting the mental state provisions of environmental and other regulatory crimes. Unlike other commentators, she suggests that mental-state analysis be grounded in notions of moral wrongdoing, understood from a modern perspective. Professor Mandiberg then applies this framework to the Resource Conservation and Recovery Act, the Clean Water Act, and the Migratory Bird Treaty Act to resolve some outstanding issues and illuminate others that have not yet been widely addressed by the courts. (v7,#1)

Manes, Christopher, Green Rage: Environmentalism and the Unmaking of Civilization. New York: Little, Brown. 291 pages. \$ 18.95. Manes, once a Fulbright scholar and early associate editor of Earth First!, wrote Green Rage during his first year of law school at the University of California at Berkeley. He chronicles the historical events, political context, and social impetus that created the radical environmentalist groups, such as Greenpeace and Earth First! Radical environmentalism may be the last chance for turning away from destroying the planet to cohabiting the planet with other life forms. Green Rage is already a best-seller on the West Coast. (v1,#4)

Manes, Christopher, "Philosophy and the Environmental Task," Environmental Ethics 10(1988):75-82. Manes argues that environmental ethics is a "negative ethics" that offers the task of resistance to the totalizing metaphysics of technology. As a philosophy, environmental ethics must be concerned with action, not philosophical dialectics, logic, or theology. Solid argument by a non-academic philosopher. (Katz, Bibl # 2)

Manes, Christopher. "Philosophy and the Environmental Task." Environmental Ethics 10(1988):75-82. Although the particular ethical consequences of biocentrism can be defended at a logical level, the centrality of problems with valuational frameworks in biocentric ethics leads to ontological ambiguities which contribute to the broader problematic of modern metaphysics. I suggest, however, that this may actually help to thematize the relationship between the metaphysical foundations of environmentalism and its social task. Mysticism and phenomenology, including the concept of the "ecological self," attempt to settle these ambiguities in a dialectical opposition to the technological world view behind the environmental crisis. Whatever ontological stability they achieve, however is at the expense of being assimilated by the same kind of metaphysical totalization characterizing technological thinking. Unlike anthropocentrism and the stewardship model of environmentalism, nevertheless, these difficulties for biocentrism lead to positive results: the ambiguities in the search for philosophic stability and foundational certainty can act as a cue to the nonmetaphysical task of analyzing and resisting technological power. The result may be a "negative ethics," but one that holds out the possibility of confronting the real power relations of technological culture (and the use of ethics within them), rather than pursuing the endless project of discovering the hidden source of value and meaning. Manes is a graduate student in Old English Literature and Medieval Studies at the University of Oregon. (EE)

Manes, Christopher. "Contact and the Solid Earth," Wild Earth 7(no.1, 1997):19. (v8,#2)

Manes, Christopher. "Nature and Silence." Environmental Ethics 14(1992):339-50. A viable environmental ethics must confront "the silence of nature"--the fact that in our culture only humans have status as speaking subjects. Deep ecology has attempted to do so by challenging the idiom of humanism that has silenced the natural world. This approach has been criticized by those who wish to rescue the discourse of reason in environmental ethics. I give a genealogy of nature's silence to show how various motifs of medieval and Renaissance origins have worked together historically to create the fiction of "Man," a character portrayed as sole subject, speaker, and telos of the world. I conclude that the discourse of reason, as a guide to social practice, is implicated in this fiction and, therefore, cannot break the silence of nature. Instead, environmental ethics must learn a language that leaps away from the motifs of humanism, perhaps by drawing on the discourse of ontological humility found in primal cultures, postmodern philosophy, and medieval contemplative tradition. Manes is a graduate student in Old English Literature and Medieval Studies at the University of Oregon. (EE)

Mangel, M. et al., "An Interdisciplinary Examination of Carnivore Reintroductions." In J. L. Gittleman, Carnivore Behavior, Ecology, and Evolution, pp. 296-336. Ithaca, NY: Cornell University Press, 1996. (v8,#1)

Mangels, Ann Reed, "Vegan Diets for Women, Infants, and Children", Journal of Agricultural and Environmental Ethics 7(1994):111-122. Infants, children, adolescents, and pregnant and lactating women have been described as groups with special needs and at higher risk for nutritional deficiencies than adult males. Vegan diets can be safely used by these groups if foods and in some cases supplements are selected with provide a healthful and nutritionally adequate diet. There is a c=scarcity of studies of "newer" vegetarians who are often more mainstream than the vegetarians of the 1960's and 1970's. In some instances this has led to assumptions about today's vegans which are based on out-dated information. Thorough scientific new studies are needed. Mangels and Havalala are nutrition advisors at the Vegetarian Resource Group, Baltimore, MD.

Mangold, Robert D. "Sustainable Development: The Forest Service's Approach." Journal of Forestry 93(no. 11, Nov. 1995):25- . (v6,#4)

Maniates, Michael F. and Whissel, John C., "Environmental Studies: The Sky Is Not Falling," Bioscience 50 (No. 6, 2000 Jun 01): 509- . (v.11,#4)

Manier, D et al., "Research article Canopy dynamics and human caused disturbance on a semi-arid landscape in the Rocky Mountains, USA," Landscape Ecology 20 (no. 1, January 2005): 1-17.

Mank, BC, "The Murky Future of the Clean Water Act after SWANCC: Using a Hydrological Connection Approach to Saving the Clean Water Act", Ecology Law Quarterly 30 (no.4, 2003): 811-892.

Manley, D, "Review of: Unwin, D. and O'Sullivan, D. Geographic information analysis," Progress in Human Geography 27(no.5, 2003):674. (v.14, #4)

Mann, Bonnie, "World Alienation in Feminist Thought: The Sublime Epistemology of Emphatic Anti-Essentialism," Ethics and the Environment 10(no. 2, 2005):45-74. The alliance between feminism and postmodernism in the American academy has brought about a revolution in feminist epistemology. Many feminists have taken on the epistemology of the simulacrum. Here "the real" plays a part only as that which dissolves into the appearances themselves. Behind the appearances, if there were such a place, would be only an abyss of absence. With this revolution in feminist epistemology comes a wholesale displacement of the feminist project. The ultimate price we pay for the feminist alliance with

postmodernism may well be a material displacement, in which we are dispossessed of our ability to inquire into and articulate our relationship to the earth itself. We find this planet we inhabit, this physical place that sustains us moment by moment, to be effectively shut out of what now passes as "good" feminist thought. Mann is in philosophy, University of Oregon, Eugene, (Eth&Env)

Mann, Charles C., and Plummer, Mark L., "Army Corps Siezed by Dam Indecison," Science 287 (7 January 2000):27. The U.S. Army Corps of Engineers pleads for more time to decide whether to remove four dams on the Snake River to save endangered salmon in the Pacific Northwest. The Corps finds that there would be great benefits to wildlife, but heavy economic and social impacts. Critics say that ample data is already in and that the Corps is stalling. (v10,#4)

Mann, Charles, "How Many is Too Many?" Atlantic Monthly, February 1993. The answers to this question since the 1700's have varied between those who believe that continued population growth will eventually lead to an environmental catastrophe (such as economist Robert Malthus in 1798 and the biologist Paul Ehrlich in his 1968 book The Population Bomb) and those who argue that increasing technological efficiency and changing social/economic patterns will solve the problem (such as the Marquis de Condorcet in 1794 or A. B. and L. H. Louvins in their 1991 essay "Least Cost Climatic Stabilization"). At the Rio Earth Summit the developing countries of the South responded to the developed countries of the North saying that the problem is not one of overpopulation in the South but of excessive consumption in the North. This ignores the increasing numbers of well-off people in developing countries who consume at the same unsustainable level as those in developed countries. India, for example, has between 150-300 million rather wealthy consumers. (v8,#3)

Mann, Charles C., and Mark L. Plummer. Noah's Choice: The Future of Endangered Species. New York: Knopf, 1995. 302 pp. \$24. ". . . an excellent review of the goals and workings of the law, . . . presents what likely will continue to be an unavoidable clash among society's fundamental values"--Brad Knickerbocker, The Christian Science Monitor, 14 March 1995, p. 11. (v6,#1)

Mann, Charles C., *1491: New Revelations of the Americas*. New York: Knopf, 2005. Mann traces new revelations about the native Americans before Columbus, in North, Central, and South America, with the general aim of shooting down previous misconceptions about Indian ignorance and simplicity, also myths about the white man's superiority. Dean R. Snow, anthropology, Pennsylvania State University, gives the book a quite mixed review in "Picturing the Pre-Columbian Americas," Science 312 (2 June 2006): 1313, finding the book a good read but erratic and sometimes mistaken.

Mann, Charles C. and Mark Plummer. "Is Endangered Species Act in Danger?" Science 267 (March 3, 1995): 1256-1258. The Act needs to be reauthorized, and refunded, this year. Far more plants and animals are being added to the list than are leaving it. Critics say that act is as fault; supporters say the budget for enforcement is far too small. Critics say few species are being recovered; supporters say that you should not expect high recovery rates in an intensive care emergency room. A frequent theme is rather pragmatic: since the Act isn't working, and can't be made to work because it is too expensive and landowners won't cooperate, maybe we should do something else. Mann and Plummer are co-authors of Noah's Choice: The Future of Endangered Species. Couple any reading of this with the review by Gary Paul Nabhan in Orion, Spring 1995, pp. 60-61: "Noah's Choice is a highly engaging and challenging but ultimately disappointing polemic on why endangered species conservation efforts are based on unsubstantiated scientific claims that do not sufficiently yield to human concerns. Although the authors are respected journalists ..., they suffer from a chronic inability to deal with a trait inherent to modern science: uncertainty." (v6,#1)

Mann, Charles C., "Extinction: Are Ecologists Crying Wolf?" Science, August 16, 1991, Critics say the mega-extinction predictions are exaggerated. Part of the trouble is whether the theory of island

biogeography is applicable to tropical forests; part of the trouble is general ignorance about what is there, especially with insects and fungi, part of the trouble is how species are related to ecosystems, and how much human interference upsets systems outside the temperate zone. (v2,#3)

Mann, Charles C., "The Real Dirt on Rainforest Fertility," Science 297(9 August 2002):920-923. Most Amazonian rainforest has poor soil; the nutrients are in the forests above the surface. But there is a soil named terra preta, prized for its great productivity. Archaeologists now believe these soils, often in 1-5 hectare plots, were created by ancient Amazonians through some agricultural practices at which we can mostly only speculate. Some argue for a modified slash and burn called "slash and char," but others claim the ancients had no way to cut down large numbers of trees. There are research efforts to create similar soils, in the hope of greater Amazonian fertility. Still others lament that the rainforest will be destroyed anyway, whether for poorer or richer soils. (v.13, #3)

Mann, Charles C. and Mark L. Plummer, "The Butterfly Problem," Atlantic Monthly, January 1992. Grounded in "the Noah principle"--the view shared by many conservationists that all species have a right to exist--the Endangered Species Act insists that we attempt to save every threatened species. This inflexibility has now become economically untenable. Because the government does not have the means to preserve endangered species, let alone a coherent plan, its decisions are haphazard. Private landowners often find themselves paying for the preservation of species they never heard of. (v3,#1)

Mann, Charles C. and Plummer, Mark L., "Forest Biotech Edges Out of the Lab," Science 295(1 March 2002):1626-1629. Transgenic forestry? Frankentrees? New, high-intensity tree plantations are setting the stage for rapid biotechnological change in forestry. But the novel methods may never be used if the ecological risks and economic obstacles cannot be overcome. In a test plantation in drylands Oregon, 7200 hectares of cloned hybrid poplars, planted in square blocks 400 meters to a side, receive water, fertilizer, and pest treatments under a computer-controlled system, and are growing at ten times the usual rate for poplars. But ecologists and others worry what if the genes from these huge mechanized plantations spread into the wild?(v.13, #3)

Mann, Charles C., "Unnatural Abundance," New York Times, November 25, 2004, an op-ed piece. Mann de-bunks the first Thanksgiving and its myth of abundance on the American landscape. Most of the productivity and many invasives were introduced either by the Europeans or were present by virtue of Indian management of the landscape, which kept the Eastern forests game-friendly, although the Indians had just been decimated before the Pilgrims arrived by a viral disease caught from shipwrecked French sailors. Mann even thinks the buffalo herds were managed by the Indians (without horses), and that the huge herds the Europeans encountered were a result of the lack of Indian control, since the virus had decimated them. The Indians likewise managed the huge flocks of passenger pigeons. (v.14, #4)

Mann, Charles C., and Mark L. Plummer, Noah's Choice: The Future of Endangered Species. New York: Alfred A. Knopf, 1995. 302 pages. \$24. (v6,#2)

Mann, Charles C. "America, Found and Lost." National Geographic Vol. 211, no. 5 (May 2007): 32-67. "Jamestown: the real story: how settlers destroyed a native empire and changed the landscape from the ground up. How the English unsettled the landscape. Far from a pristine wilderness, the land inhabited by the Powhatan Indians was carefully managed. They burned undergrowth to keep the forest open, relocated their villages when crop depleted soils, and ranged widely to fish, hunt, and gather all they needed, moving with the seasons" (p. 46).

Mann, S. and Kogl, H., "On the Acceptance of Animal Production in Rural Communities," Land Use Policy 20(no. 243-252, 2003):

Mann, Stefan, "Different Perspectives on Cross-Compliance," Environmental Values 14(2005): 471-482. Cross-compliance has proven its effectiveness, as can be shown by looking at the Swiss experience with cross-compliance since 1999. Besides describing the existing cross-compliance practices in Switzerland, the paper shows different perspectives on the efficiency and fairness of cross-compliance. It concludes that transaction cost advantages justify cross-compliance only in few cases. Usually, it will be more efficient to decouple social and environmental policy. The strong support for cross-compliance by the Swiss population is explained by a perceived unfairness in the distribution of property rights between farmers and society. If property rights would be redistributed, there probably would be no more need for cross-compliance. Mann is at the Federal Research Station for Agricultural Economics and Engineering, Ettenhausen, Switzerland. (EV)

Mann, Stefan, "Ethological farm programs and the market for animal welfare," Journal of Agricultural and Environmental Ethics 18(2005):369-382. Ethological farm programs in Switzerland are compared with environmental farm programs. Animal welfare is not a public good, and so the demand for animal welfare has a different standing in economic theory than the demand for a clean environment. The supply of animal welfare by farmers, however, largely follows the patterns known from the delivery of environmental goods. The design of ethological farm programs should be based on broad public discussions as described by deliberation theorists rather than willingness-to-pay studies. (JAEE)

Manning, A., and Serpell, J., eds., Animals and human society: Changing perspectives. New York: Routledge, 1994.

Manning, H, "The Environment, the Australian Greens and the 2001 National Election," Environmental Politics 12(no.3, 2003):123-132. (v.14, #4)

Manning, Richard, *Against the Grain: How Agriculture Has Hijacked Civilization*. New York: North Point Press, 2004. Agriculture's social, economic, and political effects on humans and their environment, from the domestication of animals and plants ten thousand years ago to today's large scale farming by corporate megafarms. Agriculture, now agribusiness, has evolved into a profit-driven industry where selected crops are designed more for creating wealth through trade than for feeding people.

Manning, Rita C. "Air Pollution: Group and Individual Obligations." Environmental Ethics 6(1984):211-25. The individual motorist often defends his unwillingness to change his driving habits in the face of air pollution by pointing out that a change in his actions would be insignificant. The environmentalist responds by asking what would happen if everyone did change. In this paper I defend the environmentalist's response. I argue that we can appeal to the following principle to defend both group and individual obligations to clean up air: if the consequences of everyone doing "a" are undesirable, then each and every one ought to do what he can to prevent the undesirable consequences. Manning is in the philosophy department, California State University, Hayward, CA. (EE)

Manning, Rita C., Speaking from the Heart: A Feminist Perspective on Ethics Rowman and Littlefield, 1992. 224 pages. \$ 14.99 paper; \$ 40.00 cloth. Contains a section "Caring for Animals: Should a Feminist Care?" Manning is in the Department of Philosophy, San Jose State University. (v4,#1)

Manning, Robert, William Valliere, and Minter, Ben. "Values, Ethics, and Attitudes Toward National Forest Management: An Empirical Study." Society & Natural Resources 12(no. 5, July 1999):421- . (v.11,#1)

Manning, Robert, Valliere, William, and Minter, Ben, "Values, Ethics, and Attitudes Toward National Forest Management: An Empirical Study," Society and Natural Resources 12(1999):421-436. A study measuring environmental values and ethics and exploring their relationships to attitudes toward national forest management. Case study: Green Mountain National Forest, Vermont. Respondents (1) favor

nonmaterial values of national forests, (2) subscribe to a diversity of environmental ethics, including anthropocentric and bio-/ecocentric, and (3) support emerging concepts of ecosystem management. The authors are in the School of Natural Resources, University of Vermont.

Manning, Robert E., "The Nature of America: Visions and Revisions of Wilderness," Natural Resources Journal 29(1989):25-40. Wilderness has proved to have not only the values Congress anticipated in the Wilderness Act, but other, unexpected values as well. Manning is professor in the School of Natural Resources, University of Vermont, Burlington. (v3,#3)

Manning, Robert E., and Valliere, William A. "Environmental Values, Environmental Ethics, and Wilderness Management: An Empirical Study." International Journal of Wilderness 2, no. 2 (August 1996): 27-32. A study of visitors to the Breadloaf Wilderness in Vermont. Both wilderness values and environmental ethics can be isolated and measured and are significantly related to wilderness purity. Manning teaches in natural resources at the University of Vermont, Valliere is a research assistant there. (v7, #3)

Manning, Russ. "Environmental Ethics and Rawls' Theory of Justice." Environmental Ethics 3(1981):155-65. Although John Rawls' A Theory of Justice does not deal specifically with the ethics of environmental concerns, it can generally be applied to give justification for the prudent and continent use of our natural resources. The argument takes two forms: one dealing with the immediate effects of which impact the present society, should be subject to environmental controls because they affect health and opportunity, social primary goods to be dispensed by society. Delayed environmental impacts, affecting future generations, are also subject to control because future generations have a just claim upon our natural resources--the generation to which a person belongs is an arbitrary contingency which should not exclude persons not yet born from consideration in the original contract of society. Manning is a free-lance science writer and editor in Knoxville, TN. (EE)

Mannison, Don, Michael McRobbie, and Richard Routley, ed. Environmental Philosophy. Reviewed in Environmental Ethics 4(1982):69-74. Richard Routley is now Richard Sylvan.

Manring, NJ, "Locking the Back Door: The Implications of Eliminating Postdecisional Appeals in National Forest Planning" Society and Natural Resources 17 (no.3, 2004): 235-245(11).

Mansbridge, Jane J., ed. Beyond Self-Interest. Chicago: University of Chicago Press, 1990. A new study of the possibility of altruism and cooperation in public and private life, with implications for an enlightened environmental policy. (v1,#3)

Manson, NC, "What is Genetic Information, and why is it Significant? A Contextual, Contrastive, Approach," Journal of Applied Philosophy 23 (no. 1, January 2006): 1-16.

Manson, Neil A. "Formulating the Precautionary Principle." In part one, I identify the core logical structure of the precautionary principle and distinguish it from the various key concepts that appear in the many different formulations of the principle. I survey these concepts and suggest a program of further conceptual analysis. In part two, I examine a particular version of the precautionary principle dubbed "the catastrophe principle" and criticize it in light of its similarities to the principle at work in Pascal's Wager. I conclude with some suggestions for advocates of the precautionary principle who wish their formulation to avoid the pitfalls confronting the catastrophe principle. Environmental Ethics 24(2002):263-274. (EE)

Manson, Neil A., "The Precautionary Principle, The Catastrophe Argument, and Pascal's Wager," CPTS (Center for Philosophy, Technology and Society, University of Aberdeen, Scotland) Ends and Means, vol 4, no. 1, Autumn 1999, pp. 12-16. Environmentalists often invoke the precautionary principle, that,

where there are real uncertainties, especially the possibility of catastrophe, one ought to act conservatively. They favor the precautionary principle over cost-benefit analysis, thinking that cost-benefit analysis is difficult, benefits likely to be more easily estimated than harms. Further, they wish to place the burden of proof on those who wish to introduce changes. But, Manson argues, some version of cost-benefit analysis is unavoidable. Instead of resisting it, environmentalists should consider embracing it. They will be pleasantly surprised by how often cost-benefit analysis rules in their favor. Manson is Gifford Research Fellow at the University of Aberdeen. (v.11,#1)

Manson, Neil A., "The Precautionary Principle, The Catastrophe Argument, and Pascal's Wager," CPTS (Center for Philosophy, Technology and Society, University of Aberdeen, Scotland) Ends and Means, vol 4, no. 1, Autumn 1999, pp. 12-16. Environmentalists often invoke the precautionary principle, that, where there are real uncertainties, especially the possibility of catastrophe, one ought to act conservatively. They favor the precautionary principle over cost-benefit analysis, thinking that cost-benefit analysis is difficult, benefits likely to be more easily estimated than harms. Further, they wish to place the burden of proof on those who wish to introduce changes. But, Manson argues, some version of cost-benefit analysis is unavoidable. Instead of resisting it, environmentalists should consider embracing it. They will be pleasantly surprised by how often cost-benefit analysis rules in their favor. Manson is Gifford Research Fellow at the University of Aberdeen. (v10,#4)

Manterfield, Mark, "Conference Report: For the Love of Nature? Centre for Human Ecology Conference, 24-28 June 1999, Findhorn, Scotland," Ecotheology No 8 (Jan 2000):129-132.

Manus, Peter M. "The Owl, the Indian, the Feminist, and the Brother: Environmentalism Encounters the Social Justice Movements." Boston College Environmental Affairs Law Review 23, no. 2 (1996): 249. (v7, #3)

Mao Liya. *A Comparative Study of Christian and Daoism Ecological Thoughts*. Chengdu: Bashu Press, 2007.

Mao, Yu-Shi, "Evolution of Environmental Ethics: A Chinese Perspective." In Frederick Ferré and Peter Hartel, eds., Ethics and Environmental Policy: Theory Meets Practice (Athens, GA: University of Georgia Press, 1994. Paper given at University of Georgia, Second International Conference on Ethics and Environmental Policies, April 5-7, 1992. The author is professor of economics, Chinese Academy of Social Sciences, Beijing. (China)

Mapel, David R., and Nardin, Terry, eds., International Society: Diverse Ethical Perspectives. Princeton, NJ: Princeton University Press, 1998. The moral foundations of the international order. Fifteen contributors. The character of international society, the authority of international law and institutions, and the demands of international justice. Mapel is in political science at the University of Colorado at Boulder. Nardin is in political science at the University of Wisconsin-Milwaukee. (v9,#1)

Mappes, Thomas A. and Jane S. Zembaty, Social Ethics: Morality and Social Policy, 4th ed., New York: McGraw Hill, 1992. Chapter 11 is on "The Environment." Readings are: William F. Baxter, "People or Penguins: The Case for Optimal Pollution"; William Godfrey-Smith, "The Value of Wilderness"; Bernard E. Rollin, "Environmental Ethics"; Peter S. Wenz, "Ecology and Morality"; Lily-Marlene Russow, "Why Do Species Matter?"; "Ramachandra Guha, "Radical American Environmentalism and Wilderness Preservation: A Third World Critique." (v2,#4)

Maraga, E.K. "A Review of Range Production and Man agement Extension Activities in Kenya," Journal of Agricultural and Environmental Ethics 11(1999):131-144. The paper presents an overview of the development of range management extension activities in Kenya. The status quo of range management

activities is discussed with particular reference to extension infrastructure, scope of extension interventions and mechanisms of dissemination of these innovations. On the basis of the nature of available innovations and efficiency of dissemination mechanisms, the paper emphasizes the need for future institutional reforms to facilitate successful application of technological interventions, validation of the Kenyan innovation Diffusion Model and enhancement of the social acceptability of technological interventions. KEY WORDS: range management extension, range production extension technology, extension infrastructure, extension innovation dissemination, extension constraints, range research

Maranzana, L. C., "Defenders of Wildlife V. Norton: A Closer Look at the 'Significant Portion of Its Range' Concept," Ecology Law Quarterly 29(no.2, 2002): 263-82. (v.13,#4)

March, W. Eugene, Israel and the Politics of Land: A Theological Case Study. Philadelphia: Westminster/John Knox, 1994. 104 pages. \$ 12.99. The Hebrew Bible does not so much give Israel its land as property willed to them by God as does it articulate a global theology of all peoples, exemplified in the Hebrews, being earth-keepers, rather than land-owners. March is professor of Old Testament at Louisville Theological Seminary, Louisville, KY. (v5,#3)

Marchak, M. Patricia, Logging the Globe. McGill-Queen's University Press. Problems and prospects facing forestry worldwide. (v6,#4)

Marcias, Thomas. "Conflict Over Forest Resources in Northern New Mexico: Rethinking Cultural Activism as a Strategy for Environmental Justice." *The Social Science Journal* Vol. 45, no. 1 (2008): 61-75. Marcias examines a conflict over forest resources management between rural Hispanics (Herencia) and white environmentalists (Forest Guardians). Marcias argues that environmental activism that presumes shared interests based on cultural values runs the risk of losing sight of structural factors that strongly influence the manner in which ethnic and racial minorities view environmental issues.

Marcolongo, Tullia. "The Pits," Alternatives 23(no.2, 1997):4. BC's Huckleberry mine raises more concerns about flaws in the environmental assessment process, and conflicts of interest in government. (v8,#2)

Marcus, Erik. *Meat Market: Animals, Ethics, and Money*. Ithaca, NY: Brio Press, 2005. Marcus argues for an ethical dismantling and collapse of animal agriculture as a fourth movement after animal rights, animal welfare, and vegetarianism. He provides extensive discussion of the meat industry, arguments for and against this it, and activist methods to help dismantle it.

Marcus, Erik. *Meat Market: Animals, Ethics, and Money*. Ithaca, NY: Brio Press, 2005. Marcus argues for an ethical dismantling and collapse of animal agriculture as a fourth movement after animal rights, animal welfare, and vegetarianism. He provides extensive discussion of the meat industry, arguments for and against this it, and activist methods to help dismantle it.

Margaret Anne Scully, Human Rights and the Environment (Indigenous Communities), University of Southern California, Ph.D thesis, 1997. 203 pages. Indigenous communities are commonly held to live in harmony with nature and yet are not immune to the environmental degradation wrought by development. Solutions to environmental problems need not be "grand schemes" or universally applicable standards. Environmental assessments intended to facilitate the "delicate balancing" of competing interests are often culturally biased. Important international agreements have broad-based aspirations but may evolve into customary norms. "Eco-cultural security" is explored in light of the desperate circumstances of many indigenous communities. Divergent cross-cultural environmental ethics can be used to privilege mainstream environmental principles. The advisor was Sheldon Kamieniecki. (v.10,#1)

Marglin, Stephen. *The Dismal Science: How Thinking Like an Economist Undermines Community*. Cambridge, MA: Harvard University Press, 2008. Economics with its focus on individual preferences and the pursuit of self-interest perverts a natural moral order: "[T]he foundational assumptions of economics are in my view simply the tacit assumptions of modernity. The centerpiece in both is the rational, calculating, self-interested individual with unlimited wants for whom society is the nation-state." And what modernism shunned was "community." "The market undermines community because it replaces personal ties of economic necessity by impersonal market transactions." "Economics is not only descriptive; it is not only evaluative; it is at the same time constructive economists seek to fashion a world in the image of economic theory." Economics and thinking like an economist are bad for the health of the world. Marglin is in economics at Harvard University. See the review "First, Kill the Economists" by E. Roy Weintraub (*Science* Vol. 320, no. 5874 (18 April 2008): 318-19).

Margolis, Michael, "Fending Off Invasive Species: Can We Draw the Line Without Turning to Trade Tariffs?" Resources (Resources for the Future), Spring 2004, no. 153, pages 18-22. Nations can wish to ban imports that may harbor invasive species, but the environmentalist concerns have a way of combining with others interested and who wish to ban the same imports for protectionist policies. Inspection of the goods is one way without tariffs, but can be costly and ineffective. Tariffs is another way to keep out the goods that might bring in invasive species. Sorting this out. (v. 15, # 3)

Margoluis, Richard, Salafsky, Nick. Measures of Success: Designing, Monitoring, and Managing Conservation and Development Projects. Washington, D.C.: Island Press, 1998. \$35. 363 pp. (v9,#2)

Marguand. Robert. "Court Weighs Widows's Rights to a Lake Tahoe View." The Christian Science Monitor, vol. 89, 27 Feb. 1997, pp. 1, 18.

Margul, Tadeusz, Zwierze w kulcie i micie (The Animal in Cult and Myth), UMCS, 1996. In Polish. (v9,#2)

Margulis, Lynn, "Science Education, USA: Not Science, Not Yet Education, The Ecology Example," pp. 307-315 in Margulis, Lynn and Sagan, Dorion, Slanted Truths (New York: Springer-Verlag, 1997). A commentary on science education, kindergarten through graduate school, especially in ecology. "The answers to nearly all the major philosophical questions are either found in or illuminated by the science of life, especially ecology, whose stated goal is the elucidation of the relationship of organisms to environment. ... Philosophical insights garnered from the life sciences are suppressed by the arbitrary pigeonholing of rigid academic traditions? What is our relation, as Homo sapiens mammals, with our environment? How much and what sort of land is required to ensure the health and growth of a person, a family? ... These enlightening questions, of intrinsic interest, cannot even be mused in the academic-environment that requires 'covering the material'" (p. 311) Margulis teaches biology at the University of Massachusetts, Amherst. (v9,#2)

Marietta, Don E., Jr. Review of People, Penguins and Plastic Trees. Edited by Donald VanDeVeer and Christine Pierce. Environmental Ethics 9(1987):373-75.

Marietta, Don E., Jr., "Environmentalism, Feminism, and the Future of American Society." The Humanist 44, no. 3 (May/June 1984): 15-18, 30. A popularized account of the blending of environmental thought and the main ideas of feminism. More rigorous presentations can be found in Environmental Ethics, 1984-87. (Katz, Bibl # 1)

Marietta, Don E. "The Interrelationship of Ecological Science and Environmental Ethics." Environmental Ethics 1(1979):195-207. A recent trend among environmentalists (e.g., Aldo Leopold) of basing ethical norms for land use, resource management, and conservation on ecological principles such

as homeostasis is examined, and a way to justify such an ethical approach through analysis of moral judgment is explored. Issues such as the is/ought impasse, the connection between value judgments and reasons for acting, and the question of whether moral judgments are definitive and categorical are treated as they relate to an ecological ethic, i.e., an environmental ethic grounded in ecological science. I argue that such an ethic is in such regards as sound as more traditional approaches. Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)

Marietta, Don E., Jr., "Environmental Holism and Individuals," Environmental Ethics 10(1988):251-258. A defense of a holistic environmental ethic that does not reject humanistic ethics. Marietta criticizes extreme holism for its abstraction and reductionism; it neglects the entire range of human experience and human ethical history. Marietta offers an important analysis, but the statement of the position is too brief; it requires a more detailed and longer argument. (Katz, Bibl # 2)

Marietta, Don E., Jr., For People and the Planet: Holism and Humanism in Environmental Ethics. Philadelphia: Temple University Press, 1994. Human duty is based on a critical and holistic philosophy of nature and a humanistic ethics. The holism stresses how humans are a part of the system of nature and rejects any claim that nature exists for humans. But holism must avoid exaggerated statements of its position, recognizing that ecological science is subject to change and growth. Humanism recognizes that humans, though part of nature, are a distinct part of nature. Without making unsupportable claims that humans are morally superior to other living things, humans are different in significant ways from the rest of nature. The humanist heritage has developed moral concepts such as justice, freedom, and development of the human personality that are too valuable to be sacrificed to environmental concern. An ethics results that combines the insights of environmental ethics and of humanism. Foreword by Holmes Rolston. Marietta is in philosophy at Florida Atlantic College. (v5,#4)

Marietta, Don E. "World Views and Moral Decisions: A Reply to Tom Regan." Environmental Ethics 2(1980):369-71. Tom Regan criticizes my thesis that obligation toward the environment is grounded in a world view and thereby has a moral overridingness which mere interests and desires do not have. He holds that my approach is too subjectivistic. I counter, first, by explaining that phenomenology, which I use in my analysis of moral obligation, is not subjectivistic in the way emotivism or prescriptivism in ethics is subjectivistic. Second, I argue that world views are products of learning and experience of one shared world, that most world views share large areas of agreement, and that they can be argued for and criticized.

Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)

Marietta, Don, Jr., and Lester Embree, eds. Environmental Philosophy and Environmental Activism. Lanham, Md: Rowman and Littlefield, 1995. 224 pages. Should environmental philosophy and ethics be seen as a form of applied philosophy or something else, perhaps best called practical philosophy. How should environmental philosophy be practiced in life, especially in the lives of academics? Contributors: J. Baird Callicott, "Environmental Philosophy is Environmental Activism: The Most Radical and Effective Kind"; Timothy Casey, "The Environmental Roots of Environmental Activism"; Lester Embree, "Phenomenology of Action for Ecosystemic Health or How to Tend One's Own Garden"; Irene Klaver, "The Implicit Practice of Environmental Philosophy"; Don Marietta, Jr., "Reflection and Environmental Activism"; Ullrich Melle, "How Deep is Deep Enough? Ecological Modernization or Farewell to the World City?"; Bryan Norton, "Applied Philosophy vs. Practical Philosophy: Toward an Environmental Policy Integrated According to Scale"; Kate Rawles, "The Missing Shade of Green"; Gary Varner, "Can Animal Rights Activists Be Environmentalists?"; Red Watson, "The Identity Crisis in Environmental Philosophy"; Peter Wenz, "Environmental Activism and Appropriate Monism." Marietta and Embree are both in philosophy at Florida Atlantic University. (v6,#3)

Marietta, Don E., Jr. "Ethical Holism and Individuals." Environmental Ethics 10(1988):251-58. Environmental holism has been accused of being totalitarian because it subsumes the interests and rights

of individuals under the good of the whole biosphere, thus rejecting humanistic ethics. Whether this is true depends on the type of holism in question. Only an extreme form of holism leads to his totalitarian approach, and that type of holism should be rejected, not alone because it leads to unacceptable practices, but because it is too abstract and reductionistic to be an adequate basis for ethics. Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)

Marietta, Don E. "Knowledge and Obligation in Environmental Ethics: A Phenomenological Approach." Environmental Ethics 4(1982):153-62. Ecological ethics, in which ecological science informs the basic principles of morality, requires a significant revision of traditional metaethics, especially regarding the views (1) that moral judgments are justified by deductive argument, and (2) that there is a dichotomy between fact and value. This interpretation of the relationship between knowledge and obligation is grounded in the phenomenology of perception with special attention to the role of a person's world view in the perception of both facts and values and the fittingness relation between perception, world view, and obligation. Marietta is in the philosophy department, Florida Atlantic University, Boca Raton, FL. (EE)

Marietta, Don, Jr. For People and the Planet. Review by Lawrence Johnson, Environmental Values 7:(1998):485.

Marincowitz, Friedl, Towards an Ecological Feminist Self beyond Dualism and Essentialism, 1998. M.A. thesis at the University of Stellenbosch, South Africa. 233 pages. Promotor: Johan P. Hattingh. (v.10,#1)

Markarian, Michael, "Tally-ho, Dude!" The Animals' Agenda 19(no. 6, Nov 01 1999):22- . Fox hunting isn't a British relic; it's an American reality, and Michael Markarian tells its dirty little secrets. (v10,#4)

Markarian, Michael. "Sport Hunting: The Mayhem in Our Woods." The Animals' Agenda 16(Jul.1996):14. (v7,#2)

Markarian, Michael. "Migratory Massacre: Foul Play Along the Flyway," The Animals' Agenda 17(no.4, 1997):22. Markarian explains how hunters use federal law as regulatory camouflage to prey upon millions of migratory birds. (v8,#3)

Markarian, Mike. "Bowhunting: Culling or Crippling?" The Animals' Agenda 16, no.1 (1996): 17. (v7, #3)

Markie, Peter J., "Feinberg on Moral Rights", Australasian Journal of Philosophy, 62 (1984) 237-45. Joel Feinberg believes that a moral right is a special kind of claim. He uses his explanation of what it is to have a moral right to defend substantive claims about the rights of animals and future generations. It is argued that Feinberg's concept of being in a position to claim is problematic. Four ways to understand this concept are examined: two of these are inconsistent with Feinberg's views on the rights of animals and members of future generations and the other two, while consistent with these views, are flawed in other ways. This leads the author to conclude that Feinberg has failed to provide a correct explanation of what it is to have a moral right which is consistent with his position on the rights of animals and future generations.

Markku Oksanen and Juhani Pietarinen (eds), Philosophy and Biodiversity, Nelson, Michael P., and Mati Grisko, Review of: Environmental Values 15(2006):124-127.

Marks, Alexandra, "Environmentalists Target Java-Drinkers to Save Birds," The Christian Science Monitor 89 (10 July 1997): 3. In the past 20 years, almost half of the old rain-forest-like coffee plantations have been replaced by high-yield, sun-grown farms. The old way provided habitat for

neotropical migratory birds. Since 1980, bird populations have dropped alarmingly: for example, Baltimore orioles have declined 20-25%, wood thrushes 40%, golden-winged warblers 50%. Other factors, too, are involved. Costa Rica has launched an "ECO-OK" project to identify shade-grown coffee to consumers. Perhaps some of the old farms can be saved, and some birds, too. (v8,#2)

Marks, Alexandra. "Environmentalists Target Java-Drinkers to Save Birds." The Christian Science Monitor 89 (10 July 1997): 3. Changes in coffee-growing methods are blamed for drops in migratory bird populations. (v8,#2)

Marks, Jonathan, What It Means to be 98% Chimpanzee: Apes, People, and their Genes. Berkeley: University of California Press, 2002. Not much more than it means for humans to be 70% fish and 25% banana, according to Marks. Humans do share many genes with animals and plants, but from this genetic similarity little follows about how similar humans are anatomically and behaviorally. The shared genes are widely used in various life forms, our protein molecules are indeed similar to those in chimps. But our cognitive and cultural capacities are very different. For Marks this also weakens the argument that chimpanzees deserve human rights and equal protections. Marks is a molecular anthropologist.

Marks, Jonathan, What It Means to be 98% Chimpanzee: Apes, People, and their Genes. Berkeley: University of California Press, 2002, 2003. If we are 98% chimp, then we should go naked and sleep in trees 98% of the time? Numbers depend on perspective. Humans have three times as much brain size as chimps, so by that standard we are 300% more than chimps. Obviously humans are quite different from chimps in their mental capacities and cultural developments, so the 98% figure is only true in a quite limited sense. Marks is in anthropology at the University of North Carolina, Charlotte. (v. 15, # 3)

Marks, R., "Review of: Judith Shapiro, Mao's War against Nature: Politics and Environment in Revolutionary China," Environmental History 7(no.3, 2002): 508-09. (v.13,#4)

Markus, Tomislav, "Ekoloska etika -- razvoj, mogucnosti, ogranicenja (Environmental Ethics, Development, Possibilities, Limitations), Socijalna Ekologija (Journal for Environmental Thought and Sociological Research (Zagreb, Croatia) 13(No. 1, 2004):1-23 (in Croatian) (missing diacritical marks in the titles) Overview of environmental ethics in English-speaking countries for the last three decades. Baird Callicott, Holmes Rolston, Eric Katz, Andrew Light, Robin Attfield and others. Environmental ethicists have given a valuable critique of environmental destructiveness of modern society and anthropocentric tendencies in Western moral philosophy and pointed to many inconsistencies in Western thought about the human relation to nature. The main insufficiency in their work is the lack of a radical enough critique of technical civilization. A second insufficiency is an idealistic approach which underestimates the material factors. Markus is at the Kroatisches Institut fur Geschichte, Zagreb. (v. 15, # 3)

Marler, Peter., "Social Cognition: Are Primates Smarter than Birds?" pages 1-32 in Nolan, Jr., Val, Ketterson, Ellen D., eds., Current Ornithology, vol. 13. New York: Plenum Press, 1996. "There are many striking similarities between the accomplishments of birds and primates. Their achievements in different forms of social learning are surprisingly similar with regard to the acquisition of both patterns of responsiveness to environmental stimulation and new motor patterns. Examples of tool use are as frequent and as complex in birds as in primates, although questions of social transmission remain moot in both cases. Primates seem to excel, however, in aspects of social cognition. There are cases of complex social cognition where primate accomplishments appear to be outstanding. . . . Accomplishments in the domain of social communication are just as impressive in birds as in monkeys and apes, and the ability for vocal learning is an outstanding avian achievement that leaves non-human primates far behind. I am driven to conclude, at least provisionally, that there are more similarities than differences between birds and primates. Each taxon has significant advantages that the other lacks" (p. 22). (v.8,#4)

Marlett, Jeffery, "Bio-dynamic Farming and the Rise of Catholic Environmentalism, 1930-60," Ecotheology No 5/6 (Jul 98 / Jan 99):51-59.

Marques, Soromenho Viriato, "Justica e Sentido da Terra (Justice and a Sense of the Earth)," Philosophica (Lisbon: Departamento de Filosofia, Faculdade de Letras da Universidade de Lisboa) 1, 1993, pp. 31-44. What is the significance today of the problem of justice, as we now have to consider it? This analysis attempts to clarify the foundation of this question, specifically through determining the interrelationships between the enormous environmental-political problems of our century and the principles of the philosophy of nature and of the philosophy of politics in the modern era. This includes an analysis of the failure of political science, of autonomy and secularization, of practical and political reason, and of the eclipse of nature within the framework of anthropological idealism. The author is professor of philosophy at the University of Lisbon. Address: Departamento de Filosofia, Cidade Universitaria, 1699, Lisboa Codex, Portugal. Home address: Praceta Dr. Joaquim Ferreira de Sousa, Lote 7-4.E C, Urbanizaçao Quinta de Vanicelos, P-2900 Setúbal, Portugal. (v4,#4)

Marquette University, Interdisciplinary Minor in Environmental Ethics, Generating and Using Electricity in the United States." A report prepared by students in the first capstone seminar for the Interdisciplinary Minor in Environmental Ethics. Accessible through: <http://www.inee.mu.edu/Capstone%202003/Proposal.htm>

An ambitious project that spanned the 2003 Spring semester, ten students identified the religious and philosophical foundations for approaching electricity use and generation from an ethical perspective (appropriated from Jesuit spirituality, Aldo Leopold, and the Roman Catholic principle of subsidiarity), researched relevant topics on use and generation by renewable and non-renewable sources, produced seventeen reports, and concluded to ninety-two recommendations through an iterative, consensus process.

Affirmation of their efforts by US Senator Russ Feingold's environment aide, Mary Frances Repko, proved to be a highlight of the capstone experience. She flew to Milwaukee while in the process of participating in the mark-up of the Senate's energy bill and engaged them in an in-depth discussion on their recommendations. When pressed for at least one to include in the bill, the students opted for an awareness alert on electricity bills that quantified environmental effects from the amount of electricity used. Jame Schaefer was the advisor. (v 14, #3)

Marquis, Robert J., and Christopher J. Whelan, "Insectivorous Birds Increase Growth of White Oak through Consumption of Leaf-Chewing Insects," Ecology 75(1994):2007-2014. The authors find that insect-eating birds substantially reduce the insects that eat tree leaves, and thus, by regulating insects, substantially increase the growth of oaks. The research suggests that the migrating songbirds that (used to) fill the North American forests each spring are not simply decorative frills playing some minor role in the ecosystems, but that they play a crucial role in maintaining the health and productivity of forest trees. But such birds, unfortunately, have been in recent decline. Marquis is in biology at the University of Missouri-St. Louis. Whelan is at the Morton Arboretum, Lisle, Illinois. For a popular summary, see Sharon Begley, "Why Trees Need Birds," National Wildlife 33 (no. 5, Aug.-Sept., 1995):42-45. (v5,#4)

Marr, Katharina. Environmental Impact Assessment in the United Kingdom and Germany: a Comparison of EIA Practice for Wastewater Treatment Plants. Brookfield, VT: Ashgate, 1998. 352 pp. \$72.95. An analysis of the differences in environmental impact assessment for managing the environment in two populous countries.

Marr, Katharina. Environmental Impact Assessment in the United Kingdom and Germany: a Comparison of EIA Practice for Wastewater Treatment Plants. Brookfield, VT: Ashgate, 1998. 352 pp. \$72.95. An analysis of the differences in environmental impact assessment for managing the environment in two populous countries.

Marra P.P.; Griffing S.; Caffrey C.; Kilpatrick A.M.; McLean R.; Brand = C.; Saito E.; Dupuis A.P.; Kramer L.; Novak R., "West Nile Virus and Wildlife," BioScience 54(no.5, 1 May 2004):393-402(10). (v. 15, # 3)

Marrs, RH, "World in Transition-Conservation and Sustainable Use of the Biosphere," Biological Conservation 108(no.1, 2002):130- . (v.13, #3)

Marsden, S; Whiffin, M; Galetti, M; Fielding, A, "How Well Will Brazil's System of Atlantic Forest Reserves Maintain Viable Bird Populations?" Biodiversity and Conservation 14 (no. 12, November 2005): 2835-2853.

Marsh, John. "No Wilderness, All Heritage", Environments 24(no. 1, 1996):39.

Marshall, Alan Hilary, The Concept of Environmental Ethics, M.A. thesis at the University of South Africa (UNISA), Pretoria, 1993. 133 pages. Human development and excesses threaten not only the continued existence of the human species but that of all other forms of life on earth. Environmental ethics ought to confront and contain this threat. There are two opposed kinds of philosophical positions: a nature-centered ethic, here called biocentrism, from which environmental ethics was developed, and homocentrism, which has arisen in opposition to biocentrism. Marshall argues for a homocentric view. The homocentric view is the world view that the peoples and nations of the world currently adopt; morality is largely worked out in that context, and it is the view most likely to be successful in environmental conservation. The supervisors were Z. Postma de Beer and P. Voice. (v6,#3)

Marshall, Alan, "A Postmodern Natural History of the World: Eviscerating the GUT's from Ecology and Environmentalism," Studies in History and Philosophy of Biological and Biomedical Sciences 29 (no. 1, 1998):137-164. The plant ecologist Henry Gleason in 1926 was already a postmodernist. If we characterize postmodernism as an emphasis on heterogeneity, ephemerality, and anti-foundationalism, pluralism, fragmentation, indeterminacy, schizophrenia, chaos, antiformalism, discontinuity, absence, playfulness, irony, localism, anarchy and ontological meaninglessness, Gleason's theory reflects such ideas in the ecological arena. There remains a need for a neo-Gleasonian postmodern approach in which ecological phenomena are examined using non-determinant, pluralist and local perspectives and that reject the foundationalism and unifying approach of modernist science. This posits a view of the Earth's biota highlighting fragmentation, anarchism, and non-interaction. Community ecology, as opposed to the unifying and totalizing tendencies of ecosystems ecology, can claim to be the intellectual site of such a postmodern natural history. But there is a final irony. There cannot be a postmodern natural history, since natural history is fractured into undefinable and indefinite fragmented associations which defy generalization. Marshall is in science and technology studies, University of Wollongong, Sydney, Australia. (v.9,#3)

Marshall, Brent K. "Globalisation, Environmental Degradation and Ulrich Beck's Risk Society." Environmental Values 8(1999):253-275. ABSTRACT:This paper is organised in three interconnected parts. First, contemporary political economic approaches to understanding the structure of the global economic system are outlined and synthesised. Specifically, it is suggested that the current structural configuration of the globe is a transitional phase between the spatially-bounded configuration hypothesised by world-system theory and the configuration hypothesised by globalisation theorists. Second, the contemporary problem of environmental degradation is situated in a global structural context. Third, an outline and critique of Ulrich Beck's theory of the "Risk Society" is presented to illustrate the increasing inadequacy of nation-state-centric theories in explaining the dynamic linkage between global capitalism and local environmental degradation. KEYWORDS: Globalisation, environmental degradation, nation-state, world-system. Brent K. Marshall, Department of Sociology University of

Tennessee 901 McClung Tower, Knoxville, TN 37920, USA Email: marshall@utkux.utcc.utk.edu (EV)

Marshall, Carolyn, "Restoration of San Francisco Bay Salt Ponds Is Begun," New York Times, July 26, 2004, p. A10. The goal is to return stagnant industrial pools to teeming tidal wetlands. (v. 15, # 3)

Marshall, Eliot, "Is the Friendly Atom Poised for a Comeback?" Science 309(19 August 2005):1168-1171. The threat of global warming and high fossil fuel prices have inspired talk of a revival of nuclear power, but skeptics say it is a poor investment and a worse security risk. Nuclear is pollution free with regard to carbon dioxide, but is pollution laden with regard to disposal of nuclear wastes. Nor is it clear that it is any cheaper. Several related stories in the same issue.

Marshall, Nina T., The Gardener's Guide to Plant Conservation. By the World Wildlife Fund in conjunction with the Garden Club of America. ISBN 0-891-139-4. Paper. \$ 12.95. Orders to World Wildlife Fund, P. O. Box 4866, Hampden Post Office, Baltimore, MD 21211, Phone 410/516-6951. There is an enormous trade in threatened and endangered wild plants sold to gardeners, and increasing interest by gardeners to control this by authenticated statements of origin. The Netherlands, which was once the worst offender, has become a leader in the labeling of plants for the market place: cyclamens, miniature daffodils, fritillarias, trilliums, orchids, cacti, trout lilies, and others. Winter daffodil (Sternbergia candida) was described as a new species in 1979 and, as a result of collecting for the garden trade, may be extinct today. (v4,#4)

Marshall, Peter, Nature's Web: An Exploration of Ecological Thinking. In U.K. published by Simon and Schuster and in U.S. by Paragon House, New York, 1992.

Marshall, Peter, Demanding the Impossible: A History of Anarchism. London: Harper Collins. 767 pages. £ 25.00 hardcover, also in paper by Fontana, £ 10.00. Chapters on Taoism, Proudhon, Kropotkin, Gandhi, and Murray Bookchin. (v4,#1)

Marshall, Peter, Nature's Web: An Exploration of Ecological Thinking (London: Simon & Schuster, 1992) has been republished in the US as Nature's Web: Rethinking Our Place in Nature (New York: Paragon House, 1994), \$29.95. A paperback edition published by Cassell is coming out this year in UK. The book has received some excellent reviews, and Choice calls it "a wonderful history of 'green' ideas."

Marshall, Peter. Nature's Web: Rethinking Our Place on Earth. Armonk, NY: M.E. Sharpe, 1996. 523 pp. \$21.95 paper. Claims to be the first comprehensive overview of the intellectual roots of the worldwide environmental movement--from ancient religions and philosophies to modern science and ethics--and to synthesize these into a new philosophy of nature adequate for a contemporary grounding of moral values and social action. (v7,#4)

Marshall, Peter. Riding the Wind: A New Philosophy for a New Era. London and New York: Cassell, 1998, 263pp. In this account of his mature thinking, Peter Marshall develops a dynamic and organic philosophy for the third millennium which he calls liberation ecology. Deep, social, and libertarian, liberation ecology seeks to free nature, society and individuals from their existing burdens so that they can all realize together their full potential. Riding the Wind presents a fresh and inspired vision which combines ancient wisdom and modern insights, reason and intuition, science and myth. Chapters include: The Way of the Universe, Nature's Web, Creative Evolution, Playful Humanity, Reverence for Being, The Family of Life, After the Leviathan, The Common Treasury, Dwelling Lightly on Earth, Learning to Live, The Alchemy of Love. John Clark, Professor of Philosophy at Loyola University, New Orleans, says: "Riding the Wind is a well written and accessible work that makes a strong statement of Peter Marshall's important and distinctive position in contemporary ecological thought. The book deserves to be read and discussed widely." Marshall is a full-time writer, and his many books include the highly

acclaimed Nature's Web: Rethinking our Place on Earth and Demanding the Impossible: A History of Anarchism. (v9,#2)

Marshall. Brent K., and J. Steven Picou. "Postnormal Science, Precautionary Principle, and Worst Cases: The Challenge of Twenty-First Century Catastrophes." *Sociological Inquiry* Vol. 78, no. 2 (2008): 230-47. Marshall and Picou examine the ability of science to address challenges created by catastrophic events, show why natural and technological disasters increasingly are becoming problematic, and argue that a more participatory approach to science bolstered by the precautionary principle and worst-case analysis is a viable strategy for addressing catastrophes.

Marshall. Brent K., and J. Steven Picou. "Postnormal Science, Precautionary Principle, and Worst Cases: The Challenge of Twenty-First Century Catastrophes." *Sociological Inquiry* Vol. 78, no. 2 (2008): 230-47. Marshall and Picou examine the ability of science to address challenges created by catastrophic events, show why natural and technological disasters increasingly are becoming problematic, and argue that a more participatory approach to science bolstered by the precautionary principle and worst-case analysis is a viable strategy for addressing catastrophes.

Marston, Ed, ed., Reopening the Western Frontier. Covelo, CA: Island Press, 1990. 350 pages. Cloth \$ 24.95; paper \$ 15.95. Members of a far-flung network of free-lance writers contribute articles describing the changes they see occurring in their respective corners of the U. S. West. Thought-provoking and never dull. (v2,#3)

Marston, Sallie A., "The social construction of scale," Progress In Human Geography 24 (No. 2, 2000): 219- . (v.11,#4)

Martell, D. L., Miyanishi, K., Bridge, S. R. J., and Johnson, E. A., "Wildfire Regime in the Boreal Forest," Conservation Biology 16(no.5, 2002): 1177-78. (v.13,#4)

Martell, Luke, Ecology and Society: An Introduction. Amherst: University of Massachusetts Press, 1994. Also: London: Polity Press, 1994. 230 pages. Chapters: Ecology and Industrialism; The Sustainable Society; Green Philosophy; The Green Movement; Ecology and Political Theory; Rethinking Relations between Society and Nature; The Future of Environmentalism. "I deal in particular with ... 'radical ecology' ... strands in environmental thinking which require ... fundamental changes in economic structure and value systems or either anthropocentric or eco-centric ethics. It is the most radical strands in which I am especially interested" (pp. 5-6). "Ecology, in short, revolutionizes thinking about the social and political world but also needs it. Both are important to change. An alliance of the green movement with social democratic and socialist movements, pushing for politically globally co-ordinated solutions, is the basis on which such change can be achieved" (p. 199). Martell is a sociologist at the University of Sussex, UK. (v.9,#4)

Martien, K. and Trojnar, K., "California: Pushing to Expand, Learning to Grow," Journal of Environment and Development 10(no.4, 2001): 391-95. (v.13,#2)

Martin, Brendan. "From the Many to the Few: Privatization and Globalization", The Ecologist 26(no. 4,1996):148. North and South, East and West, the public sector is under assault. In the name of greater "efficiency", public services have been "contracted out": development projects "franchised" to private companies; state spending slashed; user charges for basic services introduced or increased; and markets "deregulated". In the process, power and wealth have become increasingly concentrated and the ability of nation states to protect the public interest has been undermined. The chief beneficiaries have been transnational corporations which have used the auctioning-off of the state sector to integrate their operations further. (v7,#4)

Martin, Calvin Luther, In the Spirit of the Earth, Reviewed by Jim Cheney in Environmental Ethics 16(1994):321-327.

Martin, Calvin Luther, In the Spirit of the Earth: Rethinking History and Time. Baltimore: Johns Hopkins University Press, 1992. 152 pages. \$ 19.95. Teachers and writers of history must go beyond history-as-usual to speak of the much deeper story of humans and their connections to the earth. Martin earlier wrote Keepers of the Game, on native American relationships with the animals. The more participatory sense of the natural world held by small hunting groups led more clearly to the fundamental truth that nature conserves humans. (v4,#1)

Martin Enserink, "The Lancet Scolded Over Pusztai Paper," Science 286(22 October, 1999):565. Britain's most prestigious medical journal, The Lancet, published a transgenic food paper by Stanley Ewen and Arpad Pusztai claiming that rats fed transgenic potatoes had abnormalities in their intestines. The authors, especially Pusztai, have also claimed that transgenic potatoes can stunt rats' growth and impair their immune systems. Critics say the paper is deeply flawed. The Lancet editors admit the paper is controversial but reply that five of six referees (twice the usual number) recommended publication, if only to get the claims evaluated. There is currently a heated debate over transgenic foods in the U. K. See Ewen, Stanley W. B., and Pusztai, Arpad, "Effects of Diets Containing Genetically Modified Potatoes Expressing Galanthus nivalis Lectin on Rat Small Intestine," The Lancet 354 (October 16, 1999):1353-1354. The authors are pathologists at the University of Aberdeen. (v10,#4)

Martin, Evelyn and Timothy Beatley, "Our Relationship with the Earth: Environmental Ethics in Planning Education," Journal of Planning Education and Research 12(1993):117-126. The results of a study of the extent to which university planning programs are contributing to new ethical relationships through the teaching of environmental ethics. Eighty-one programs were surveyed. The links between environmental ethics and environmental planning are often weaker than they can be and ought to be. Implications for planning education and recommendations for future curriculum development. The survey involves some rather sophisticated inquiry about where (in which departments) environmental ethics is and is not taught on which campuses. "Exposure to such ethical theories, concepts, and tools is as essential to the long term productivity, effectiveness, and relevance of planners as are the more conventional skills-based courses." Martin is with the Center for Respect of Life and Environment, a division of the Humane Society of the United States; Beatley is chair of the Department of Urban and Environmental Planning at the University of Virginia. Also involved is Bruce K. Ferguson, Landscape Architecture, University of Georgia. This study was also the subject of panels at the Annual conference, Council of Educators in Landscape Architecture, Charlottesville, VA, October 17-20, 1992 and at the Association of Collegiate Schools of Planning, Columbus, OH, October 30-November 1, 1992. Those interested in further information and in the Land Ethics program are invited to contact Evelyn Martin, Center for Respect of Life and Environment, 2100 L Street, N.W., Washington, DC 20037. Phone 703/329-3320. (v4,#1)

Martin, Evelyn, "The Last Mountain," American Forests, April 1993. "The Mt. Graham red squirrel controversy [building a telescope that threatens a subspecies of red squirrel] raises fundamental questions about whether we humans should reach for the stars without coming to know the land at our feet." (v4,#1)

Martin, Jay G. "Developing Global Environmental Management Programs," Natural Resources & Environment 11(1997):33.

Martin, John N. Review of Environment and Ethics-A New Zealand Contribution. Edited by John Howell. Environmental Ethics 10(1988):357-62.

Martin, John N. "The Concept of the Irreplaceable." Environmental Ethics 1(1979):31-48. An analysis is proposed for the common argument that something should be preserved because it is irreplaceable. The argument is shown to depend on modal elements in irreplaceable, existence assumptions of preserve, and the logic of obligation. In terms of this theory it is argued that utilitarianism can account for most, but not all instances of persuasive appeals to irreplaceability. Being essentially backwards looking, utilitarianism cannot in principle justify preservation of objects irreplaceable because of their history or genesis. Martin is in the philosophy department, University of Cincinnati, Cincinnati, OH. (EE)

Martin, John N. "Order Theoretic Properties of Holistic Ethical Theories." Environmental Ethics 13(1991):215-34. Using concepts from abstract algebra and type theory, I analyze the structural presuppositions of any holistic ethical theory. This study is motivated by such recent holistic theories in environmental ethics as Aldo Leopold's land ethic, James E. Lovelock's Gaia hypothesis, Arne Naess' deep ecology, and various aesthetic ethics of the sublime. I also discuss the holistic and type theoretic assumptions of such standard ethical theories as hedonism, natural rights theory, utilitarianism, Rawls' difference principle, and fascism. I argue that although there are several common senses of part-whole in ethical theory, the central sense of holism in ethics is that of a theory that defines its key moral idea as an emergent group property grounded in the relational properties of its individual constituents. Hedonism and Kantianism do not count as holistic in this sense. Natural rights theory does in a degenerate way. Utilitarianism and various environmental ethics are paradigm examples. I point out as a general structural weakness of environmental holistic theories that their first-order grounding in nonmoral vocabulary seems to preclude an explanation of many moral intuitions about human ethics. Martin is in the philosophy department, University of Cincinnati, Cincinnati, OH. (EE)

Martin, John N. Review of Environmental Ethics: Philosophy and Policy Perspectives. Edited by Philip P. Hanson. Environmental Ethics 10(1988):357-62.

Martin, Lana, "World Trade Organization and Environmental Protection: Reconciling the Conflict," Currents: International Trade Law Journal 9 (2000): 69- .

Martin, Michael, "Ecosabotage and Civil Disobedience," Environmental Ethics 12(1990):291-310. One of the few analyses of the morality of ecosabotage. Martin discusses the relationship between ecosabotage and civil disobedience, with the crucial distinction that civil disobedience is a public act, while ecosabotage is not. There are no general arguments against ecosabotage, but there are also no specific justifications for it. Martin argues on utilitarian grounds and ignores (generally) the non-anthropocentric value systems of most ecosaboteurs. But it is the radicalism of the goal---a non-anthropocentric ethic---that requires the disobedient action. (Katz, Bibl # 2)

Martin, Michael. "Ecosabotage and Civil Disobedience." Environmental Ethics 12(1990):291-310. I define ecosabotage and relate this definition to several well-known analyses of civil disobedience. I show that ecosabotage cannot be reduced to a form of civil disobedience unless the definition of civil disobedience is expanded. I suggest that ecosabotage and civil disobedience are special cases of the more general concept of conscientious wrongdoing. Although ecosabotage cannot be considered a form of civil disobedience on the basis of the standard analysis of this concept, the civil disobedience literature can provide important insights into the justification of ecosabotage. First, traditional appeals to a higher law in justifying ecosabotage are no more successful than they are in justifying civil disobedience. Second, utilitarian justifications of ecosabotage are promising. At present there is no a priori reason to suppose that some acts of ecosabotage could not be justified on utilitarian grounds, although such ecosaboteurs as Dave Foreman have not provided a full justification of its use in concrete cases. Martin is in the philosophy department, Boston University, Boston, MA. (EE)

Martin, Paul S., *Twilight of the Mammoths: Ice Age Extinctions and the Rewilding of America*. Berkeley,

CA: University of California Press, 2005. North America lost most of its large mammals near the close of the last ice age: mastodons, mammoths, giant ground sloths, car-sized glyptodonts, rhino-sized marsupials, giant kangaroos, gorilla-sized lemurs. Martin is an enthusiastic advocate of "blitzkrieg," that nearly arrived humans rapidly killed off naive prey unfamiliar with this new predator. (Others find few such kill sites, are less sure how when and how rapidly humans invaded the Americas, and doubt that prey species stay naive very long.) Since humans were a leading cause of such extinctions, Martin also argues that where such species still exist elsewhere, they should be restored to North America (and Eurasia) in Quaternary parks filled with wild horses, camels, elephants, lions, and cheetahs.

Martin, Paul S., and Szuter, Christine R., "War Zones and Game Sinks in Lewis and Clark's West," Conservation Biology, February 1999. Native American warfare's unnatural ecological effects. The number and distribution of bison and other big animals was likely determined by the presence of buffer zones between warring Native tribes. In an individual tribe's homeland, populations of bison and elk were often in serious decline. But in the war zones between tribes, where hunters seldom went, these animals flourished. The conclusion, say these most recent advocates of this "war zone theory," is that the scarcity or abundance of large animals seen by the Lewis and Clark expedition was not "truly natural, that is, falling outside human influence or control. ... The West in the time of Lewis and Clark was long past any purely 'natural condition' that might serve as an absolute benchmark for planners." One of the study's authors--an advocate of the "blitzkrieg" theory that newly arrived human hunters drove North America's megafauna such as mammoths and mastodons extinct some 13,000 years ago--suggests conservationists might want to restore pre-Native American nature preserves by importing elephants who would mimic the extinct megafauna. See also Stevens, W. K., "Unlikely Tool for Species Preservation: Warfare," New York Times, 3/30/99. (v.10,#2)

Martin, Paul S., and Christine R. Szuter. "War Zones and Game Sinks in Lewis and Clark's West." *Conservation Biology* Vol. 13, no. 1 (1999): 36-45. Native Americans often over-hunted their lands, and the most abundant game was often in the contested territories between tribes, where they were reluctant to hunt. In the absence of Native Americans, bison, elk, deer, and wolf populations would have been larger. With evidence from the Lewis and Clark journals.

Martin, Peter and Ritchie, Helen, "Logics of Participation: Rural Environmental Governance under Neoliberalism in Australia," Environmental Politics 8(no. 2, Summer 1999):117- .
McKinnell, Robert G. and DiBerardino (Di Berardino), Marie A., "The Biology of Cloning: History and Rationale," Bioscience 49(no. 11, Nov 01 1999):875- . (v10,#4)

Martin, Thomas E. and Finch, Deborah M., eds., Ecology and Management of Neotropical Migratory Birds: A Synthesis and Review of Critical Issues. New York: Oxford University Press, 1995. \$28.00 paper \$52.00 cloth. 512 pages. The apparent decline in numbers among many species of migratory songbirds is a timely subject in conservation biology, particularly for ornithologists, ecologists, and wildlife managers. This book is an attempt to discuss the problem in full scope. It presents an ambitious, comprehensive assessment of the current status of neotropical migratory birds in the U.S., and the methods and strategies used to conserve migrant populations. Each chapter is an essay reviewing and assessing the trend from a different viewpoint, all written by leaders in the fields of ornithology, conservation, and population biology. Thomas E. Martin is from University of Montana, and Deborah M. Finch is from USDA Forest Service, Arizona. (v7,#1)

Martin, Vance C., and Alan Watson, "International Wilderness." In Hendee, John C. and Chad P. Dawson, Wilderness Management: Stewardship and Protection of Resources and Values. 3rd ed. Fulcrum Publishing, 2002. Internationally "there is increasing acceptance of the term [wilderness] to mean those areas legislated or zoned for protection in their natural condition, [yet] accommodating a wider spectrum of human activity than the U.S. definition might allow." (v. 15, # 3)

Martin, Vance G., "Australia's Wilderness Movement--Gathering Momentum," International Journal of Wilderness 2, no. 1 (May 1996):10-14. Australia's wilderness movement emphasizes some uniquely Australian features, on a continent as large as the United States but with 10% of the U.S. population, largely semiarid or arid, but with rainforest as well and with an unusual fauna and flora. Designation is principally at the state level, and increasingly recognizes the histories of the aboriginal peoples. Good summary of political and philosophical issues, as well as of designated areas. Martin is with the International Center for Earth Concerns and the WILD foundation, Ojai, CA. (v7,#2)

Martin, Vance, Tyler, Nicholas, eds. Arctic Wilderness--The 5th World Wilderness Congress. Ojai, California: The WILD Foundation, Nov. 1995. \$32. The aim of the 5th WWC was to enhance awareness of the natural beauty, natural resources, and the aesthetic and scientific importance of the Arctic and Antarctica. Examples of discoveries and developments in both basic and applied science, of exploitation of renewable and nonrenewable natural resources, and of new information discovered. There are clear warnings about the consequences of human activity at high latitudes. (v7,#4)

Martin, Vance G., and Nicholas Tyler eds. Arctic Wilderness , the 5th World Wilderness Congress. Golden, CO: North American Press, 1995. (v6,#3)

Martin, Vance, Cyril F. Kormos, Franco Zunino, Till Meyer, Ulf Doerner, and Toby Aykroyd. "Wilderness Momentum in Europe." *International Journal of Wilderness* Vol. 14, no. 2 (2008): 34-38, 43. The fall of the Iron Curtain revealed large, intact wilderness areas in central and Eastern Europe. Most Eastern Bloc countries wish to be in the European Union, which pays considerable attention to conserving natural areas. Changes in agriculture have resulted in the rewilding of some former agricultural areas. There is an increased number of NGOs interested in wilderness.

Martin, Vance G. *The Wild Planet Project*, Special Publication of the WILD Foundation, in cooperation with the *International Journal of Wilderness*. Boulder, CO: The Wild Foundation, 2007. (See also <www.wild.org>.) The Wild Planet Project focuses on wilderness in international and global contexts, and here are a dozen short articles summarizing that experience over several decades, which has led up to the Wild Planet Project. Vance discusses the benefits of wilderness (especially in and to third world countries), policy tools for wilderness designation, ocean wilderness, private sector wilderness, wilderness and biodiversity, and more.

Martin, William F. "Nuclear Doubts Put US Out of Step on Global Warming." The Christian Science Monitor 89.86 (31 March 1997): 19.

Martinez, Eluid. "Coping with Scarcity on the Rio Grande/Rio Bravo." Natural Resources Journal 39(No. 1, Winter 1999):117- . (v10,#4)

Martinez, Graciella, "Ecoturismo en la Sierra Tarahumara" published in El Heraldo, a newspaper of Chihuahua, Mexico, February 7, 1998. Available on website at:

http://www2.planeta.com/mader/planeta/0898/0898_Tarahumara.html

A warning for the local communities and the State Government of Chihuahua, Mexico, about the possible adverse consequences of ecotourism. There are negative impacts on the Tarahumara indigenous peoples and on the environment in the Copper Canyon area, and such impacts are typical of many others elsewhere around the globe. Ecotourism needs careful regulation if its benefits are to be realized. Martinez also read a paper at the South West Texas and New Mexico Philosophical Society, El Paso, Texas, in April 1998, "Bringing Environmental Ethics down to Earth," arguing that grand theories in environmental ethics are not particularly helpful in solving the on-the-ground problems of ecotourism. Martinez is a Mexican philosopher, who has recently completed a master's degree in the philosophy of environment and development at Colorado State University. (v.9,#3)

Martinez-Alier, Joan, The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation. Cheltenham, UK: Edward Elgar, 2002. Reviewed by Pat Devine. Environmental Values 13(2004):269-274. (EV)

MartinezAlier (Martinez-Alier), J., "Distributional Obstacles to International Environmental Policy: The Failures at Rio and Prospects after Rio." Environmental Values Vol.2 No.2(1993):97-124. ABSTRACT: The concept of 'sustainable development' as used by the Brundtland Commission was meant to separate environmental policy from distributional conflicts. Increases in income sometimes are beneficial for the environment (for instance, they allow the use of domestic cooking fuels which in some ways are less damaging to the environment), but higher incomes have meant higher emissions of greenhouse gases, and higher rates of genetic erosion. In the aftermath of the Rio conference of June 1992, this article analyses some unavoidable links between distributional conflicts and environmental policy. Often, environmental movements have tried to keep environmental resources and services outside the market, but there are now attempts to establish property rights on, and to give money values to, environmental resources and services, such as agricultural genetic resources and the CO2 absorption facility provided by the oceans and new vegetation. European 'green' proposals to impose an 'eco-tax,' and proposals from India to create a world market for CO2 emission permits are considered. The issue raised by the growing Third World agroecology movement, of payment of 'farmers' rights' for in situ agricultural biodiversity is discussed. The article includes a short discussion of the North American free trade agreement (NAFTA) between Mexico and the USA. in so far as it involves so-called 'ecological dumping,' i.e. trading at values which do not include environmental costs. In the last sections, the article asks how prices in ecologically-extended markets would be formed, how much such prices will depend on distribution, and how much (or how little) such payments would change distribution of income. Environmental movements of the Poor are faced with the dilemma of keeping environmental resources and services out of the market, or else asking for property rights to be placed on them. KEYWORDS: property rights, environmental movements, greenhouse effect, agricultural biodiversity, environmental policy, poverty and environment, ecological debt. Universitat Autònoma, Barcelona 08193, Spain.

Martinschramm, (Martin-Schramm), James B., Population, Consumption, and Ecojustice: Challenges for Christian Conceptions of Environmental Ethics, Union Theological Seminary, New York, Ph.D. thesis. 314 pages. Four moral norms that have been proposed as the foundation for an ethic of ecojustice (sustainability, sufficiency, participation, and solidarity) are applied to the problems posed by unsustainable patterns of human production, consumption, and reproduction. An examination of the ecological, theological, and moral challenges posed by population growth and overconsumption. A constructive ethic of ecojustice and a critique of the 1994 United Nations World Plan of Action on World Population. An assessment of five important theologians: James Nash, Sallie McFague, John Cobb, Jr., Rosemary Radford Ruether, and Leonardo Boff. An adequate ethic of ecojustice must emphasize the reciprocal relationship of ecological integrity and social justice and must offer not only sound theological grounding but also specific ethical guidance toward policy formulation. The advisor was Larry Rasmussen. (v.10,#1)

MartinSchramm (Martin-Schramm), James B. "Population-Consumption Issues: The State of the Debate in Christian Ethics," in Dieter T. Hessel, Ed., Theology for Earth Community (Maryknoll, NY: Orbis, 1996), 132-142.

MartinSchramm (Martin-Schramm), James B., "Population Growth, Poverty, and Environmental Degradation," Theology and Public Policy 4(1992):26-38. Martin-Schramm is at Union Theological Seminary, New York. (v3,#3)

MartinSchramm (Martin-Schramm), James B. "Population Growth, Poverty, and Environmental

Degradation," Theology and Public Policy 4(no. 1, 1992).

Marvier, Michelle A., Smith, David L. "Conservation Implications of Host Use for Rare Parasitic Plants," Conservation Biology 11(no.4, 1997):839. (v8,#3)

Marvin, E. Olsen, Dora G. Lodwick, and Riley E. Dunlap. Viewing the World Ecologically. Boulder, CO: Westview Press, 1992. 214 pp. \$28.00 paper. The authors use surveys to look at how strongly society adheres to the prevailing paradigm of the twentieth century, the technological social paradigm of the industrial period, compared with a shift to a sustainable development paradigm. Many persons hold attitudes that relate to both paradigms. Most of the data are about a decade old. (v6,#1)

Marvin, G.R. Review of Susan Davis, Spectacular Nature. Environmental Values 8(1999):521. (EV)

Marx, Leo, The Report from the Institute for Philosophy and Public Policy, vol. 10, no.3/4, Summer/Fall 1990. "Post-Modernism and the Environmental Crisis." "There may be more than coincidence involved in the simultaneous discovery of the global and social nature of environmental degradation and the skeptical, anti-foundationist drift of contemporary philosophy and critical theory." (v2,#2)

Mary O'Brien. Making Better Environmental Decisions: An Alternative to Risk Assessment. Reviewed in Environmental Ethics 25(2003):211-214. (EE)

Marzluff, J. M., "Fringe Conservation: A Call to Action," Conservation Biology 16(no.5, 2002): 1175-76. (v.13,#4)

Marzluff, John M., and Tony Angell, *In the Company of Crows and Ravens*. New Haven: Yale University Press, 2005. The authors claim there is much culture in crows and raven, where culture means "socially transmitted behavior patterns," also that "to know the crow is to know ourselves," partly because humans have so long and so often interacted with corvids. Marzluff is a wildlife biologist at the University of Washington; Angell is an artist and writer from the San Juan Islands of Washington.

Marzluff, John, and Hamel, Nathalie, "Land-Use Issues," Encyclopedia of Biodiversity 3: 659-674. Land use issues concern the processes by which human activities determine land cover. Important issues are agricultural development and intensification, settlement, and extraction of natural resources. In response to human land use, the earth's land cover has changed from a mosaic of native woodlands, forests, and grasslands to an increasingly impacted mixture of degraded and fragmented native habitats, exotic croplands, and impervious urban surfaces. In the last three centuries, models suggest that forests have declined 19%, grasslands have declined 8%, and cropland has increased over 400%. This article discusses how land use processes have changed through time and how they have caused the natural pattern of land cover to change. This transformation of the planet's landscape is widely recognized as the primary driver in the current global loss of biodiversity. Several examples of how land use can influence biodiversity are also considered. (v.11,#4)

Marzluff, John M., Sallabanks, Rex, eds. Avian Conservation: Research and Management. Washington, D.C.: Island Press, 1998. \$55. 512 pp. (v9,#2)

Marzluff, John M., Eric Shulenberger, Wilfried Endlicher, Mariana Alberti, Gordon Bradley, Clare Ryan, Ute Simon, and Craig ZumBrunnen, eds. *Urban Ecology: An International Perspective on the Interaction Between Humans and Nature*. New York: Springer 2008. Contents include: (1) "Human Domination of Earth's Ecosystems" by Peter M. Vitousek, Harold A. Mooney, Jane Lubchenco, and Jerry M. Melillo, (2) "Humans as the World's Greatest Evolutionary Force" by Stephen R. Palumbi, (3) "Urbanization" by Brian J.L. Berry, (4) "Urban Ecology as an Interdisciplinary Field: Differences in the use of 'Urban'

Between the Social and Natural Sciences” by Nancy E. McIntyre, K. Knowles-Yanez, and D. Hope, (5) “The Growth of the City: An Introduction to a Research Project” by Ernest W. Burgess, (6) “On the Early History of Urban Ecology in Europe” by Herbert Sukopp, (7) “Urban Ecological Systems: Linking Terrestrial Ecological, Physical, and Socioeconomic Components of Metropolitan Areas” by S.T.A. Pickett, M.L. Cadenasso, J.M. Grove, C.H. Nilon, R.V. Pouyat, W.C. Zipperer, and R. Costanza, (8) “Integrated Approaches to Long-Term Studies of Urban Ecological Systems” by Nancy B. Grimm, J. Morgan Grove, Steward T.A. Pickett, and Charles L. Redman, (9) “Integrating Humans into Ecology: Opportunities and Challenges for Studying Urban Ecosystems” by Marina Alberti, John M. Marzluff, Eric Shulenberg, Gordon Bradley, Clare Ryan, and Craig Zumbunnen, (10) “Sealing of Soils” by Gerd Wessolek, (11) “Producing and Consuming Chemicals: The Moral Economy of the American Lawn” by Paul Robbins and Julie T. Sharp, (12) “Streams in the Urban Landscape” by Michael J. Paul and Judy L. Meyer, (13) “The Urban Climate: Basic and Applied Aspects” by Wilhelm Kuttler, (14) “Global Warming and the Urban Heat Island” by Maria Joao Alcoforado and Henrique Andrade, (15) “A Retrospective Assessment of Mortality from the London Smog Episode of 1952: The Role of Influenza and Pollution” by Michele L. Bell, Devra L. Davis, and Tony Fletcher, (16) “Heat Waves, Urban Climate and Human Health” by Wilfried Endlicher, Gerd Jendritzky, Joachim Fischer, and Jens-Peter Redlich, (17) “The City as a Subject for Ecological Research” by Herbert Sukopp, (18) “Ecosystem Processes Along an Urban-to-Rural Gradient” by Mark J. McDonnell, Steward T.A. Pickett, Peter Groffman, Patrick Bohlen, Richard V. Pouyat, Wayne C. Zipperer, Robert W. Parmelee, Margaret M. Carreiro, and Kimberly Medley, (19) “House Sparrows: Rapid Evolution of Races in North America” by Richard F. Johnston and Robert K. Selander, (20) “On the Role of Alien Species in Urban Flora and Vegetation” by Ingo Kowarik, (21) “Socioeconomics Drive Urban Plant Diversity” by Diane Hope, Corinna Gries, Weixing Zhu, William F. Fagan, Charles L. Redman, Nancy B. Grimm, Amy L. Nelson, Chris Martin, and Ann Kinzig, (22) “Fauna of the Big City: Estimating Species Richness and Abundance in Warsaw, Poland” by Maciej Luniak, (23) “Island Biogeography for an Urbanizing World: How Extinction and Colonization May Determine Biological Diversity in Human-Dominated Landscapes” by John M. Marzluff, (24) “A Long-Term Survey of the Avifauna in an Urban Park” by Michael Abs and Frank Bergen, (25) “Biodiversity in the Argentinean Rolling Pampa Ecoregion: Changes Caused by Agriculture and Urbanisation” by Ana M. Faggi, Kerstin Krellenberg, Roberto Castro, Mirta Arriaga, and Wilfried Endlicher, (26) “Does Differential Access to Protein Influence Differences in Timing of Breeding of Florida Scrub-Jays (*Aphelocoma coerulescens*) in Suburban and Wildland Habitats?” by Stephan J. Schoech and Reed Bowman, (27) “Creating a Homogeneous Avifauna” by Robert B. Blair, (28) “Towards a Mechanistic Understanding of Urbanization’s Impacts on Fish” by Christian Wolter, (29) “Bat Activity in an Urban Landscape: Patterns at the Landscape and Microhabitat Scale” by Stanley D. Gehrt and James E. Chelvig, (30) “Urbanization and Spider Diversity: Influences of Human Modification of Habitat Structure and Productivity” by E. Shochat, W.L. Stefanov, M.E.A. Whitehouse, and S.H. Faeth, (31) “Social Science Concepts and Frameworks for Understanding Urban Ecosystems” by Carolyn Harrison and Jacquie Burgess, (32) “The Iceberg and the Titanic: Human Economic Behavior in Ecological Models” by Jane V. Hall, (33) “Forecasting Demand for Urban Land” by Paul Waddell and Terry Moore, (34) “Characteristics, Causes, and Effects of Sprawl: A Literature Review” by Reid H. Ewing, (35) “Urban Ecological Footprints: Why Cities Cannot be Sustainable and Why They are a Key to Sustainability” by William Rees and Mathis Wackernagel, (36) “Health, Supportive Environments, and the Reasonable Person Model” by Stephen Kaplan and Rachel Kaplan, (37) “Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity” by Reid Ewing, Tom Schmid, Richard Killingsworth, Amy Zlot, and Stephen Raudenbush, (38) “Megacities as Global Risk Areas” by Frauke Kraas, (39) “Why Is Understanding Urban Ecosystems Important to People Concerned About Environmental Justice?” by Bunyan Bryant and John Callewaert, (40) “The Struggle to Govern the Commons” by Thomas Dietz, Elinor Ostrom, and Paul C. Stern, (41) “Modeling the Urban Ecosystem: A Conceptual Framework” by M. Alberti, (42) “Scientific, Institutional, and Individual Constraints on Restoring Puget Sound Rivers” by Clare M. Ryan and Sara M. Jensen, (43) “Toward Ecosystem Management: Shifts in the Core and the Context of Urban Forest Ecology” by Rowan A. Rowntree, (44)

“What Is the Form of a City, and How Is It Made?” by Kevin A. Lynch, (45) “What Should an Ideal City Look Like from an Ecological View? Ecological Demands on the Future City” by Ruediger Wittig, Juergen Breuste, Lothar Finke, Michael Kleyer, Franz Rebele, Konrad Reidl, Wolfgang Schulte, and Peter Werner, (46) “Land Use Planning and Wildlife Maintenance: Guidelines for Conserving Wildlife in an Urban Landscape” by Michael E. Soulé, (47) “Terrestrial Nature Reserve Design at the Urban/Rural Interface” by Craig L. Shafer, (48) “Restoration of Fragmented Landscapes for the Conservation of Birds: A General Framework and Specific Recommendations for Urbanizing Landscapes” by John M. Marzluff and Kern Ewing, (49) “Steps Involved in Designing Conservation Subdivisions: A Straightforward Approach” by Randall G. Arendt, and (50) “Beyond Greenbelts and Zoning: A New Planning Concept for the Environment of Asian Mega-Cities” by Makoto Yokohari, Kazuhiko Takeuchi, Takashi Watanabe, and Shigehiro Yokota.

Mascia, MB, "The Human Dimension of Coral Reef Marine Protected Areas: Recent Social Science Research and Its Policy Implications", Conservation Biology 17(no.2, 2003):630-632.

Mase, Hiromasa, "Ecophilosophy as Liberal Arts Philosophy," Philosophical Inquiry 11(nos. 1-2, Winter-Spring 1989):28-36. "Confronted with today's ecological problems, basically what we are seeking is the ecological attitude, 'we, as a part, also live for the whole'. ... 'Mankind bears a moral responsibility for the world of the future, and also for the whole of nature'" (p. 34). Mase is at Keio University, Tokyo.

Mase, Hiromasa. Keio University, Japan, "Nature and Ethics: Whiteheadian Approach," Annals of the Japan Association for Philosophy of Science (Tokoyo) 7(March, 1988):155-161. Argues for an environmental ethics based on intrinsic value in nature, using a Whiteheadian philosophy, with some attention to Aldo Leopold. A key category is "experience" in the Whiteheadian sense. (v1,#2)

Maser, Chris, The Redesigned Forest. San Pedro: R. & E. Miles, 1988. P., xx, 234. Maser is a former employee of the Bureau of Land Management, a zoologist and expert on forest ecology. This book is an argument for a more enlightened policy of sustainable forestry. Maser criticizes current philosophical attitudes to forestry, the so-called "plantation mentality," but his alternative of sustainable forest management is still locked into an overly mechanistic and anthropocentric conception of nature. "We need to learn to see the forest as the factory that produces raw materials...for a common goal...a sustainable forest for a sustainable industry for a sustainable environment for a sustainable human population" (pp. 148-149). A good example of the limitations of "resource environmentalism."

Maser, Chris, Sustainable Forestry: Philosophy, Science, and Economics. Delray Beach, FL: St. Lucie Press, 1994. 373 pages. \$ 39.95. Maser dislikes intensive forestry and proposes policies that would lead to lower, although probably more sustainable, harvest levels. He recognizes the legitimate role humans play in ecosystems and is concerned for the protection of scarce resources such as old growth forestry and biodiversity; he is also concerned about the fallacy of every-increasing human populations and economic activity. Maser is a forest ecologist. (v6,#4)

Maser, Chris, The Redesigned Forest. San Pedro, CA: R. and E. Miles Publishers, 1988. In the redesigned forest, natural forces are mimicked successfully and are also highly controlled.

Maser, Chris. Sustainable Community Development. Delray Beach, FL: St. Lucie Press, 1997. 280pp. \$39.95 paper. Maser presents a clear picture of a community-directed process of development based on human values, active learning, shared communication and cooperation within a fluid system that becomes shared societal vision both culturally and environmentally. (v8,#1)

Maser, Chris. Resolving Environmental Conflict: Towards Sustainable Community Development. Delray

Beach, FL: St. Lucie Press, 1996. Maser examines notions of development sustainability, and community and the synergism of ecology, culture and economic needs that promote a healthy environment enriching the lives of all its inhabitants. (v7,#1)

Masolo, D. A., African Philosophy in Search of Identity. Bloomington, Indiana: Indiana University Press, 1994, and Edinburgh: Edinburgh University Press, 1994. Is there an African philosophy? A Kenyan philosopher analyzes this debate, its history and current status. African thinkers have used philosophy as the primary vehicle for theoretical articulation of their identities as the means for contesting identities imposed by outsiders. Among the philosophers studied is H. Odera Oruka, who has an interest in environmental philosophy. African philosophy has grown out of unique cultural circumstances and now embraces many different constructions of African reality, problems, and methods of acquiring meaningful knowledge. Masolo is in philosophy at the University of Nairobi, also he has been visiting professor at Antioch College. (v6,#3)

Mason, C. Larry, et al., "Investments in Fuel Removals to Avoid Forest Fires Result in Substantial Benefits," Journal of Forestry 104 (no.1, January/February 2006): 27-31.

Mason, C. *Stanley, Voices on the Wind*. Camden, Maine: Countrysport Press, 2004. Bird-hunting as a spiritual quest. Eating and being eaten as the truth about the world. Death in the web of life. Life, death, and resurrection. Participatory environmentalism and bird-hunting as a powerful metaphor for the search for grace and goodness. Mason is a freelance writer and Mennonite pastor from Des Moines, Iowa.

Mason, Christopher. "Avian species richness and numbers in the built environment: can new housing developments be good for birds?" *Biodiversity and Conservation* Vol. 15, no. 8 (2006): 2365-78.

Mason, J., and Singer, P., Animal factories. New York: Crown, 1980.

Mason, J., An unnatural order: Uncovering the roots of our domination of nature and each other. New York: Simon & Schuster, 1993.

Mason, Jim. "A Lion in Every Back Yard: The Mass Marketing of Exotic Animals." The Animals' Agenda 16(Jul. 1996):26. (v7,#2)

Mason, Marianne D. "Saving the Chesapeake Bay, One Gazebo at a Time." Natural Resources & Environment 14(No. 2, Fall 1999):134- . (v10,#4)

Mason, Michael, "Democratising Nature? The Political Morality of Wilderness Preservationists," Environmental Values 6(1997):281-306. ABSTRACT: Deep ecological appeals for wilderness preservation commonly conjoin arguments for participatory land use decision-making with their central championing of natural areas protection. As an articulation of the normative meaning of participatory democracy, the discourse ethics advanced by Jürgen Habermas is employed to highlight the consistency and justifiability of this dual claim. I argue that Habermasian moral theory reveals a key tension between, on the one hand, an ethical commitment to wilderness preservation informed by deep ecological and bioregional principles that is oriented to a naturalistic value order and, on the other, the procedural norms of democratic participation. It is claimed that discourse ethics thereby raises critical philosophical and practical questions concerning the political legitimacy of deep ecology. In examining the progressive claims of environmental philosophers and wilderness activists embracing this perspective, I draw empirically upon Canadian arguments for natural areas protection and associated radical prescriptions for a democratisation of land use decision-making. School of Geography and Environmental Studies University of North London, 62-66 Highbury Grove, London, N5 2AD, UK. (EV)

Mason, Miriam, "Lifestyle: Exploring Community Life at the Morning Star Center," Ecotheology No 3

(July 1997):111-116.

Mason, Simon, "Lifestyle: Gh1andi's Spirituality in Today's Ecological Crisis," Ecotheology No 5/6 (Jul 98 / Jan 99):226-238.

Masri, Al-Hafiz B. A., Islamic Concern for Animals (Petersfield, Hants, England: The Athene Trust, 1987). The author was for many years the first Sunni Imam of the Shah Jehan mosque, Woking, United Kingdom. Includes 100 Quranic quotations and 50 from the Hadith. Dr. Masri has also produced a videotape in this field. (v2,#1)

Massey, Marshall, "Where Are Our Churches Today? A Report on the Environmental Positions of the Thirty Largest Christian Denominations in the United States," Firmament, vol. 2, no. 4, Winter, 1991. "Over 70% of all U. S. Christians are now in denominations that either have active ecology ministries or are beginning to assemble ecological ministries." Programs are underway in the United Methodist Church (3rd largest), Evangelical Lutheran Church in America (5th), Presbyterian Church (USA) (8th), United Church of Christ (14th), Christian Church (Disciples of Christ) (20th), and programs are beginning in the Catholic Church (1st), the Southern Baptist Convention (2nd), the National Baptist Convention of America (9th), the Lutheran Church--Missouri Synod (10th), the Episcopal Church (12th), American Baptist Churches USA (13th), and the Seventh-day Adventist Church (24th). The larger denominations that have taken no action are the National Baptist Convention (4th), the Church of God in Christ (Memphis, TN) (7th), and the Church of Jesus Christ of the Latter-day Saints has made a formal commitment to inaction (6th). (v2,#1)

Massinga, Antonio. "Development Dilemmas in Mozambique." The Ecologist 26(Mar.1996):73. After three decades of warfare, Mozambique is being developed as a tourist destination. While the economic returns for local people are slim, the ecological damage is often considerable. But tourism is not the only destructive industry making land grabs on Mozambique. Trapped by the current development model, many environmentalists feel forced to make invidious choices. (v7,#2)

Masson, Jeffrey Moussiaeff, and McCarthy, Susan, When Elephants Weep. New York: Delacorte Press, 1995. A comprehensive argument for animal sensibility. (v.10,#2)

Masson, Jeffrey. "Animal Passions," The Animals' Agenda 17 (no.1, 1997):34. Jeffrey Masson explores animal emotions with Kim Sturla. (v8,#2)

Masson, Philippe. "Sustainable Rural Development," Land Use Policy 14(1997):75. (v8,#1)

Matczak, P., Problemy ekologiczne jako problemy spo»eczne (Ecological problems as Social Issues), Wydawnictwo Naukowe UAM (UAM Press), Pozna½, 2000.

Matczak, P., Problemy ekologiczne jako problemy spo»eczne (Ecological problems as Social Issues), Wydawnictwo Naukowe UAM (UAM Press), Pozna½, 2000. (v.13,#1)

Matheny, G, "Expected Utility, Contributory Causation, and Vegetarianism," Journal of Applied Philosophy 19(no.3, 2002): 293-298.

Matheny, Gaverick, and Kai M. A. Chan, "Human Diets and Animal Welfare: The Illogic of the Larder," Journal of Agricultural and Environmental Ethics 18(2005):579-594. Few moral arguments have been made against vegetarian diets. One exception is the Logic of the Larder: We do animals a favor by purchasing their meat, eggs, and milk, for if we did not purchase these products, fewer animals would exist. This argument fails because many farm animals have lives that are probably not worth living, while

others prevent a significant number of wild animals from existing. Even if this were not so, the purchase of animal products uses resources that could otherwise be used to bring a much greater number of animals into existence. Keywords animal welfare - farm animals - utilitarianism - vegetarianism - wildlife. Matheny is in the Department of Agricultural and Resource Economics, University of Maryland. Chan is with the Center for Conservation Biology, Stanford University, also with the Institute for Resources Environment and Sustainability, University of British Columbia. (JAEE)

Matheny, Gaverick, "Least harm: A defense of vegetarianism from Steven Davis's omnivorous proposal." Journal of Agricultural and Environmental Ethics 16(2003):505-511. Steven Davis argues that the number of animals killed in ruminant-pasture production is less than the number of animals killed in crop production. Davis then concludes the adoption of an omnivorous diet would cause less harm than the adoption of a vegetarian diet. Davis's argument fails on three counts: first, Davis makes a mathematical error in using total rather than per capita estimates of animals killed; second, he focuses on the number of animals killed in production and ignores the welfare of these animals; and third, he does not count the number of animals who may be prevented from existing. KEY WORDS: animal production, animal rights, animal welfare, least harm, population, utilitarianism, vegetarianism. (JAEE)

Mather, A., "Managing Scotland's Environment," Land Use Policy 20(no. 2, 2003): 198. (v 14, #3)

Mather, Alexander S. Global Forest Resources (London: Belhaven Press, 1990). (v1,#2)

Mather, Jennifer A., and Roland C. Anderson, "Personalities of Octopuses (*Octopus rubescens*), Journal of Comparative Psychology 107 (1993): 336-340. Variations in octopus behavior might be called "temperament," but these authors find they are similar to dimensions of personality in humans. Some octopuses they call "aggressive," others "indifferent," and some "paranoid."

Mathews, A, "Power/Knowledge, Power/Ignorance: Forest Fires and the State in Mexico," Human Ecology 33 (no. 6, December 2005): 795-820.

Mathews, David Ralph. "Common versus Open Access: The Canadian Experience," The Ecologist 25(no.2/3, Mar. 1995):86- . Government fisheries policy in Canada has been heavily influenced by the "Tragedy of the Commons' thesis-with disastrous results; the regulated commons; Discrimination and redundancies; opening up access for industrial trawlers; Local resistance. (v6,#4)

Mathews, Freya, ed., Ecology and Democracy. London and Portland, OR: Frank Cass, 1996. Nine contributors. Originally published as volume 4, no. 4, of Environmental Politics. (v7,#4)

Mathews, Freya, "Ecological Philosophy," in Routledge Encyclopedia of Philosophy, 10 vols, ed, Edward Craig (London: Routledge, 1998) in vol. 3, pp. 197-202. Mathews is in philosophy, LaTrobe University, Victoria, Australia. (v.13,#1)

Mathews, Freya, For Love of Matter: A Contemporary Panpsychism. Albany: State University of New York Press, 2003. "To adopt a panpsychist outlook is to enter the terrain of 'spirituality,' since it opens up this possibility of communicative engagement with a responsive world that invites us to assume an attitude of eros in relation to it. In considering this invitation however, we are immediately confronted with the traditional problem of evil: why should we make ourselves available and vulnerable to a world that can and does visit so much suffering and harm upon us? How can we affirm the erotic intent of the One in creating us, in the light of the tortured testimony of the created?" (p. 10). A useful account is the story of Eros and Psyche, recorded by Lucius Apuleius in the second century A.D. "This story reveals how it is possible to sustain an erotic engagement with the world, consonant with a panpsychist outlook,

in full knowledge of the possibilities of suffering and death that this world holds for us" (p. 10). Mathews is in philosophy, La Trobe University, Australia.

Mathews, Freya, "Conservation and Self-Realization: A Deep Ecology Perspective," Environmental Ethics 10(1988):347-355. An excellent discussion of the basic tenets of deep ecology---self-realization and identification with the wider world---and the apparent dilemma this creates for conservation policies. Deep ecology assumes that "identification" with nature leads to conservation as a matter of self-defense, but if nature as a whole would continue without humanity, why is it important to conserve for the survival of humanity? Mathews argues that "identification, in the context of deep ecology, is premised on a convergence of interests" (p. 353). An individual's interests lead to a wider identification; but one cannot then nullify the more local concerns for the sake of more cosmic ones. Mathews also bases the argument on the unargued claim that the universe as a whole is a self-realizing entity, endowed with conatus. Cosmic identification does seem to "lose" the individual. Mathews ends by saying that the loss of life on Earth can be viewed with equanimity, but this is a strange way to argue for environmentalism. (Katz, Bibl # 2)

Mathews, Freya, For Love of Matter: A Contemporary Panpsychism. Albany: State University of New York Press, 2003. Reviewed by Rebecca Garcia Lucas in Environmental Values 14(2005):523-524.

Mathews, Freya, The Ecological Self. London: Routledge, 1990, published in the United States by Barnes and Noble, Savage, Maryland, 1991. Mathews claims here the first book-length treatment of the metaphysical foundations of ecological ethics. The author seeks to provide a metaphysical illumination of the fundamental ecological intuition that we are in some sense "one with" nature and that everything is connected to everything else. She considers and rejects the dominant atomistic metaphysics implicit in Newtonian physics. Drawing on Einsteinian cosmology, modern systems theory, and the philosophy of Spinoza, she elaborates a new metaphysics of interconnectedness. The normative implications of this new metaphysics for our conceptions of nature and the self are analyzed in this provocative study. (v2,#3)

Mathews, Freya, "Beyond Modernity and Tradition: A Third Way for Development," Ethics and the Environment 11(2006):85-113. How we understand the world (our metaphysical premise) determines, to a large degree, how we treat it. How we treat our world constitutes our basic modality. Our basic modality colors everything we do--our entire culture takes its cue from it. Three basic modalities are here distinguished. The first is the modality of pre-materialist or traditional, religion-based societies. This is a modality of importuning, the seeking of assistance from supernatural sources. The second is the modality of materialist or modern, secular societies. This is a modality of instrumentalism, involving mastery, control, and a will to re-make the world in accordance with human ends. The third is the modality of prospective post-materialist societies. These societies would be post-religious but not post-spiritual. Their modality would be one of letting the world unfold according to its own nature, and, by extension, finding creative synergies between human and nonhuman conativities. This modality of synergy is explicated by reference to the Daoist notion of wu wei. Mathews is in philosophy, La Trobe University, Australia. (Eth&Env)

Mathews, Freya, "Vale Val: In Memory of Val Plumwood," Environmental Values 17(2008):317-321. On 29 February 2008, Val Plumwood died of stroke at the age of 68. She was not only a seminal environmental thinker, whose book *Feminism and the Mastery of Nature* has become a classic of environmental philosophy; she was also a woman who fearlessly lived life on her own deeply considered terms, often in opposition to prevailing norms. In this obituary Freya Mathews discusses Val's life and her contributions to environmental philosophy.

Mathews, Freya, "Thinking from Within the Calyx of Nature," Environmental Values 17(2008): 41-65. Is philosophy an appropriate means for inducing the 'moral point of view' with respect to nature? The

moral point of view involves a feeling for the inner reality of others, a feeling which, it is argued, is induced more by processes of synergistic interaction than by the kind of rational deliberation that classically constituted philosophy. But how are we to engage synergistically with other-than-human life forms and systems? While synergy with animals presents no in-principle difficulty, synergy with larger life systems takes us into epistemological realms explored only in the margins of the Western tradition, such as in Goethe's Romantic alternative to science. These 'alternative' epistemological realms are however the very province of the Daoist arts of China, and these arts accordingly furnish us with practices conducive to a moral consciousness of nature.

Mathews, Freya. "Community and the Ecological Self." Environmental Politics 4(Winter 1995):66. (v7,#2)

Mathews, Freya. For Love of Matter: A Contemporary Panpsychism. Albany, NY: SUNY Press, 2003. Challenges basic assumptions of Western science, modern philosophy, and environmental philosophy, arguing that the environmental crisis is a symptom of a larger, metaphysical crisis. Western science rests on the premise that the world is an inert backdrop to human presence rather than a communicative presence in its own right, one capable of dialogical congress with us. Mathews explores the transformative effects of a substitution of the latter, panpsychist premise for the former, materialist one. She suggests that to exist in a dialogical modality is to enter an expanded realm of eros in which the self and world are mutually kindled into a larger, more incandescent state of realization. She argues that any adequate philosophical response to the so-called "environmental crisis" cannot be encompassed within the minor discipline of environmental philosophy but must instead address the full range of existential questions. Freya Mathews is Senior Lecturer of Philosophy at La Trobe University. She is the author of The Ecological Self and editor of Ecology and Democracy. (v.14, #4)

Mathews, Freya. "Introduction: Ecology and Democracy." Environmental Politics 4(Winter 1995):1. (v7,#2)

Mathews, Freya. "Conservation and Self-Realization: A Deep Ecology Perspective." Environmental Ethics 10(1988):347-55. Nature in its wider cosmic sense is not at risk from human exploitation and predation. To see life on Earth as but a local manifestation of this wider, indestructible and inexhaustible nature is to shield ourselves from despair over the fate of our Earth. But to take this wide view also appears to make interventionist political action on behalf of nature--which is to say, conservation--superfluous. If we identify with nature in its widest sense, as deep ecology prescribes, then the "self-defence" argument usually advanced by deep ecologists in support of conservation appears not to work. I argue that the need for eco-activism can be reconciled with a rejection of despair within the framework of deep ecology, and that in the process of this reconciliation the meaning of the term conservation acquires a new, spiritual dimension. Mathews is in the philosophy department, University of Melbourne, Victoria, Australia. (EE)

Mathews, Jessica, "Post-Clone Consciousness," Washington Post (3/7/97): A19. See under: Kolata, Gina, "With Cloning of a Sheep, the Ethical Ground Shifts," New York Times (2/24/97): A1. (v8,#1)

Mathisen, Werner Christie, "Green Utopianism and the Greening of Science and Higher Education," Organization and Environment, 19 (no. 1, March 2006).

Matloff, Judith. "Above Rwanda's Madding Crowd, Mountain Gorillas Reign." The Christian Science Monitor, vol. 80, 10 Dec. 1996. p. 5.

Matloff, Judith. "Africa's Oil is Cheap, But Often a Hassle." The Christian Science Monitor, vol. 88, 16 Oct. 1996, p. 9.

Matloff, Judith. "Battle For River City Seen as Turning Point in War Over Zaire." The Christian Science Monitor, vol. 89, 10 March 1997, pp. 1, 18.

Matloff, Judith. "Southern Africa's Oasis May Turn to Dust." Christian Science Monitor 89 (22 July 1997): 1, 9. (v8,#3)

Matossian, Mary Kilbourne. Shaping World History: Breakthroughs in Ecology, Technology, Science, and Politics. Armonk, NY: M. E. Sharpe, 1997. 240pp. \$22.95. A survey of humankind from earliest times to the present which focuses on four factors: climate, communication and transportation technology, scientific advances, and the competence of political elites. (v8,#1)

Matson, P. A., et al, "Agricultural Intensification and Ecosystem Properties," Science 277(1997):504-509. See under theme issue, Science, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Matsuzawa, T., ed., Primate Origins of Human Cognition and Behavior. Tokyo: Springer, 2001. A Japanese view of primates, primate culture, primate science, and the cognitive capacities of chimpanzees and macaques--always with respect for the primates. (v.13,#1)

Matthew, R. A., "Review of: Restoring Nature: Perspectives from the Social Sciences and Humanities, edited by Paul H. Gobster & R. Bruce Hull," Natural Resources Journal 41(no.4, 2001): 1023-26. (v.13,#2)

Matthew, Richard A., ed., Contested Grounds: Security and Conflict in the New Environmental Politics. Albany, NY: State University of New York Press, 1999.

Matthews, Anne, "Slow Death Beyond the 98th Meridian. Can Anyone Out There Save the Great Plains?" Outside, May 1993. Two percent of the nation live in this vast area, largely depopulated with the agricultural revolution and industrialization. The plains are overgrazed, overplowed, overfenced, and also a wheat basket. Can the plains be re-invented as an alternative to industrial, urban civilization? "We're hard-wired for the Paleolithic," says Wes Jackson. "We need less technological cleverness, more understanding." (v4,#1)

Matthews, Clifford, Tucker, Mary Evelyn, and Hefner, Philip, eds., When Worlds Converge: What Science and Religion Tell Us about the Story of the Universe and Our Place in It. Peterborough, NH: Open Court, 2001. Contributions arising from the 1999 Parliament of World's Religions, often with a concern for the relationship between humans and their planet. (v.13,#1)

Matthews, Freya, "Letting the World Grow Old: An Ethos of Counter-Modernity," Worldviews 3(no. 2, 1999):

Matthews, George W. Review of The Struggle for Nature: A Critique of Radical Ecology. By Jozef Keulartz. Environmental Ethics 22(2000):431-434.

Matthews, Patricia M. Reivew of: Brady, Emily, Aesthetics of the Natural Environment. Environmental Values 13(2004):401-403. (EV)

Matthews, Sue, "The IMF and the World Bank: Financial Friends or Environmental Enemies," Africa - Environment and Wildlife 2(no. 2, January/February, 1994):27-31. In early 1993, after a hiatus of almost 30 years, the World Bank offered to lend South Africa 3 billion rand (\$ 800,000), following the new government there, and the lifting of United States and United Nations sanctions. There were detailed negotiations with the South African government and the African National Congress (ANC) party about

potential projects within a social reconstruction program. The International Monetary Fund (IMF) also offered an equally large loan to help relieve the balance-of-payments strain South Africa had experienced as a result of the drought and the consequent heavy maize imports of 1992. These advances were met with jubilation on the one hand and words of warning on the other. Many critics felt it was unwise to drive South Africa further into debt, and even unnecessary, given its huge gold reserve. When World Bank President Lewis Preston visited the country, Nedbank's chief economist was quoted, "We have enough finance in this country, but we just don't know how to use it." Others were wary of accepting the World Bank and IMF loans, having seen the consequences of the debt crisis in the rest of Africa. And since both institutions are controlled by member countries whose votes are in accordance with the size of their respective donations, the United States wields the most power. Through the bank and the IMF, the United States has exerted such a strong influence over the macroeconomic policies of African nations that it has been likened to the recolonization of Africa. Particularly troublesome are Structural Adjustment Programmes (SAF's), which typically require currency devaluation to make exports cheaper and imports more expensive, spending cuts, withdrawal of subsidies, and trade liberalization, resulting in plummeting per capita incomes, rising unemployment and urban poverty, and reduced government spending on social services, also encouraging the expansion of cash crops for export at the expense of food crops which are grown for local consumption. Much of this burden of adjustment falls on the poor, especially women and children. The World Bank and IMF have been attempting reforms, but reform is difficult. Matthews is a marine ecologist and free lance journalist.

Matthewson, K, "Review of: Murphy, A.B. and Johnson, D.L., editors, Cultural encounters with the environment: enduring and evolving geographic themes", Progress in Human Geography 27(no.2, 2003):245-246.

Matthiessen, Peter, The Birds of Heaven: Travels with Cranes. Paintings by Robert Bateman. San Francisco: North Point Press, 2001. Cranes are birds out of time and rapidly running out of space. Ancient birds, all fifteen species are in trouble, and on every continent except South America. Several species seemed doomed to extinction. Yet no other birds have as popular a hold on the imagination of as many cultures. Matthiessen travels to China, Mongolia, India, Europe, and the United States to investigate and to lament the plight of cranes. (v.13,#1)

Matthiessen, Peter, "The Last Cranes of Siberia," New Yorker, May 3, 1993. The cranes of Russia are facing extinction amid Russia's economic anarchy, as multinational corporations and local entrepreneurs plunder the natural resources of Siberia's Amur Basin. Now environmental delegates from Russia, China, Japan, and the U.S. are putting aside national disputes in the fight to save the region's endangered species. (v4,#2)

Matthiessen, Peter. "The Last Wild Tigers." Audubon 99 (no. 2, March-April 1997):54-63, 122-25. There are now about 3,000 tigers in Asia, down from 100,000 at the turn of the century. Prospects for survival are not good, given the mix of escalating numbers of people, their demands on the environment, and the vicissitudes of governments in the regions the tigers inhabit. Matthiessen is a well-known wildlife conservationist. (v8,#1)

Mattingly, Michael. "Private Development and Public Management of Urban Land: a Case Study of Nepal." Land Use Policy 13(Apr.1996):115. (v7,#2)

Mattson, David J., and Merrill, Troy, "Extirpations of Grizzly Bears in the Contiguous United States, 1850-2000", Conservation Biology 16(no. 4, August 2002):1123-1136. The Yellowstone grizzly bear owes its survival to the Endangered Species Act. The estimated 400-600 grizzlies in the greater Yellowstone ecosystem would not be there today if not for the bear's listing under the ESA a quarter-century ago. The authors use a computer model to compare population trends before and after listing, and figure in changes in land management resulting from the ESA, and conclude that, without the law, the bear would have a "one in quadrillion chance" of still existing as a viable population. Mattson is a biologist with the U.S. Geological Survey, Colorado Plateau Field Station, Northern Arizona University, Flagstaff. Merrill is an independent researcher, Moscow, ID. (v.13, #3)

Mattson, David J. "Ethics and Science in Natural Resource Agencies", Bioscience 46(no.10, 1996):767. (v7,#4)

Mattson, David J.; Herrero, Stephen; and Pease, Craig M. "Science and Management of Rocky Mountain Grizzly Bears." Conservation Biology 10, no.4 (1996): 1013. (v7, #3)

Maturana, Humberto R. and Francisco J. Varela, Autopoiesis and Cognition: The Realization of the Living. Dordrecht/Boston: D. Reidel Publishing Co., 1980. This book was first published in Chile as Autopoiesis: The Organization of the Living. This seems to be the origin of the recent term "autopoiesis" (autos, self, and poiēin, to produce) to refer to nature and organisms as self-organizing systems, although this idea is an old one ("the earth produces of itself, Greek: automatically, Luke 4.28). More recently, the idea had already been in use in systems theory and in irreversible thermodynamics. The authors claim that organisms are self-organizing machines. A popular account is The Tree of Knowledge: The Biological Roots of Human Understanding. Boston, Shambhala, 1988.

Matzke, Gordon Edwin, and Nabane, Nontokozi. "Outcomes of a Community Controlled Wildlife Utilization Program in a Zambezi Valley Community." Human Ecology Forum 24 (Winter 1996): 65. (v7, #3)

Matzke, Jason P., A Pluralistic Humean Environmental Ethic: Dealing with the Individualism-Holism Problem, Ph.D. thesis, Michigan State University, Spring 2003. Environmental ethicists often argue for ethical holism, granting moral standing to ecosystems and species. However, this conflicts with traditional ethics which attributes moral standing to individual organisms. This is the individualism-holism problem. Marry Anne Warren and J. Baird Callicott have each offered solutions which they claim are monistic. I synthesize their views and reinterpret them as a pluralistic Humean environmental ethic, one which ameliorates but cannot fully eliminate the conflict.

Warren's principles are revised here in light of my contention that interests play the central role in determining the moral standing of individual organisms and this provides substance to Callicott's otherwise more abstract approach. Callicott's work, in turn, provides theoretical coherence for Warren's principles.

Humean sentimentalism, however, is open to the charge of relativism, especially since Hume's appeal to universal agreement on central moral beliefs cannot be sustained in a world so obviously diverse. Humean sentimentalism can be reinterpreted pluralistically. Differences in experience and culture prevent universal agreement, but the common experience of living as humans in this world, with its particularities, limits the range of acceptable alternatives. Furthermore, because reason informs sentiment, there are grounds for critically assessing Humean moral claims.

A pluralistic approach to moral reasoning provides an alternative to the continuing theoretical and practical stalemate between individualists and holists. Choices may have ethical remainders, but neither side of a debate can so easily insist that compromise threatens their moral integrity. The thesis advisor was Fred Gifford. (v.14, #4)

Mauchamp, A. "Threats from Alien Plant Species in the Galapagos Islands," Conservation Biology 11(no.1, 1997):260. (v8,#2)

Maurer, Brian A. "Relating Human Population Growth to the Loss of Biodiversity", Biodiversity Letters 3(no.1, 1996):1. (v7,#4)

Maurer, Brian A., "Ecological Science and Statistical Paradigms: At the Threshold," Science 279(1998):502-504. Ecosystems are too complicated to form testable theories about easily. Linear thinking about ecosystems--assumptions that they are "balanced" or "stable," for example--is being replaced by the view that ecosystems are constantly changing and that those changes depend to a large extent on conditions experienced by an ecosystem before its measurement. Are ecosystems predictable in dynamic change, and lawlike or regular to this extent? Not yet in many cases, since both the theory and the statistics used in analysis have been too simplistic. But they may become so with more sophisticated statistical methods. Maurer is in zoology, Brigham Young University, Provo, UT. (v9,#1)

Maurer, Brian A., Untangling Ecological Complexity: The Macroscopic Perspective. Chicago: University of Chicago Press, 1999. Maurer argues that ecology can and ought to study fauna and flora on regional and continental scales, often more enlightening than too much detailed study in local communities, the macroscopic scale as opposed to the microscopic scale. (v.10,#1)

Mauritz, Elizabeth. Review of The Sunflower Forest: Ecological Restoration and the New Communion With Nature. By William R. Jordan III. Environmental Ethics 28(2006):433-434. (EE)

Maxeiner, D., Miersch, M. Öko-Optimismus. Review by Inglofur Blühdorn, Environmental Values 7:(1998):490.

Maxwell, Fordyce, "The Treatment of Animals and the Food Industry," Pages 10-15 in The Animal Kingdom and the Kingdom of God, Occasional Paper No. 26, Centre for Theology and Public Issues, New College, University of Edinburgh, 1991. Co-published by the Church and National Committee of

the Church of Scotland. ISBN 1 870126 17 3.

Maxwell, Steven. "The Commercial Environmental Services Industry: Overview and Outlook." Journal of Environmental Law and Practice 3(no.4, Jan. 1996):4. Despite a shake-out among environmental companies, the need for high-quality environmental services will endure, and the forecast is optimistic. (v7,#1)

May, Elizabeth, At the Cutting Edge: The Crisis in Canada's Forests. Toronto: Key Porter Books, Ltd. Canadian \$ 25.00. An analysis of what modern industrial forestry is all about, according to May, the wholesale destruction of Canada's natural heritage. Myths and half-truth perpetuated by the Forest Industry and the Canada government. (v.10,#2)

May, Gerald G. *The Wisdom of Wilderness: Experiencing the Healing Power of Nature*. San Francisco: HarperSanFrancisco, 2006. The healing power of nature in diverse ranges of experiences, written when the author knew he was dying. By a psychiatrist who served as a medic in Vietnam, founding a Christian contemplative organization with insights from Eastern traditions. "Before we can effectively heal the wounds we have inflicted upon the rest of Nature, we must allow ourselves to be healed. And we must allow the rest of Nature to help us."

May, Larry and Shari Collins Sharatt, eds., Applied Ethics: A Multicultural Approach. Englewood Cliffs, NJ: Prentice-Hall, 1994. 553 pages. Paper. Another reader in applied ethics, this one features multicultural perspectives and in that respect is distinctive. The multicultural emphasis is apparent in the section on "Environmental Ethics": Bernard E. Rollin, "Environmental Ethics and International Justice"; William K. Reilly, "The Green Thumb of Capitalism: The Environmental Benefits of Sustainable Growth"; J. Baird Callicott, "Traditional American Indian and Western European Attitudes Toward Nature: An Overview"; Chung-ying Cheng, "On the Environmental Ethics of the Tao and Ch'i"; Karen J. Warren, "The Power and the Promise of Ecological Feminism"; and Ramachandra Guha, "Radical American Environmentalism and Wilderness Preservation: A Third World Critique." Both editors are at Washington University, St. Louis. (v4,#4)

May, Peter H., da Motta, Ronaldo Seroa, eds. Pricing the Planet: Economic Analysis for Sustainable Development. New York: Columbia University Press, 1996. 192 pp. \$45. Environmental economists and ecologists explore possibilities for sustainable development on a global scale. In the process they shed light on some difficult questions about how much we can expect from economic development projects as they currently stand, given the finite resources of our Earth. (v7,#4)

May, Peter H., ed., Natural Resource Valuation and Policy in Brazil. New York: Columbia University Press, 1999. (v.13,#4)

May, R. "Conservation: Dealing With Extinction," Pages 48-62 in Imagine Tomorrow's World, Gland: Switzerland, IUCN, 1998. (v.10,#1)

May, Robert M., "The Modern Biologist's View of Nature," pages 167-182 in Torrance, John, ed., The Concept of Nature. Oxford: Clarendon Press, 1992. "My conclusion is that humanity today does indeed have a very special place in nature, not because we were divinely created to use it and rule it, but rather because we have--for what must be a fleeting moment in evolutionary time--cast off the shackles that keep population in check, and in so doing threaten, by the continuing increase in human numbers and associated activities, to bring about the end of history in the natural world. ... I believe we should cherish and conserve diversity primarily for the ethical reason that we now recognize we are no more, though no less, than a part of it; no longer can an educated person see the world as a God-given inheritance to wreak to human ends" (p.168, p. 182). May is in zoology, Oxford University. (v.10,#1)

May, Robert M., "Taxonomy as Destiny," Nature 347 (September 13, 1990):129-130 and C. H. Daugherty, A. Cree, J. M. Hay, and M. B. Thompson, "Neglected Taxonomy and Continuing Extinctions of Tuatara (Sphenodon), Nature 347 (September 13, 1990):177-179. The tuatara is a large, iguana-like reptile, the sole survivor of a group that flourished in the Triassic Period, now confined to a few islets off the coast of New Zealand. It has a well-developed third eye in the center of its head, a variation on an organ that has been reduced to the pineal gland in most vertebrates. The authors argue that there are three species, not one, and that the established view that there is one species has resulted in inadequate conservation, with one species now extinct and the others imperiled. Further, they wonder whether these two remaining species, quite disparate from superficially similar lizards, do not by some measures represent as much diversity as in all 6,000 species of more common snakes, lizards, and amphibians. Phylogenetic distance needs to be figured into estimates of diversity and into priorities in conservation. They suggest some ways to calculate this. May is a zoologist at Oxford; Daugherty, Cree, and May are biologists at Victoria University of Wellington in New Zealand; Thompson is a zoologist at the University of Sydney in Australia. (v5,#1)

Mayer, J. "The Stalemate in Food and Agricultural Research, Teaching, and Extension," Science 260: 881-82. (v6,#2)

Mayer, Sue, and Stirling, Andy, "Finding a Precautionary Approach to Technological Developments - Lessons for the Evaluation of GM Crops," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):57-71. The introduction of genetically modified (GM) crops and foods into Europe has generated considerable controversy. Despite a risk assessment system that is intended to be precautionary in nature, the decisions that have been taken have not gathered public confidence. Key attributes of a precautionary appraisal system include humility, completeness, assessing benefits and justifications, making comparisons, allowing for public participation, transparency, diversity, and the "mapping" of alternative views rather than the prescription of single solutions. A comparison of the European GM regulatory system with a different (more precautionary) approach using a "multi-criteria mapping" technique reveals a number of problems. These include the narrow framing of the established risk assessment system (thereby excluding many issues of public concern), a lack of public involvement in the process, and a failure to include appropriate comparisons or a diversity of options. Recent changes to the European regulatory system only go part of the way to addressing these issues. Further controversy may therefore be expected. However, practical ways of undertaking a more broad-based precautionary approach are now available (including the multi-criteria mapping method). These new approaches to technology assessment offer a means for decision making to earn greater public confidence in this complex and difficult area. KEY WORDS: GMO, genetically modified crops, multi-criteria mapping, precautionary principle, risk assessment. technology assessment. Mayer is with GeneWatch UK, Tideswell, Buxton, Derbyshire, UK. Stirling is with Science and Technology Policy Research, University of Sussex, Brighton, UK. (JAEE)

Mayo, Deborah G. and Rachele D. Hollander, eds., Acceptable Evidence: Science and Values in Risk Management. New York: Oxford University Press, 1991. \$ 19.95. 292 pages. In Oxford's Environmental Ethics and Science Policy Series. Twelve contributors. Three sections: Perceiving and Communicating Risk Evidence; Uncertain Evidence in Risk Management; Philosophy and Scientific Evidence. Sample chapters: Kristin Shrader Frechette, "Reductionist Approaches to Risk"; Ellen K. Silbergeld, "Risk Assessment and Risk Management: An Uneasy Divorce"; Sheila Jasanoff, "Acceptable Evidence in a Pluralistic Society." Mayo teaches philosophy at Virginia Polytechnic Institute. Hollander is coordinator for ethics and value studies at the National Science Foundation. (v5,#3)

Mayo, Deborah G., ed., Acceptable Evidence: Science and Values in Risk Management. New York: Oxford University Press, 1991. 304 pages. \$ 35.00. (v3,#3)

Mayo, Deborah G., and Rachele Hollander, eds., Acceptable Evidence: Science and Values in Risk Management. New York: Oxford University Press, 1991, paper edition, 1994. 304 pages. \$ 19.95. "This volume shows that rational, critical approaches to value-laden risk judgments can be fruitful, making possible more sophisticated risk assessments and risk management that better comprehends the values at stake." - Ethics. Now in paper and complimentary examination copies are available. Mayo teaches philosophy at Virginia Polytechnic Institute and Hollander is coordinator for Ethics and Values Studies at the National Science Foundation. (v5,#1)

Mayo, Ed. "The Potential of Eco-Taxes", The Ecologist 26(no.5, 1996):204. (v7,#4)

Mazis, Glen A., Earthbodies: Recovering our Planetary Senses. Albany, NY: State University of New York Press, 2002. (v.13, #3)

Mazis, Glen A., Earthbodies: Rediscovering Our Planetary Senses. Albany: State University of New York Press, 2002. Can we understand our bodies without understanding how they are part of a rhythmic flow with the rest of the planet. How can we decide how to treat the animals around us when we fail to realize the nature of our kinship with them. Without hearing the voices of the earth, rocks, and ocean waves, how can we dialogue with the planet or understand ourselves. What kind of ethics would help us find a moral way to achieve an inclusive global community and cherish the environment? Mazis is professor of humanities and philosophy at Soka University and also Associate Professor of humanities and philosophy at Penn State at Harrisburg. (v.13,#2)

Mazza, Mia Anna. "The New Evidentiary Privilege for Environmental Audit Reports: Making the Worst of a Bad Situation." Ecology Law Quarterly 23, no.1 (1996): 79. (v7, #3)

Mazzotta, Marisa J. and Kline, Jeffrey, "Environmental Philosophy and the Concept of Nonuse Value," Land Economics 71 (no. 2, 1995):244-249. Economists have hotly debated nonuse values, whether they are measurable, and whether they should be included in environmental decision-making. It is important to consider the possibility that many individuals may view nonmarket valuation as irrelevant to the more fundamental issue of whether humans have obligations to nature beyond purely anthropocentric concerns. Philosophical questions are at least as important to consider as methodological questions. The debate over nonuse values can be enriched by considering different environmental philosophies. This is a challenge for economists, but if resource economists broaden their anthropocentric perspective to encompass nonanthropocentric environmental philosophies, they may find that many of the methodological problems associated with defining and measuring nonuse values will be cast in a new light. Mazzotta and Kline are in Resource Economics, University of Rhode Island, Kingston. (v.10,#1)

Mc. All Mc's should also be searched under Mac in exact alphabetical order.

McAuliffe, Dennis, "Snowmobilers Could Shift Into Park Again," Washington Post (2/15/02): A3. Gatekeepers in Yellowstone wear gas masks. West Yellowstone, Montana bills itself as the "Snowmobile Capital of the World." At the entrance to the park just outside of the city, National Park employees are wearing gas masks to ward off headaches, dizziness, and nausea from the fumes of the snowmobiler entering the park. Says one gatekeeper: "It's a nightmare. It's chaos. It's loud. It's smelly. It's dangerous. . . . It's just too much. The roads can't handle it. The animals can't handle it. We can't handle it." Under the Clinton Administration, the Park Service had ordered snowmobiles phased out of Yellowstone by the winter of 2003-2004. The only vehicles that would then be allowed in the Park in the winter would be snow coaches--minivans on skis and tank-like treads--that carry 12 passengers. But after a lawsuit filed by a snowmobiler manufacturer's association, the Bush Administration has reopened the decision and is considering a compromise proposal that would allow a reduced number of snowmobiles in

the park each day and would require new stringent emissions for the vehicles. To meet these requirements, snowmobilers would have to ride new, cleaner and quieter machines with four-stroke engines instead of the two-stroke engines common today. Two-stroke snowmobiles have engines comparable in noise and emissions to law-mower motors. Four-stroke snowmobiles are quiet enough that you can talk in their presence. Some prefer them to the snow coaches, which although they reduce pollution by carrying multiple passengers, are incredibly noisy (ear plugs are provided for passengers who ride in them). After seeing the new quieter snowmobiles, some Park Service employees are saying they can live with them.

McAvoy, Leo H. and Daniel L. Dustin. "Toward Environmental Eolithism." Environmental Ethics 6(1984):161-66. We apply two contrasting principles of human workmanship, the principles of design and eolithism, to the issue of responsible environmental stewardship. Both principles are described and analyzed in an environmental context with an emphasis on the weaknesses of the more popular design principle and the strengths of the lesser known eolithic principle. We conclude with a discussion of the principles' complementary potential for environmental planning and management. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is at the department of Recreation, San Diego State University, San Diego, CA. (EE)

McAvoy, Leo H. "Hardening National Parks." Environmental Ethics 2(1980):39-44. The "tragedy of the commons" argument developed by Garrett Hardin is applied to problems associated with the increasing use of the national parks in the United States. The relevance of his argument to such problems is illustrated by a discussion of the proposals included in the recent Draft General Management Plan for Yosemite National Park. Implications for the future management of Yosemite and other public recreation resources conclude the article. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN.

McAvoy, Leo H. and Dustin, Daniel L., "The Right to Risk in Wilderness," Journal of Forestry 79(no. 3, 1981):150-152. Outdoor recreation opportunities ought to be expanded to include "no-rescue" wilderness areas in which users would bear sole responsibility for their personal welfare. Some wilderness enthusiasts want the challenge of being totally on their own, and they have this right. Agencies managing areas designated as full-risk would be absolved, indeed prohibited, from intervening at any time on behalf of any recreationist in distress. With comment by J. Alan Wagar.

McAvoy, Leo H., and Daniel L. Dustin. "The Decline and Fall of Quality Recreation Opportunities and Environments?" Environmental Ethics 4(1982):49-57. User satisfaction as the ultimate goal of recreation planning and management is contested by a discussion of human adaptability which makes it possible for people to adjust to a progressively lower quality of recreation opportunities without loss of satisfaction. Recreation planning and management based on such satisfaction levels are then shown to perpetuate a deterioration in the quality of recreation environments themselves. To arrest this trend, a new goal for recreation planning and management is proposed based on the equation of quality of opportunity with diversity of environmental settings. The article concludes with a discussion of this goal in light of the Recreation Opportunity Spectrum (ROS) concept developed recently by members of the United States Forest Service. McAvoy is at the Division of Recreation, Park and Leisure Studies, University of Minnesota, Minneapolis, MN. Dustin is at the department of Recreation, San Diego University, San Diego, CA. (EE)

McBeath, Jerry, and Jonathan Rosenberg. *Comparative Environmental Politics*. New York: Springer, 2006. McBeath and Rosenberg discuss (1) state-society relations, (2) environmental non-governmental organizations, green parties, and environmental movements, (3) government and policy-making institutions, (4) the capacities of nations to protect the environment, and (5) national responses to global environmental problems.

McBride, Eileen. "Australia Takes Barriers Off World's Greatest Reef." The Christian Science Monitor,

vol. 89, 8 Jan. 1997, pp. 10-11.

McBride, Eileen. "Island of Isolation." The Christian Science Monitor, vol. 89, 29 Jan. 1997, pp. 10-11.

McBride, Eileen. "Australia Defines Nature-Friendly Tours." The Christian Science Monitor 89.103 (23 April 1997): 10.

McCabe, Robert A. Aldo Leopold: The Professor. Madison, WI: Rusty Rock Press, 1987. ISBN 0-910122-98-9 (Rusty Rock Press, Attn: Pam Starr, Department of Wildlife Ecology, University of Wisconsin, 1630 Linden Dr., Madison, WI 53706). \$29.95 hardbound, plus \$2.50 shipping. McCabe took up the professorial reins in the University of Wisconsin Department of Wildlife Ecology when Leopold died and remained in the department until he retired about 1986, and continued to hold an office there until his death about two years ago. McCabe has collected and his recollections about Leopold. Sections on Leopold's department, Leopold as a teacher, personal and professional interactions, the shack, Leopold as a scientist, commissioner, hunter, writer, and the end of his life. (Thanks to Curt Meine.)

McCabe, Robert A, ed., Leopold: Mentor, by His Graduate Students. Proceedings of an Aldo Leopold Centennial Symposium held in Madison, Wisconsin, April 23-24, 1987. Madison, WI: Department of Wildlife Ecology, UW-Madison, 1988. No ISBN number. \$ 6.00 plus \$ 1.50 shipping. (Pam Starr, Department of Wildlife Ecology, University of Wisconsin, 1630 Linden Dr., Madison, WI 53706). Recollections by about two dozen graduate students. (v9,#1)

McCaffrey S., "Thinking of Wildfire as a Natural Hazard," Society and Natural Resources 17(no.6, July 2004):509-516(8). (v. 15, # 3)

McCaffrey S.M., "Fighting Fire with Education: What Is the Best Way to Reach Out to Homeowners?," Journal of Forestry 102(no.5, July/August 2004):12-19(8). (v. 15, # 3)

McCaffrey, Stephen C. "An Assessment of the Work of the International Law Commission", Natural Resources Journal 36(no.2, 1996):297. (v7,#4)

McCagney, Nancy, Religion and Ecology. Oxford: Blackwell's, 1999. 288 pages. Humans in common need a healthy environment, and a cross-cultural dialogue about environmental values will facilitate shared values and the re-evaluation of environmentally destructive practices. Science and religion must work together in mutual respect. McCagney is at the University of Delaware. (v.11,#1)

McCammon, Antony L. T. "Banking Responsibility and Liability for the Environment: What Are Banks Doing." Environmental Conservation 22, no.4 (1995): 297. (v7, #3)

McCann, L., "Transaction Costs of Pesticide Policies in Vietnam," Society and Natural Resources 18(no. 8, September 2005): 759-766.

McCarthy, Elaine, Yearley, Steven. "The Irish Environmental Protection Agency: The Early Years." Environmental Politics 4(Winter 1995):257. (v7,#2)

McCarthy, James. "Rural geography: alternative rural economies the search for alterity in forests, fisheries, food, and fair trade." Progress in Human Geography Vol. 30, no. 6 (2006): 803-11.

McCarthy, John, Noor, Yus Rusila. "Bird Hunting in Krangkeng, West Java: Linking Conservation and Development," The Journal of Environment and Development 5(no.1, 1996):87. (v8,#2)

McCarthy, L, "The brownfield dual land-use policy challenge: reducing barriers to private redevelopment while connecting reuse to broader community goals," Land Use Policy 19(no.4, 2002): 287-296.

McCarthy, Michael A., Lindenmayer, David B., Drechsler, Martin. "Extinction Debts and Risks Faced by Abundant Species," Conservation Biology 11(no.1, 1997):221. (v8,#2)

McCarthy, Tom. *Auto Mania: Cars, Consumers, and the Environment*. New Haven: Yale University Press, 2007. McCarthy presents an environmental history of the automobile, including how consumer desire and manufacturer decisions created impacts from raw material extraction to manufacturing to consumer use to disposal.

McCauley, Douglas J. "Selling Out on Nature." *Nature* Vol. 443, no. 7107 (7 September 2006): 27-28. With scant evidence that market-based conservation works, the time is ripe for returning to the protection of nature for nature's sake. Conservation based on ecosystem services is limited and often fails. "Are there other socially viable paths for conservationists besides the commodification of nature? Yes. Nature has an intrinsic value that is priceless, and this is reason enough to protect it" (p. 28). McCauley is in biology at Stanford University. For replies, see the following letters to the editor: (1) "*Nature*: ecosystems without commodifying them" by Robert Costanza (*Nature* Vol. 443, no. 7113 (19 October 2006): 749), (2) "*Nature*: the many benefits of ecosystem services" by Walter V. Reid, Harold A. Mooney, Doris Capistrano, Stephen R. Carpenter, Kanchan Chopra, Angela Cropper, Partha Dasgupta, Rashid Hassan, Rik Leemans, Robert M. May, Prabhu Pingali, Christián Samper, Robert Scholes, Robert T. Watson, A.H. Zakri, and Zhao Shidong (*Nature* Vol. 443, no. 7113 (19 October 2006): 749), and (3) "*Nature*: poorest may see it as their economic rival" by Michelle Marvier, Joy Grant, and Peter Kareiva (*Nature* Vol. 443, no. 7113 (19 October 2006): 749-50).

McCay, Bonnie J. and James M. Acheson, eds., The Question of the Commons: The Culture and Ecology of Communal Resources. 439 pages, \$ 14.95 paper. Tuscon: University of Arizona Press, 1991. The problems that arise in using common resources. (v2,#4)

McClanahan, T. R., and Young, Truman P. East African Ecosystems and Their Conservation. New York: Oxford University Press, 1996. 480pp. \$70. Draws on the expertise of leading ecologists, each intimately familiar with a particular set of East African ecosystems, to provide an in-depth and integrated account of the ecology, management, threats, and conservation of these diverse ecosystems. Each chapter analyzes a given ecosystem type, taking the reader through the basics of its ecology, its historical use (and misuse) by humans, and its prospects for conservation. (v8,#1)

McClelland, Linda Flint, Building the National Parks: Historic Landscape Design and Construction. Baltimore, MD: Johns Hopkins University Press, 1998. 656 pages. \$ 30, paper. (v.10,#3)

McClendon, Shannon K. and Martin V. Melosi, eds., Comparative Environmental Management in the Americas: Social, Cultural and Legal Perspectives. Houston, TX: Institute for Public History, 1993. Contains Max Oelschlaeger, "Managing Planet Earth: Questions Concerning Expert Management," pp. 100-128. (v5,#2)

McClintock, Jack, "Peter the Great," Discover, October 1999, pp. 80-87. Profile of Peter Raven, Missouri Botanical Gardens, one of the half dozen most effective conservationists in the world. (v.11,#1)

McCloskey, H. J., Ecological Ethics and Politics. Totowa, New Jersey: Rowman and Littlefield, 1983. P. 167. This book attempts too much and ends up saying too little. Divided into three parts, it examines the scientific, ethical, and political dimensions of the environmental crisis. In Part I, McCloskey dismisses scientific predictions of ecological disaster because they are based on projections--assumptions that

present trends will continue unchanged. In Part II, McCloskey argues for a human-based ethical theory, modelled on W. D. Ross, rather than for a new ecological or nonanthropological ethic. But the position seems a muddle, for he claims (p. 36) that nonhuman natural objects can have great intrinsic value. Later, he seems to confuse intrinsic with instrumental value, for species that are ugly or harmful to man are denied the value necessary for protection (p. 61). But if human use is the criterion for protection, then there are only prudential limits on mankind's use/destruction of the natural environment. Perhaps the best part of the book is Part III, where McCloskey argues for international political solutions to the ecological crisis. Many readers, however, may find too sanguine his faith in Western liberalism. (Katz, Bibl # 1)

McCloskey, H. J. Ecological Ethics and Politics. Reviewed in Environmental Ethics 7(1985):71-74.

McCloskey, Michael. "What the Wilderness Act Accomplished in Protection of Roadless Areas Within the National Park System." Journal of Environmental Law and Litigation 10, no.2 (1995): 455. (v7, #3)

McCloskey, Michael. "Conservation Biologists Challenge Traditional Nature Protection Organizations," Wild Earth 6(1996):67. (v8,#1)

McCloskey, Michael, "Local Communities and the Management of Public Forests," Ecology Law Quarterly 25(No.4, 1999):624-. (v.10,#2)

McCluskey, JJ; Rausser, GC, "Hazardous waste sites and housing appreciation rates", Journal of Environmental Economics and Management 45(no.2, 2003):166-176.

McComas, LA; Shanahan, J; Butler, JS, "Environmental Content in Prime-Time Network TV's Non-News Entertainment and Fictional Programs," Society and Natural Resources 14(no. 6, 2001):533-542. (v.13,#1)

McConkey, Edwin H. and Ajit Varki, "Thoughts on the Future of Great Ape Research," Science 309(2 Sept. 2005):1499-1501. After the sequencing of both the human and the chimpanzee genomes, "can we now provide a DNA-based answer to the fascinating question, 'What makes us human?' Not at all! Comparison of the human and chimpanzee genomes has not yet offered any major insights into the genetic elements that underlie bipedal locomotion, a big brain, linguistic abilities, elaborated abstract thought, or any other unique aspect of the human phenome." Some of that may be forthcoming; some may be long out of reach. McConkey is in molecular, cellular and developmental biology, University of Colorado, Boulder.

McConnell, W. J., "Madagascar: Emerald Isle or Paradise Lost?," Environment 44(no.8, 2002): 10-23. (v.13,#4)

McCormick, Bill. "SimEve Meets OncoMouse." Real WORLD (Spring 1997): 12-13. An entertaining review of works by Donna Haraway (University of California at Santa Cruz), including her book with the unwieldy title (in cyber-jargon)

Modest*Witness@Second*Millennium.FemaleMan*Meets*OncoMouse, and her video, Donna Haraway Reads the National Geographics of Primates. After wading hip-deep in deconstruction jargon, which was inspired by Derrida and has been typified by square brackets, as in [eco]logic, whereby you can both use a word and deny it, we may now have to wade, up to our necks, in academic cyber-jargon. Or, perhaps, you can avoid stepping in. Computer-generated signifiers used by Haraway include trademark, copyright, and other signs. So Nature becomes Nature, trademarked; Earth becomes SimEarth, sim for simulated. Haraway has been praised by William Cronin in Uncommon Ground and by Michael Zimmerman in Contesting Earth's Future. Although he says he's torn between laughing and crying, McCormick, nevertheless, thinks that David Lehman's indelible phrase describes Haraway's work: it "gives bullshit a

bad name." (v8,#3)

McCormick, John. Reclaiming Paradise: The Global Environmental Movement (Bloomington: Indiana University Press, 1989, and London: Belhaven Press). A history of environmentalism on a global scale. \$ 35.00. (v1,#2)

McCormick, William, "Antoine Roquetin and 'The Adulterous Woman': Reading Sartre and Camus on Nature." Manuscript paper. Antoine Roquetin is the diarist in Nausea. Sartre thought of it as his goal "to rescue the entire [human] species from animality." He looked in the mirror one day and found out what he "had always known: I was horribly natural." "The Adulterous Woman" is one of Camus' short stories revealing an attitude toward nature. In contrast with Sartre, Camus had great respect for nature; he believed that "the earth is our common homeland," and "the body is our common bond." Copies from the author: P. O. Box 1729, Charlottesville, VA 22902-1729. (v6,#4)

McCormick, Bill. "The Island of Dr. Haraway." Environmental Ethics 22(2000):409-418. Donna Haraway's cyberfeminism has shown considerable appeal on an interdisciplinary level. Her basic premise is that by the end of the twentieth century the boundary between humans and machines has become increasingly porous, and, whether we acknowledge it or not, we are already cyborgs. She also posits this cyborg identity as an acceptable emblem for progressive politics. I disagree, and cite such writers as Susan Bordo, Sharon Ben-Tov, and Jhan Hochman to highlight some of the weaknesses of her position. I argue that we have had repeated warnings about implications of yoking the human to the machine, and that Haraway's "promising monsters" are anything but promising. (EE)

McCoy, Earl D. "Advocacy as Part of Conservation Biology." Conservation Biology 10, no.3 (1996): 919. (v7, #3)

McCullough, Dale R., ed. Metapopulations and Wildlife Conservation. Washington, D.C.: Island Press, 1996. 432 pages. \$55 cloth, \$28 paper. Contributors describe what metapopulation thinking has been applied in specific situations and suggest the analysis required in given cases. Case studies of an array of vertebrate species illustrate nuances of metapopulation theory analysis and its practical applications. (v7, #3)

McCullough, Dale, "North American Deer Ecology: Fifty Years Later." Pages 115-122 in Tanner, Thomas, ed., Aldo Leopold: The Man and His Legacy (Ankeny, Iowa: Soil Conservation Society of America, 1987). Includes the controversy over deer management on Angel Island in the San Francisco Bay. The state of California tried both relocating deer and birth control implants, under pressure from the San Francisco Society for the Prevention of Cruelty to Animals. 85% of relocated deer died within one year of relocation. The Society was unable to trap and implant enough females to prevent continued population growth. "The alternatives to shooting for control of deer populations are expensive, ineffective, and not particularly humane." (p. 121). McCullough teaches wildlife management at Berkeley.

McCullough, Edwin R. "Through the Eye of a Needle: The Earth's Hard Passage Back to Health." Journal of Environmental Law and Litigation 10, no.2 (1995): 389. (v7, #3)

McCully, Patrick. Silenced Rivers: The Ecology and Politics of Large Dams. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1996. The history and politics of dam building world wide and why large dams have become the most controversial of technologies. The wide-ranging ecological impacts of dams, the human consequences of these impacts, and the extensive technical, safety and economic problems which afflict the technology are described through numerous case studies. (v7,#1)

McCutcheon, Marc, The Beast in You: Activities and Questions to Explore Evolution. Charlotte, VT: Williamson Publishing Co., 1999. ISBN 1-885593-36-8. A book for kids, explaining the beast inside them. "Look in a mirror. What do you see? (Besides one handsome kid!) Look closely. See a beast? No, of course not. Look again. See parts of a beast? Hmm. Smile. There's one! Hold up your fingers. There's another! Wiggle your ears. There's another! Would you believe that whenever you are afraid or angry, an ancient beast springs into action? Yet it also lies quietly with you when you sleep. Sometimes the beast is warm and fuzzy. But sometimes it is as ferocious as a lion. Who is this weird creature, and why can only remnants, or parts, of it be seen? Where did the beast come from in the first place? And why has most of it disappeared?

For kids. But it could provoke useful discussion in a college class on how far humans are beasts, whether we are a part of or apart from nature, on nature and culture, and whether our beastliness is part of the problem or part of the solution. (v.13, #3)

McDaniel, Bruce A., "Economic and Social Foundations of Solar Energy," Environmental Ethics 5(1983):155-168. Solar energy is supported as an expression of certain values--such as individual freedom--and not as the satisfaction of economic preferences. (Katz, Bibl # 1)

McDaniel, Bruce A. "Economic and Social Foundations of Solar Energy." Environmental Ethics 5(1983):155-68. Underlying solar energy development is a fundamental issue of values and individual choices. Where solar energy comes to include such ideas as appropriate decentralized technology, self-sufficiency and autonomy, and a responsibility to conserve and preserve the environment, solar energy can become a channel for exploring alternative values. The requirement here is to view solar energy not as just another energy source maintaining an ever increasing flow of consumption goods. Rather, solar energy should be viewed as an opportunity for the development of values which expand individual choices through the creative process of the community paradigm. McDaniel is at the Economics department, Marquette University, Milwaukee, WI. (EE)

McDaniel, Carl N. *Wisdom for a Livable Planet: The Visionary Works of Terri Swearingen, Dave Foreman, Wes Jackson, Helena Norberg-Hodge, Werner Fornos, Herman Daly, Stephen Schneider, and David Orr*. San Antonio, TX: Trinity University Press, 2006.

McDaniel, J, "Spirituality and Sustainability," Conservation Biology 16(no.6, 2002): 1461-1464.

McDaniel, Jay B. Earth, Sky, Gods and Mortals: Developing an Ecological Spirituality (Mystic, CT: Twenty-Third Publications, 1990). 214 pages. McDaniel weaves together various strands of contemporary theology for an ecological spirituality. Influenced by process theology, the author synthesizes core insights of feminism, liberation theology, creation theology, and world religions. Study questions and an annotated bibliography. This is a work of ecological theology more than environmental ethics. Influenced by the process philosophy of Whitehead and contemporary feminist thought about ethics, McDaniel articulates one vision of an "ecological Christianity." McDaniel is professor of religion at Hendrix College, Conway, Arkansas, has served as chair of Meadowcreek Project, and is a member of the Church and Society Working Committee of the World Council of Churches. (v1,#1)

McDaniel, Jay B. Earth, Sky, Gods & Mortals: Developing an Ecological Spirituality. Reviewed in Environmental Ethics 13(1991):361-65.

McDaniel, Jay B., Living from the Center: Spirituality in an Age of Consumerism. St. Louis: Chalice Press, 2000. Ten healing alternatives to the temptations of consumerism, including: "The world is not a global marketplace, but rather a gorgeous planet, filled with many creatures, each of whom is loved by God on its own terms and for its own sake, and each of whom contains God within. (v.13,#1)

McDaniel, Jay B., With Roots and Wings. Maryknoll, NY: Orbis Books, 1995. 243 pages. \$ 16.95, paper. Insights from the sciences, Christian theology, and interreligious dialogue break new ground in the search for wholistic spirituality. An alternative to consumerism and fundamentalism. Be open to being rooted in the earth; be open to the insights of people of other faiths. Become centered on God. (v6,#4)

McDaniel, Jay, "Physical Matter as Creative and Sentient," Environmental Ethics 5(1983):291-317. A provocative blending of quantum physics and process philosophy (Whitehead) that asks us to consider the value of "nonliving" physical matter. (Katz, Bibl # 1)

McDaniel, Jay, "Land Ethics, Animal Rights, and Process Theology." Process Studies 17 (1988): 88-102. McDaniel is primarily concerned with demonstrating the relevance of environmental philosophy for Christian "creation consciousness"---the idea that humans should care for the world as God's creation. He uses Whitehead's process theology to blend together the diverse philosophical views of animal rights, Leopold's land ethic, Heidegger, and deep ecology. (Katz, Bibl # 2)

McDaniel, Jay B., Of God and Pelicans: A Theology of Reverence for Life. Louisville: Westminster/John Knox Press, 1989. Pp. 168. In this book McDaniel argues for a life-centered ethic with a central concern for the ethical consideration of animals, rather than (as in Earth, Sky, Gods, and Mortals) an ecological vision. Influences of process thought and feminism infuse the argument. Develops from a process perspective a theological sensitivity for all living things, animal and human, especially those who suffer and are oppressed. (v1,#1) Reviewed in Environmental Ethics 13(1991):361-65. (Katz, Bibl # 2)

McDaniel, Jay B., "Communion with Spirits and Ancestors," Ecotheology No 1 (July 1996):9-34.

McDaniel, Jay, ed., Liberating Life: Contemporary Approaches to Ecological Theology. Maryknoll, NY: Orbis Press, 1990. (v1,#2)

McDaniel, Jay. "Physical Matter as Creative and Sentient." Environmental Ethics 5(1983):291-317. With the emergence of quantum theory, the Newtonian idea that matter is inert, devoid of creativity and sentience, becomes questionable. Yet, physicists have by no means agreed upon an alternative understanding that can replace the Newtonian paradigm. Henry Stapp and others argue that Whitehead's thought provides a peculiarly appropriate framework for a new understanding of matter in light of quantum theory. The implications for a theology of ecology are manifold. No longer are matter and mind utterly discontinuous, nor is matter devoid of value until assigned value by humans or by God. Even the divine reality is, in a certain sense, "material." This calls for a new sensitivity within Western religion, in which religion itself becomes openness to, and appreciation for, physical matter. McDaniel is at the department of religion, Hendrix College, Conway, AR. (EE)

McDaniel, Jay. "Christian Spirituality as Openness toward Fellow Creatures." Environmental Ethics 8(1986):33-46. In developing theologies and spiritualities of ecology, Christians can learn from the Nobel laureate Barbara McClintock and from process theology. That "feeling for the organism" of which McClintock speaks can be understood within a process context as a distinctive mode of spirituality. The feeling is an intuitive and sympathetic apprehension of another creature in a way which mirrors God's own way of perceiving. It involves feeling the other creature as a fellow subject with intrinsic value. A subjective capacity of this sort is by no means sufficient for a spirituality of ecology, but by all means necessary. McDaniel is at the department of religion, Hendrix College, Conway, AR. (EE)

McDonagh, Sean, To Care for the Earth: A Call to a New Theology. Santa Fe, NM: Bear and Co., 1986. 215 pp.

McDonagh, Sean, "Resolving the Third World Debt Crisis: A Crucial Challenge for Ecojustice," Ecotheology No 5/6 (Jul 98 / Jan 99):95-113.

McDonagh, Sean. Passion for the Earth: The Christian Vocation to Promote Justice, Peace and the Integrity of Creation. Maryknoll, NY: Orbis Books, 1997. 163pp. \$14 paper. An analysis of how the world's economic system poisons the Earth and disrupts justice, peace, and the integrity of creation. (v8,#1)

McDonagh, Sean. The Greening of the Church. London: Geoffrey Chapman, 1990. (v8,#2) Also: Maryknoll, NY: Orbis Books, 1990.

McDonald, Bryan "Considering the Nature of Wilderness: Reflections on Roderick Nash's `Wilderness and the American Mind'" Organization and Environment 14 (No. 2, June 2001) pp.188-201. This piece considers both Nash's work and the continued relevance and impact of his ideas. The objective way Nash describes wilderness as a pristine place through much of his work has become increasingly problematic as scholars consider the ways in which humans construct and reconstruct different and often contradictory conceptualizations of nature. Although Nash's work does not definitively explore the concept of wilderness and its modern significance, it does provide a foundational consideration of the way Americans have interacted with the concept of a reality not modified by human industry, culture or technology. MacDonald is a doctoral student at the School of Social Ecology, University of California at Irvine. (v.13,#2)

McDonald, David. "City Limits," Alternatives 23(no.2, 1997):28. New public-private partnerships for improving cities may not meet UN Habitat Conference expectations. (v8,#2)

McDonald, Hugh P., John Dewey and Environmental Philosophy. Albany, NY: State University of New York Press, 2004. Major figures in contemporary environmental ethics compared, contrasted with a detailed analysis of John Dewey's ethics, his theory of intrinsic value, and his holistic approach to moral justification. Arguing against the idea that Dewey's philosophy is anthropocentric, McDonald claims that using Dewey's philosophy will result in a superior framework for environmental ethics. McDonald is in philosophy at New York City College of Technology (CUNY).

McDonald, Hugh P. "Dewey's Naturalism." In the recent literature of environmental ethics, certain criticisms of pragmatism in general and Dewey in particular have been made, specifically, that certain features of pragmatism make it unsuitable as an environmental ethic. Eric Katz asserts that pragmatism is an inherently anthropocentric and subjective philosophy. Bob Pepperman Taylor argues that Dewey's naturalism in particular is anthropocentric in that it concentrates on human nature. I challenge both of these views in the context of Dewey's naturalism. I discuss his naturalism, his critique of subjectivity, his naturalization of intrinsic value, and his holistic treatment of justification. Environmental Ethics 24(2002):189-208. (EE)

McDonough, William, and Braungart, Michael, "The Next Industrial Revolution," The Atlantic Monthly, October 1998, pages 82-92. Since UNCED at Rio de Janeiro, the business buzzword has been "eco-efficiency." "Eco-efficiency is an outwardly admirable and certainly well-intended concept, but, unfortunately, it is not a strategy for success over the long term, because it does not reach deep enough. It works within the same system that caused the problem in the first place, slowing it down with moral proscriptions and punitive demands. It presents little more than an illusion of change. Relying on eco-efficiency to save the environment will in fact achieve the opposite--it will let industry finish off everything quietly, persistently, and completely" (p. 83). The authors propose instead "eco-effectiveness." "Our concept of eco-effectiveness leads to human industry that is regenerative rather than depletive. It involves the design of things that celebrate interdependence with other living systems. From

an industrial-design perspective, it means products that work within cradle-to-cradle life cycles rather than cradle-to-grave ones" (p. 88). (v.9,#4)

McDowell, James B., Rethinking Man and Nature: Eco-feminism, Taoism and the Human Character Ideal, Master's Thesis, Department of Philosophy, Lancaster University, September 1990.

McDuff, Mallory D. "Public Outreach and Conservation Scientists." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 4, August 1999):695- . (v10,#4)

McEachern, M. G., and Schroder, M. J. A., "The Role of Livestock Production Ethics in Consumer Values Towards Meat," Journal of Agricultural and Environmental Ethics 15(no. 2, 2002):221-237, (JAEE)

McElroy, Michael B., Nielsen, Chris P., and Lydon, Peter, eds., Energizing China: Reconciling Environmental Protection and Economic Growth. Cambridge, MA: Harvard University Committee on Environment, distributed by Harvard University Press, 1998. Studies of Phase I of the Harvard University Committee on Environment China Project (1995-1998). \$ 25, paper. 719 pages.

Nineteen contributors. Examples:

--Alford, William P., and Shen, Yuanyuan, "Limits of the Law in Addressing China's Environmental Dilemma"

--Panayotou, Theodore, "The Effectiveness and Efficiency of Environmental Policy in China"

--Weller, Robert P., and Bol, Peter K., "From Heaven-and-Earth: Chinese Concepts of the Environment and Their Influence on Policy Implementation"

--Wu, Baozhong, He, Kebin, Fan Yuansheng, and Shao, Weijun, "The Status and Trend of China's Policies on Climate Change" (v.10,#2)

McElroy, Susan Chernak, Animals as Teachers and Healers. New York: Ballantine Books (Random House), 1996, 1997. A New York Times bestseller. McElroy lives on a farm in Wyoming. (v.10,#3)

McElroy, Susan Chernak, Animals as Guides for the Soul. New York: Ballantine Books (Random House), 1998. (v.10,#3)

McEwen, F. L. and Milligan, L. P., Discussion Note on "An Analysis of the Canadian Research and Development System for Agriculture/Food", Journal of Agricultural and Environmental Ethics 5(1992):107-109.

McFague, Sallie. Super, Natural Christians: How We Should Love Nature. Minneapolis: Augsburg Fortress, 1997. 200pp. \$15 paper. Reorienting our religious sensitivities from the "supernatural" to the "super, natural" can help us "see these earth others as we see the human others--as made in the imago dei--and therefore as both subjects in themselves and as intimations of God." McFague teaches theology at Vanderbilt Divinity School. (v8,#1)

McFague, Sally, The Body of God: An Ecological Theology. Minneapolis, MN: Fortress Press, 1993. Most accounts of religion and science address only issues pertaining to epistemology and method or offer a simple theology of the stewardship of nature. McFague wants to link the whole scientific worldview with questions of social justice, the environment, and Christian doctrines. She wants an organic model and constructs something like a liberation theology of nature. She shifts from person-centered to cosmos-centered theology. Seeing the universe as God's body impels us into an ethic of care. This is a model of God specifically for the sake of the Earth. McFague teaches theology at Vanderbilt Divinity School. Her 1987 Models of God received the American Academy of Religion's Award for Excellence. (v4,#1)

McGaa, Ed, Eagle Man, Mother Earth Spirituality: Native American Paths to Healing Ourselves and Our

World. 230 pages. \$ 14.95. San Francisco: Harper and Row, 1990. A Sioux Indian with a law degree from the University of South Dakota, also a Marine Corps veteran of over 100 combat missions in Viet Nam, argues that "a reversal of world values, a spiritual concept of the earth as God-created and sacred, is in order before we two-leggeds can be environmentally effective on a global basis." (v2,#4)

McGarigal, K; Romme, WH; Crist, M; Roworth, E; "Cumulative effects of roads and logging on landscape structure in the San Juan Mountains, Colorado (USA)," Landscape Ecology 16(no. 4, 2001):327-349. (v.13,#1)

McGarvey, Daniel J. "Merging Precaution with Sound Science under the Endangered Species Act." *BioScience* Vol. 57, no. 1 (2007): 65-70. Hypothesis tests, which aim to minimize type I errors (false positive results), are standard procedures in scientific research, but they are often inappropriate in Endangered Species Act (ESA) reviews, where the primary objective is to prevent type II errors (false negative results). Recognizing this disparity is particularly important when the best data available are sparse and therefore lack statistical power, because hypothesis tests that use data sets with low statistical power are likely to commit type II errors, thereby denying necessary protection to threatened and endangered species. Equivalence tests can alleviate this problem, and ensure that imperiled species receive the benefit of the doubt, by switching the null and alternative hypotheses. These points are illustrated by critiquing a recent review of ESA requirements for endangered fishes in Upper Klamath Lake (southern Oregon).

McGee, Glenn, "Consumers, Land, and Food: In Search of Food Ethics" in Alessandro Bonanno, ed., The Agricultural and Food Sector in the New Global Era. New Delhi: Concept Publications, 1993. McGee is with the Dept. of Philosophy, University of Massachusetts, Dartmouth, Dartmouth, MA. (v5,#2)

McGee, Glenn, "The Relevance of Foucault to Whiteheadian Environmental Ethics." Environmental Ethics 16(1994):419-424. Although he devotes little explicit analysis to ethics, Whitehead's understanding of the human moral life immerses both human moral agency and environmental ethics in the natural world, judging good actions in the context of complex and interdependent histories of value present in societies of what he calls actual occasions. In this sense, Whiteheadian environmental ethics draws on the most interesting features of Michel Foucault's genealogies of values that suffuse institutions. Nevertheless, a Whiteheadian notion of environmental ethics exceeds Foucault's work in that Whitehead acknowledges the possibility of responsible human values and actions with regard to the environment. McGee is with the Dept. of Philosophy, University of Massachusetts, Dartmouth, Dartmouth, MA. (EE)

McGinley, PC, "From Pick and Shovel to Mountaintop Removal: Environmental Injustice in the Appalachian Coalfields," Environmental Law 34(no.1, 2004):21-106. (v. 15, # 3)

McGinn, Thomas, "Ecology and Ethics," IPQ: International Philosophical Quarterly 14(1974):149-160. Humanism and anti-humanism in the ecological context. The relation of instinct and reason in value judgments. The objectivity of value. The relationship of whole and part in the ecological system. The relation of ends and means in ecological systems. Technological development and moral responsibility. "If man must respect nature as he respects his own body, a new emphasis on cooperation with natural processes must replace disruptive exploitation" (p. 159). McGinn is with the Christophers and has taught at Makerere University in Uganda.

McGinn, Thomas, "Ecology and Ethics," IPQ: International Philosophical Quarterly 14(1974):149-160. "Developed countries have an obligation to restore a disturbed balance of nature. If man must respect nature as he respects his own body, a new emphasis on cooperation with natural processes must replace disruptive exploitation. But economic and technological development looked at on a world scale raises the different problem of distributive justice. ... The ethics of ecology joined to the ethics of distributive

justice furnish the necessary guidelines for this planning. Any further destruction of the balance of nature is an attack on man and as such can be condemned on humanistic moral grounds." McGinn has taught at Makerere University in Uganda.

McGinnis, Michael V., "On the Verge of Collapse: The Columbia River System, Wild Salmon and the Northwest Power Planning Council," Natural Resources Journal 35(1995):63-92. The Columbia River Basin contains several species of endangered fish and wildlife. The Northwest Power Planning Council has attempted to restore salmon. The stakeholders are presumed to share values about the landscape, their sense of place in it, their relationship to nature, and to share faith in the ability of science and technology to restore ecosystems. Cooperation requires a high level of ecocentrism, principles of reverence, respect, humility, responsibility, care and respect--essentially an ethic of the environment. Nevertheless, the biological collapse of the salmon is at risk. But there is some hope. McGinnis is at the Center for Bioregional Studies and Conflict Resolution, Goleta, CA. (v.10,#1)

McGinnis, Michael V. "Myth, Nature, and the Bureaucratic Experience." Environmental Ethics 16(1994):425-436. From the "deep" ecological perspective, there is a dualism between an ecocentric and an anthropocentric perspective, and this dualism is reflected in the ideal of the bureaucratic experience. The bureaucrat lives by the myth of the human ability to control nature. An eco-myth is evolving that can offer one means of transcending the dominant bureaucratic mythic experience. This eco-myth moves toward a positive and sensitive human relationship with nature—a collective experience that values nature on its own terms and not as standing reserve. This position is no less mythic than the one it is replacing, but it is a better myth, because, being non-dualist, it offers the prospect of a political society in harmony with nature. McGinnis is with the Center for Bioregional Studies, Goleta, CA. (EE)

McGinnis, Michael V., "Collective Bads: The Case of Low-level Radioactive Waste Compacts," Natural Resource Journal 34, no. 3 (July 1994). (v6,#1)

McGinnis, Michael V., "On the Verge of Collapse: The Columbia River System, Wild Salmon and the Northwest Power Planning Council," Natural Resource Journal 35, no. 1. (v6,#1)

McGinnis, Michael V., "The Politics of Restoring Versus Restocking Wild Salmon in the Columbia River," Restoration Ecology 2 (no. 3, 1994):149-155 (v6,#1)

McGinnis, Michael Vincent, "Deep Ecology and the Foundations of Restoration," Inquiry 39(no. 2, June, 1996):203-217. "Throughout the globe, degraded ecosystems are in desperate need of restoration. Restoration is based on world-view and the human relationship with the natural world, our place, and the landscape. The question is, can society and its institutions shift from development and use of natural resources to ecological restoration of the natural world without a change in world-view? Some world-views lead to more destructive human behavior than others. Following Naess's ecosophical comparison of the deep and shallow ecology movements, this essay depicts the relationships between restorationists and the natural world. Contrast the anti-restoration position of Katz/Elliot. In deep ecological restoration we can develop a realization that our community is part of the self-producing character of all life. In deep ecological restoration, we find one important medium for the institutionalization, politicalization, and transpersonalization of a deeper understanding of what it means to be human being with nature." McGinnis is with the Center for Bioregional Conflict Resolution, Goleta, CA. (v8,#3)

McGlone, John J., "What is Animal Welfare?", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. A theoretical framework is developed to distinguish between acceptable and unacceptable welfare. To use this model, we can first consider a hypothetical environment that meets all known needs. If we then impose a graded stressor and take measures we could initially detect only behavioural changes. The animal would still be in a state of well-being. As the environment changes

further, the animal makes major, measurable behavioural and physiological adjustments. Still, these changes are in the range of normal homeokinetic adjustment, and are characteristic of a response to stress. Well-being is maintained, with some effort, but the animal, although not comfortable, maintains an acceptable level of well-being. These types of physiological and behavioural adjustments would also be observed among wild counterparts of the domestic species in a natural setting. Next, the animal reaches a state of environmental stress in which it would suffer health and reproductive problems if it remained in this state for a prolonged period. Even though the animal could live in this state for a long time, its well-being is lowered. The final state is a severe, acute challenge that results in death in a short time. Of course, everyone would agree the animal's welfare is poor in this final state. The question of where to draw the line between normal and poor welfare is critical. Because feeling a little poorly is much like feeling hungry (something we all normally experience from time to time), this cannot be the critical measure of well-being. Rather, only when animals reach a prepathological state (Moberg, 1985) can we say welfare is poor. Two examples are included to support the model: pain-induced immunosuppression and immunosuppression associated with depression. McGlone is in the Departments of Animal Science & Cell Biology, Texas Tech University, Lubbock, Texas 79409-2141.

McGovern, George, Bob Dole and Donald E. Messer, *Ending World Hunger Now*. Minneapolis: Augsburg, 2006. Three bipartisan voices behind a shared conviction, and addressed to the Christian religious community. Advocating personal commitment and political involvement for the cause.

McGowan, Christopher, *The Raptor and the Lamb: Predators and Prey in the Living World*. New York: Henry Holt, 1997. 235 pages. \$ 25. Predation is one of the fundamental forces driving the economy of life on Earth, and humans are fascinated by it. Studying predation offers a way to understand dynamic relations among species and to see the adaptations made in response to a dangerous world. McGowan is in zoology at the University of Toronto. (v8,#3)

McGrath, Alister, *The Reenchantment of Nature: The Denial of Religion and the Ecologic Crisis*. New York: Doubleday, 2002. Contrary to Lynn White and to the cultured despisers of religion, it is not Christianity that is the cause of the environmental crisis, but the Enlightenment secularizing of nature and exalting of human autonomy. Belief in the Christian God brings with it a profound sense of human limits with regard to nature and a thoroughgoing respect for and wonder at nature, a reenchantment of nature for which many, especially exponents of the Romantic tradition as Wordsworth and Thoreau, have long been searching. McGrath devotes much less time to the anti-nature elements within Christianity, or to the ambiguous understandings of nature as being both good and fallen. McGrath is professor of historical theology, Wycliffe Hall, Oxford.

McGrath, SW, "Review of: Susan Fenimore Cooper. Rochelle Johnson and Daniel Patterson, eds. *Essays on Nature and Landscape*", *Environmental History* 9 (no.1, 2004): 153.

McGregor, Liz, "Kruger's thriving elephant herds face a new cull," *The Observer* (U.K.), *International Magazine*, Sunday August 31, 2003. More than 3,000 elephants in Kruger National Park in South Africa face culling. There are 11,000 elephants in the park and they are reproducing in this protected and benign environment at about 1,000 per year. Elephants reproduce about once every four years between the ages of 14 and 45. They are good parents and infant mortality is negligible, and they live for up to 70 years. They are eating up the park, say officials. Contraception methods have failed. (v.14, #4)

McGregor, Robert Kuhn, "Deriving a Biocentric History: Evidence from the Journal of Henry David Thoreau." *Environmental Review* 12 (1988): 117-126. An argument for a "biocentric" history to broaden our understanding of human-nature interactions. (Katz, Bibl # 2)

McGregor, Robert Kuhn, *A Wider View of the Universe: Henry Thoreau's Study of Nature*. Champaign, IL: University of Illinois Press, 1997. Using Thoreau's unabridged journals and field notes, McGregor

analyzes Thoreau's efforts to understand and form a comprehensive view of nature as a spiritual whole in which all species are interdependent. (v9,#2)

McGrew, William C.; Marchant, Linda F.; and Nishida, Toshisada, eds. Great Ape Societies. New York: Cambridge University Press, 1996. 350 pages. \$64.95 cloth, \$24.95 paper. Comprehensive up-to-date syntheses of work on chimpanzees, baboons, gorillas, and orangutans, drawing on decades of international field work, zoo and laboratory studies. (v7, #3)

McGurty, Eileen Maura. "From NIMBY to Civil Rights: The Origins of the Environmental Justice Movement," Environmental History 2(no.3, 1997):301. (v8,#3)

McHenry, MG, "The Worst of Times: A Tale of Two Fishes in the Klamath Basin", Environmental Law 33 (no.4, 2003): 1019-1058.

McHenry, T, "Review of: Theodore Binnema, Common and Contested Ground: A Human and Environmental History of the Northwestern Plains," Environmental History 7(no.4, 2002): 698.

McInnis, Noel, and Don Albrecht, ed., What Makes Education Environmental? Washington, DC: Environmental Educators, Inc., and Louisville, KY: Data Courier, Inc., 1975. Two dozen articles. The authors are both freelance authors, based in Wisconsin. (v6,#2)

McIntosh, Alastair, Soil and Soul: People versus Corporate Power. London: Aurum Press, 2001. A radical politics of place, with much attention to the Hebrides of Scotland. Earth, or soil in a metaphorical sense, and people, or metaphorically, soul. The interrelationships between natural ecology, social community, and the human spirit. Engagement with soil and soil transforms into a vision of freedom and social justice. A radical liberation theology, rediscovering both the presence of God in nature and the neglected femininity of divine wisdom. Two successful campaigns at community empowerment: land reform on the Isle of Eigg and in the new Scottish Parliament. How the people of the Isle of Harris resisted their mountain being turned into the gravel pit of Europe by a multinational road-stone company. The world can be reconstituted; we can all assume responsibility for our lives and for the planet. A call to "make beauty blossom anew out of desecration". (v.13,#4)

McIntosh, Alastair, "The Emperor has no Clothes ... Let us Paint our Loincloths Rainbow: A Classical and Feminist Critique of Contemporary Science Policy," Environmental Values 5(1996):3-30. The British government's White Paper on science together with government research council reports are used as a basis for critiquing current science policy and its intensifying orientation, British and worldwide, towards industrial and military development. The critique draws particularly on Plato and Bacon as yardsticks to address who science is for, what values it honours and where current policy departs from imperatives of socio-ecological justice. Metaphors of the Emperor's New Clothes and incremental spectral shift in attitude help illuminate both the problems and ways forward. The paper calls for a re-integration of classical perspectives with added insights, often ecofeminist, from philosophy, poetics and a theology of reverence. Predication on the values of love, interconnectedness and orientation towards children's all-round development should be central to curricular reform. Consistent with the views of Plato, the original founder of the Academy, the utilitarian role of science ought to be balanced with a contemplative role of science as the art of knowing ourselves in relation to nature. Only with such a holistic academic approach can it adequately rise to providing a pedagogy of authentic human development, service to the poor and remedies, rather than contribution, to the ongoing destruction of nature. KEYWORDS: Philosophy of science, ecophilosophy, ecofeminism, ecotheology, human ecology, geopoetics, reverence, deep ecology, environmental education, science policy, Plato, Bacon. (EV)

McIntosh, Alastair. Review of Dieter Steiner and Markus Nauser. Fragments of Anti-fragmentary Views

of the World: (London: Routledge, 1993). (EV)

McIntosh, Alistair, "The Case for God: Carbeth Hutter's Feudal Defence against Eviction," Ecotheology No 8 (Jan 2000):86-110.

McIntosh, Robert P., The Background of Ecology: Concept and Theory. NY: Cambridge University Press. Ecology cannot change the dominant humans-nature paradigm. (v4,#1)

McIntyre, Krista K. "RCRA: Circuits Conflict on Private-Party Cost Recovery." Natural Resources and Environment 10(no. 3, Winter 1996):58. (v7,#1)

McIntyre, Rick, A Society of Wolves: National Parks and the Battle over the Wolf. Stillwater, MN: Voyageur Press, 1993. (v7,#1)

McKay, Christopher P., "Does Mars Have Rights: An Approach to the Environmental Ethics of Planetary Engineering." In Don MacNiven, ed., Moral Expertise: Studies in Practical and Professional Ethics (London: Routledge, 1990). See under Haynes, Robert H.

McKay, Christopher P. and Robert H. Haynes, "Should We Implant Life on Mars?" Scientific American, December 1990. "Traditional theories of value are based on two ingrained habits of human thought: anthropocentrism and geocentrism. Principles of ethics have been formulated primarily to guide and govern the relations among people here on Earth. The scope of ethical theory has recently been expanded, however, to encompass all forms of nonhuman life, ecosystems and even inanimate structures, such as rocks, landforms and barren planets. This radical environmental ethic includes the idea that Earth's rich and diverse biota is inherently good. Thus, the biosphere as we know it is by definition what these theories assert ought to be." Turning to the solar system, "ecopoiesis" is "the fabrication of a self-sustaining ecosystem on a lifeless planet." "Clearly, ecopoiesis raises philosophical issues that can be resolved only by adopting a cosmocentric theory of intrinsic values." "If and only if no potentially viable forms of life are found should we attempt to introduce emigrant species from Earth." McKay is a research scientist with NASA in California and Haynes is distinguished research professor of biology at York University, Toronto. NASA has just launched an eight-year "Search for Extraterrestrial Intelligence--Microwave Observing Project (SETI-MOP)" that will scan 10 billion times more search space than the sum of all previous searches. (v1,#4)

McKean, Andrew, "Manhunters," Outdoor Life 213 (no. 3, March 2006): 52-57. Wolves killed Kenton Carnegie, a college student on a short-term contract to survey mineral deposits in northern Saskatchewan in November 2005, in what looks like a clear case of wolf predation on humans. This is the first documented wolf-caused fatality of a human in North America in at least 100 years and perhaps the first ever on this continent. There are, however, some 80 incidents of wolves attacking or injuring people, without fatality. A frequent issue in such incidents is whether the wolves had been harassed, not an issue here. However, these wolves were quite habituated to people, living around mine site camps and their dumps, and some say that the wolves were living in a quite unnatural condition and had become more like junkyard dogs. Dogs in North America kill about twenty people a year.

McKean, J., Johnson, D., Johnson, R. and Garth Taylor, R., "Can Superior Natural Amenities Create High Quality Employment Opportunities? The Case of Nonconsumptive River Recreation in Central Idaho," Society and Natural Resources 18(no. 8, September 2005): 749-758.

Mckeand, Steve, Svensson, Jan. "Sustainable Management of Genetic Resources," Journal of Forestry 95(no.3, 1997):4. (v8,#2)

McKenny, Gerald P., To Relieve the Human Condition: Bioethics, Technology, and the Body. Albany, NY: State University of New York Press, 1998. In contrast to the utopian quest of medicine for perfect health, with the human body brought under our choices and desires, McKenny argues that the task of bioethics is to explore the moral significance of the body as it is expressed in the discourse and practice of moral and religious traditions. McKenny is in religious studies at Rice University. (v8,#3)

McKibben, Bill, The End of Nature. Now released in paperback, Anchor, 1990, \$ 9.95. (v1,#4)

McKibben, Bill, Maybe One: A Personal and Environmental Argument for Single-Child Families. New York: Simon and Schuster, 1998. 240 pages. Summarized in "The Case for Single-Child Families," Christian Century, May 13, 1998, vol. 115, pp. 498-504. A sensitive study of the pros and cons of having one child instead of two, or three, with saving the environment in mind. In some senses this can seem concerned and selfless, though from other perspectives, one has to take seriously those who think having no children, or one, is selfish, since such parents often wish to do more self-fulfilling things with themselves than to bother with children. "My hope is not to settle this question for anyone else; it truly isn't my business what you chose to do. All I want to do is to open the debate, to remove 'population' from the category of abstraction and make it the very real consideration of how many children you or I decide to bear. No single decision any of us will make will mean as much to our own lives or to the life of the planet."

"The beginning of Genesis contains the fateful command ... to 'be fruitful and multiply, and fill the earth.' That this was the first commandment gave it special priority. And it was biological, too, a command that echoed what our genes already shouted. But there is something else unique about it--it is the first commandment we have fulfilled. ... We can check this commandment off the list. ... But when you check something off a list, you don't throw the list away. You look further down the list and see what comes next. ... Feed the hungry, clothe the naked, comfort the oppressed, love your neighbor as yourself; heal the earth." McKibben, author of The End of Nature, is Sunday School superintendent at a Methodist Church in upstate New York. He and his wife have one child.

McKibben, Bill, The Age of Missing Information. New York: Random House, 1992. 261 pages. \$ 20.50. McKibben conducted an experiment. On May 3, 1990 he had the entire output of the United States' largest cable TV system taped, almost 100 channels. McKibben analyzed the films, programs, news, commercials to discover the nature of electronic media and how it reduces the sort of information we receive. This analysis is compared with the information presented to him on an overnight stay in the Adirondack Mountains. The ecological crisis is grounded in an inability to relate to the natural world, and this is compounded by the media. What habits of mind and body do TV ads and jingles help produce? Sloppy habits, where we cease to be mindful of how we are connected to a finite Earth. McKibben (like Gore) analyzes this as, at depth, a spiritual problem. (v3,#4)

McKibben, Bill, The Comforting Whirlwind: God, Job, and the Scale of Creation. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1994. Paper, \$ 8.99. McKibben, author of The End of Nature, here undertakes an environmentalist reading of the book of Job. (v5,#4)

McKibben, Bill, The End of Nature. New York: Random House, 1989. Pp. ix, 226. Originally a lengthy magazine article for The New Yorker, this is a highly readable and significant merging of scientific, religious, philosophical, and political thought concerning the environmental crisis. McKibben begins with the scientific fact that humanity has altered the atmosphere, and thus the climate of the earth. Nothing, therefore, exists in the world untouched by human technology; the idea of a pure, unspoiled nature, existing somehow apart from human civilization, is an impossible contradiction. McKibben explores the meaning of this end of nature, particularly for religious and philosophical conceptions of humanity. The end of the book involves a tour through two opposing philosophical visions, continued domination of nature and resistance to human-centeredness. As a work of journalism, this book has no

documentation--there are no footnotes despite many references to other books and thinkers. Nonetheless, it is a poignant and moving introduction to the problems of environmental philosophy. (Katz, Bibl # 2)

McKibben, Bill, "Climate Change and the Unraveling of Creation," Christian Century 116 (no. 34, Dec. 8, 1999):1196-1199. "In the past 30 years we have systematically and even more rapidly destroyed this planet's inventory of life. ... In the case of the struggle to save and preserve the environment--God's creation--the church's leadership is absolutely mandatory." McKibben is the author of The End of Nature and Maybe One, recently reissued by Penguin. (v10,#4)

McKibben, Bill, "Creation Unplugged," Religion and Values in Public Life, vol. 4, no. 2/3, Winter/Spring 1996. The Center for the Study of Values in Public Life at Harvard Divinity School. A supplement to the Harvard Divinity Bulletin, vol 25, no. 2/3, 1996. "If we are not to wreck God's creation, then there are certain things we simply must not do--we simply must not continue consuming as we are now. And there are certain things we must do--we must share our bounty with the rest of the world, finding somewhere a middle ground so they don't follow our path to consumer development" (p. 20). McKibben is the author of The End of Nature and Hope, Human and Wild: True Stories of Living Gently on the Earth; and lives in the Adirondacks. (v7,#2)

McKibben, Bill, Hope, Human and Wild. Little, Brown, 1995. \$ 22.95. After The End of Nature, McKibben now finds hope for our beleaguered Earth. Hope begins when he notices the remarkable recovery of forest and wildlife in the Adirondacks around his home, even though the area had been a barren, overlogged wasteland only a hundred years ago. This sent him on a quest for other signs of hope, found as far off as Brazil and India. (v6,#4)

McKibben, Bill, Enough: Staying Human in an Engineered Age. New York: Times Books (Henry Holt), 2003. First the "end of nature," and next "the end of humans." An assessment from the frontiers of bioscience and robotics of how these developments are both rapidly maturing and veering inexorably out of control. McKibben applauds genetic engineering when linked with therapy, for in this case we do not tamper with the fundamental genetic materials passed to future generations in the germline. But genetic engineering is likely also to be used to enhance height, intelligence, athletic ability, or just about any trait imaginable. Parents will choose the genes that shape their children's future; a child will become a pianist because that's what his parents choose for him, not because he chose it. If we can reshape our bodies to overcome any setbacks we encounter, life is meaningless because you can never know how you would really feel, if your body were not pumping designer proteins. This starts us on the road to leaving human nature behind, engineering ourselves into a "posthumanity." The genetic engineering and nanotechnology future crosses the line beyond "enough" into the zone of "way too much." There is a spiritual boundary, "the enough point."

McKibben, Bill, *Wandering Home: A Long Walk Across America's Most Hopeful Landscape: Vermont's Champaign Valley and New York's Adirondacks*. New York: Crown (Random House), 2005. McKibben takes a journey between the two homes he owns, from the first in Ripton, Vermont, where he lives now, to the second in the Adirondack town of Johnsburg, where he spent the better part of his adult life. The two homes are about seventy miles apart, but the meandering route he takes becomes a few hundred miles. He finds the landscape physically rich; and the region with its pockets of communities endeavoring to live intentionally and sustainably offers the promise of "graceful inhabitation, for working out the answers that the planet is posing in this age of ecological pinch and social fray." He comes across one newly built house "four times too large for any conceivable purpose," and worries "that the scale of this region--herb farms, piano teaching, general stores, little libraries--coexist[s] uneasily with the high-octane national economy."

McKibben, Bill, "A Deeper Shade of Green," National Geographic, August 2006. Ideas for a new, cultural environmentalism. "Humans have never faced a civilization-scale challenge before. Whether we deal with it gracefully or not depends, I believe, on what happens to that creed we call environmentalism." The original environmentalism, saving remnants of wild nature, was impressively successful, "but when it came to deal with global warming, this kind of environmentalism flunked." People desire growth and that depends on fossil fuel consumption; we must address the issue of intelligent growth that builds on "people's aspirations for good and secure and durable lives." "We would need a new kind of cultural environmentalism that asks deeper questions than we're used to asking." McKibben lives in a Vermont valley, working out this new cultural environmentalism, and wondering whether it means The End of Nature.

McKibben, Bill, "The Emotional Core of The End of Nature" accompanies a symposium on McKibben's *The End of Nature*, Organization and Environment 18 (no 2, June 2005).

McKibben Bill, ed. *American Earth: Environmental Writing Since Thoreau*. New York: Literary Classics of the United States, 2008 (distributed by Penguin Putnam). Contents include: (1) from *Journals* by Henry David Thoreau, (2) from *Walden; or, Life in the Woods* by Henry David Thoreau, (3) from *Huckleberries* by Henry David Thoreau, (4) from *Letters and Notes on the Manners, Customs, and Condition of the North American Indians* by George Catlin, (5) "Fallen Forests" by Lydia Huntley Sigourney, (6) from *Rural Hours* by Susan Fenimore Cooper, (7) "Table Rock Album" by Susan Fenimore Cooper, (8) "This Compost" from *Leaves of Grass* by Walt Whitman, (9) "Song of the Redwood-Tree" by Walt Whitman, (10) from *Man and Nature* by George Perkins Marsh, (11) from *The Humbugs of the World* by P.T. Barnum, (12) from *A Thousand-Mile Walk to the Gulf* by John Muir, (13) "A Wind-Storm in the Forests" by John Muir, (14) from *My First Summer in the Sierra* by John Muir, (15) "Hetch Hetchy Valley" by John Muir, (16) from *Adventures in the Wilderness* by W.H.H. Murray, (17) from *A Review of Recent Changes, and Changes Which Have Been Projected, in the Plans of the Central Park* by Frederick Law Olmstead, (18) "About Trees" by J. Sterling Morton, (19) "To Frank Michler Chapman" by Theodore Roosevelt, (20) "To John Burroughs" by Theodore Roosevelt, (21) "Speech at Grand Canyon, Arizona, May 6, 1903" by Theodore Roosevelt, (22) "The Scavengers" by Mary Austin, (23) from *Man and the Earth* by Nathaniel Southgate Shaler, (24) "The Art of Seeing Things" by John Burroughs, (25) "The Grist of the Gods" by John Burroughs, (26) "Nature Near Home" by John Burroughs, (27) "Prosperity" by Gifford Pinchot, (28) "The Bird Tragedy on Laysan Island" by William T. Hornaday, (29) "A Certain Oil Refinery" by Theodore Dreiser, (30) "The Last Passenger Pigeon" by Gene Stratton-Porter, (31) "Orion Rises on the Dunes" by Henry Beston, (32) "The Indigenous and the Metropolitan" by Benton MacKaye, (33) "What a few more seasons will do to the ducks" by J.N. "Ding" Darling, (34) from *Wintertrip into New Country* by Robert Marshall, (35) "Don Maquis what the ants are saying" by Robert Marshall, (36) "Letter from the Dust Bowl" by Caroline Henderson, (37) "Birds That Are New Yorkers" by Donald Culross Peattie, (38) "The Answer" by Robinson Jeffers, (39) "Carmel Point" by Robinson Jeffers, (40) from *The Grapes of Wrath* by John Steinbeck, (41) "This Land Is Your Land" by Woody Guthrie, (42) from *The Everglades: River of Grass* by Marjory Stoneman Douglas, (43) from *A Sand County Almanac* by Aldo Leopold, (44) "The Fog" by Berton Roueché, (45) "The Longest Day" by Edwin Way Teale, (46) from *Living the Good Life* by Helen and Scott Nearing, (47) "Northern Lights" by Sigurd F. Olson, (48) "Sootfall and Fallout" by E.B. White, (49) "How Flowers Changed the World" by Loren Eiseley, (50) from *My Wilderness: The Pacific West* by William O. Douglas, (51) "Dissent in *Sierra Club v. Morton*" by William O. Douglas, (52) from *The Death and Life of Great American Cities* by Jane Jacobs, (53) from *Silent Spring* by Rachel Carson, (54) "The Great Paver" by Russell Baker, (55) "The Living Canyon" by Eliot Porter, (56) from *The Wilderness Act of 1964* by Howard Zahniser, (57) "Remarks at the Signing of the Highway Beautification Act of 1965" by Lyndon B. Johnson, (58) from *The Economics of the Coming Spaceship Earth* by Kenneth E. Boulding, (59) "On the Historical Roots of Our Ecologic Crisis" by Lynn White Jr., (60) "Polemic: Industrial Tourism and the National Parks" by Edward Abbey, (61) from *The Population*

Bomb by Paul R. Ehrlich, (62) from “The Tragedy of the Commons” by Garrett Hardin, (63) “Do Androids Dream of Electric Sheep?” by Philip K. Dick, (64) “A Sample Day in the Kitchen” by Colin Fletcher, (65) “Spaceship Earth” by R. Buckminster Fuller, (66) “Mills College Valedictory Address” by Stephanie Mills, (67) “Smokey the Bear Sutra” by Gary Snyder, (68) “Covers the Ground” by Gary Snyder, (69) “The Beginning” by Denis Hayes, (70) “Millions Join Earth Day Observances Across the Nation” by Joseph Lelyveld, (71) “Big Yellow Taxi” by Joni Mitchell, (72) “Mercy Mercy Me (The Ecology)” by Marvin Gaye, (73) from *Encounters with the Archdruid* by John McPhee, (74) “Friends of the Earth from Only One Earth” by John McPhee, (75) “Manifesto: The Mad Farmer Liberation Front” by Wendell Berry, (76) “The Making of a Marginal Farm” by Wendell Berry, (77) “Preserving Wildness” by Wendell Berry, (78) “Fecundity” by Annie Dillard, (79) “The World’s Biggest Membrane” by Lewis Thomas, (80) “The Third Planet: Operating Instructions” by David R. Brower, (81) from *Energy Strategy: The Road Not Taken?* By Amory B. Lovins, (82) “A First American Views His Land” by N. Scott Momaday, (83) from *Ceremony* by Leslie Marmon Silko, (84) “A Short History of America” by R. Crumb, (85) “Outside the Solar Village: One Utopian Farm” by Wes Jackson, (86) from *Love Canal: My Story* by Lois Marie Gibbs, (87) from *The Fate of the Earth* by Jonathan Schell, (88) “Seasons of Want and Plenty” by William Cronon, (89) “Everything Is a Human Being” by Alice Walker, (90) “Bernhardsdorp” by E.O. Wilson, (91) “Wrath of Grapes Boycott Speech” by César Chávez, (92) “A Presentation of Whales” by Barry Lopez, (93) “Place” by W.S. Merwin, (94) from *The End of Nature* by Bill McKibben, (95) from *Dumping in Dixie* by Robert D. Bullard, (96) “The Summer Day” by Mary Oliver, (97) from *Refuge: An Unnatural History of Family and Place* by Terry Tempest Williams, (98) from *The Ninemile Wolves* by Rick Bass, (99) “The Dubious Rewards of Consumption” by Alan Durning, (100) “After the Flood” by Scott Russell Sanders, (101) from *The Last Panda* by George B. Schaller, (102) “The Flora and Fauna of Las Vegas” by Ellen Meloy, (103) “Dwellings” by Linda Hogan, (104) from *The Ecology of Magic* by David Abrams, (105) “The Song of the White Pelican” by Jack Turner, (106) “A Multicultural Approach to Ecopsychology” by Carl Anthony & Renée Soule, (107) “Speech at the Kyoto Climate Change Conference” by Al Gore, (108) from *Heart and Blood: Living with Deer in America* by Richard Nelson, (109) “Planet of Weeds” by David Quammen, (110) from *Ecology of a Cracker Childhood* by Janisse Ray, (111) from *The Legacy of Luna* by Julia Butterfly Hill, (112) from *Inspirations for Sustaining Life on Earth* by Calvin B. DeWitt, (113) “Greeting Friends in Their Andean Gardens Sandra Steingraber” from *Having Faith* by Calvin B. DeWitt, (114) “Knowing Our Place” by Barbara Kingsolver, (115) from *The Omnivore’s Dilemma* by Michael Pollan, (116) from *Blessed Unrest* by Paul Hawken, and (117) “The Thoreau Problem” by Rebecca Solmit.

McKibben, Bill. Maybe One: A Personal and Environmental Argument for Single-Child Families. A review by G. WUNDERLICH, Journal of Agricultural and Environmental Ethics 11(1999):158-162. (JAEE)

McKibben, Bill. "More Thoughts on Common Ground with Conservatives." Wild Earth 6, no.1 (1996): 7. (v7, #3)

McKibben, Bill. *Deep Economy: The Wealth of Communities and the Durable Future*. New York: Times Books, 2007.

McKibben, Bill. “Cutting Carbon: A Strategy to Stabilize the Atmosphere.” *Christian Century* (July 2, 2008). Reducing CO₂ in the atmosphere to 350 parts per million represents a safety zone. We are already past that number, 385 parts per million and rising. McKibben defends a plan to reach that goal, with a movement called 350.org.

McKibben, Bill. “Last Best Chance for Baby Boomers to Help the Next Generation.” *Earth Letter* (Spring 2007): 1, 12-13. The college movement against climate change is among the most sophisticated parts of the environmental effort. It could be yet more effective. This article appeared earlier in *Orion*

(November-December 2006).

McKim, Robert, Book review of Eric Freyfogle, *The Land We Share*. *Journal of Agricultural and Environmental Ethics* 20(2007):215-219.

McKinley, Jr., James C., "With Help, Sea Turtles Rally to Escape Oblivion," New York Times, October 14, 2004, A1, A12. Olive ridley sea turtles are recovering in Mexico, although the other six species of sea turtles are not doing well. Hundreds of thousands of ridley sea turtles now come ashore in Mexico to nest, recovering since the 1980's, with this year's landing one of the largest in recent memory. But the turtles and their nests have to be guarded at gunpoint against poachers, who kill the turtles and sell the eggs as a delicacy in Mexican markets. (v.14, #4)

McKinney, William J. and H. Hamner Hill. "Of Sustainability and Precaution: The Logical, Epistemological, and Moral Problems of the Precautionary Principle and Their Implications for Sustainable Development." Ethics and the Environment 5(2000):77-88. ABSTRACT: From the convening of the Brundtland Commission in 1983 to the United Nations Conference on Environment and Development and beyond, sustainable development has been one of the core issues facing environmental ethicists and policy makers. The challenge facing both policy makers and ethicists has been to ascertain the proper formulation and implementation of sustainable development practices either within the present global market economy or within a new, more ecological, paradigm. This analysis, however, takes a slightly different tack. (E&E)

McKinney, M. L., "Why Larger Nations Have Disproportionate Threat Rates: Area Increases Endemism and Human Population Size," Biodiversity and Conservation 11(no.8, 2002): 1317-25. (v.13,#4)

McKinney, Matthew J., "Designing a Dispute Resolution System for Water Policy and Management," Negotiation Journal, April 1992. McKinney has recently been named the director of the Montana Office of Public Policy Dispute Resolution. He completed his M.A. in environmental ethics at Colorado State University and a Ph.D. in natural resources at the University of Michigan. (v4,#3)

McKinney, Matthew J., "Dispute Resolution Courses in Natural Resource Schools: Status and Needs for the Future," Renewable Resources Journal, Summer 1993. Much of the problem in environmental conflict is structural, as well as differences on issues. Few opportunities exist for the interests affected by proposed actions to participate directly in the decisionmaking process. What's going on, and what might be better, at 46 natural resources schools in the training of natural resource professionals entering this arena. McKinney has taught a dispute resolutions course at the University of Montana, and is director of the Montana Consensus Council. (v6,#2)

McKinney, ML, "Urbanization, Biodiversity, and Conservation," Bioscience 52(no.10, 2002): 883-890.

McKnight, Bill M., ed., Biological Pollution: The Control and Impact of Invasive Exotic Species. Indianapolis: Indiana Academy of Science, 1993. (1102 North Butler Avenue, Indianapolis, IN 46219). (v4,#4)

McLaughlin, A., "Is Science Successful? An Ecological View." Philosophical Inquiry 6, no. 1 (Winter 1984): 39-46. McLaughlin uses the metaphor of an organism as part of a net to show why we believe science to be successful and why at the same time it is not--i.e., why it is leading into an ecological crisis (see also McLaughlin's article in Environmental Ethics 7 [Winter 1985). (Katz, Bibl # 1)

McLaughlin, Andrew, "Images and Ethics of Nature," Environmental Ethics 7(1985):293-320. This is a further development of a paper on science and ecology. Here McLaughlin discusses the way different world-views construct an image of nature, and consequently, an ethics of nature. Science is merely

instrumental, and so nature is not respected. But alternative views of nature, primarily the image of an interconnected web, can be derived from ecological principles and Buddhism. (Katz, Bibl # 1)

McLaughlin, Andrew, Regarding Nature: Industrialism and Deep Ecology. Albany, NY: State University of New York Press, 1993. Deep ecology explained and demystified for a general readership by drawing out areas of continuity and discontinuity between deep ecology and progressive political thought. The fundamental assumptions of the ideologies within which we find ourselves caught--capitalism, socialism, anthropocentrism, egocentrism. McLaughlin is professor of philosophy, Herbert H. Lehman College, City University of New York. (v4,#1)

McLaughlin, Andrew, Regarding Nature: Industrialism and Deep Ecology. Reviewed by Holmes Rolston, III, Ethics 105(1994):201-202.

McLaughlin, Andrew, "Marxism and the Mastery of Nature: An Ecological Critique," in Roger S. Gottlieb, ed., Radical Philosophy: Tradition, Counter-Tradition, Politics (Philadelphia: Temple University Press, 1993) Within the Marxist tradition, industrialism and the domination of nature have largely been endorsed as a potentially progressive expansion of human power and the avenue toward the historical realization of human freedom. But any dialectical project that acknowledges the embeddedness of humanity within nature should be skeptical of the project of the domination of nature. The Marxist project of domination is incompatible with a dialectical understanding of society and nature. McLaughlin is a philosopher at Lehman college in the Bronx, New York. (v5,#1)

McLaughlin, Andrew, "Ecology, Capitalism, and Socialism." Socialism and Democracy (Spring/Summer 1990): 69-102. Excellent overview of the failures of both capitalism and socialism (in its current forms) to deal with ecological problems. Capitalism fails for three fundamental reasons: the dynamics of markets, the discounting of the future, and the requirement of non-sustainable growth. Centralized socialism fails because "bureaucratic rationality" is unable "to achieve an ecologically adequate society" (p. 91), primarily because of inadequate knowledge of the manipulation of environments. A socialism tied to bioregions, democratic and decentralized, is the best possible solution. (Katz, Bibl # 2)

McLaughlin, Andrew, "Ecology, Capitalism, and Socialism" Socialism and Democracy Spring/Summer 1990. There are theoretical and practical difficulties matching capitalism with an ecologically sound human society or with adequate respect for nature. Socialism has more promise theoretically, but existing socialist societies are often no better in practice than capitalist ones. The centralized Soviet bureaucracy is a major problem. Bioregional (green) socialism could be an answer. Useful survey of the Soviet debate about nature preserves. (v1,#2)

McLaughlin, Andrew. "Images and Ethics of Nature." Environmental Ethics 7(1985):293-319. Science generates an image of nature as devoid of meaning or value, and this image makes moral limits on the human manipulation of nature appear irrational. In part this results from the particular kind of abstraction that constitutes scientific activity. For both epistemological and practical reasons this abstraction should not be taken as the only reality of nature. Such mis-taking becomes increasingly likely--and dangerous--as science and technology are used in the construction of the world within which we experience nature and ourselves. Three alternative images of nature are discussed to indicate other possibilities. Imaging nature as an interconnected network, a view rooted in both ecology and Buddhism, is a more comprehensive and adequate foundation for conceptualizing the practical and ethical dimensions of humanity's relation with nature. McLaughlin is in the philosophy department, Lehman College, City University of New York, Bronx, NY. (EE)

McLaughlin, Andrew. Review of The Whale and the Reactor. By Langdon Winner. Environmental Ethics 9(1987):377-80.

McLaughlin, Andrew. "Ethical Intuitions and Environmental Ethics." Environmental Ethics 5(1983):283-84.

McLaughlin, Andrew. Regarding Nature: Industrialism and Deep Ecology: (Albany: State University of New York Press, 1993). Reviewed by Richard Gault in Environmental Values 4(1995):79-81. (EV)

McLean, J. and Straede, S., "Conservation, Relocation, and the Paradigms of Park and People Management? A Case Study of Padampur Villages and the Royal Chitwan National Park, Nepal," Society and Natural Resources 16(no. 6, 2003): 509-526.

McLean, Daniel; Jensen, Ryan, "Community Leaders and the Urban Forest: A Model of Knowledge and Understanding," Society and Natural Resources 17(no.7, August 2004):589-598(10). (v. 15, # 3)

McLean, Douglas, and Peter G. Brown, eds., Energy and the Future. Totowa, New Jersey: Rowan and Littlefield, 1983. Pp. 206. This is a collection of essays written under the auspices of the Center for Philosophy and Public Policy, University of Maryland. It is interdisciplinary; the main philosophical interest lies in the arguments regarding ethical obligations to future generations. Several perspectives are proposed: In two separate papers, Brian Barry, "Intergenerational Justice in Energy Policy," (pp. 15-30), and Talbot Page, "Intergenerational Justice as Opportunity," (pp. 38-58), argue that justice demands the preservation, not of resources, but of opportunities for the use of resources and the creation of the good life. David A. J. Richards, "Contractarian Theory, Intergenerational Justice, and Energy Policy" (pp.131--150), attempts to use the idea of Rawls' "original position" as a model for intergenerational justice. Hillel Steiner, "The Rights of Future Generations," (pp. 151-165), attacks the notion that nonexistent entities can have rights now and uses this critique to undermine the currently fashionable Lockean/Nozick view of property rights regarding natural resources. Douglas MacLean, "A Moral Requirement for Energy Policies," (pp. 180-197) argues that concern for the future is a moral value promoting the good life--it is not a contingent concern of human interest or preference. But the central essay in this collection is Derek Parfit's "Energy Policy and the Further Future: The Identity Problem" (pp. 166-179). I consider this essay, along with Parfit's "Future Generations: Further Problems," Philosophy and Public Affairs 11 (1982): 113-172, to be the most important theoretical work in the ethics of future generations. Parfit's problem is simple: any policy we contemporary people adopt will change the identities of the people who actually exist in the future: thus, our obligations regarding the future cannot be directed at future people. Nevertheless, Parfit still wants to claim that it is better for us to create a good world for the future. But for whom is it better? Not the people who exist because of the policy, and not the people who would have existed if we had adopted a different policy. Parfit's position amounts to this principle: "It is bad if those who live are worse off than those who might have lived." (p. 75). But he admits that this principle is, at present, unjustified. No argument concerning the obligations to future generations can avoid Parfit's paradox; but a solution to it will likely lead to a redrawing of the map of ethical principles (see pp. 176-178, "Theoretical Footnote"). (Parfit's work has produced a vast bibliography in its own right, and I do not list any of these works here. See, e.g., Ethics 96, no. 4 [1986], a Symposium on Derek Parfit's Reasons and Persons [Oxford University Press, 1984].)

McLean, George F., ed. Man and Nature. Reviewed in Environmental Ethics 3(1981):177-80.

McLean, Ian F. G. "The Role of Legislation in Conserving Europe's Threatened Species." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):966- . (v10,#4)

McLean, Samantha. Review of Brian Tokar (Ed.), "Redesigning Life? The Worldwide Challenge to Genetic Engineering", Organization and Environment 14 (No. 4, December 2001) pp.474-77. McLean is a PhD student working on sustainable agriculture issues in the School of Social Ecology and Lifelong

Learning at the University of Western Sydney, Australia. (v.13,#2)

McLean, Samantha. Review of Vandana Shiva, "Stolen Harvest: The Hijacking of the Global Food Supply", Organization and Environment, 15, (No. 2, 2002): 212-14. Samantha McLean is a PhD candidate at the School of Social Ecology and Lifelong Learning, University of Western Sydney, Australia. (v.13, #3)

McLuhan, T. C. The Way of the Earth. New York: Simon and Schuster, 1994. 570 pages. Hardcover, \$ 30.00. Six diverse cultures that show how different spiritual traditions world-wide have valued, perceived, and understood the earth. Extensive art and literature from Aboriginal Australia, Greece, Africa, South America, and Native North America, with the intent of displaying underlying unities in the belief systems and wisdom of the peoples of the world. (v7, #3)

McMakin, AH; Malone, EL; Lundgren, RE, "Motivating Residents to Conserve Energy Without Financial Incentives," Environment and Behavior 34(no.6, 2002): 848-863.

McManus, Reed. "Green & Greed: Can They Get Along?" *Sierra* Vol. 91, no. 1 (January/February 2008): 26-33. McManus audits the merger of business and the environment. For those who think environmental problems need a host of piecemeal solutions, cumulating into overall effectiveness, this is a useful summary of what business is doing to go green and typically also to save money: better packaging, energy savings, offsetting emissions, fair-trade certified crops, and hybrid vehicles. Wal-mart gives better placement in stores for products that have addressed sustainability issues. Wal-mart used research by energy consultant Amory Lovins to improve fuel efficiency by 25%, partly by installing generators in its fleet of trucks so that parked drivers don't need to run their engines to get air conditioning. Dell Computer plans for its entire operation to be carbon neutral this year.

McMichael, Anthony J., Planetary Overload: Global Change and the Health of the Human Species. New York: Cambridge University Press, 1993. 352 pages. An analysis of the ways in which global change is affecting human health adversely. (v6,#2)

McMichael, Tony, Human Frontiers, Environments and Disease: Past Patterns, Uncertain Futures. Cambridge, UK: Cambridge University Press, 2001. Epidemiology and environments, past and future. The dilemma is that stressed environments promote disease epidemics. Most of the world lives at a level of privation Westerners would not accept, beyond the reach of the very resources Westerners cannot live without. The worsening dilemma is that to the extent that Westerners support their development in, and extension of their prosperity to, the rest of the world, they sow the seeds of everyone's destruction. There may already be too many people in the world to support universal living standards at a level Westerners consider minimal. There isn't enough land, enough water, or enough resources. In a zero sum game, reality trumps altruism; the price of comfort for some being the misery of others, including their epidemic diseases, which may also become ours. (v.13,#1)

McMillion, Scott, "Cattle-killing Wolf Pack in for Shock," Bozeman Daily Chronicle (5/18/00): A1. Yellowstone wolves being trained to avoid cattle. Members of the Sheep Mountain wolf pack, one of about a dozen packs of restored wolves in Yellowstone area, are being captured, placed in a pen, and fitted with shock collars that will activate whenever they get within two meters of a calf placed in the pen with them. The pack has been killing cattle for several years and past attempts to modify their behavior (by killing members known to have eaten cattle) have failed. The plan is to train the wolves for several months so they realize "that livestock aren't prey items" and then release them back into their home territory. The hope is that these wolves will learn to avoid livestock and will teach their offspring to do the same. Ed Bangs, the leader of the wolf-restoration effort in the region, thinks "the only alternative is to shoot them all." But then a new pack would probably take over the territory that includes both private

and public grazing land bordering the Park and they too would probably begin to prey on cattle. (v.11, #2)

McMillion, Scott, "Cherry Creek Poisoning Plan OK'd," Bozeman Daily Chronicle (7/24/98): 3. Poisoning three species of trout to assist an endangered trout. In order to provide habitat for West slope cutthroat trout, the Gallatin National Forest in Montana plans to remove brook, rainbow, and Yellowstone cutthroat trout from Cherry Lake in the Lee Metcalf Wilderness by poisoning the lake and its tributaries. The West slope cutthroats are candidates for listing under the Endangered Species Act. Because a waterfall kept any fish from reaching upstream on their own, the drainage was barren of trout until people introduced the fish earlier this century. Thus none of these species of fish are "native to this habitat," though one might argue that 50 to 80 years is sufficient for the introduced fish to become "naturalized." Ironically, about 100 miles away, National Park Service officials are trying to protect the Yellowstone cutthroat by killing Midwestern lake trout, a species that was introduced into Yellowstone Lake. (v.9,#3)

McMullen, A, "Peatlands and environmental change," Land Use Policy 19(no.4, 2002): 336-337.

McMurtry, John. Review of Vivek Pinto, Gandhi's Vision and Values: The Moral Quest for Change in Indian Agriculture, Journal of Agricultural and Environmental Ethics 11(1999):243-246. (JAEE)

McNairn, Heather E. and Mitchell, Bruce, "Locus of Control and Farmer Orientation: Effects on Conservation Adoption", Journal of Agricultural and Environmental Ethics 5(1992):87-102. Farmers in a southwestern Ontario watershed were surveyed to determine factors influencing their attitudes towards adoption of soil conservation practices. The majority of farmers in the watershed were internally motivated which indicates they believe that their own actions determine their successes and failures. Most respondents were also environmentally oriented. McNairn is in land resource science at the University of Guelph, Ontario. Mitchell is in geography at the University of Waterloo, Ontario.

McNally, Mary. "Indian Reservations, Solid Waste and Development: Some Difficult Choices." Environments 23, no.3 (1996): 1. (v7, #3)

McNally, Ruth, Wheale, Peter. "Biopatenting and Biodiversity: Comparative Advantages in the New Global Order", The Ecologist 26(no.5, 1996):222. Genetic engineering has enabled novel species of plants, animals, and micro-organisms to be created as genes from totally unrelated species, which cannot breed with each other so are spliced together. To reap financial gain, the biotechnology industry has, over the past two decades, pushed for patent law to cover its "inventions". Patent rights over living organisms, combined with the industry's efforts to gain exclusive access to the world's biodiversity, are exacerbating the commodification and industrialized use of species. Opposition to this "biotechnological imperialism" is gaining momentum. (v7,#4)

McNally, Ruth and Peter Wheale, "Biopatenting and Biodiversity: Comparative Advantages in the New Global Order," The Ecologist 26 (no. 5, Sept.-Oct, 1996):222-228. Over the last two decades, the biosciences industry has been stretching the interpretation of patent law in order to attain intellectual property rights over genetically engineered living organisms. Such patent rights, coupled with moves to gain exclusive access to the biodiversity of the South, are leading to a new global order. Opposition to such "biotechnological imperialism" is gaining in momentum. McNally is in human sciences at Brunel University. Wheale is with the University of Surrey's European Management School. (v9,#1)

McNamara, Kenneth J., eds., Evolutionary Trends (Tuscon: University of Arizona Press, 1990). 368 pages, paper \$ 24.95 (v2,#1)

McNamee, Kevin, "Undermining Wilderness," Alternatives 25(no. 4, Fall 1999):24- . The Canadian

mining industry is abandoning its support for a national network of protected areas. (v.11,#1)

McNamee, Kevin. "Accelerating and Enhancing Our Efforts to Protect National Heritage", Environments 24(no. 1, 1996):35.

McNeeley, Jeffrey A., et al., eds., Global Strategy on Invasive Alien Species. Covelo, CA: Island Press, 2001.

McNeeley, Jeffrey A. and Keeton, William S., "The Interaction between Biological and Cultural Diversity," in von Droste, Bernd, Plachter, Harald, and Rössler, Mechtild, eds., Cultural Landscapes of Universal Value: Components of a Global Strategy. Jena, Germany: Gustav Fischer, 1995, in cooperation with UNESCO. (v8,#3)

McNeeley, Jeffrey A., Kenton R. Miller, W. V. Reid, R. A. Mittermeier, T. B. Werner, Conserving the World's Biological Diversity. 1990. Available for \$ US 18.00, including postage, from IUCN Publications, 1196 Gland, Switzerland; World Resources Institute, P. O. Box 4852 Hamden Station, Baltimore, MD 21211; or World Bank Publications, P. O. Box 7247-8619, Philadelphia, PA 19170-8619. (v1,#3)

McNeely, Jeffrey A., "The Convention On Biological Diversity: A Solid Foundation For Effective Action," Environmental Conservation 26 (No. 4, Dec 01 1999): 250- . (v.11,#2)

McNeely, Jeffrey A., Rojas, Martha, Martinet, Caroline. "The Convention on Biological Diversity: Promise and Frustration," The Journal of Environment and Development 4, no. 2 (Summer 1995): 33- . (v6,#4)

McNeely, Jeffrey; Schroth, Gotz, "Agroforestry and Biodiversity Conservation Traditional Practices, Present Dynamics, and Lessons for the Future," Biodiversity and Conservation 15 (no.2, February 2006): 549-554 (6).

McNeil, Jr., Donald G., "The Great Ape Massacre," New York Times Magazine, May 9, 1999, Section 6, pages 54-57. The bushmeat crisis in Africa.

Further information: On 19 February 1999, 34 experts, representing 28 different organizations and agencies, assembled at the offices of the American Zoo and Aquarium Association (AZA) in Silver Spring, Maryland in a consensus statement expressed alarm at the commercial bushmeat crisis in Africa and its impact on threatened and endangered species, particularly great apes. The bushmeat trade is having dire consequences, not only for wildlife, but also for people in Africa and throughout the world. If current unsustainable rates of exploitation continue, the commercial bushmeat trade will decimate, if not eliminate, some endangered species, such as great apes, forest elephants, and other fauna upon which the health of forest ecosystems depend. It may have already caused the extinction of Miss Waldron's red colobus monkey, which formerly existed in the forested zones of Ivory Coast and Ghana. The African great apes--chimpanzees, gorillas, and bonobos--are at particular risk. This illegal trade is destroying free-ranging populations of chimpanzees just when their protection in the wild is being recognized as important for understanding how to control the spread of HIV and other emerging infectious diseases in humans. Moreover, the killing and dressing of chimpanzee meat in the bush may present a human health risk for those engaged in this trade and is a potential point of entry for new diseases into the global human population.

African governments are called to take full responsibility for enforcing existing laws and maintaining vigilance against corruption, and until policy makers put the value of protecting wildlife ahead of immediate financial gain, there will be no way to stem the loss of Africa's irreplaceable biological heritage, including our closest living relatives, the great apes. Logging companies, mining firms, and other extractive industries bear a significant responsibility for the growth of the unregulated

commercial bushmeat trade. They must ensure that illegal hunting of threatened and endangered species is prohibited in their concessions and minimize their impact on wildlife by providing alternative sources of food for their employees. They should also do all they can to contribute to equitable, transparent, and lasting solutions. Contact: Michael Hutchins, Director, Conservation and Science, American Zoo and Aquarium Association, 8403 Colesville Road, Silver Spring, MD 20910-3314. MHutchins@aza.org (301) 562-0777, ext. 240. Fax: (301) 562-0888.

McNeil, Jr., Donald G., "Kosher Authority Seeks Change in Steer Killings," New York Times, December 3, 2004, p. A 17. In the wake of accusations of cruelty from People for the Protection of Animals (PETA), the world's largest kosher certification authority has asked a major kosher slaughterhouse in Iowa (AgriProcessors Inc.) to change the way it kills animals. The plant is the U.S. largest producer of meat that is glatt kosher, the highest standard of cleanliness. It is also the only American plant allowed to export to Israel. Israel's chief rabbinate has also said that it will no longer accept meat from the plant, unless practices are changed. PETA managed clandestine videotaping of killings in the plant showing workers cutting the throats out of living steers and then dumping the animals on the floor where they thrashed and bellowed while bleeding to death.

McNulty, SG; Aber, JD, "US National Climate Change Assessment on Forest Ecosystems: An Introduction," Bioscience 51(no, 9, 2001):720-722. (v.13,#1)

McNutt, John, Boggs, Lesley P. Running Wild: Dispelling the Myths of the African Wild Dog. Washington, D.C.: Smithsonian Institution Press, 1997. 150 pp. \$45. Uncovering extraordinary new facts about the life and habits of the African wild dog, the authors argue for its importance as an "indicator species" in one of the world's most ecologically significant wetlands. They document the hunting behavior, play rituals, and natural history of the Mombo pack in the heart of Botswana's Okavango Delta. (v8,#3)

McPeak, John, "Individual and Collective Rationality in Pastoral Production: Evidence From Northern Kenya," Human Ecology 33(no.2, April 2005):171-197(27).

McPhail, Robyn, "Living on the Land: Ecotheology in Rural New Zealand," Ecotheology Vol 6 (Jul 01/Jan 02):138-151. chirmac@voyager.co.nz Do we, in the churches in New Zealand, have an ecotheology? The presenter draws on experience in rural church and community, noting changes since the mid twentieth century and exploring issues of theory versus practice and secular versus religious. Some anecdotal evidence for incipient ecotheology is offered, with reference to perceptions of relationship with the land, and popular theology in Bible texts and hymns. The aim is to counter claims that New Zealand agriculture is devoid of ecotheological foundation, but also to affirm the positive in actual thought and practice of rural people and raise questions about what is still missing. Case studies - sustainable logging, the dairy mega-merger and genetic modification - set the scene for a gospel commission for Church and academy to spread our ecotheological vision. The presentation culminates with the point and purpose of all faith and practice - indeed the crown of creation itself - the sabbath.

McPhee, Euan, "Developing a Theological Basis for a Land Ethic," Ecotheology No 1 (July 1996):43-52.

McPherson, G, et al., "Municipal Forest Benefits and Costs in Five US Cities," Journal of Forestry 103 (no. 8, December 2005): 411-416.

McQueery, Margaret, and Gavrish, Tetyana, eds., Nuclear Legacy: Students of Two Atomic Cities. Columbus, OH: Battelle Press, 2000. Articles authored by students of the Tri-Cities area in the state of Washington, near the Hanford nuclear research facility, which produced plutonium, and Slavutych, Ukraine, near Chernobyl, who share a common inheritance--coming of age in a nuclear community.

(v.13,#2)

McQuillan, Alan G. "Passion and Instrumentality: Further Thoughts on the Callicott-Norton Debate." Environmental Ethics 20(1998):317-24. Although J. Baird Callicott and Bryan G. Norton define the word intrinsic quite differently, both are against any "essentialist" position which posits "an objectivist theory of value in nature." Viewed in this context, their differences emerge in terms of instrumentality and anthropocentrism. While a nonanthropocentrist position is tenable, it cannot be divorced from the centrality of human passion and desire. From the Humean perspective, assumed by both authors, however, desire does not reduce to instrumental value alone. As a result, Callicott's position emerges as the stronger argument: that the moral consideration of nature requires more than instrumental value, no matter how broadly instrumentality is construed. MacQuillan is in the School of Forestry, University of Montana. (EE)

McQuillan, Alan G., "Is National Forest Planning Incompatible with a Land Ethic?" Journal of Forestry, May 1990. "The forestry profession has not developed an acceptable methodology for allocating forest land among often mutually exclusive uses." "The question about which lands are suitable for timber production is not one that the profession is well-prepared to answer." The Forest Service "determines what lands to allocate to timber harvest on the basis of whether they are needed to meet timber production targets established for each forest rather than on the basis of the forest lands' inherent productive potential. These targets may be passed down to the forest level or on the basis of local timber production goals set to meet the needs of existing or projected milling capacity in or near each national forest. Either way, by allowing output targets to drive the land allocation process, Forest Service planners can avoid the more difficult question of whether road building and timber harvesting represent the highest and best use of any particular ground in the forest." "It is hardly surprising that the agency tends toward schizophrenia." McQuillan is director of the Wilderness Institute, University of Montana, Missoula. (v1,#4)

McQuillan, Alan G., "Cabbages and Kings: The Ethics and Aesthetics of New Forestry." Environmental Values Vol.2 No.3(1993):191-222. ABSTRACT: The advent of new forestry in the United States represents a traumatic shift in the philosophy of national forestry praxis, a broadening of values to include aesthetics and sustainability of natural ecological process. The ethics of traditional forestry are shown to be 'Stoic utilitarian' and positivist, while the ethics of new forestry adhere closely to the 'land ethic' of Aldo Leopold. Aesthetics in traditional forestry are shown to be modernist, and to have developed from, and in opposition to a Romantic aesthetic of the late nineteenth century. This transition is traced from the first U.S. landscape architect, Frederick Law Olmsted Sr., to the first U.S.-born forester, Gifford Pinchot. The language and precepts of new forestry are shown to parallel those of postmodernism, and the possibility of a broadened aesthetics of forestry, developed through postmodernist criticism, is outlined. The language of gardening is used as a model of forestry praxis, with traditional forestry adhering to the principles of vegetable gardening, while new forestry offers an opportunity to flesh out an entire spectrum of gardening genres. KEYWORDS: Environmental ethics, aesthetics, forestry, forest policy, postmodernism. School of Forestry, University of Montana, Missoula, MT 59812, USA.

McQuillan Alan G., and Preston, Ashley L., eds., Globally and Locally: Seeking a Middle Path to Sustainable Development. Lanham, MD: University Press of America, 1998. (v.9,#3)

McQuillan, Alan G., "Is National Forest Planning Incompatible with a Land Ethic?" Journal of Forestry 88 (no. 5, May 1990):31-37. "Can forest planning adhere in principle to Leopold's land ethic and juggle multiple uses in practice?" "The question about which lands are suitable for timber production is not one that the professional is well-prepared to answer." "It is hardly surprising that the agency [U. S. Forest Service] tends toward schizophrenia." McQuillan is director of the Wilderness Institute and a professor at the University of Montana, Missoula. (v2,#1)

McShane, Katie, The Nature of Value: Environmentalist Challenges to Moral Theories, Ph.D. thesis, University of Michigan, Ann Arbor. 2002. Environmentalists have argued that contemporary ethical theories have overly strict rules about what kinds of things can be intrinsically valuable. These rules make it impossible for many of the things that environmentalists care deeply about to be considered bearers of intrinsic value--things which are not rational, sentient, or in some cases, even alive. In this dissertation I consider possible responses to this environmentalist criticism from within mainstream ethical theories. Using the value of ecosystems as a test case, I analyze what features a thing must have, and why, in order to be a (potential) possessor of intrinsic value on each of three ethical theories: wellbeing-based, Moorean, and rational attitude accounts. Ultimately, I argue that while a place can be made for the intrinsic value of ecosystems on all three theories, rational attitude accounts do the best job of accommodating environmentalist concerns without incurring other significant theoretical costs. McShane is in philosophy at North Carolina State University, but this year a visiting professor at the Center for Ethics and the Professions at the Kennedy School, Harvard University. Her committee was: Elizabeth Anderson (chair), Stephen Darwall, P. J. Ivanhoe, John Vandermeer (Biology).

McShane, Katie, "Anthropocentrism vs. Nonanthropocentrism: Why Should We Care?" *Environmental Values* 16(2007): 169-186. Many recent critical discussions of anthropocentrism have focused on Bryan Norton's 'convergence hypothesis': the claim that both anthropocentric and nonanthropocentric ethics will recommend the same environmentally responsible behaviours and policies. I argue that even if we grant the truth of Norton's convergence hypothesis, there are still good reasons to worry about anthropocentric ethics. Ethics legitimately raises questions about how to feel, not just about which actions to take or which policies to adopt. From the point of view of norms for feeling, anthropocentrism has very different practical implications from nonanthropocentrism; it undermines some of the common attitudes - love, respect, awe - that people think it appropriate to take toward the natural world. McShane is in philosophy, North Carolina State University.

McShane, Katie, "Convergence, Noninstrumental Value and the Semantics of 'Love': Reply to Norton," *Environmental Values* 17(2008): 15-22. Bryan Norton argues that my recent critique of anthropocentrism presupposes J. Baird Callicott's philosophically problematic distinction between intrinsic and instrumental value and that the problems that it raises for anthropocentrism in general are in fact only problems for strong anthropocentrism. I argue, first, that my own view does not presuppose Callicott's distinction, nor any claims about instrumental value, and second, that the problems it raises for anthropocentrism apply to weak and strong anthropocentrism alike

McShane, Katie. "Ecosystem Health." *Environmental Ethics* 26(2004):227-245. On most understandings of what an ecosystem is, it is a kind of thing that can be literally, not just metaphorically, healthy or unhealthy. Health is best understood as a kind of well-being; a thing's health is a matter of retaining those structures and functions that are good for it. While it is true both that what's good for an ecosystem depends on how we define the system and that how we define the system depends on our interests, these facts do not force us to the conclusion that an ecosystem has no good of its own. Ecosystems and persons can have goods of their own in spite of the fact that the schemes we use to categorize them are matters that we decide upon. (EE)

McShane, Katie. Review of *Morality's Progress: Essays on Humans, Other Animals, and the Rest of Nature*. By Dale Jamieson. *Environmental Ethics* 28(2006):323-326. (EE)

McShane, Katie. "Why Environmental Ethics Shouldn't Give Up on Intrinsic Value." *Environmental Ethics* 29(2007):43-61. Recent critics (Andrew Light, Bryan Norton, Anthony Weston, and Bruce Morito, among others) have argued that we should give up talk of intrinsic value in general and that of nature in particular. While earlier theorists might have overestimated the importance of intrinsic value, these recent critics underestimate its importance. Claims about a thing's intrinsic value are claims about the distinctive

way in which we have reason to care about that thing. If we understand intrinsic value in this manner, we can capture the core claims that environmentalists want to make about nature while avoiding the worries raised by contemporary critics. Since the distinction between intrinsic and extrinsic value plays a critical role in our understanding of the different ways that we do and should care about things, moral psychology, ethical theory in general, and environmental ethics in particular shouldn't give up on the concept of intrinsic value. (EE)

McShane, TO, "The Devil in the Detail of Biodiversity Conservation", Conservation Biology 17(no.1, 2003):1-3.

McWhorter, Ladelle, ed., Heidegger and the Earth: Issues in Environmental Philosophy. Six essays. Samples: "Heidegger and Ecology," "The Strange Uncanniness of Human Being on Earth; "Meeting and Place." McWhorter is professor of philosophy at the University of Richmond, Virginia. (v3,#4)

Meadowcroft, James. Review of David Pepper. Eco-socialism: From Deep Ecology to Social Justice: (London: Routledge, 1993). (EV)

Meadows, Donella, Jorgen Randers, and Dennis Meadows, Limits to Growth - The 30-Year Update. White River Junction, Vermont: Chelsea Green Publishing Co, 2004. Reviewed by Udo E. Simonis in Environmental Values 14(2005):274-276.

Meadows, Donella H., Dennis L. Meadows, and Jorgen Randers, Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future. Post Mills, VT: Chelsea Green Publishing Co., 1992. 300 pp. \$ 19.95. A sequel to the 1972 book, The Limits to Growth (which sold 9 million copies in 29 languages). The ruling metaphor in the book is "overshoot," which occurs when excessive growth pushes a system beyond its limits. (v3,#2)

Meadows, Donella, The Global Citizen (Corvelo, CA: Island Press, 1991). 300 pages. \$ 24.95 cloth, \$ 14.95 paper. By the co-author of Limits to Growth. Meadows teaches at Dartmouth College. (v2,#2)

Meadows, Donella, "Chicken Little, Cassandra, and the Real Wolf: So Many Ways to Think about the Future," Wild Earth 9 (No. 4, Wint 1999): 24- . (v.11,#2)

Meagher, Laura, Teaching Children about Global Awareness. Crossroad/Continuum, 1991. 144 pages. Practical ideas to help children live responsibly in an interdependent world. (v2,#3)

Mealey, Stephen P., "Ethical Hunting: Updating an Old Heritage for America's Hunting and Wildlife Conservation Future." Keynote address at the Foundation for North American Wild Sheep Conference, San Antonio, Texas, February 18, 1994. "I believe killing wildlife, as part of hunting, is acceptable only when it is the true and artful climax of the hunting ritual, practiced as the timeless art of self-sustenance, with reconnection to, and participation in, the natural process of 'life unto life only through death.' Full appreciation of this most fundamental and bittersweet process comes with full participation, and full participation through the hunt cannot occur without experiencing, first-hand, the kill." Mealey is Forest Supervisor of Boise National Forest. Copies on request Stephen P. Mealey, Boise National Forest, 1750 Front Street, Boise, ID 83702. (v5,#1)

Meaton, Julia, Morrice, David, "The Ethics and Politics of Private Automobile Use," Environmental Ethics 18(1996):39-54. Despite growing awareness of its various problems, private automobile use is still seen as an inviolable individual freedom. We consider the ethical arguments for and against private automobile use with particular reference to John Stuart Mill's theory of freedom. There is much evidence to show that private automobile use is an other-regarding harmful activity that is, therefore, on Mill's terms, liable to public control. Although it cannot be an entirely self-regarding activity, we consider

private automobile use in this category and argue that even on Mill's terms it can properly be subjected to extensive control. We also challenge Mill's theory and argue that private automobile use lacks adequate moral justification. We then consider the policy implications of this ethical argument and review some of the policy options available. We conclude that although an immediate total ban on private automobile use is justifiable, it is inadvisable at this time and that more limited, but effective control should be implemented in preparation for a total ban. Meaton is in geographical and environmental sciences, Huddersfield University, Yorkshire, UK. Morrice is in social sciences, Staffordshire University, UK. (EE)

Meatyard, B., "Review of: Groombridge, Brian, Et Al, World Atlas of Biodiversity: Earth's Living Resources in the 21st Century (Berkeley, CA: University of California Press, 2002)," Biological Conservation 114(no. 2, 2003): 305-306.

Meatyard, B., "Review of: C. D. Preston and D. Pearman, New Atlas of the British and Irish Flora (Oxford: Oxford University Press, 2002)," Biological Conservation 114(no. 1, 2003): 154-155.

Mech, L. David, "The Challenge and Opportunity of Recovering Wolf Populations," Conservation Biology 9 (1995): 270-78. There is an expanding opportunity for wolf recovery, but, because of the wolf's mobility, fertility, and long life, there are few places where wolves can be reintroduced without control, which means trapping and killing problem wolves. Those who favor wolves typically favor government rather than public control, but if control were allowed by the public (ranchers, landowners, hunters), this could be more effective and cheaper, more acceptable to those for whom wolves create problems, and allow wolves to live in far more places. Mech is the foremost wolf biologist in the world, with the National Biological Service, Laurel, MD, USA. (v6,#2)

Medeiros, Paul Joseph, Juxtaposing Aldo Leopold and Martin Heidegger: Interpretation, Time, and the Environment. Ph.D. thesis, Duke University. May, 2000. The concepts of authentic time, inauthentic time, and everyday time, articulated by Martin Heidegger in the 1924 lecture "The Concept of Time" and in Being and Time, are used to disclose American environmentalism as a tradition calling for a temporal modification of everyday life through engaged contact with the wild. The essays of conservationist Aldo Leopold, forerunner of contemporary environmental ethics, are chosen as representative of a tradition that includes Emerson, Thoreau, and Muir. The three main themes intrinsic to Leopold's essays--that our historical roots in the wild yield cultural values, that the whole of nature can be perceived as a community, and that we ought to respect and care for the land (the famous "land ethic")--are interpreted in terms of Heidegger's concepts of the authentic past, present, and future, respectively.

Issues of interpretation, specifically the linguistic and metaphysical obstacles to our understanding of Heidegger and the problem of a philosophical representation appropriate to Leopold and the American environmental tradition in general, are a major concern of the dissertation. These problems are unraveled by virtue of the dissertation's hermeneutical structure: Part I presents the evolution of the three themes in Leopold's essays leading up to their explicit formulation in A Sand County Almanac, Part II is a tripartite analysis of Heidegger's translated works from the 1966 Der Spiegel interview back to "The Concept of Time" guided by Leopold's themes, and Part III reinterprets Leopold's environmental philosophy, including the land ethic, in light of the results of Part II i.e., Heidegger's phenomenological conception of past, present, and future. The dissertation concludes that the possibility of authentically interpreting both Leopold and Heidegger in this circular manner is grounded in their common heritage in German Romanticism. Principal advisors were Alasdair MacIntyre and Gregory Cooper. (v.11,#1)

Medina, Ada, "The artist on process and ethics," Ethics and the Environment 8 (no. 1, 2003):3-21. Interview with Ada Medina. The conceptual and material processes behind her work. Art and philosophy, politics, nature, aesthetics, and her own creative practices. Art as "negotiating an in-between space, a threshold of contingency and flux, where oppositions permeate each other." Work in

environmental ethics and ecophilosophy also aims to engage liminal spaces, including nature/culture, thought/action, and self/other. In art and philosophy, the most interesting and innovative work does not stop at describing such dualisms, and does not aim to transcend them. Instead, it directs attention to the complexity and relation within any seeming opposition. Why that project is compelling and important. Medina is an artist, Santa Fe, NM. (E&E)

Medina, Martin. *The World's Scavengers: Salvaging for Sustainable Consumption and Production*. Walnut Creek CA: AltiMira Press, 2007. Medina tells us that up to 2% of the urban population in developing countries survives by salvaging materials from waste for recycling, which represents up to 64 million scavengers in the world today. Despite these numbers, we know little about the impact of scavenging on global capitalism development. The author examines its historical evolution and its linkages with formal and informal sector productive activities in capitalist and non-capitalist societies in case studies from Mexico, Brazil, Colombia, Argentina, Egypt, the Philippines, and India. He attempts to debunk popular perceptions about scavenging, demonstrating that many widely-held beliefs are wrong: scavenging is not primarily the activity of the poor nor is it a strictly marginal activity; the economic impact of scavenging is significant and can increase industrial competitiveness; and scavenging can be compatible with a sustainable waste management system. Scavenging represents an adaptive response to poverty, yet at the same time it can be a resource to cities, whose contributions should be recognized and understood.

Meeker, Joseph W. *Minding the Earth: Thinly Disguised Essays on Human Ecology*. Alameda, CA: The Latham Foundation, 1988. (v6,#3)

Meeker, Joseph W., *The Comedy of Survival: Studies in Literary Ecology*. New York: Scribner, 1974.

Meeker, Joseph W., *The Comedy of Survival: In Search of an Environmental Ethic*. Los Angeles, CA: International College, Guild of Tutors Press, 1980.

Meeker, Joseph W., *Minding the Earth: Thinly Disguised Essays on Human Ecology*. Alameda CA: Latham Foundation Publications, 1988. 110 pages. \$ 8.95 paper.

Meeker, Joseph W., Review of: Theodore Rozak: *The Voice of the Earth*, *Environmental Ethics* 16(1994):111.

Meeker, Joseph W., *The Spheres of Life: An Introduction to World Ecology*. New York: Scribner, 1975.

Meeks, M. Douglas, *God the Economist*. Minneapolis: Fortress Books, 1989. 257 pages. North Americans live by the logic of the market. Value is determined by exchange in the marketplace. Everything becomes a commodity to be used and depleted, hoarded or cast away. When persons are valued for their exchange in the marketplace, insecurity and competitiveness result. Instead of loving one another, sharing with one another, nurturing the well-being of one another, we compete with one another, use one another, and discard one another. These are the perils of riches. Meanwhile, forty million people die every year from poverty's perils, the lack of food, shelter, health, education, and hope. (v8,#3)

Meeks, M. Douglas. *God the Economist: The Doctrine of God and Political Economy*. Minneapolis: Fortress Press, 1989.

Meffe, G. K., L. A. Nelson, R. L. Knight, and D. A. Shenborn, *Ecosystem Management: Adaptive, Community-Based Conservation*. Washington, DC: Island Press, 3003. (v. 15, # 3)

Meffe, Gary K., and C. Ronald Carroll, eds., *Principles of Conservation Biology*. Sunderland, MA: Sinauer Associates, Inc., 1994. 600 pages. Hardcover. Twelve major chapter authors, in addition to the

two editor authors, and over 50 authors of selected short essays. What is conservation biology, populations, genetics, ecosystems, reserve designs, biodiversity, restoration, political and social issues, sustainable development, risk assessment, the future. For the chapter on conservation ethics and values, see the Callicott entry below. This and Richard B. Primack, Essentials of Conservation Biology (also by Sinauer), see Newsletter, Fall 1993) are the two leading texts in the field. (v5,#2)

Meffe, Gary K. and C. Ronald Carroll, Principles of Conservation Biology. Sunderland, MA: Sinauer Associates, forthcoming 1994. With 55 contributors, many doing chapters, many doing short box essays. For upperclass use, in contrast to the preceding which is for introductory use. J. Baird Callicott writes chapter 2, "Philosophy and Ethics of Conservation." Some short essays: Susan Bratton, "Monks, Temples, and Trees: the Spirit of Biodiversity"; Roderick Nash, "Discovering Radical Environmentalism in Our Own Cultural Backyard: From Natural Rights to the Right of Nature"; Holmes Rolston, "Duties to Endangered Species," David Orr, "Liberalizing the Liberal Arts: From Domination to Design"; Phil Pister, "Agency Multiple-Use Conflicts"; Frederick Ferré, "The Post-modern World"; Eric Katz, "A New Vision: Humans and the Value of Nature." Meffe is at the Savannah River Ecology Laboratory in South Carolina; Carroll is at the University of Georgia in ecology. (v4,#2)

Meffee, Gary K., and C. Ronald Carroll, and contributors, Principles of Conservation Biology, 2nd ed. Sunderland, MA: Sinauer and Associates, 1997. 729 pages. 155 pages longer than the first edition in 1994, with more focus on ecosystem management, also with a chapter on becoming more effective in the policy press. More on the marine environment. Two dozen new box essays. The chapter on "Conservation Values and Ethics" continues by J. Baird Callicott. Box essays by Holmes Rolston, III, "Our Duties to Endangered Species"; Susan P. Bratton, "Monks, Temples, and Trees: The Spirit of Diversity"; Roderick Frazier Nash, "Discovering Radical Environmentalism in Our Own Cultural Backyard: From Natural Rights to the Rights of Nature." Meffee is the incoming editor of Conservation Biology. Carroll is at the Institute of Ecology, University of Georgia. (v8,#2)

Meffee, Gary K., and C. Ronald Carroll, Principles of Conservation Biology. Sunderland, MA: Sinauer Associates, 1994. 575 pages. \$ 46.95. With chapter contributions by various authors. The chapter on "Conservation Values and Ethics" is by J. Baird Callicott, with box essays by Holmes Rolston on "Duties to Endangered Species" by Susan P. Bratton on "Monks, Temples, and Trees: The Spirit of Diversity," and by Roderick Frazier Nash, "An American Perspective: Discovering Radical Environmentalism in our Own Cultural Backyard--From Natural Rights to the Rights of Nature." By a team of authors. Other sample chapters: James A. MacMahon and William R. Jordan, III, "Ecological Restoration"; Gordan H. Orians, "Global Biodiversity: Patterns and Processes"; Norman Myers, "Global Biodiversity: Losses"; Gary S. Hartshorn, "Sustainable Development Case Studies." Eighteen chapters in all. Meffee is at the University of Georgia Savannah River Ecology Laboratory and Carroll is at the Institute of Ecology at the University of Georgia. (v5,#1)

Meffert, Lisa Marie, "How Speciation Experiments Relate to Conservation Biology," Bioscience 49 (No. 9, 1999 Sep 01): 701- . The assumption of captive breeding strategies--that founder events reduce genetic variation--may not always be correct. (v.11,#4)

Mehalik, M. M., "Technical and Design Tools: The Integration of ISO 14001, Life Cycle Development, Environmental Design and Cost Accounting." In ISO 14001 Case Studies and Practical Experience, ed. Ruth Hillary. London: Greenleaf Publishing, 2000. (v.11,#2)

Mehalik, Matthew Marc, "Sustainable Network Design: A Commercial Fabric Case Study." Interfaces: Special Edition on Ecologically Sustainable Business Practices, 2000. Mehalik is in Systems Engineering, School of Engineering and Applied Science, University of Virginia.

Mehren, M 1991. Francis of Assisi: Reconciliation with God, humanity and creation. *Missionalia* 19:3, 183-191. (Africa)

Meijboom, Franck L. B. , "Trust, Food, and Health. Questions of Trust at the Interface between Food and Health," *Journal of Agricultural and Environmental Ethics* 20(2007):231-245. The food sector and health sector become more and more intertwined. This raises many possibilities, but also questions. One of them is the question of what the implication is for public trust in food and health issues. In this article, I argue that the products on the interface between food and health entails some serious questions of trust. Trust in food products and medical products is often based upon a long history of rather clear patterns of mutual expectations, yet these expectations are not similar in both sectors. As long as the food sector and health sector remain distinct, these differences will not lead to problems of trust, yet when new products are introduced, like functional foods or personalized dietary advices, trust can be threatened. To prevent this, we need clarity with regard to *what* we can expect of these new products and of *whom* to expect what in this situation. This requires not only adequate information on operating procedures, but also a profound debate on responsibilities and the explication and interpretation of moral values and norms. Keywords: functional food - health - personalized dietary advice - trust - trustworthiness. Meijboom is at Ethics Institute, Utrecht University, Utrecht, Netherlands.

Meijboom, Franck L. B., Tatjana Visak and Frans W. A. Brom, "From Trust to Trustworthiness: Why Information is not Enough in the Food Sector," *Journal of Agricultural and Environmental Ethics* 19(2006):427-442. The many well-publicized food scandals in recent years have resulted in a general state of vulnerable trust. As a result, building consumer trust has become an important goal in agri-food policy. In their efforts to protect trust in the agricultural and food sector, governments and industries have tended to consider the problem of trust as merely a matter of informing consumers on risks. In this article, we argue that the food sector better addresses the problem of trust from the perspective of the trustworthiness of the food sector itself. This broad idea for changing the focus of trust is the assumption that if you want to be trusted, you should be trustworthy. To provide a clear understanding of what being trustworthy means within the food sector, we elaborate on both the concept of trust and of responsibility. In this way we show that policy focused on enhancing transparency and providing information to consumers is crucial, but not sufficient for dealing with the problem of consumer trust in the current agri-food context. Keywords: food - food policy - responsibility - trust - trustworthiness. The authors are in the Ethiek Instituut, Utrecht University, Utrecht, The Netherlands. (JAEE)

Meiklejohn, Brad. "Alaska: The Wildlands Model?", *Wild Earth* 6(no.3, 1996):50. (v7,#4)

Meilaender, Gilbert, "Terra es animata: On Having a Life," *Hastings Center Report* 23(no. 4, 1993):25-32. The contemporary concept of the person, dominant in bioethics, has lost the connection between our person and the natural trajectory of the bodily life, a strange upshot for bioethics. Premodern Christians knew persons as terra animata, animated earth. Persons are inseparable from the growth, development, and decline of their bodies. The humanist, Enlightenment concept of the person overlooks this and finds the essence of personality in rational autonomy, without which the organic body lacks all value. Among the peculiarities of our historicist and purportedly antiessentialist age is the rise to prominence of an ahistorical and essentialist concept of the person. On this view it is not the natural history of the embodied self but the presence or absence of certain transnatural capacities that makes the person. The so-called materialistic age ironically holds that everything central to our person is separated from the body. But to have a life is to be terra animata, a living body whose natural history has a trajectory. Every human life has a narrative quality, one that begins before we are conscious of it and may, in our decline, continue for a time after we have lost consciousness of it. This is relevant for how we interpret living wills. Also medical suicide, when a person takes rational, autonomous control over the circumstances of one's death, can elevate the cerebral over the biological dimensions of life. Meilaender is in religion at Oberlin College. (v5,#4)

Meinberg, Eckhard, Homo Oecologicus. Reviewed by Ingolfer Blühdorn. Environmental Values 6(1997):116-117.

Meine, C, "Roosevelt, Conservation, and the Revival of Democracy," Conservation Biology 15(no. 4, 2001):829-831. (v.13,#1)

Meine, Curt, "The Reach of Words," Wild Earth 9(no. 3, Fall 1999):22- . (v.11,#1)

Meine, Curt, ed. Wallace Stegner and the Continental Vision: Essays on Literature, History, and Landscape. Covelo, CA: Island Press, 1997. 240 pp. \$24.95. Contributors consider Stegner as writer, as historian, and as conservationist, discussing his place in the American literary tradition, his integral role in shaping how Americans relate to the land, and his impact on their own personal lives and careers. (v9,#2)

Meine, Curt, and Meffee, Gary K. "Conservation Values, Conservation Science: A Healthy Tension." Conservation Biology 10, no.3 (1996): 916. (v7, #3)

Meine, Curt, "Conservation Movement, Historical," Encyclopedia of Biodiversity 1: 883-896. Modern efforts to conserve biodiversity have their foundations in older traditions of resource management and nature protection. This chapter traces the history of the conservation movement, focusing on those events and patterns that led to the emergence of biodiversity conservation from earlier utilitarian and preservation-oriented approaches. Because the conservation movement continues to redefine itself, this articles concludes with a consideration of key themes from recent history. (v.11,#4)

Meine, Curt, Aldo Leopold: His Life and Work. Madison: University of Wisconsin Press, 1988. Pp. xv, 638. The first complete biography of Leopold, the most influential thinker in contemporary environmental philosophy. The text builds upon and expands the classic treatment of Leopold in Susan Flader, Thinking Like a Mountain (1974). (Katz, Bibl # 2)

Meine, Curt. Review of Global Bioethics. By Van Renssalaer Potter. Environmental Ethics 11(1989):281-85.

Meine, Curt. Aldo Leopold: His Life and Work. Reviewed in Environmental Ethics 11(1989):369-72.

Meiners, Roger E., and Yandle, Bruce, "The Common Law: How It Protects the Environment," PERC Policy Series, No. PS-13, May 1998. (PERC, 502 South 19th Avenue, Suite 211, Bozeman, MT 59718-6827). Common law cases, that preceded environmental regulation, were more successful than people usually think, and offer an alternative to still more government regulation. Meiners teaches economics and law at the University of Texas at Arlington. Yandle is in economics and legal studies, Clemson University. (v9,#2)

Meiners, Roger E. and Bruce Yandle, eds. Taking the Environment Seriously. Lanham, MD: Rowman & Littlefield, 1993. 288 pages. \$42.50. Essays argue that it is time to consider market-oriented solutions to environmental problems. (v5,#2)

Meinig, D. W., ed. The Interpretation of Ordinary Landscapes: Geographical Essays. New York: Oxford University Press, 1979. Sense of place. (v8,#1)

Meir, Avinoam, and Tsoar, Haim. "International Borders and Range Ecology: The Case of Bedouin Transborder Grazing." Human Ecology Forum 24 (March 1996): 39. (v7, #3)

Meiring, PGJ 1991. The Greens - avant-garde missionaries? *Missionalia* 19:3, 192-202. (Africa)

Meisels, T., "Liberal Nationalism and Territorial Rights," *Journal of Applied Philosophy* 20(no. 1, 2003): 31-44. (v 14, #3)

Mejia, Alfonso Alonso, Lianne Tennant de Alonso, Lincoln Brower, and Dennis Murphy, "Maintaining Migratory Phenomena: The Mexican Monarch Butterfly Challenge," *Society for Conservation Biology Newsletter* 3 (special issue, May 1996):1, 17. The Monarchs winter in selected forests of Oyamel fir in Mexico, clustering in large groups in some eight or so areas. They need the protection of the forests to survive winter freezing, but forest destruction threatens their survival. Mexico has set aside a Monarch Butterfly Special Biosphere Reserve by presidential decree, though much of the reserve is private land, and only a portion of the reserve is fully protected. Logging is still permitted on much of it. Ways to combine butterfly protection and the economic needs of local peoples are reviewed. The authors, zoologists from the University of Florida, Harvard, and Stanford, have been involved in intensive study of the problem. (v7,#2)

Melin, Anders, "Genetic Engineering and the Moral Status of Non-Human Species," *Journal of Agricultural and Environmental Ethics* 17(2004):479-495. Genetic modification leads to several important moral issues. Up until now they have mainly been discussed from the viewpoint that only individual living beings, above all animals, are morally considerable. The standpoint that also collective entities such as species belong to the moral sphere have seldom been taken into account in a more thorough way, although it is advocated by several important environmental ethicists. The main purpose of this article is to analyze in more detail than often has been done what the practical consequences of this ethical position would be for the use of genetic engineering on animals and plants. The practical consequences of the holistic standpoint (focused on collective entities) of Holmes Rolston, III, is compared with the practical consequences of the individualistic standpoints (focused on individual living beings) of Bernard E. Rollin and Philipp Balzer, Klaus Peter Rippe, and Peter Schaber, respectively. The article also discusses whether the claim that species are morally considerable is tenable as a foundation for policy decisions on genetic engineering. Keywords: Balzer et al., genetic engineering, holistic ethical position, Rollin, Rolston. The author is at the Centre for Theology and Religious Studies, Lund University, Sweden. (JAEE)

Melis, Alicia P., Brian Hare, and Michael Tomasello, "Chimpanzees Recruit the Best Collaborators," *Science* 311 (3 March 2006): 1297-1300. Chimps will get help when it takes two to get the food (pulling on two ropes far apart) and they will unlock a door to get a helper, and, after experience, seek the most effective helper. Companion article is: Warneken, Felix and Michael Tomasello, "Altruistic Helping in Human Infants and Young Chimpanzees," *Science* 311 (3March 2006): 1301-1303.

Mellon, M., Biotechnology and the Environment: A Primer on the Environmental Implications. A publication of the National Wildlife Foundation, Biotechnology Policy Center, 1400 16th St., N. W. Washington, DC 20036. (v4,#1)

Mellor, Mary, Review of Cook, Julie, Breaking the Boundaries: Towards a Feminist Green Socialism. *Environmental Values* 3(1994):278-279. (EV)

Mellor, Mary, Breaking the Boundaries: Towards a Feminist Green Socialism. London: Virago, 1992. £ 8.99. Green politics, ecofeminism, deep ecology, clan societies, global development, industrialism, capitalism, North and South and related women and environment issues. Women and their work is a central theme. Although socialism has rather consistently failed to respond adequately to the challenges of either feminism or environmentalism, a feminist green socialism is possible. Reviewed, rather negatively, by Julie Cook, Women's Environmental Network, in *Environmental Values* 3(1994):278-279.

(v5,#3)

Mellor, Mary. "Feminism and Environmental Ethics: A Materialist Perspective." Ethics and the Environment 5(2000):107-124. ABSTRACT: There is a long-standing claim within feminist literature that women speak with a 'different voice' (Gilligan 1982), that it is both possible and desirable to have on ethics from the standpoint of women (Noddings 1990), that the standpoint of women is a better starting point for adequate knowledge of the world (Harding 1993). This claim is central to ecofeminist politics. that women have a particular perspective on the relationship between humanity and nature and have a moral/political calling to reweave the world (Diamond and Orenstein 1990) or heal the wounds of an ecologically destructive social order (Plant 1989). In this essay I will not be making the claim that women

per se have a superior vision or a higher moral authority, but that (in ethics that does not take account of the gendered nature of society is doomed to failure as it will confront neither the material structure of human society or the way in which that structure impacts on the materiality of the relationship between humanity and nature. (E&E)

Melosi, M. V., "Review of: Ted Steinberg. Acts of God: The Unnatural History of Natural Disaster in America," Environmental History 7(no.1, 2002): 137.

(v.13,#2)

Melosi, Marvin V., "Equity, Eco-racism and Environmental History," Environmental History Review 19 (1995): 1-16. If the emergence of the Environmental Justice Movement shows us anything, it clearly demonstrates that the foundations of environmentalism laid twenty-five years ago are not unshakable; that the connection between environmental rights and civil rights has to be taken seriously. Melosi is at the University of Houston. (v6,#4)

Melton Journal, The . "Judaism and Ecology: Our Earth and Our Tradition," is a theme issue of The Melton Journal, a publication of the Melton Research Center for Jewish Education at the Jewish Theological Seminary of America, no. 24, spring 1991. Included is an article by Eric Katz, "Are We the World's Keepers? Toward an Ecological Ethic for Our Home Planet." Other articles are on a Jewish theology of creation, animal life in Jewish and Christian traditions, kosher vegetarianism, a high school curriculum on Judaism and ecology, and environmental organizations in Israel. (v2,#2)

Melton Journal (Melton Research Center for Jewish Education, The Jewish Theological Seminary of America). Spring 1991, no. 24, is Judaism and Ecology: Our Earth and Our Tradition, with nine feature articles. Spring 1992, no. 25, is Towards a Jewish Ecological Paradigm: Essays and Explorations, with ten articles. Melton Research Center, Jewish Theological Seminary of America, 3080 Broadway, New York, NY 10027. (v5,#2)

Mench, Joy A., "Assessing Animal Welfare: An Overview", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. Because of increasing public concern about the quality of life of farm animals, there has been a growing effort to develop rigorous and clearly interpretable scientific criteria for assessing animal welfare. The indicators which have commonly been used to assess welfare in farm animals are productivity, health, physiology and behaviour. Each of these indicators has advantages and disadvantages with regard to measurement and interpretation. One underlying problem is that it may be difficult or impossible to determine a norm or standard to which measures can be compared in an effort to evaluate welfare. Instead, it is necessary to direct attention to an understanding of the causal and functional aspects of behavioural and physiological events in animals. In this context, I discuss integrative research approaches which can be used to evaluate the emotional, motivational and cognitive factors affecting animal welfare. Mench is in the Department of Poultry Science, University of Maryland,

College Park, MD 20742.

Mencher, Marissa, "The Panama Canal: Danger Ahead," The Journal Of Environment And Development 8(no. 8, Dec 01 1999):407- . (v.11,#1)

Mendel, LC; Kirkpatrick, JB, "Historical Progress of Biodiversity Conservation in the Protected-Area System of Tasmania, Australia," Conservation Biology 16(no.6, 2002): 1520-1529.

Meng Peiyuan. *Human Beings and Nature: The Ecological Perspectives of Chinese Philosophy*, Beijing: Renmin Press, 2004.

Menon, Surabi, et al, "Climate Effects of Black Carbon Aerosols in China and India," Science 297(27 September 2002):2250-2250. With commentary: Chameides, William L., and Bergin, Michael, "Soot Takes Center Stage," Science 297(27 September 2002):2214-2215. Carbon dioxide is still the principal globally significant greenhouse gas. But soot in the air, not a gas but a particulate, may also seriously perturb regional climate. Soot emission in China and India may be responsible for the increase in droughts in northeast China and flooding in southeast China in the summer observed in the last twenty years. Warming over northern Africa and cooling over the Southern United States may also be involved. But measuring techniques for soot leave uncertainty. What this means for environmental policy (and ethics) is also uncertain. (v.13,#4)

Menotti, Victor, and Sobhani, Ladam. "Globalisation and Climate Change." The Ecologist 29(no. 3, May 1999):178- . (v.11,#1)

Menotti, Victor. "Forest Destruction and Globalisation." The Ecologist 29(no. 3, May 1999):180-

Menz, Fredric C. "Transborder Emissions Trading between Canada and the United States." Natural Resources Journal 35, no.4 (1995): 773. (v7, #3)

Mepham, Ben, (ed.). Food Ethics. Review by Mark Fisher, Environmental Values 7:(1998):375.

Mepham, Ben, "Farm Animal Diseases in Context," Journal of Agricultural and Environmental Ethics 17(2004):331-340. This special issue is devoted to a series of papers that explore the ethical implications of epizootics, diseases affecting large numbers of farm animals. The aim is to consider the general context in which epizootics (like foot and mouth disease) and zoonoses (like avian flu) occur, and new approaches to animal husbandry by which they might be avoided in the future. Mepham is at the Centre for Applied Bioethics, University of Nottingham, UK. (JAEE)

Mepham, T.B., G.A. Tucker, J. Wiseman. Issues in Agricultural Bioethics. Review by Richard Bawden, Journal of Agricultural and Environmental Ethics 11(1999):145-150. (JAEE)

Mepham, Ben, ed. Food Ethics, New York: Routledge, 1996. pp. 178, Index. Price Hb: \$49.95 (Can Hb \$69.95); Pb: \$17.95 (Can Pb \$24.95). Reviewed by Hugh Lehman, Journal of Agricultural and Environmental Ethics 10(1997/1998):203-205.

Merchant, Carolyn, ed. Ecology. Atlantic Highlands NJ: Humanities Press, 1994. This, the fourth volume in a series "Key Concepts in Critical Theory" is designed for courses in environmental studies, politics, history, and philosophy. This explores the connections between the domination of nature and human beings as articulated by thinkers such as Adorno, Horkheimer, and Marcuse, and asks how current environmental philosophies propose to liberate both humans and nature. The relationships between domination and class society, hierarchy, human-centeredness, patriarchy, economics, religion, and science are discussed. Merchant is at the University of California, Berkeley. (v7,#1)

Merchant, Carolyn, ed. Green Versus Gold. Washington, D.C.: Island Press, 1998. \$45 cloth, \$25 paper. 416 pp. (v9,#2)

Merchant, Carolyn, Earthcare. Reviewed by Sara Ebenreck. Environmental Ethics 19(1997):323-325. (EE)

Merchant, Carolyn, Earthcare: Women and the Environment. (New York: Routledge, 1995). Reviewed by Ariel Salleh. Environmental Values 6(1997):372-373. (EV)

Merchant, Carolyn, Radical Ecology: The Search for a Liveable World. London and New York: Routledge, 1993. 288 pages. \$ 49.95 cloth. In order to maintain a liveable world, we must formulate new social, economic, scientific, and spiritual approaches that will fundamentally transform human relationships with nature. Merchant analyzes the revolutionary ideas of visionary ecologists to bring environmental problems to the attention of the public and examines the problems, the ideas, the actions that will make society rethink, reconstruct, and reinvent its relationship with the non-human world in the search for a liveable world. (v4,#3)

Merchant, Carolyn, ed., Major Problems in American Environmental History: Documents and Essays. Lexington, MA: D. C. Heath, 1993. 544 pages. American environmental history from pre-contact Indian times to the present, each illustrated by several primary source documents and essays. Specific regional concerns as well as larger cultural issues including the confrontation between nature and civilization in the nineteenth century. Conservation, pollution, and wilderness preservation. Many dozens of documents over four centuries from the past to the present. With an instructor's manual. Merchant is professor of environmental history at the University of California, Berkeley. (v3,#4)

Merchant, Carolyn, Ecological Revolutions: Nature, Gender, and Science in New England. Chapel Hill: University of North Carolina Press, 1989. Pp. xv, 379. Important work of environmental history from a pioneer in the field. Merchant explores the colonization of New England from 1600-1850 as an example of the ecological transformations that shaped the dominant world-view of the twentieth century. In this period the ideas of mechanization, market-production, patriarchy, and domination became the controlling aspects of human consciousness regarding nature. As Merchant writes in the preface, this work continues the discussion of the themes of her earlier book, The Death of Nature: "the roots of the environmental crisis, the roles of women in history, the change from nature as mother to nature as machine, and the place of science in the creation of the modern world" (p. xiii). Contains detailed appendices, notes, and bibliography. (Katz, Bibl # 2)

Merchant, Carolyn, ed. Ecology: Key Concepts in Critical Theory. Atlantic Highlands, NJ: Humanities Press, 1994. 35 selections, reprints of previously published articles, organized in seven sections: (1) Critical Theory and the Domination of Nature, (2) Environmental Economics and Politics, (3) Deep, Social, and Socialist Ecology, (4) Ecofeminism, (5) Environmental Justice, (6) Spiritual Ecology, and (7) Postmodern Science. "Domination is one of our century's most fruitful concepts for understanding human-human and human-nature relationships. The theme of domination and its reversal through liberation unites critical theorists and environmental philosophers whose work spans the twentieth century. When the domination of nonhuman nature is integrated with the domination of human beings and the call for environmental justice, Critical Theory instills the environmental movement with ethical fervor" (p. 1). Merchant teaches environmental history, philosophy, and ethics in the Department of Environmental Science, Policy, and Management, University of California, Berkeley. (v7, #3)

Merchant, Carolyn. American Environmental History: An Introduction. New York: Columbia University Press, 2007. Merchant's illustrated environmental history begins with precolonial land-use practices of

Native American Indians and ends with the global ecological crisis of the twenty-first century. She discusses issues such as slavery, the expulsion of native peoples from national parks, population growth, suburban sprawl, wilderness preservation, the environmental justice movement, globalization, and the formative forces of race, gender, and class.

Merchant, Carolyn. Earthcare: Women and the Environment. London and New York: Routledge, 1996. (v7, #3)

Merchant, Carolyn. The Death of Nature: Women, Ecology, and the Scientific Revolution. Reviewed in Environmental Ethics 3(1981):365-69.

Merchant, Carolyn. "Environmental Ethics and Political Conflict: A View from California." Environmental Ethics 12(1990):45-68. I examine three approaches to environmental ethics and illustrate them with examples from California. An egocentric ethic is grounded in the self and based on the assumption that what is good for the individual is good for society. Historically associated with laissez faire capitalism and a religious ethic of human dominion over interests. A homocentric ethic is grounded in society and is based on the assumption that policies should reflect the greatest good for the greatest number of people and that, as stewards of the natural world, humans should conserve and protect nature for human benefit. Historically associated with government regulation of the private sector, a homocentric approach can be illustrated by federal, state, and local environmental agencies charged with protecting the welfare of the general public. An ecocentric ethic is grounded in the cosmos, or whole environment, and is based on the assignment of intrinsic value to nonhuman nature. Exemplified by ecologically based sciences and process-oriented philosophies, an ecocentric approach often underlies the political positions of environmentalists. This threefold taxonomy may be useful in identifying underlying ethical assumptions in cases where ethical dilemmas and conflicts of interest develop among entrepreneurs, government agencies, and environmentalists. Merchant is at the Department of Conservation and Resource Studies and Division of Biological Control, University of California, Berkeley. (EE)

Merchant, Carolyn. *Reinventing Eden: The Fate of Nature in Western Culture*. New York: Routledge, 2004.

Merchant, Carolyn. Earthcare: Women and the Environment. Review by Patsy Hallen, Ethics and the Environment 3(1998):197-200.

Merchant, Carolyn. *American Environmental History: An Introduction*. New York: Columbia University Press, 2007. Merchant's illustrated environmental history begins with precolonial land-use practices of Native American Indians and ends with the global ecological crisis of the twenty-first century. She discusses issues such as slavery, the expulsion of native peoples from national parks, population growth, suburban sprawl, wilderness preservation, the environmental justice movement, globalization, and the formative forces of race, gender, and class.

Merchant, Carolyn. *The Death of Nature: Women, Ecology, and the Scientific Revolution*. Translators: Wu Guosheng, et al. (Changchun: Jilin People's Press, 2000). (in Chinese)

Merenlender, AM; Huntsinger, L; Guthey, G; Fairfax, SK; "Land Trusts and Conservation Easements: Who Is Conserving What for Whom?", Conservation Biology 18 (no.1, 2004): 65-76.

Meretsky, VJ, et al., "New Directions in Conservation for the National Wildlife Refuge System," BioScience 56 (no. 2, February 2006): 135-143. The National Wildlife Refuge System Improvement Act of 1997 includes the nation's broadest statutory commitment to ecosystem protection: to "ensure that the biological integrity, diversity, and environmental health of the system are maintained." The act also

directs the US Fish and Wildlife Service (FWS) to expand the scope of conservation monitoring, assessment, and management beyond refuge boundaries to encompass surrounding landscapes. The act thus gives the FWS a leadership role in developing research and management partnerships with other agencies, organizations, and neighboring landowners. Increasing research capacity and scientific expertise, and strengthening institutional resolve to limit activities that impede the attainment of this directive, are challenges for the FWS. Success requires reexamination of existing priorities, refocused training, the acquisition of new funding and technical expertise, etc.

Merge, W, SS, F 2008 and 3 journals E&E, EV, JAEE. not EnvEthics yet.

Merkel, Angela, "The Role of Science in Sustainable Development," Science 282(1998):336-337. "If we are to move toward sustainable development, the industrialized communities will have to accept special responsibilities--not only because of their past ecological sins, but also because of their present technological know-how and financial resources." "Sustainability, as a strategic aim, involves optimizing the interactions between nature, society, and the economy, in accordance with ecological criteria." "In the long term, 'progress' works against us if it continues to be detrimental to nature. .. Environmental protection will play a central role in the 21st century and will be a major challenge for politicians and scientists alike." Nerkel is a member of the German Parliament and Minister for the Environment, Nature Conservation, and Nuclear Safety. (v.9,#3)

Merlo, Maurizio, and Croitory, Lelia, eds., Valuing Mediterranean Forests New York: Oxford University Press, 2005. The authors are at the University of Padova, Italy.

Merrell, David J. The Adaptive Seascape: The Mechanism of Evolution. Minneapolis: University of Minnesota Press, 1994. 280 pages. \$34.95. Hidden and often poorly founded assumptions of the synthetic theory of evolution are unraveled from the perspective of ecological genetics. Based on laboratory and field research. The metaphor of an "adaptive seascape" is proposed to replace Sewall Wright's well-known "adaptive landscape."

Merritt, J. Quentin, Review of Andrew Rowell, Green Backlash. Environmental Values 7:(1998):370.

Merritt, J. Quentin, Review of Tim Lang and Colin Hines, The New Protectionism: Protecting the Future against Free Trade. Environmental Values 7(1998):120.

Merz-Perez, Linda, and Heide, Kathleen M., Animal Cruelty: Pathway to Violence Against People. Lanham, MD: Rowman and Littlefield, 2004. Merz-Perez is with the Humane Society, Shelby County, Alabama. Heide is in criminology, University of South Florida.

Messina, Anthony M. "The Not So Silent Revolution: Postwar Migration to Western Europe," World Politics v.49(no.1, 1996):130.

Metzner, Ralph, Green Psychology: Cultivating a Spiritual Connection with the Natural World. Inner Traditions International Ltd., 1999. Our ecocatastrophe results from the religions of Western civilization ceasing to be based on living harmoniously with the earth, and seeking dominion over nature instead of partnership. This created a pathology; we are disrespecting and destroying what sustains the human spirit. Deep ecology and ecofeminism are evidence of the human ability to return to the earth and bond spirit to nature. Metzner is a psychotherapist at the California Institute of Integral Studies, San Francisco. (v.10,#3)

Meyer-Abich, Klaus M. "Toward a Practical Philosophy of Nature." Environmental Ethics 1(1979):293-308. The application of the polluter-pays principle in environmental policy depends on answers to the philosophical questions about what is good or detrimental with respect to nature. Science

and the economy constitute a functional circle of "observing" nature's unity as well as its utility. Based on a concept of nature as a system of causally related objects or--complementary to this--as a bunch of "resources," however, the human interest and responsibility in nature do not seem to be properly observed. Subjecting nature to human subjectivity may have been an adaptation in the wrong direction, since, if humanity is taken as the measure, there is no measure for humanity. A practical philosophy of nature should start from the assumption that science's missing unity and the economy's missing goodness are equivalent shortcomings in a complementary way. On the one hand, philosophy should engage in the problem-oriented reintegration of the sciences by establishing nuclei of interdisciplinary cooperation. We are relating ourselves to nature in a responsible way only when approaching nature as our own nature. On the other hand, while our technological faculties have reached a very high level of reliability and differentiation, we are definitely much less successful in recognizing goodness in economic "goods." This calls for demand education with respect to how human needs are to be brought to bear as demands on nature, a human relation to nature as well as natural relations between human beings, again depending on answers to philosophical questions. In the history of ideas, nature has declined from "the nature of things and beings" to "the things and beings of nature," or from being to beings. We will, however, never be able to judge what is good or bad with respect to nature if we do not from the outset start--pragmatically--with a normative concept of nature. Meyer-Abich is in the philosophy department, Universitat Essen, Essen, Germany. (EE)

Meyer, Art and Jocele Meyer, Earthkeepers: Environmental Perspectives on Hunger, Poverty, and Injustice. Scottsdale, PA: Herald Press, 1991. 264 pages. \$ 12.95. A biblical theology of creation brought to bear on the duties of Christians in major areas of ecological concern: global warming, ozone depletion, wasted natural resources, pollution, toxic wastes. (v3,#4)

Meyer, Carrie A. "Public-Nonprofit Partnerships and North-South Green Finance," The Journal of Environment and Development 6(no.2, 1997):123. (v8,#2)

Meyer, Christian. Animal Welfare Legislation in Canada and Germany: A Comparison. A review by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1999):150-151. (JAEE)

Meyer, Gitte, "Journalism and Science: How to Erode the Idea of Knowledge," Journal of Agricultural and Environmental Ethics 19(2006):239-252. This paper discusses aspects of the relationship between the scientific community and the public at large. Inspired by the European public debate on genetically modified crops and food, ethical challenges to the scientific community are highlighted. This is done by a discussion of changes that are likely to occur to journalistic attitudes - mirroring changing attitudes in the wider society - towards science and scientific researchers. Two journalistic conventions - those of science transmission and of investigative journalism - are presented and discussed in relation to the present drive towards commercialization within the world of science: How are journalists from these different schools of thought likely to respond to the trend of commercialization? Likely journalistic reactions could, while maintaining the authority of the scientific method, be expected to undermine public trust in scientists. In the long term, this may lead to an erosion of the idea of knowledge as something that cannot simply be reduced to the outcome of negotiation between stakeholders. It is argued that science is likely to be depicted as a fallen angel. This may be countered, it is posited, by science turning human, by recognizing its membership of society, and by recognizing that such membership entails more than just commercial relations. To rethink its relationship with the public at large - and, in particular, to rethink the ideal of disinterested science - is an ethical challenge facing the scientific community. Keywords: authority - commercialization - disinterestedness - public sphere - science journalism - trust. Meyer is in the Danish Centre for Bioethics and Risk Assessment, Valby, Denmark, also the International Center for Business and Politics, Copenhagen Business School, Frederiksberg, Denmark. (JAEE)

Meyer, John M., Political Nature: Environmentalism and the Interpretation of Western Thought.

Cambridge, MA: MIT Press, 2001. Environmentalist interpretations in Western thought. Especially Hobbes and Aristotle. Nature, politics, and the experience of place. New possibilities for environmental politics.

Meyer, John M., "Interpreting Nature and Politics in the History of Western Thought: The Environmentalist Challenge," Environmental Politics 8(no.No2, Summer 1999): 1- . (v.11,#1)

Meyer, John M. Review of Peter Hay, A Companion to Environmental Thought, Organization and Environment, 16, (No. 1, 2003): 121-22. Meyer is assistant professor in government and politics at Humboldt State University, Arcata, California. (v 14, #3)

Meyer, Judith L. The Spirit of Yellowstone: The Cultural Evolution of a National Park. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1996. 176 pp. \$26.95 cloth. Meyer demonstrates how important the park's past was in shaping our contemporary perceptions of Yellowstone and identifies six major themes important to the Yellowstone experience. She argues that it is Yellowstone's persistent spirit of place that park managers should seek to preserve and to keep in mind alongside politics, economics, and science. (v8,#2)

Meyer, Stephen M. "The Economic Impact of Environmental Regulation." Journal of Environmental Law and Practice 3, no.2 (1995): 4. (v7, #3)

Meyer, Stephen. *The End of the Wild*. Cambridge, MA: The MIT Press, 2006. "We have accumulated a mountainous extinction debt that makes recovery and restoration even with herculean efforts an illusion" (p. 73).

Meyer, William B. Human Impact on the Earth. New York: Cambridge University Press, 1996. 248 pages. \$69.95 cloth, \$24.95 paper. At a level accessible to the educated lay reader, Meyer describes the changes human activities have produced in the global environment from 300 years ago to the present day. A comprehensive inventory of human impact in its varied forms on the oceans, atmosphere, and climate. (v7, #3)

Meyer-Abich, Klaus Michael. Revolution for Nature: From the Environment to the Connatural World. Cambridge: The White Horse Press, 1993. 145 pages. Translation by Matthew Armstrong of Aufstand für die Natur, Von der Umwelt zur Mitwelt, 1990. "What I recommend is a peaceful consumers' revolution." "We require ecological disobedience, if we are to accomplish more than the government thinks fit" (p. 21). Meyer-Abich combines anthropocentric and nonanthropocentric theories; it is neither the natural world nor the human world but the connatural world. We move from egocentricity to nepotism to anthropocentrism to mammalism to biocentrism to physiocentrism. Meyer-Abich is in the philosophy department, Universität Essen, Essen, Germany. (v6,#3)

Meyer-Abich, Klaus M. Revolution for Nature. Reviewed by Laura Westra, Environmental Values 3(1994):184-185. (EV)

Meyers, Gary D., "Old-Growth Forests, the Owl, and Yew: Environmental Ethics Versus Traditional Dispute Resolution Under the Endangered Species Act and Other Public Lands and Resource Laws," Boston College Environmental Affairs Law Review 18 (1991) 623-668. The owl/old-growth controversy is not really about owls versus people, jobs versus old-growth, environmentalists versus the timber industry, or science versus politics. The issue is about values, what we value, what evidence we need to make decisions, and what methods we use to implement choices. The issue cannot be considered only in terms of human wants and human needs. ... Until we value ecosystems for all the services they perform and express that value in our resource management laws, the owl/old-growth controversy will continue to

haunt us. ... If greater recognition of our place in nature is one of the outcomes of revising our values, and if we can achieve greater understanding of our need for others in the natural community, then possibly we can avoid the ... tragedy of the commons. ... We can, with time, move beyond fellowship to communion with our fellow creatures. Meyers is in law, Lewis and Clark College. (v5,#4)

Meyerson, L.A., and Reaser, J. K., "Biosecurity: Moving toward a Comprehensive Approach," Bioscience 52(no.7, 2002): 593-600. (v.13,#4)

Mezey, Matthew K. N., Deep Ecology and Transpersonal Psychology: an Enlightening Confrontation?, Master's Thesis, Department of Philosophy, Lancaster University, September 1997.

Mezey, Matthew K. N., Deep Ecology and Transpersonal Psychology: an Enlightening Confrontation?, Master's Thesis, Department of Philosophy, Lancaster University, September 1997. (v7,#1)

MGonigle (M'Gonigle), Michael, "A New Naturalism: Is There a (Radical) 'Truth' Beyond the (Postmodern) Abyss?", Ecotheology No 8 (Jan 2000):8-39.

Miceli, Thomas J., Pancak, Katherine A., Sirmans, C.F., "Protecting Children from Lead-Based Paint Poisoning: Should Landlords Bear the Burden", Boston College Environmental Affairs Law Review, 23(No.1, 1995):1- . (v7,#1)

Michael, Mark A., "What's In a Name? Pragmatism, Essentialism, and Environmental Ethics," Environmental Values 12(2003): 361-379. Essentialists like J. Baird Callicott have argued that one cannot have an environmental ethic unless one adopts the nonanthropocentric principle, which holds that things other than humans can be morally considerable in their own right, typically because they are thought to be intrinsically valuable. Pragmatists like Bryan Norton reject this; they claim that environmental ethics has no core or essence, and hence that the nonanthropocentric principle is not essential to an environmental ethic. Norton advances as an alternative the Convergence Hypothesis, which says that there are many different ways of justifying environmental principles and policies. In this paper I show that pragmatists and essentialists are arguing past one another because they fail to note two crucial points. First, they often propose different accounts of which principles constitute an environmental ethic and so they disagree about which principles must be justified. The nonanthropocentric principle may be required to justify the principles that Callicott believe to be constitutive of an environmental ethic, but it may be unnecessary to justify those principles that pragmatists think are constitutive. Second, essentialists and pragmatists often overlook the distinction to be made between the adequacy of a justification and its epistemic or rhetorical preferability. The nonanthropocentric principle may not be needed to provide an adequate justification of the constitutive principles and judgements, but a justification that contains the nonanthropocentric principle might nevertheless be epistemically preferable. (EV)

Michael, Mark A., ed. Preserving Wildlife: An International Perspective. Amherst, NY: Humanity Books, 1999. 275 pages. \$21.95. (v.11,#1)

Michael, Mark A. "International Justice and Wilderness Preservation." Social Theory and Practice 21 (no. 2, Summer 1995):149-176. (v6,#4)

Michael, Mark A., "To Swat or Not to Swat: Pesky Flies, Environmental Ethics, and the Supererogatory," Environmental Ethics 18(1996):165-180. A central thesis of biocentrism is that all living things have intrinsic value. But when conflicts arise between the interests of humans and other organisms, this claim often has counterintuitive consequences. It would be wrong, for example, to swat pesky flies. Some biocentrists have responded by positing a taxonomy of interests in which human interests justifiably supersede those of other living things. I express doubts about whether this maneuver can succeed, and

suggest that even if it does, it then commits biocentrists to the claim that it is wrong not to harm living things, when doing so is necessary to advance nonbasic human interests, a position which runs counter to the biocentric attitude of respect for nature. As a result, biocentrists must adopt either a highly counterintuitive position or one that is contrary to their general outlook. I show that the introduction of the supererogatory may resolve not only this biocentric dilemma but other quandaries in environmental ethics. Michael teaches philosophy at Austin Peay State University, Clarksville, TN. (EE)

Michael, Mark A. "Environmental Egalitarianism and 'Who Do You Save?' Dilemmas," Environmental Values 6(1997):307-326. ABSTRACT: Some critics have understood environmental egalitarianism to imply that human and animal lives are generally equal in value, so that killing a human is no more objectionable than killing a dog. This charge should be troubling for anyone with egalitarian sympathies. I argue that one can distinguish two distinct versions of equality, one based on the idea of equal treatment, the other on the idea of equally valuable lives. I look at a lifeboat case where one must choose between saving a human and saving a dog, and using the work of Peter Singer and Tom Regan, I show why equality understood as equal treatment does not entail that lifeboat cases are moral toss-ups. But the view that all lives are equally valuable does entail this, and so egalitarians should reject this alternative account of equality. The upshot is that egalitarians need to be more careful about distinguishing between these two versions of equality. The failure to insist on this distinction has led many to believe that egalitarianism generally has counter-intuitive implications when in fact only one version of egalitarianism has this problem. Department of Philosophy Austin Peay State University, Clarksville, TN 37044, USA. (EV)

Michael, Mark A., ed. Preserving Wildlife: An International Perspective. Amherst, NY: Humanity Books, 1999. 275 pages. \$21.95. (v10,#4)

Michael, Mark, "An Alternative to the Common Heritage Principle," Environmental Ethics 9(1987):351-371. An argument in favor of a modified Lockean principle of acquisition regarding unowned resources. Nations should be permitted to acquire resources they develop, as long as there is some international mechanism to prevent overexploitation. This "limited Lockean" principle preserves fairness, freedom, and the maximization of the common good. (Katz, Bibl # 1)

Michael, Mark A., "Is It Natural to Drive Species to Extinction?" Ethics and the Environment 10(no. 1, 2005):49-66. Whether or not extinction caused by human activities is natural depends on which sense of the term "natural" is under consideration. Given one sense of that term which has some grip on the popular imagination, it is. This suggests that at a minimum environmentalists should be very careful about invoking "the natural" and related concepts such as "acting naturally" when they propose moral principles. I argue here for the stronger claim that the "natural" is either redundant and serves to obscure more than it brings to light, or that it is bound up with a picture of the world which is false, and so theoretically useless. Thus "the natural" can do no useful theoretical work in a completely developed environmental ethic. Michael is in philosophy, Austin Peay State University, Clarksville, TN. (Eth&Env)

Michael, Mark. "An Alternative to the Common Heritage Principle." Environmental Ethics 9(1987):351-71. Many valuable natural resources are found outside current territorial limits, for example, on the Moon and in the deep sea. As technology advances, these resources become more accessible. I argue that the claim that all humanity owns these resources is insupportable if taken literally. Because they are truly unowned, we need to develop a principle of justice in acquisition which describes the procedure that must be followed to obtain property rights to these unowned objects. I conclude with a tentative development of such a principle based on the moral ideals of fairness, freedom, and the maximization of the common good. Michael is in the philosophy department, State University of New York, Albany, NY. (EE)

Michael, Mark. Review of How Much Should A Person Consume? Environmentalism In India and The United States. By Ramachandra Guha. *Environmental Ethics* 30(2008):97-100. (EE)

Michael, Mike, and Robin Grove-White. "Talking about Talking about Nature: Nurturing Ecological Consciousness." *Environmental Ethics* 15(1993):33-47. The increasing effort, both lay and academic, to encourage a transition from an "I-It" to an "I-Thou" relation to nature is located within a typology of ways of "knowing nature." This typology provides the context for a particular understanding of human conversation which sees the relation as a cyclical process of "immersion" and "realization" from which a model of the dialectic between "I-It" and "I-Thou" relations to nature can be developed. This model can be used to identify practical measures that can be taken as first steps toward a balance between these relations, both in general and in the context of science-oriented nature conservation organizations such as English Nature in Britain (formerly, the Nature Conservancy Council). Michael is at the School for Independent Studies, Lancaster University, Lancaster, U.K. Grove-White is at the Centre for the Study of Environmental Change, Lancaster University, Lancaster, U.K. (EE)

Michael Zimmerman, J. Baird Callicott, Karen J. Warren, and John Clarke, eds. *Environmental Philosophy: From Animal Rights to Radical Ecology*, second edition. Upper Saddle River, NJ: Prentice-Hall, 1998. This second edition of a popular anthology expands edition one (1993) with two new essays on environmental ethics, a section on political ecology, social ecology, including essays on free market environmentalism, sustainable development, liberal environmentalism, socialist environmentalism, bioregionalism, ecotage. (v9,#1)

Michaelowa, A., "Review of: Urs Luterbacher and Detlev Sprinz (Eds.), *International Relations and Global Climate Change*," *Environmental Politics* 12(no. 1, 2003): 259. (v 14, #3)

Michaelowa, Axel, Review of Edward A. Page, *Climate Change, Justice and Future Generations*, *Environmental Values* 16(2007):404-406.

Michaels, S., "Review of Czech, Brian, and Paul R. Krausman, *The Endangered Species Act: History, Conservation Biology, and Public Policy*," *Society and Natural Resources* 15(no.9, 2002): 860-61. (v.13,#4)

Michaels, Sarah, Mason, Robert J. and Solecki, William D., "The importance of place in partnerships for regional environmental management," *Environmental Conservation* 26(no. 3, Sept 01 1999):159- . (v.11,#1)

Michalopoulos, Tassos, Michiel Korthals and Henk Hogeveen, "Trading Ethical Preferences in the Market: Outline of a Politically Liberal Framework for the Ethical Characterization of Foods," *Journal of Agricultural and Environmental Ethics* 21(2008):3-27. The absence of appropriate information about imperceptible and ethical food characteristics limits the opportunities for concerned consumer/citizens to take ethical issues into account during their inescapable food consumption. It also fuels trust crises between producers and consumers, hinders the optimal embedment of innovative technologies, "punishes" in the market ethical producers, and limits the opportunities for politically liberal democratic governance. This paper outlines a framework for the ethical characterization and subsequent optimization of foods (ECHO). The framework applies to "imperceptible," "pragmatic," and "reasonable" food characteristics about which consumers/citizens maintain concerns. A political perspective is assumed in that valid information is taken to serve the politically liberal and democratic functions of the market by allowing concerned citizens to make informed choices in their role as food consumers. Information is aggregated by multi-attribute modeling. It takes the form of "maximized" ("utilitarian") to "most balanced" (MINMAX) non-binary aggregate comparative rankings of perceptibly substitutable food products. The model requires the description of characteristics by means of criteria and weights

(structural input), and technical input on the performance of food for these criteria (product input). Structural input is grounded on relevantly concerned citizen/consumers' perceptions. It is culture and times dependent. Availability of product input is assumed. Uses for the amelioration of the aforementioned limitations are discussed. So long as, and to the extent that, certain ethical concerns are not addressed by public policy, the ECHO framework may facilitate offering members of society a necessary (though not a sufficient) condition for regulating the ethical aspects of food production in self-regulated markets as consumers, when they are constrained to do so through their government as citizens. In doing that, the framework may contribute to the development of the ethical dimension of food production and may bring rewards for food supply actors that take reasonable concerns of citizen/consumers into account. The authors are at the Applied Philosophy and Business Economics groups, Centre for BioSystems Genomics, Wageningen University, The Netherlands.

Michelfelder, Diane P., "Valuing Wildlife Populations in Urban Environments," Journal of Social Philosophy 34 (no. 1, 2003): 79-90. A framework for understanding the status and value of wild animals in urban environments.

Michener, W. K., Baerwald, T. J., Firth, P., Palmer, M. A., Rosenberger, J. L., Sandlin, E. A. and Zimmerman, H., "Defining and Unraveling Biocomplexity," Bioscience 51(no.12, 2001):1018-23. (v.13,#2)

Michnowski, L., Jak żyć? Ekorozwój albo..., (How to Live? Ecodevelopment or...), Wydawnictwo Ekonomia i Drodowisko (Economy & Environment Publishers), Bialystok, 1995. (v.13,#1)

Michnowski, L., Jak żyć? Ekorozwój albo..., (How to Live? Ecodevelopment or...), Wydawnictwo Ekonomia i Drodowisko (Economy & Environment Publishers), Bialystok, 1995.

Mickelsson, R; Oksanen, M, "Greens in the 2003 Finnish Election," Environmental Politics 12(no.3, 2003):133-138. (v.14, #4)

Mickey, Adrian, Moral Responsibility: A Case Study in Investment Banking, Master's Thesis, Department of Philosophy, Lancaster University, September 1991.

Mickey, Adrian, Moral Responsibility: A Case Study in Investment Banking, Master's Thesis, Department of Philosophy, Lancaster University, September 1991. (v7,#1)

Micklin, M, "Review of: Mol, Arthur P. J., Globalization and Environmental Reform: The Ecological Modernization of the Global Economy", Society and Natural Resources 16(no.3, 2003):270-274.

Middleton, Harry, "A Sense of Place," Southern Living, March 1990, pages 106-113. The South's past depended on its land. Now, in a very different sense, so does its future. A plea for environmental conservation and sensitivity to the landscape in the rapidly growing U. S. South, faced with frequent environmental degradation. (v2,#1)

Middleton, Neil, Phil O'Keefe, and Sam Mayo, Tears of the Crocodile: From Rio to Reality in the Developing World. Nairobi: East African Educational Publishers, 1993. ISBN 9966 46 584 4. 228 pages. This is a critique of those in the developed North who have failed to identify the links between poverty and environmental destruction. The real agenda at Rio was preserving the interests of the developed North both at the expense of the developing South and of the natural world. Middleton is a publisher in Dublin; O'Keefe is in environmental management at the University of Northumbria; Moyo is with the Zimbabwe Institute of Development Studies. (v6,#3)

Middleton, Susan, and David Littschwager, Witness: Endangered Species of North America. San Francisco: Chronicle Books, 1994. Largely a photographic album, with some text. Excellent portraits of endangered species. (v6,#4)

Midgley, David, Review of Badiner, Allan Hunt, ed., Dharma Gaia: A Harvest of Essays in Buddhism and Ecology. Environmental Values Vol.2 No.2(1993):183.

Midgley, Mary, Review of: Fons Elders (ed.), Visions of Nature: Studies on the Theory of Gaia and Culture in Ancient and Modern Times, Environmental Values 15(2006):253-255.

Midgley, Mary, "Visions, Secular and Sacred," The Hastings Center Report (no. 5, September, 1995): 20- . An imaginative vision of life as a whole is a central part of our mental equipment for any serious study; we must be careful what vision we espouse. If science is not furnished with a sensible one, it cannot fail to gather a wild one. (v6,#4)

Midgley, Mary, "Beasts Versus the Biosphere?" Environmental Values Vol.1 No.2(1992):113-122. ABSTRACT: Apparent clashes of interest between 'deep ecologists' and 'animal liberationists' can be understood as differences in emphasis rather than conflicts of principle, although it is only too easy for campaigners to regard as rivals good causes other than their own. Moral principles are part of a larger whole, within which they can be related, rather than absolute all-purpose rules of right conduct. This is illustrated using the practical dilemma which often occurs in conservation management, of whether or not to cull animals that are damaging their habitat by overgrazing. Here, and in general, when we are faced with a choice between two evils, the need for scrupulous discrimination and honesty cannot be overstated; but it is not a worthy option to retreat behind moral principles of limited application. KEYWORDS: Culling, habitat-management, moral dilemmas, moral judgement. 1A Collingwood Terrace, Newcastle-on-Tyne NE2 2JP, UK.

Midgley, Mary, Animals and Why They Matter. Athens, GA: University of Georgia Press, 1983.

Midgley, Mary, "Sustainability and Moral Pluralism," Ethics and the Environment 1(no.1, 1996):41-54. Discussions of environmental ethics, and of applied ethics generally, easily produce a sense of unreality. But they are not a luxury. Faced with a new and monstrous predicament, we do need new thinking. Enlightenment morality, on which we still largely rely, has had enormous merits, but it strongly tends towards egoism and social atomism. This makes it hard for us to think, as we now must, about larger wholes. Midgley taught philosophy at the University of Newcastle upon Tyne, U.K. (E&E)

Midgley, Mary, Review of Leahy, Michael P.T., Against Liberation. Environmental Values Vol.1 No.1(1992):81.

Midgley, Mary, The Ethical Primate. New York: Routledge, 1994, paper 1996. 193 pages. Scientists and philosophers find it difficult to understand how each human being can be both a living part of the natural world and at the same time a genuinely free agent. Various responses to this paradox analyzed. Our evolutionary origin, properly understood, explains why human freedom and morality have come about. Midgley was formerly Senior Lecturer in philosophy at the University of Newcastle upon Tyne, UK.

Midgley, Mary. Animals and Why They Matter. Reviewed in Environmental Ethics 7(1985):171-75.

Mies, Maria and Vandana Shiva. Ecofeminism. London: Zed Books, 1993. 328 pages, \$19.95. Mies, a German social scientist, and Shiva, an Indian physicist, provide a critique of prevailing economic theories, conventional concepts of women's emancipation, and the myth that "the good life" can only be reached by catching up to Europe, North America, and Japan on an identical path of industrialization,

technological progress, and capital accumulation. (v6,#1)

Mies, Maria, Shiva, Vandana, Ecofeminism and Val Plumwood: Feminism and the Mastery of Nature. Reviewed by Greta Gaard. Environmental Ethics 18(1996):93-98. (EE)

Mies, Maria and Vandana Shiva, Ecofeminism. London: Zed Books, 1993. 288 pages. Examines the relation between patriarchal oppression and the destruction of nature in the name of profit and progress. Reviewed in Environmental Values 4(1995):271-274 by Ariel Salleh. (v4,#1)

Mies, Maria, and Shiva, Vandana. Ecofeminism: (London: Zed Books, 1993). Reviewed by Ariel Salleh in Environmental Values 4(1995):271-274. (EV)

Mighetto, Lisa, Wild Animals and American Environmental Ethics (Tucson: University of Arizona Press, 1991). \$35.00 cloth, \$ 17.95 paper. A historical study of the roots of present attitudes. Americans now stand at a critical point in wildlife protection with inherited attitudes that are only partially adequate to meet the crisis. Mighetto teaches environmental and western history at the University of Puget Sound. (v2,#2)

Mikosz, Jerzy. "Water Management Reform in Poland: A Step Toward Ecodevelopment." The Journal of Environment and Development 5, no.2 (1996): 233. (v7, #3)

Milazzo, P, "Review of: Shannon Petersen, Acting for Endangered Species: The Statutory Ark", Environmental History 8(no.2, 2003):337.

Milbrath, Lester, W., Learning to Think Environmentally, While There Is Still Time. Albany, NY: State University of New York Press, 1996. The survival of planet Earth's nourishing life systems ultimately depends on how we humans think about them. Unfortunately, our culture's assumptions about the way the world works ignore recent scientific understanding of life systems. A new way of thinking in public discourse is needed that understands the interdependency and delicate balance of biological, geological, and chemical systems as environmental scientists now understand them. Milbrath directs the Research Program in Environment and Society, State University of New York, Buffalo. (v7,#2)

Milbrath, Lester W., "Redefining the Good Life in a Sustainable Society." Environmental Values Vol.2 No.3(1993):261-270. ABSTRACT: The good life, as practiced in modern society, not only is unsustainable but also is frequently not really good. Quality in living is necessarily subjective, it cannot be defined in physical terms, and can be found in many manifestations. The search for quality is conducted within ourselves and not in a shopping mall. Several suggestions for modes of living that provide quality but do not burden or injure ecosystems are presented. The condition of life systems on our planet demand that we cultivate simple lifestyles that are inwardly rich. KEYWORDS: Quality of life, sustainable society, voluntary simplicity, the good life. Department of Sociology, State University of New York, Buffalo, NY 14620, USA.

Milbrath, Lester W., Envisioning a Sustainable Society: Learning our Way Out (Albany: State University of New York Press, 1989. \$ 18.95 paper; \$ 57.50 hardcover. 400 pages. Sample chapters: ecosystem viability, sustaining our food supply, work that is fulfilling in a sustainable society, enjoying life without material indulgence, science and technology in a sustainable society, a governance structure designed to help a society learn how to become sustainable, one biosphere but a fragmented world. Milbrath teaches political science and sociology at the State University of New York at Buffalo. (v3,#1)

Milbrath, Lester, Yvonne Downes, and Kathleen Miller. "Sustainable Living: Framework of an Ecosystemically Grounded Political Theory." Environmental Politics 3 (no. 3, 1994): 421- . (v6,#1)

Milburn, Micheal P., "Sun Provides Renewable Energy Alternatives for Developing World," Alternatives 22(no.1, Jan. 1996):4- . (v6,#4)

Miles, J. C., "Review of: Stephen C. Trombulak, ed., So Great a Vision: The Conservation Writings of George Perkins Marsh," Environmental History 7(no.3, 2002): 526-27. (v.13,#4)

Milich, Lenard, "Resource Mismanagement Versus Sustainable Livelihoods: The Collapse of the Newfoundland Cod Fishery," Society & Natural Resources 12(no. 7, Oct 01 1999):625- . (v.11,#1)

Milius, Susan, "Art with a Conscience," National Wildlife, June-July 1991, vol. 29, no. 4. Animals artists are looking for ways to help their beleaguered subjects. Artist Chuck Ripper has painted 458 paintings for a National Wildlife Federation conservation stamp program. Roger Tory Peterson oversees the stamp effort and has painted 192 himself. Similar efforts by other artists. (v2,#4)

Millar, Heather. "Coverage for Carnivores." *National Wildlife* Vol. 46, no. 2 (February/March 2008): 30J-30P. Project Snow Leopard is a program to insure herders in Pakistan against livestock losses to snow leopards. The program has been worked out by a native Pakistani and Yale University Ph.D. student, Shafqat Hussain, mixes the modest insurance investments of local herders with income from ecotourism and foundation grants, and is administered in such a way, including herder participation and decisions about payments, that non-cooperation and cheating are discouraged. As a result, unlike other such compensation programs, this one seems to be working well.

Millar, Kate, and Sandy Tomkins, "Ethical Analysis of the Use of GM Fish: Emerging Issues for Aquaculture Development," *Journal of Agricultural and Environmental Ethics* 20(2007):437-453. Improvements in production methods over the last two decades have resulted in aquaculture becoming a significant contributor to food production in many countries. Increased efficiency and production levels are offsetting unsustainable capture fishing practices and contributing to food security, particularly in a number of developing countries. The challenge for the rapidly growing aquaculture industry is to develop and apply technologies that ensure sustainable production methods that will reduce environmental damage, increase productivity across the sector, and respect the diverse social and cultural dimensions of fish farming that are observed globally. The aquaculture industry currently faces a number of technology trajectories, which include the option to commercially produce genetically modified (GM) fish. The use of genetic modification in aquaculture has the potential to contribute to increased food security and is claimed to be the next logical step for the industry. However, the potential use of these technologies raises a number of important ethical questions. Using an ethical framework, the Ethical Matrix, this paper explores a number of the ethical issues potentially raised by the use of GM technologies in aquaculture. Several key issues have been identified. These include aspects of distributive justice for producers; use of a precautionary approach in the management of environmental risk and food safety; and impacts on the welfare and intrinsic value of the fish. There is a need to conduct a comparative analysis of the full economic cycle of the use of GM fish in aquaculture production for developing countries. There is also a need to initiate an informed dialogue between stakeholders and strenuous efforts should be made to ensure the participation of producers and their representatives from developing nations. An additional concern is that any national licensing of the first generation of GM fish, i.e., in the USA, may initiate and frame an assessment cycle, mediated by the WTO, which could dominate the conditions under which the technology will be applied and regulated globally. Therefore, an integrated analysis of the technology development trajectories, in terms of international policy, IPR, and operational implications, as well as an analysis of a broader range of ethical concerns, is needed. Millar and Tomkins are at the Centre for Applied Bioethics, School of Biosciences, University of Nottingham, UK.

Millar, Kate, et al., "Developing the Ethical Delphi," *Journal of Agricultural and Environmental Ethics* 20(2007):53-63. A number of EU institutions and government committees across Europe have expressed

interest in developing methods and decision-support tools to facilitate consideration of the ethical dimensions of biotechnology assessment. As part of the work conducted in the EC supported project on ethical tools (Ethical Bio-TA Tools), a number of ethical frameworks with the potential to support the work of public policy decision-makers has been characterized and evaluated. One of these potential tools is the Delphi method. The Delphi method was originally developed to assess variables that are intangible and/or shrouded in uncertainty by drawing on the knowledge and abilities of a diverse group of experts through a form of anonymous and iterative consultation. The method has hitherto been used by a diversity of practitioners to explore issues such as technology assessment, environmental planning, and public health measures. From the original (classical) Delphi, a family of Delphi-related processes has emerged. As a result of the evaluation of the various Delphi processes, it is proposed that the classical method can be further developed and applied as a form of ethical framework to assist policy-makers. Through a series of exercises and trials, an Ethical Delphi has been developed as a potential approach for characterizing ethical issues raised by the use of novel biotechnologies. Advantages and disadvantages of the method are discussed. Further work is needed to develop the procedural aspects of the Ethical Delphi method and to test its use in different cultural contexts. However, utilizing an ethical framework of this type combines the advantages of a methodical approach to capture ethical aspects with the democratic virtues of transparency and openness to criticism. Ethical frameworks such as the Ethical Delphi should contribute to better understanding of and decision-making on issues that involve decisive ethical dimensions. Keywords: ethical frameworks - biotechnology - Delphi method - GM fish - Ethical Delphi. The authors are at the Centre for Applied Bioethics, School of Biosciences, University of Nottingham, Sutton Bonington Campus, Loughborough, Leicestershire, UK.

Millard, Frances. "Environmental Policy in Poland." Environmental Politics 7(no.1, Spring 1998):145- . (v10,#4)

Millennium Ecosystem Assessment, Ecosystems and Human Well-Being: A Framework for Assessment. Washington: Island Press, 2003. Co-editors Harold Mooney, Angela Cropper. A four-year international work program designed to meet the needs of decision-makers for scientific information on the links between ecosystem change and human-well being. One of the contributors is J. Baird Callicott. A program launched by the U.N. Secretary-General. (v.14, #4)

--Millennium Ecosystem Assessment. *Living Beyond our Means: Natural Assets and Human Well-Being: Statement from the Board*. 2005. Walter V. Reid is the Director. This is a huge project sponsored by the United Nations and a host of organizations and corporations and involving some 1,360 experts worldwide. This report begins: "At the heart of this assessment is a stark warning. Human activity is putting such strain on the natural functions of Earth that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted" (p. 5). They are releasing five technical volumes, published by Island Press in early 2006: Vol. 1: Current State and Trends: Findings of the Condition and Trends Working Group. Vol. 2. Scenarios: Findings of the Scenarios Working Group. Vol. 3. Public Response: Findings of the Responses Working Group. Vol. 4. Multiscale Assessments: Findings of the Sub-global Assessments Working Group. (5) Our Human Planet: Summary for Decision-makers.

There is a massive website: <http://maweb.org>. Various presentations are available there and can be downloaded, including some in PowerPoint. Also a World Health Organization spinoff: Ecosystems and Human Well-Being: Health Synthesis. Another one is Ecosystems and Human Well-Being: Wetlands and Water Synthesis. Yet another is Ecosystems and Human Well-Being: Opportunities and Challenges for Business and Industry. A basic framework is to classify ecosystem services into four categories: (1) Supporting Services, those that result directly from ecosystem functioning, such as nutrient cycling and primary production. (2) Provisioning Services, the products obtained directly such as food, fresh water, fuel wood. (3) Regulating Services, such as climate regulation, erosion control, control of pests and diseases, often viewed as "free" services. (4) Cultural Services, nonmaterial benefits such as cultural heritage values, sense of place, spiritual and inspirational values. An earlier publication is: Ecosystems

and Human Well-Being: A Framework for Assessment. Washington: Island Press, 2003. Co-editors Harold Mooney, Angela Cropper.

The Millennium Ecosystem Assessment leaders won the million dollar Zayed Prize, funded by the crown prince of Dubai. Half of it went to United Nations Secretary-General Kofi Annan for his championing the project; \$ 300,000 to the project itself, and \$ 200,000 to panel co-chairs Angela Cropper and Emil Salim, the former Indonesian environmental minister. Kofi Annan will use his prize money to establish a foundation to promote agriculture and women's education in Africa. Science 311 (17 February 2006): 949.

Miller, Alan, Gaia Connections: An Introduction to Ecology, Ecoethics, and Economics. Lanham, MD: Roman and Littlefield, 2003.

Miller, Alan S., Gaia Connections: An Introduction to Ecology, Ecoethics, and Economics (Savage, MD: Rowman and Littlefield, 1991). 288 pages, \$17.95 paper; \$52.25 hardcover. Whether or not the Gaia hypothesis holds up within the formal boundaries of the earth sciences, it is metaphysically correct. Until we come to think of the Earth as a complex, fecund, self-sustaining organism, we will have difficulty moving beyond the shallowest levels of ecology. Chapters on environmental ethics, the moral demand of the steady state, bioethics, economics as if nature mattered, the social sources of environmental values, ecoethics and modern war, and much more. Miller is at the University of California, Berkeley. (v2,#1)

Miller, AP, "Rural Development Considerations for Growth Management", Natural Resources Journal 43 (no.3, 2003): 781-802.

Miller, B; Conway, W; Reading, RP; Wemmer, C; Wildt, D; Kleiman, D; Monfort, S; Rabinowitz, A; Armstrong, B; Hutchins, M, "Evaluating the Conservation Mission of Zoos, Aquariums, Botanical Gardens, and Natural History Museums", Conservation Biology 18 (no.1, 2004): 86-93.

Miller, Brian, Reading, Richard, Forrest, Steve. Prairie Night. Washington, D.C.: Smithsonian Institution Press, 1996. 320pp. \$34.95 cloth. The biology and natural history of the black-footed ferret with an account of the decisions on how to save it. A valuable case study for biologists and wildlife managers who must grapple with ecosystem survival and the future of endangered species policy. (v.7,#4)

Miller, Brian, Richard Reading, and Steve Forrest, Prairie Night: Black-Footed Ferrets and the Recovery of Endangered Species. Washington, DC: Smithsonian Institution Press, 1997. \$ 34.95. (v8,#1)

Miller, C, "Thinking Like a Conservationist," Journal of Forestry 100(no.8, 2002): 42-45.

Miller C., "Book Review: Jack Ward Thomas: The Journals of a Forest Service Chief," Journal of Forestry 102(no.5, July/August 2004):56-58(3). (v. 15, # 3)

Miller, Char, "Aldo Leopold (1921) The Wilderness and Its Place in Forest Recreation Policy, Journal of Forestry 19(7): 718721," Journal of Forestry 104 (no.1, January/February 2006): 51-51 (1).

Miller, Char, ed., American Forests: Politics, Nature, and Culture. Lawrence, KS: University of Kansas Press, 1997.

Miller, Char and Staebler, Rebecca, The Greatest Good: 100 Years of Forestry in America. Bethesda, MD: Society of American Foresters, 1999. A photographic history, with commentary.

Miller, Char. "A Cautionary Tale: Reflections on Reinventing the Forest Service." Journal of Forestry 94(no.1, Jan.1996):6. (v7,#1)

Miller, Charles A., Jefferson and Nature: An Interpretation. Baltimore: Johns Hopkins University Press, 1988. 300 pages. The first comprehensive study to take Thomas Jefferson at his word--his favorite word. Nature--the term and the many ideas associated with it--pervades Jefferson's life and writings. It sets him apart from his colleagues in the American Enlightenment and provides the distinctive gateway to this thought and action. By no means consistent and at times apparently opportunistic in his use of the term, Jefferson nevertheless draws nearly every realm of life back to this essential word and idea. Miller teaches politics at Lake Forest College, Lake Forest, Illinois. (v8,#3)

Miller, Chris, "Attributing Priority to Habitats," Environmental Values 6(1997):341-353. ABSTRACT: A close scrutiny of a European Community directive on habitats and of the statutory instrument by which it is implemented in Britain reveals small but nevertheless significant concessions towards an ecocentric approach. Planning law now allows interference in the habitats of protected species only when human interests are demonstrably overriding. Recent decisions of the European Court of Justice have given a very restrictive interpretation of the circumstances in which such interference may be permitted. The implications for further ecocentric influence in environmental law are discussed. European Studies Research Institute, University of Salford, Salford, M5 4WT, UK. (EV)

Miller, Clark A. "The Dynamics of Framing Environmental Values and Policy: Four Models of Societal Processes." Environmental Values 9(2000):211-233. Abstract: While the subject of framing has achieved considerable recognition recently among social scientists and policy analysts, less attention has been given to how societies arrive at stable, collective frames of meaning for environmental values and policy. This paper proposes four models of societal processes by which framing occurs: narration, modelling, canonisation and normalisation. These four models are developed, compared, and explored in detail through a case study of the framing of the impacts of climate change on human societies in US science policy from the 1960s through the 1990s. I conclude by offering a number of potentially fruitful avenues for further research into the dynamics of framing. Keywords: Framing, climate change, environmental values, environmental policy. Clark A. Miller is in the Department of Political Science, Iowa State University, 515 Ross Hall, Ames, IA 50011, USA. (EV)

Miller, Clark A. and Edwards, Paul N., ed., Changing the Atmosphere: Expert Knowledge and Environmental Governance. Cambridge, MA: MIT Press, 2001. The contributors argue that in the current debate about global warming the distinction between science and policy is almost absent. Environmental "science's place in global policymaking is increasingly formalized, boosting its authority in policymaking processes but also subjecting it to new forms of political and legal oversight and review. International expert institutions such as the IPCC (Intergovernmental Panel on Climate Change) increasingly determine which knowledge counts and which does not, helping to shape crucial policy outcomes" (Miller and Edwards, introduction). Meanwhile, climate models have more uncertainty by far than weather models and we do not know enough about historical climate changes over the millennia to make good predictions. Contains:

-Jamieson, Dale, "Climate Change and Global Environmental Justice," pp. 287-307. Scientific knowledge and conceptions of justice. Two views of global environmental justice, and a proposal for the distribution of emissions permissions embodying concerns about justice. But its adoption is unlikely, and the likely outcomes are more unjust. (v.13,#1)

Miller, Elaine P., "'The World Must be Romanticised ...': The (Environmental) Ethical Implications of Schelling's Organic Worldview," Environmental Values 14(2005): 295-316. This essay addresses the implications of German Idealism and Romanticism, and in particular the philosophy of Schelling as it is informed by Kant and Goethe, for contemporary environmental philosophy. Schelling's philosophy posits a nature imbued with freedom which gives rise to human beings, which means that any ethics, insofar as ethics is predicated upon freedom, will be an "environmental ethic". At the same time, Schelling's

organismic view of nature is distinctive in positing a fundamental gap between nature and human beings. Without this absolute alterity, there could be no real ethical relationship between human beings and nature. I conclude by briefly gesturing toward Schelling's role in the development of an ethics of alterity (which I apply to environmental ethics) in continental philosophy through Heidegger, Derrida, and Levinas. Miller is in philosophy, Miami University, Oxford, OH. (EV)

Miller, Gifford H., "Ecosystem Collapse in Pleistocene Australia and a Human Role in Megafaunal Extinction," *Science* 309(8 July 2005):287-290 and commentary 255-256. The arrival of humans in the Americas after the ice ages coincides, more or less, with some megafaunal extinctions, but it is difficult to separate climate change from human hunting as a cause. Australia had no such ice ages and it had had humans much longer (c. 11,000 vs. 45,000 years). Coinciding with human arrival there, more or less, one larger flightless bird went extinct (*Genyornis*) and another did not (the emu, continuing to the present). The authors find a sudden change in emu diet at the time of human arrival, shifting from mostly photosynthetic C3 plants (shrubs, trees, herbs) to C4 plants (grasses). The authors surmise that the change from woodlands to grassland was caused by humans lighting fires and that *Genyornis* could not adapt to this change but that the emu could. If so, this is one of the few widespread ecosystem changes attributable to aboriginal peoples. One problem: no charcoal records exist for this region.

Miller, Gordon L., ed. *Nature's Fading Chorus*. Covelo, CA: Island Press, 2000. Declining amphibian life, figured into the worldviews of the many writers, scientists, and naturalists who considered amphibians across Western natural history tradition. Begins with Aristotle and continues through recent scientific accounts of declines and deformities in amphibian species. (v.11,#4)

Miller, Greg. "All Together NowPull!" *Science* Vol. 317, no. 5843 (7 September 2007): 1338-40. Miller researches social behavior in chimpanzees, particularly how far and when they will cooperate with each other to gain food that is out of reach by together pulling ropes that enables them to retrieve the food. Some do, some don't, and some are more tolerant of collaboration than others. Behavior may depend on whether food is, or has been, shared. Most such behavior is with captive chimps in laboratory conditions. Little such behavior has been observed in the wild.

Miller, Greg. "Animal Extremists Get Personal." *Science* Vol. 318, no. 5858 (21 December 2007): 1856-58. As animal rights extremism wanes in the United Kingdom, US researchers have faced increasing threats and harassment. The Animal Liberation Brigade has left a bomb on the doors of the home of a physician-researcher and physicians that are involved in a study to test an electrical stimulator that could bring paralyzed eye muscles back to life in children.

Miller, Greg. "The Roots of Morality." *Science* Vol. 320, no. 5877 (9 May 2008): 734-37. Neurobiologists, philosophers, psychologists, and legal scholars are probing the nature of human morality using a variety of experimental techniques and moral challenges. New studies tend to support the view of David Hume that emotions drive moral judgments, contrary to Immanuel Kant's arguments that reason should be the driving force. Many of these conclusions are based on what parts of the brain (as found in neuroimaging) are active in making moral decisions. Critics respond that the testing situations used involve quick responses to unfamiliar moral situations (flipping a track switch to decide who gets killed) and does not allow for a more sustained context of moral reasoning.

Miller, Harlan B., and William H. Williams, eds., *Ethics and Animals*. Clifton, New Jersey: Humana, 1983. Pp. xii, 400. This is not an important book for those interested in environmental ethics. Even the few articles that deal with environmental issues seem dated--perhaps because the conference in which these papers were presented was held in 1979. The only article of real interest is Peter S. Wenz, "Ecology, Morality, and Hunting" (pp.183-197). Wenz argues that we have obligations to ecosystems, not just to humans or other sentient beings. He then claims that we can use this obligation to limit the

practice of hunting. (Katz, Bibl # 1)

Miller, Harlan B. and William H. Williams, eds. Ethics and Animals. Reviewed in Environmental Ethics 6(1984):373-76.

Miller, J. N., Brooks, R. P., Croonquist, M. J. "Effects of Landscape Patterns on Biotic Communities," Landscape Ecology 12(no.3, 1997):137. (v8,#3)

Miller, J. K., Scott, J. M., Miller, C. R. and Waits, L. P., "The Endangered Species Act: Dollars and Sense?," Bioscience 52(no.2, 2002): 163-68. (v.13,#2)

Miller, Jonathan, "Australian Approaches to Wilderness," International Journal of Wilderness 1(no. 2, December):38-39. Six of the eight Australian states, plus the Australian Commonwealth Territory, have wilderness legislation. Some wilderness initiatives are also undertaken at the national level, especially the National Wilderness Inventory. Miller is with the Australian Heritage Commission, Canberra. (v7,#1)

Miller, Joseph A., Sarah M. Friedman, David C. Grigsby, and Annette Huddle, compilers, The Island Press Bibliography of Environmental Literature. Washington, DC: Island Press, 1993. 396 pages. Hardbound, \$ 48. 3,084 entries, includes a section on "Ethics, Philosophy, and Religion." The authors are with the Yale School of Forestry and Environmental Studies. (v4,#2)

Miller, JR; Hobbs, RJ, "Conservation Where People Live and Work," Conservation Biology 16(no.2, 2002):330-337. (v.13, #3)

Miller, JR; Turner, MG; Smithwick, EAH; Dent, CL; Stanley, EH, "Spatial Extrapolation: The Science of Predicting Ecological Patterns and Processes", BioScience 54 (no.4, 2004): 310-320(11). Ecologists are often asked to contribute to solutions for broadscale problems. The extent of most ecological research is relatively limited, however, necessitating extrapolation to broader scales or to new locations. Spatial extrapolation in ecology tends to follow a general framework in which (a) the objectives are defined and a conceptual model is derived; (b) a statistical or simulation model is developed to generate predictions, possibly entailing scaling functions when extrapolating to broad scales; and (c) the results are evaluated against new data. In this article, we examine the application of this framework in a variety of contexts, using examples from the scientific literature. We conclude by discussing the challenges, limitations, and future prospects for extrapolation.

Miller, Lantz, "Filling the Gaps in the Risks vs. Benefits of Mammalian Adult-Cell Cloning: Taking Bernard Rollin's Philosophy Its Next Step," Journal of Agricultural and Environmental Ethics 11(1998):1-16. ABSTRACT. A critique is made of Bernard Rollin's examination of the ethics of cloning adult mammalian cells. The primary concern is less to propound an anticloning or procloning position than to call for full exploration of the ethical complexities before a rush to judgment is made. Indeed, the ethical examination in question rushes toward an ethical position in such a way that does not appear consistent with Rollin's usual methodology. By extending this methodology - which entails full weighing of benefits and costs - it becomes apparent that there are real potential risks to this type of cloning in both animals and humans, besides the possible benefits, and that the scientific, political, philosophical, and broader academic communities should explore these risks and benefits extensively. Rollin's usual methodological call for hesitation before risks would translate into hesitation before the ethical risks of adult mammalian cell cloning instead of his paper's curiously laissez-faire stance. KEY WORDS: animal adult-cell cloning, human adult-cell cloning, genetic ecology, genetic monoculture, synchronic genetic diversity, diachronic genetic diversity, rights of future generations. (JAEE)

Miller, M. L., and J. Kirk, "Marine Environmental Ethics," Ocean and Coastal Management

17(1992):237-251. (v5,#4)

Miller, Mara, The Garden as an Art. Albany: SUNY Press, 1993. 273 pages. Paper, \$ 18.95. Theoretical issues in aesthetics that gardens raise, with examples. Miller challenges contemporary aesthetic theory to include gardens in an expanded definition of art. Gardens mix art and nature in varying proportions. She challenges the idea that art should be studied within the context of a single culture and period, the idea that art should be conceived as a discrete object unrelated to our survival as persons, as cultural communities, and as a species. She challenges the idea that all signifying systems are like language use. The element of nature in gardens is part of this challenge. Miller is director of the Asian Studies Program and teaches philosophy at Drew University. (v5,#2)

Miller, Pamela A., The Implications of John Dewey's Ideas for Environmental Ethics (Pragmatism), 1998, Indiana University, Ph.D. thesis. 515 pages. Dewey's pragmatism identifies and addresses conflicts between human and nonhuman interests that can help bridge the gap between practice and theory in environmental ethics. Traditional arguments in environmental ethics often give little or no guidance in conflicts faced in practice. Dewey's philosophy offers an alternative that gives direction to practitioners for resolving conflicts so that all parties to a conflict 'grow' as a result of the conflict. This requires focus on the notions of inquiry, experience, growth, the idea of character in moral judgment, and Dewey's concept of the "good". A Deweyan approach to environmental ethics lends support to major claims of the ecofeminists. The advisor was Karen Hanson. (v.10,#1)

Miller, Peter, "Descartes' Legacy and Deep Ecology." Dialogue 28 (1989): 183-202. An argument for an axiology of "extended naturalism." This view is contrasted with a pure Cartesian separation of value from the material world and with a modified Cartesian "projectionist" axiology that insists value must be based in the mind of a conscious evaluator. Projectionism is in "the firm grip of the Cartesian legacy" because "not only the appreciation but also the very existence of those values 'within' the non-human natural order [are] contingent upon human altruistic sentiments, value experiences, or evaluations" (p. 194). The mistake is the confusion of "epistemic primacy with ontological primacy" (p. 199). (Katz, Bibl # 2) (v1,#1)

Miller, Peter and Westra, Laura, eds., Just Integrity. Lanham, Md: Rowman and Littlefield, 2002. (v.13,#4)

Miller, Peter, "The Place of Recycling in Sustainable Development," A Manitoba New Democratic Party Environmental Task Force Report. The fifty page study examines the feasibility of recycling in the province of Manitoba, with attention to combining theory and practice. Copies available on request. Department of Philosophy, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba R3B 2E0, Canada. (v1,#1)

Miller, Peter. "Do Animals Have Interests Worthy of Our Moral Interest?" Environmental Ethics 5(1983):319-33. The conclusion of animal liberationists that the underlying assumptions of modern egalitarian humanism can be construed to imply an equal moral desert for the higher nonhuman animals has recently been challenged by R. G. Frey on the grounds that linguistic incompetence and lack of self-consciousness on the part of animals preclude them from having desires, beliefs, interests, and rights. Although Frey's arguments fail, they challenge us to provide alternative accounts of these descriptive and normative categories of human and animal psychology. Phenomenological and behavioral analyses demonstrate both the meaningfulness and the truthfulness of attributing desires, beliefs, and interests to many nonhuman animals. Principles of axiology and ethics prescribe that animal interests ought to be objects of our moral concern, but do not vindicate an egalitarian interpretation of animal liberation. A fundamental challenge of the animal liberation debate is how to frame a nonegalitarian ethic that can nevertheless preserve the moral gains of various liberation movements inspired by principles of equality.

Miller is in the philosophy department, University of Winnipeg, Winnipeg, Canada. (EE)

Miller, Peter. "Value as Richness: Toward a Value Theory for the Expanded Naturalism in Environmental Ethics." Environmental Ethics 4(1982):101-14. There is a widespread conviction amongst nature lovers, environmental activists, and many writers on environmental ethics that the value of the natural world is not restricted to its utility to humankind, but contains an independent intrinsic worth as well. Most contemporary value theories, however, are psychologically based and thus ill-suited to characterize such natural intrinsic value. The theory of "value as richness" attempts to articulate a plausible nonpsychological theory of value that accommodates environmentalist convictions as well as more traditional value concerns. It has implications not only for our care for and preservation of nature, but also for the enrichment of human lives. Miller is in the philosophy department, University of Winnipeg, Winnipeg, Canada. (EE)

Miller, Peter. Review of The Nature of the Beast. By Stephen R. L. Clark. Environmental Ethics 9(1987):277-79.

Miller, Ronald I., ed., Mapping the Diversity of Nature. London: Chapman and Hall, 1994. 218 pages. \$ 60. Mapping the elements of diversity, with an example of the rare species of Madagascar. Remote-sensing of tropical habitat availability for a nearctic migrant, the wood thrush. Using maps for the conservation of large mammals around the globe. Mapping the global distribution of species. A continental conservation mapping program. (v8,#2)

Millette, Thomas L., Sullivan, James D., Henderson, James K. "Evaluating Forestland Uses: A GIS-Based Model," Journal of Forestry 95(no.9, 1997). (v8,#3)

Milliken Jr., Roger. "Eleven Generations of Forest Benefits: Where Do We Go From Here?" Journal of Forestry 94(no.2, Feb.1996):6. (v7,#1)

Mills, Claudia, Values and Public Policy. Fort Worth: Harcourt Brace Jovanovich, 1992. Chapter 2 is on "Nature, the Environment, and Animal Rights." Short articles, drawn from the Institute for Philosophy and Public Policy's quarterly, QQ, by Claudia Mills on endangered species; Mark Sagoff on biotechnology, property rights and environmental law, and animal liberation and environmental ethics; C. A. J. Coady defending human chauvinism; and Robert Wachbroit on patenting animals. Chapter 1 is on "Technology, Risk, and the Environment."

Mills, Ian. "Dwelling in No-Place: Our Ethical Between." Environmental Ethics 28(2006):413-428. Suggestions made by Luce Irigaray in her book, An Ethics of Sexual Difference, may offer a solution to a problem in environmental ethics which has much in common with the gender problem: the tendency of the masculine to exploit the Other as "a-place-to-be-in." If humans are to achieve the ethicality of mutually beneficial, sustainable relating with all beings, we need to initiate an economy of desire which has regard to a reciprocity of receptivity-activity, as a way of safeguarding a clear space open to the kind of relating that makes possible a "permanent becoming" together of all beings. We need to live in a psychic No-Place, to experience our environment as the potentially infinite "Open" of "our-between." (EE)

Mills, Lisa Nicole, Science and Social Context: The Regulation of Recombinant Bovine Growth Hormone in North America (Montreal: McGill-Queens University Press, 2002). Reviewed by Adam Diamond. Journal of Agricultural and Environmental Ethics 18(2005):509-513. (JAEE)

Mills, M. G. L., "Conservation Management of Large Carnivores in Africa," Koedoe: Research Journal for National Parks in the Republic of South Africa 34 (no. 1, 1991): 81-90. Problems and opportunities in

keeping people in reasonable harmony with big predators on a landscape. (v2,#4)

Mills, M; Schwartz, M, "Rare plants at the extremes of distribution: broadly and narrowly distributed rare species," Biodiversity and Conservation 14 (no. 6, June 2005): 1401-1420.

Mills, Stephanie, ed., In Praise of Nature, Covelo, CA: Island Press, 1990. 258 pages. \$ 14.95 paper, \$ 22.95 cloth. A smorgasbord of nature writing: John Muir, Aldo Leopold, Barry Lopez, Wendell Berry, John McPhee, Edward Abbey, Rachel Carson, and others. There is an annotated bibliography of more than 100 books comparable to Davis's Ecophilosophy (Newsletter, Spring, 1990, p. 7) with these major differences: it is more broadly conceived both topically and temporally and the notations and reviews are written by many authors, among them Baird Callicott. (v1,#4)

Mills, Stephanie. "The Leopolds' Shack." Wild Earth 6, no.1 (1996): 56. (v7, #3)

Millstone, Erik, "Can food safety policy-making be both scientifically and democratically legitimated? If so, how?" *Journal of Agricultural and Environmental Ethics* 20(2007):483-508.

This paper provides an analysis of the evolution of thinking and talking about the role of scientific knowledge and expertise in food safety policy-making, and in risk policy-making more generally from the late 19th century to the present day. It highlights the defining characteristics of several models that have been used to represent and interpret the relations between policy-makers and expert scientific advisors and between scientific and political considerations. Both conceptual and empirical strengths and weaknesses of those models are identified, focusing in particular on the ways in which they deal with scientific uncertainties and social choices. By drawing on both empirical evidence and conceptual analysis, a novel and more realistic model is provided along with an account of some conditions for food safety policy-making achieving both scientific and democratic legitimacy. Keywords. democratic legitimacy - public policy - science - scientific legitimacy.

Milly, P.C.D., Julio Bentancourt, Malin Falkenmark, Robert M. Hirsch, Zbigniew W. Kundzewicz, Dennis P. Lettenmaier, and Ronald J. Stouffer. "Stationarity is Dead: Whither Water Management." *Science* Vol. 319, no. 5863 (1 February 2008): 573-74. Climate change undermines a basic assumption that historically has facilitated water management: natural flow systems fluctuate within limits of variability ("stationarity"). "Substantial anthropogenic change of Earth's climate is altering the means and extremes of precipitation, evapo-transpiration, and rates of discharge of rivers." That poses enormous challenges in water management.

Milne, Courtney, The Sacred Earth. New York: Harry N. Abrams, 1993. \$ 49.50. A coffee table book, marvelous photographs, largely of natural scenes and formations, perhaps of religious shrines, with selected texts, grouped around the following themes: legacies from antiquity; waters of cleansing, havens of renewal, the high places, places of transformation.

Milton, Kay, ed. Environmentalism: The View from Anthropology: (London: Routledge, 1993). Reviewed by Laura Rival in Environmental Values 4(1995):83-84. (EV)

Milton, Kay, Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse. New York: Routledge, 1996. Environmentalists often claim that non-industrial societies, usually described as "indigenous" or "traditional," have a better relationship with their environment than industrial societies do. A growing body of anthropological literature has thrown doubt on this belief, and suggests that it should be seen as a "myth," both in the popular sense of something that is untrue and in the sense often used by anthropologists as something that is asserted as dogma. Our contemporary understanding of these cultures is shaped by our pre-conceptions and by the arguments we wish to pursue. Both the reality of human-environment relations, and our interpretations of them, are

considerably more complex than the environmentalist myth suggests. Milton teaches social anthropology at the Queen's University, Belfast. (v8,#3)

Milton, Kay, Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse. London: Routledge, 1996. "The position that human beings are unique in possessing culture has always seemed an absurd denial both of experience and of logic" (pp. 63-64). "The myth of primitive ecological wisdom is not well founded" (p. 133). (v10,#4)

Milton, Kay, Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse. London: Routledge, 1996. "The position that human beings are unique in possessing culture has always seemed an absurd denial both of experience and of logic" (pp. 63-64). "The myth of primitive ecological wisdom is not well founded" (p. 133). (v.11,#1)

Milton, Kay, ed. Environmentalism: The View from Anthropology. London: Routledge, 1993. 240 pages. £ 14.99 paper. Stressing the cultural dimensions of green issues, the contributors maintain that anthropology has a distinctive contribution to make to the ecological debate. Milton is in social anthropology at the Queen's University, Belfast. (v6,#1)

Milton, Kay. "Nature is Already Sacred." Environmental Values 8(1999):437-449. ABSTRACT: Environmentalists often argue that, in order to address fundamentally the harmful impact of their activities on the environment, western industrial societies need to change their attitude to nature. Specifically, they need to see nature as sacred, and to acknowledge that humanity is a part of nature rather than separate from it. In this paper, I seek to show that these two ideas are incompatible in the context of western culture. Drawing particularly on ideas expressed by western conservationists, I argue that nature is already seen as sacred, and that its sacredness depends on it being seen as separate from humanity, an idea which effectively contradicts the scientific knowledge on which many conservationists base their actions. Goodin's green theory of value is used as a source of ideas about why non-human nature is experienced as sacred, and can be extended to suggest that other values, such as "development" and "progress", are also seen as sacred. KEYWORDS: Nature, sacredness, conservation, non-human nature, western culture. Kay Milton, School of Anthropological Studies The Queen's University of Belfast Belfast BT7 1NN, Northern Ireland Email: kmilton@clio.arts.qub.ac.uk. (EV)

Milton, Kay. Review of: Satterfield, Terre, Anatomy of a Conflict: Identity, Knowledge and Emotion in Old-Growth Forests. Environmental Values 13(2004):118-119. (EV)

Minai, Asghar Talaye, Aesthetics, Mind, and Nature: A Communication Approach to the Unity of Matter and Consciousness. Westport, CT: Praeger, 1993. "The totality of cosmic order bears messages of meaning and is 'beautiful'. The properties of this system may fall in either rational or random order, the former promoting well-ordered, rule-generated, sociobiological conditions, but the latter providing the necessary complexity and variety that transforms the mundane into the beautiful. ... This book aims to satisfy the urge for better understanding of the underlying principle of beauty and the nature of what is beautiful (p. xvi). (v7,#2)

Minckley, W. L. and James E. Deacon, eds., Battle against Extinction: Native Fish Management in the American West. Tuscon: University of Arizona Press, 1992. Includes, "Fishes in the Desert: Paradox and Responsibility" by Holmes Rolston; articles by Phil Pister, James Deacon, and others on fish conservation in the American West. \$ 40.00. (v2,#4)

Minckley, W. L. et al., "A Conservation Plan for Native Fishes of the Lower Colorado River," BioScience 53 (no. 3, 2003):219-234. Native fish fauna of the Lower Colorado River, including four "big-river" fishes that are federally listed as endangered species, are inadequately protected. The authors propose a

more realistic plan.

Minckley, Wendell L. and James E. Deacon, eds., Battle Against Extinction: Native Fish Management in the American West (Tucson: University of Arizona Press, 1991), \$ 40.00 cloth. Nearly a third of the native fishes of North America live in the arid West; nearly all are threatened or of concern. Holmes Rolston contributes an article on duties to endangered fishes. Minckley is professor of zoology at Arizona State University. Deacon is professor of biology at the University of Nevada, Las Vegas. (v2,#2)
Minckly, WL; Marsh, PC; Deacon, JE; Dowling, TE; Hedrick, PW; Matthews, WJ; Mueller, G, "A Conservation Plan for Native Fishes of the Lower Colorado River" Bioscience 53(no.3, 2003):219-234.

Mineau, Pierre, McLaughlin, Alison. "Conservation of Biodiversity Within Canadian Agricultural Landscapes: Integrating Habitat for Wildlife," Journal of Agricultural and Environmental Ethics 9(1996):93-113. This review of current literature considers the potential for non-crop areas within agricultural landscapes to be reservoirs of agronomically beneficial organisms including plants, invertebrates, and vertebrate species. Non-crop habitats adjacent to crop land have been identified as significant for the maintenance of plant species diversity, for the conservation of beneficial pollinating and predatory insect and as essential habitat for birds. A key component for enhancement of biodiversity is the reintroduction of landscape heterogeneity by (1) protection and enhancement of key non-crop areas, (2) smaller fields and farms, and (3) a greater mixture of crops, through rotation, intercropping and regional diversification. The benefits of increased biodiversity within arable lands are reviewed for various species groups. The problems of crop depredation by vertebrate species, weed and insect competition are also discussed. Keywords: biodiversity, wildlife habitat, agriculture, hedgerows, field margins. Mineau and McLaughlin are with the Canadian Wildlife Service, Hull, Quebec. (JAEE)

Minehart, D. and Neeman, Z., "Effective Siting of Waste Treatment Facilities," Journal of Environmental Economics and Management 43(no.2, 2002): 303-24. (v.13,#2)

Mingozzi, T., Esteve, R. "Analysis of a Historical Extirpation of the Bearded Vulture Gypaetus Barbatus (L.) in the Western Alps (France-Italy): Former Distribution and Causes of Extirpation," Biological Conservation 79(no.2/3 1997):155.

Minion, Chris, "Publicly Funded Scientific Entrepreneurs Are Entitled to Profit From Their Discoveries", Journal of Agricultural and Environmental Ethics 4(1991):186-191. In a debate: Are publicly funded scientific entrepreneurs entitled to profit from their discoveries?

Mink, Frank L., Coleman II, James C. "Superfund Site Contamination: Apportionment of Liability," Natural Resources & Environment 12(no.1,1997):68. (v8,#3)

Minteer, B. A., and J. P. Collins, "Ecological Ethics: Building a New Tool Kit for Ecologists and Biodiversity Managers," Conservation Biology 19(2005):1804-1812. Examples of ethical dimensions in ecology and conservation biology involving choosing between protected and endangered species. Mountain lions have been removed to protect desert bighorn sheep.

Objections by Rominger, Eric M., Vernon C. Bleich, and Elise J. Goldstein, "Bighorn Sheep, Mountain Lions, and the Ethics of Conservation," Conservation Biology 20(2006):1341. Minteer and Collins are mistaken about several of their claims about lions and bighorns. With reply by Minteer and Collins, *ibid*.

Minteer, Ben A. Review of Virginia A. Sharpe, Bryan Norton, and Strachan Donnelley, eds. Wolves and Human Communities: Biology, Politics, and Ethics. Environmental Ethics 25(2003):207-210. (EE)

Minteer, Ben A., "No Experience Necessary? Foundationalism and the Retreat from Culture in Environmental Ethics," Environmental Values 7(1998): 333-348. Many of the leading contributors to the field of environmental ethics demonstrate a preference for foundationalist approaches in their theoretical

justifications of environmentalism. I criticise this tendency as it figures in the work of Holmes Rolston III, J. Baird Callicott, and Eric Katz. I illustrate how these writers' desire for philosophical absolutes leads them to reject the moral resources present within human culture; a move that carries with it a number of troubling philosophical and political problems. I conclude that environmental theorists would be better served by taking a more contextual, social, and pragmatic approach to justifying their moral projects regarding nature, and that this mode of inquiry will ultimately lead toward a more philosophically sound and democratically authentic environmental ethics. KEYWORDS: environmental ethics, foundationalism, pragmatism, contextualism. Ben A. Minteer is at the University of Vermont. (EV)

Minteer, Ben A., and Robert E. Manning. "Pragmatism in Environmental Ethics: Democracy, Pluralism, and the Management of Nature." Environmental Ethics 21(1999):191-207. A growing number of contributors to environmental philosophy are beginning to rethink the field's mission and practice. Noting that the emphasis of protracted conceptual battles over axiology may not get us very far in solving environmental problems, many environmental ethicists have begun to advocate a more pragmatic, pluralistic, and policy-based approach in philosophical discussions about human-nature relationships. In this paper, we argue for the legitimacy of this approach, stressing that public deliberation and debate over alternative environmental ethics is necessary for a culture of democracy to be upheld in decision making and policy formulation. Then we argue for a democratically tempered environmental ethics that is grounded in a practical understanding of the character of moral claims regarding the natural world. We offer the results of an empirical study of environmental ethics held by the public to illustrate the diversity in their moral commitments to nature. Finally, we conclude with a discussion of the implications of this ethical pluralism for policy discussions about the management of American public lands. (EE)

Minteer, Ben A., and Manning, Robert E., eds., Reconstructing Conservation: Finding Common Ground. Washington, DC: Island Press, 2001. Includes:

-Norton, Bryan, "Conservation: Moral Crusade or Environmental Public Policy?" pages 187-205.

-Callicott, J. Baird, "The Implications of the 'Shifting Paradigm' in Ecology for Paradigm Shifts in the Philosophy of Conservation," pages 239-261. (v.14, #4)

Minteer, Ben A., Elizabeth A. Corley, and Robert E. Manning, "Environmental Ethics Beyond Principle? The Case for a Pragmatic Contextualism," Journal of Agricultural and Environmental Ethics 17(2004):131-156. Many nonanthropocentric environmental ethicists subscribe to a "principle-ist" approach to moral argument, whereby specific natural resource and environmental policy judgments are deduced from the prior articulation of a general moral principle.

More often than not, this principle is one requiring the promotion of the intrinsic value of nonhuman nature. Yet there are several problems with this method of moral reasoning, including the short-circuiting of reflective inquiry and the disregard of the complex nature of specific environmental problems and policy arguments. In the present paper, we advance an alternative, pragmatic contextualist approach to environmental ethics, one grounded in the moral theory of John Dewey. We present the results of an empirical study of public environmental ethics and natural resource management attitudes to support our position, and we conclude with a few recommendations for future inquiry in the field of environmental ethics. Keywords: contextualism, empirical study, environmental ethics, pragmatism, public attitudes. The authors are in Human Dimensions of Biology, Faculty School of Life Sciences, Arizona State University, Tempe, AZ. (JAEE)

Minteer, Ben A. & Manning, Robert E., "An Appraisal of the Critique of Anthropocentrism and Three Lesser Known Themes in Lynn White's The Historical Roots of Our Ecologic Crisis," Organization and Environment 18 (no. 2, June 2005).

Minteer, Ben A., "Environmental Philosophy and the Public Interest: A Pragmatic Reconciliation," Environmental Values 14(2005): 37-60. Most environmental philosophers have had little use for

'conventional'

philosophical and political thought. This is unfortunate, because these traditions can greatly contribute to environmental ethics and policy discussions. One mainstream concept of potential value for environmental philosophy is the notion of the public interest. Yet even though the public interest is widely acknowledged to be a powerful ethical standard in public affairs and public policy, there has been little agreement on its descriptive meaning. A particularly intriguing account of the concept in the literature, however, may be found in the work of the American pragmatist John Dewey. Dewey argued that the public interest was to be continuously constructed through the process of free, cooperative inquiry into the shared good of the democratic community. This Deweyan model of the public interest has much to offer environmental philosophers who are interested in making connections between normative arguments and environmental policy discourse, and it holds great promise for enhancing environmental philosophy's role and impact in public life. Minter is in human dimensions of biology, Arizona State University, Tempe, AZ. (EV)

Minter, Ben A., and Elizabeth A. Corley, "Conservation or Preservation? A Qualitative Study of the Conceptual Foundations of Natural Resource Management," *Journal of Agricultural and Environmental Ethics* 20(2007):307-333. Few disputes in the annals of US environmentalism enjoy the pedigree of the conservation-preservation debate. Yet, although many scholars have written extensively on the meaning and history of conservation and preservation in American environmental thought and practice, the resonance of these concepts outside the academic literature has not been sufficiently examined. Given the significance of the ideals of conservation and preservation in the justification of environmental policy and management, however, we believe that a more detailed analysis of the real-world use and understanding of these ideas is needed. In this paper, we describe the results of a qualitative, semantic study of the concepts of conservation and preservation undertaken in the context of the Chattahoochee National Forest (CNF), located in northern Georgia (USA). Thirty in-depth interviews were conducted with scientists and north Georgia residents either interested or involved in the future management of the forest. Respondents were asked to define conservation and preservation in their own words and to indicate which approach they felt was more appropriate for the management of the CNF. Qualitative content analysis was used to elicit a set of recurring themes for each foundational concept. Taken together, these themes help to flesh out the meaning of conservation and preservation for citizens and scientists today, and illustrate the evolving nature of two of the more significant and venerable ideas animating US environmental policy and management.

The authors are at Arizona State University.

Minter, Ben A. "Biocentric Farming? Liberty Hyde Bailey and *Environmental Ethics*." *Environmental Ethics* 30(2008):341-359. Most environmental ethicists adhere to a standard intellectual history of the field, one that explains and justifies the dominant commitments to nonanthropocentrism, moral dualism, and wilderness/wildlife preservation. Yet this narrative—which finds strong support in the work of first generation environmental historians—is at best incomplete. It has tended to ignore those philosophical projects and thinkers in the American environmental tradition that challenge the received history and the established conceptual categories and arguments of *Environmental Ethics*. One such figure is the agrarian thinker, conservationist, and rural reformer, Liberty Hyde Bailey. A writer whose environmental philosophy combined biocentric attitudes toward nature with more humanistic concerns about intergenerational fairness and civic responsibility, Bailey remains an invisible figure in *Environmental Ethics*, despite his clear influence on the later work of such conservation luminaries as Aldo Leopold, Wendell Berry, Wes Jackson, and others. We would benefit from a recovery of Bailey's environmental philosophy, especially his articulation of a pluralistic ethical outlook defined by the melding of anthropocentric moral and civic concerns with biocentric commitments regarding the beauty and resilience of the properly cultivated landscape. (EE)

Mintz, J. A., "The Uncertain Future Path of Environmental Enforcement and Compliance: A Book Review Essay Regarding Clifford Rechtschaffen and David L. Markell, Reinventing Environmental Enforcement and the State-Federal Relationship," Environmental Law 33(2003): 1093-1104.

Mintzer, Irving M., and Leonard, J.A., eds., Negotiating Climate Change: The Inside Story of the Rio Convention. Cambridge: Cambridge University Press, 1994. 392 pages. The fate of the Framework Convention on Climate Change in the light of political and industrial pressures to avoid doing much about real change. Science, values, and politics in a complex treaty. Nevertheless, there has been some achievement. There is a formal, binding requirement, sound reporting of emissions and target-hitting, or missing, verification by an independent authority, and there are continued negotiations. Much of this achievement was spearheaded by contributors to this volume. (v9,#2)

Mintzer, Irving M., Leonard, J.A.. Negotiating Climate Change: The Inside Story of the Rio Convention. Reviewed by Tim O'Riordan, Environmental Values 7(1998):115.

Mirkarimi, Ross. "Dangerous Liaisons. War and the Environment." The Christian Science Monitor, vol. 89, 24 Jan 1997, p. 19.

Miroiu, Adrian, "Global Warming and Moral Theorizing," Theoria: Revista de Teoria, Historia y Fundamentos de la Ciencia (San Sebastian, Spain) 11(no. 27, 1996):61-81. ISSN 0495-4548. In English. "The aim of my paper is to explore in some detail some epistemological issues concerning moral theorizing on global warming. First, I consider the issue of the structure of the theoretical approach in a field of inquiry requiring normative assessments. How do theoretical principles work here? What is to be regarded as a normative evidence for such a theory? Second, the criteria to determine which part, if any, of the theory gets normatively constrained, and which does not, are discussed. Third, I focus on the procedures to reach an equilibrium between such a theory and its evidence and to reach it, changes might be required on the normative side of the theory rather than on its non-normative side." Miroiu is in the faculty of philosophy, University of Bucharest, Romania. (v.9,#3)

Miroiu, Adrian, Etica Aplicata (Applied Ethics). Bucharest, Romania: Editura Alternative, 1995. ISBN: 973-96996-6-9. Translations into Romanian of selected articles from the West on applied ethics. In addition to sections on abortion, the right to die, and euthanasia, it contains a section on nature, with translations from Peter Singer on "Animal Liberation," Tom Regan on "The Rights of Animals," and Elliot Sober's "Philosophical Problems for Environmentalism." Miroiu teaches philosophy at the University of Bucharest and is in the ministry of higher education for Romania. (v7,#2)

Mirovitskaya, Natalia, and Marvin S. Soroos. "Socialism and the Tragedy of the Commons: Reflections on Environmental Practice in the Soviet Union and Russia." The Journal of Environment and Development 4 (no. 1, 1995): 77- . (v6,#1)

Mishalani (Mish'alani), James K., "The Limits of Moral Community and the Limits of Moral Thought," Journal of Value Inquiry 16(1982):131-141. "We may expect moral community to be structured concentrically, so that we will find at the center those who are both authors and beneficiaries of moral consideration, and in a wider circle around them those whose well-being is in the care of the former, namely, pure beneficiaries. Such wards of a moral community may in turn be arranged in ever-expanding circles, so that the custodial responsibilities of the central community become ... increasingly attenuated as we move outward toward the periphery" (p. 132). "If moral community is conceived of as a series of ever-widening concentric circles encompassing the whole realm of living beings, then to say that we ought to minimize harm is to say that whenever we, in seeking our own interests, are forced to jeopardize the interests of other beings, we ought, other things being equal, always to prefer the destruction of peripheral interests to central ones, and of fewer to more interests of the same degree of remoteness from

the center" (p. 140). Mish'alani is at the University of Washington.

Mistretta, P. A., "Managing for Forest Health," Journal of Forestry 100(no.7, 2002): 24-27. (v.13,#4)

Mitcham, Carl, ed., Banchetti-Robino, Marina Paola, Marrietta, Jr., Don E., and Embree, Lester, guest eds., Research in Philosophy and Technology: Volume 18, Philosophies of the Environment and Technology. Stamford, Connecticut: JAI Press, 1999. 376pp. \$ 78, hardbound only. Expensive, but there is a lot in it. Only Parts I and II are relevant here.

Part I. Philosophies of the Environment and Technology

--Callicott, J. Baird, "After the Industrial Paradigm, What?," pp. 13-25. "A human economy shifting from industrial production and consumption of material objects to postindustrial production and consumption of information will be better adapted to the natural environment" (p. 25).

--Ihde, Don, "Phil-Tech Meets Eco-Phil: The Environment," pp. 27-38. The relationships between philosophy of technology and environmental philosophy, with the aim of redirecting concerns that should unite these two disciplines.

--Hickman, Larry, "Green Pragmatism: Reals Without Realism, Ideals Without Idealism," pp. 39-56. John Dewey's critique of technology sheds much light on some of the issues now debated within environmental philosophy. Dewey advanced a broad critique of technological culture, and was also an evolutionary naturalist who rejected the extremes of scientific realism on the one hand and romantic idealizations of nature on the other.

--Marietta, Don E., Jr., "Decisions Regarding Technology: The Human Factor," pp. 57-72. "We have good reasons for not using certain technologies, either because they are harmful to the natural environment for us to tolerate their use, or because they are harmful to humans, either individual humans or human groups" (p. 58).

--Casey, Timothy, "Architecture As Environmental Philosophy." "It is the built environment that establishes the cultural context within which utensils and tools are employed and nature is first uncovered." Using "architecture" in this broad sense, any kind of building by which humans open up places and situate themselves in their world, a people's architecture is "an ethos that establishes their place in the world. It is in such places that we first discover the environment and hence the 'place' of nature in our lives" (p. 74).

--Robino, (Banchetti-Robino), Marina Paola, "Hermeneutic Technics: The Case of Nuclear Reactors," pp. 85-94. "The purpose of this paper ... is ... to examine phenomenologically the nature of the relation between the operator of a nuclear reactor and the instruments through which this operator gains information about the nuclear pile by focusing specifically on what went wrong" (pp. 85-86).

--Frodeman, Robert, "The Rebirth of Gaia and the Closure of Homo Technologicus," pp. 95-113. "A geological reading of the close of modernity and the advent of a postmodern era, ... by tracing the changing relationship between technology and nature. Since the industrial revolution, geology has been predominantly an economic discipline, supplying the raw materials for a technological way of life. In the future, the central role of the earth sciences will be political, helping to define the limits that individuals and communities must live within in order to flourish. ... On this reading the earth sciences become narrative sciences." (p. 95).

--Embree, Lester, "Personal Environmental Phenomenology, or the Examination of Electric Vehicle Technology," pp. 115-130. The environmental case for electric vehicles, and the phenomenological justification for driving an electric vehicle.

--Ferré, Frederick, "On Matter and Machines: An Environmental Speculation," pp. 131-142. "'Materialism,' though avidly pursued, is yet widely subjected to scorn." Wherein lies the conflict? "The alienation between matter and spirit, matter and mind, matter and purpose, though a deep historical reality in our modern worldview, is not a theoretical necessity" (p. 113). "The matter with matter, as depicted in the dominant modern worldview and as incorporated in our culture's characteristic technologies, is that it leaves out too much that is important and true. It leaves out quality. It leaves out adventure. It leaves out society. It leaves out mind and purpose and value. But this need not be the case, and should not long

continue" (p. 141).

--Rolston, Holmes III, "A Managed Earth and the End of Nature?", pp. 143-164. Humans increasingly see themselves as the planetary managers, regionally if not globally. Perhaps nature is at an end? All culturally intended activity modifies spontaneous wild nature. Nature widely bears the marks of human transforming, although there remains also much relatively undisturbed nature. Some respond that evolutionary and ecosystemic natural history has been overtaken by human engineering. Others seek a revised account by which human activity is, or should be, natural. The idea(l) of nature, absent humans, ought to be replaced with an idea(l) in which the human presence is also natural. A postmodern claim is that humans have never known, and cannot know, nature as it is itself. Wild nature is ended, because we now know that nature always wears for us a human face. But nature neither is, or ought to be, ended. Although humans belong on Earth; we do not have and do not want an entirely managed, humanized nature. Nature ought also be an end in itself.

Part II. A Symposium on Michael Zimmerman's Contesting Earth's Future.

--Davion, Victoria, "Zimmerman on Feminism, Truth and Objectivity."

--Maskit, Jonathan, "'All in Post': On Michael Zimmermann's Contesting Earth's Future."

--Vogel, Steven, "On Michael Zimmerman's Contesting Earth's Future."

--Zimmerman, Michael E., "Recognizing the Limits of Contesting Earth's Future."

Mitcham, Carl, Thinking Through Technology. Reviewed by Robert Frodeman, Environmental Ethics 18(1996):111-112. (EE)

Mitcham, Carl, ed., The Encyclopedia of Science, Technology, and Ethics has just been published by Macmillan Reference. A four-volume work with over 700 articles by 300 authors from 30 countries, the Encyclopedia promotes critical interdisciplinary reflection on the role of science and technology in society (broadly construed to include engineering, medicine, computers, and more). Editor in chief Carl Mitcham has been assisted by associate editors Larry Arnhart, Deborah Johnson, and Ray Spier, along with a 25-member editorial advisory board. Articles range in length from 250 words to 5000 words.

Mitcham, Carl. Review of Abram, David, The Spell of the Sensuous. Science 275(1997):174. "A truly original work by a philosophical anthropologist and practitioner of participatory ethnology." (v8,#1)

Mitchell, Bruce, Getting It Green: Case Studies in Canadian Environmental Regulation, Journal of Agricultural and Environmental Ethics 5(1992)235.

Mitchell, Bruce. "Water and Waterscapes: Some Conflicting Interests", Environments 24(no. 1, 1996):97.

Mitchell, C., "Review of: John M. Meyer, Political Nature: Environmentalism and the Interpretation of Western Thought," Environmental History 7(no.3, 2002): 529. (v.13,#4)

Mitchell, D, "Cultural landscapes: the dialectical landscape - recent landscape research in human geography," Progress in Human Geography 26(no.3, 2002):381-390. (v.13, #3)

Mitchell, George J., World on Fire: Saving an Endangered Earth. New York: Scribner's, 1991. \$22.50. (v3,#1)

Mitchell, George J., World on Fire: Saving an Endangered Earth (New York: Scribners, 1990). \$22.50. 247 pages. George Mitchell is Senate Majority Leader, Democrat from Maine, and a key person in most of the current environmental legislation. (v2,#1)

Mitchell, John Hanson, Trespassing: An Inquiry into the Private Ownership of Land. Reading, MA: Addison-Wesley, 1998. By what right do humans own land at all? Mitchell, a frequent trespasser, is

especially interested in 500 acres in eastern Massachusetts, tracing its history of owners from the native Americans to the present, with tales of their attachments to the land, the differing ways they have owned it, and how this affects the boundary between what humans hold in common and what they hold privately. Common needs weighed against the private right. (v9,#2)

Mitchell, John G., The Man Who Would Dam the Amazon and Other Accounts from Afield (Lincoln: University of Nebraska Press, 1990). \$24.95. 368 pages. Twelve essays from Audubon and Wilderness demonstrating the systematic defilement of the environment and the bureaucratic neglect of natural resources. Stories from Kentucky, Utah, Alaska, Interstate highways, and elsewhere. (v2,#1)

Mitchell, Jon. "Panama Indians Battle Modern 'Invader' Over Mining Rights." The Christian Science Monitor, vol. 89, 15 January 1997, p. 6.

Mitchell, Jon. "Jewels of the Sea Fight for Survival in Fragile Ecosystems." The Christian Science Monitor, vol. 88, 27 Sept. 1996, pp. 10-11.

Mitchell, Katharyne, "Geographies of identity: multiculturalism unplugged", Progress in Human Geography 28(no.5, 1 October 2004):641-651(11).

Mitchell, Lawrence E., Corporate Irresponsibility: America's Newest Export. New Haven: Yale University Press, 2001. U.S. law has frozen the business organization at a very early stage of moral development. Law encourages corporations to maximize stockholder profit and confines the major players--stockholders, managers and board members--to morally stunted roles in pursuit of this profit. Social good all too often fails before the desire for shareholder value. What corporations really need are knowledgeable investors who will tolerate and encourage the pursuit of long-term strategies that have no short-term profit payoff (which happens more often in Europe). But board members fester in a system that encourages them to stifle these larger fiduciary duties and long-term social interests. Alas, it is tough to fix this situation by giving executives more freedom and responsibility. Stockholders cannot ensure that the board members will not "self-deal"; corporate managers cannot protect themselves from the short-term greed of stockholders. And, with global capitalism, American is exporting this flawed system around the world. Needless to say, environmental protection and conservation is near the bottom of this agenda. Mitchell is a research professor at George Washington Law School. (v.13,#2)

Mitchell, Ross E. "Thorstein Veblen: Pioneer in Environmental Sociology", Organization and Environment 14 (No. 4, December 2001) pp.389-408. This article investigates the writings of American institutional economist Thorstein Bunde Veblen (1857-1929) on capitalism and environment. The two main queries concern (a) Veblen's stand on natural resource utilization as a consequence of capitalism and (b) its current relevance to environmental sociology. Veblen's theories of conspicuous consumption, absentee ownership, and natural resource exploitation are examined from several of his seminal contributions. The article concludes that Veblen's pioneering analysis of wasteful use of natural resources and emulative consumerism is essential to environmental sociology and timely because of current environmental crises. Future research is suggested in two areas: (a) applying Veblen's theoretical approaches to the ecological aspects of capitalism and (b) comparing Veblen with other classical theorists such as Marx and Weber within the subfield of environmental sociology. Mitchell is a PhD candidate in the Department of Rural Economy at the University of Alberta. (v.13,#2)

Mitchell, Timothy. "The Use of an Image: America's Egypt and the Development Industry." The Ecologist 26, no.1 (1996): 19. USAID and other development agencies typically portray Egypt as the narrow valley of the River Nile hemmed in by the desert and crowded with rapidly-multiplying millions of inhabitants, a picture which enables Egypt's poverty to be ascribed to demography and geography. Such an image obscures the political and social inequalities that underlie Egypt's inability to feed itself. It

also hides the role that USAID plays in the promotion of policies framed to support US domestic issues. (v7, #3)

Mitman, Gregg, The State of Nature: Ecology, Community, and American Social Thought, 1900-1950. Chicago: University of Chicago Press, 1992. 290 pages. \$ 23.50 paper. A study of the connection between liberal social thought and the concept of harmony in nature in the first half of the century. Social attitudes and commitments shaped ecological thinking, which in turn sought to influence social and political thinking. There were steady interactions between ecology and ecologists and ideas of social community and social forces. The cooperative view of nature eroded in the 1940's and 1950's due both to the modern Darwinian synthesis of evolution by natural selection, as well as through the association of organicism with totalitarian ideologies. Mitman is in the history of science at the University of Oklahoma. (v4,#2)

Mitra, Barun, "Selling the Tiger to Save It," New York Times, August 15, 2006. Op-ed. China has a few dozen tigers, staring at extinction. Of the planet's estimated 5,000 wild tigers, about 75% are in India. China has 4,000 in captivity. The U.S. has more tigers than anybody else, 10,000 in zoos and privately owned. China has followed a strict prohibition policy, trying to prevent poaching for the use of tiger parts in traditional medicine. Now China plans to establish more tiger-breeding facilities and see the tiger parts for medicinal use, to eliminate the incentive for poaching. Never mind that these treatments are worthless; you can make lots of money selling tigers. Mitra directs the Liberty Institute, a research organization that promotes free-market economics.

Mittelstrass, J., "Umwelt und Gesundheit: Von der Schwierigkeit, sich mit Umwelt- und Gesundheitsstandards in einer Kulture-Natur zurechtzufinden [Ethics of Environment and Health: On the Difficulty of Determining Environmental and Health Standards in a Cultural Nature]," in Wiener Klinische Wochenschrift 101 (no 17, 1989): 563-571. Scientific cultures, i.e. modern industrial societies, create their own environment. The expression denoting such a creation is a Kultur-Nature (cultural nature) determined by environmental and health standards. These standards are neither natural laws nor can they be derived from nature. They are instead a part of human rationality. They also have an ethical dimension. The argument focuses on the following aspects: scientific and technological rationality as problem solver and problem producer, exploration of the concept of the Kultur-Natur, the status of environmental and health standards, presenting the case for the concept of rational ethics (Vernunftethik) against the concept of ecological ethics and the supplementation of a research imperative by an ethical imperative. Mittelstrass is at the Zentrum Philosophie und Wissenschaft Theorie, University of Constance, Germany. (v2,#2)

Mizzoni, John, "Franciscan Biocentrism and the Franciscan Tradition," Ethics and the Environment 13(no. 1, 2008):121-134. Franciscan biocentrism is the view that Francis of Assisi is a biocentrist who holds that all living things have intrinsic value. Recently, biocentric theorists Sterba and Taylor have modified biocentrism to accommodate holistic entities. I consider thinkers from the broader Franciscan intellectual tradition (Bonaventure and Scotus) to see whether Franciscan biocentrism can be similarly modified. I discuss notions from these medieval philosophers such as the Cosmic Christ and the concept of haecceitas. I also explore whether Franciscan biocentrism can provide a satisfactory response to the problem of evil, since Franciscan biocentrism faces an issue that secular biocentrism does not: making sense of extinction. John Mizzoni is Associate Professor of Philosophy at Neumann College in Aston, PA.

Mizzoni, John. "St. Francis, Paul Taylor, and Franciscan Biocentrism." Environmental Ethics 26(2004):41-56. The biocentric outlook on nature affirms our fellowship with other living creatures and portrays human beings as members of the Earth's community who have equal moral standing with other living members of the community. A comparison of Paul Taylor's biocentric theory of environmental

ethics and the life and writings of St. Francis of Assisi reveals that Francis maintained a biocentric environmental ethic. This individualistic environmental ethic is grounded in biology and is unaffected by the paradigm shift in ecology in which nature is regarded as in flux rather than tending toward equilibrium. A holistic environmental ethic that accords moral standing to holistic entities (species, ecosystems, biotic communities) is more vulnerable to these changes in ecology than an environmental ethic that accords moral standing to individuals. Another strength of biocentrism is its potential to provide a unified front across religious and scientific lines. (EE)

Moberg, Gary P., "Using Risk Assessment to Define Domestic Animal Welfare", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. It is doubtful that there will ever be a universally acceptable definition of animal welfare, but I believe that it is possible to arrive at a working definition of what are acceptable practices for managing domestic animals by the use of risk assessment. Risk to an animal's welfare occurs when an animal experiences stress of such magnitude that there is a significant diversion of the animal's biological resources from normal function. This is the biological cost of stress. If the biological cost becomes great enough, the animal enters a prepathological state where it is vulnerable to disease, where it may no longer be able to reproduce, or where it may be unable to grow. These types of biological responses can be measured and, as a result, can in turn be used as measures of well-being. These measures of well-being can then be used to establish a scale of biological cost, providing us with a basis for using risk assessment to determine what management practices place a domestic animal's well-being at risk. Risk assessment makes it possible to evaluate domestic animal welfare under various management conditions, providing definitions of welfare that can be used to set legal guidelines for the care and use of domestic animals.

Moberg is with the Department of Animal Science, University of California, Davis.

Moehlman, Patricia D.; Amato, George; and Runyoro, Victor. "Genetic and Demographic Threats to the Black Rhinoceros Population in the Ngorongoro Crater." Conservation Biology 10, no.4 (1996): 1107. (v7, #3)

Moffat, Anne Simon, "Resurgent Forests Can Be Greenhouse Gas Sponges," Science 277 (18 July, 1997):325-316. Recent evidence indicates that forests store much more carbon than had been thought. Some previous studies calculated that forests take up about as much carbon dioxide while photosynthesizing as they give off when respiring, resulting in little net carbon flow into or out of forests. But new results, some from re-analysis of the old data, indicates that forests and the carbon they sequester have been undervalued, especially the carbon in forest soils, much in peat, also much more than thought in tropical forests. Reforestation can be significant in offsetting industrial carbon. (v8,#3)

Moffat, Anne Simon, "Global Nitrogen Overload Problem Becomes Critical," Science 279(1998):988-989. Synthetic nitrogen, from fertilizers, is overloading many regional ecosystems. Though fixed nitrogen is essential for life, the added nitrogen is too much of a good thing. Human activities, mostly synthetic fertilizers, but also fossil fuel burning, especially in automobiles, produce 60% of all the fixed nitrogen deposited on land each year. The situation is changing quite rapidly. (v9,#1)

Moffett, George, "Reining in the World's Galloping Population," The Christian Science Monitor 86 (17 August 1994): 7-14. (v5,#3)

Moffett, George, "UN Population Conference Meets Religious Resistance," The Christian Science Monitor 86 (6 September 1994): 1, 4. (v5,#3)

Moffett, George. "Promise of Rice Aplenty for World is Limited by Shrinking Resources." The Christian Science Monitor, June 21, 1995, pp. 1, 18. (v6,#2)

Moffett, Mark W., "Tree Giants of North America," National Geographic 191(no. 1, January 1997):44-61. New discoveries in the difficult-to-reach forest canopies of the Pacific Northwest. With brief remarks about the ethics of climbing, which damages the trees and the community of life in the canopies, whether done by scientists or for increasingly popular sport tree climbing. (v8,#1)

Mohai, P., "Dispelling Old Myths: African American Concern for the Environment," Environment 45(no. 5, 2003): 10-27. (v 14, #3)

Mohai, P. "Black environmentalism." Social Science Quarterly 4(1990):744-765.

Mohai, Paul and Ben W. Twight, "Age and Environmentalism," Social Science Quarterly 68(1989):798-815. (v8,#3)

Mohai, Paul, Jakes, Pamela. "The Forest Service in the 1990s: Is It Headed in the Right Direction?" Journal of Forestry 94(no.1, Jan.1996):31. (v7,#1)

Mojtabai, Cyndi. "Arsenic and Old Lace: The EPA Should Not Have Approved a Water Quality Standard for Arsenic That Is Below Natural Background Levels in City of Albuquerque v. Browner." Natural Resources Journal 35, no.4 (1995): 997. (v7, #3)

Mol, APJ, "Joint Environmental Policymaking in Europe: Between Deregulation and Political Modernization", Society and Natural Resources 16(no.4, 2003):335-348.

Mol APJ; Spaargaren, G, "Ecological Modernization and Consumption: A Reply", Society and Natural Resources 17 (no.3, 2004): 261-265(5).

Mol, Arthur P.J. "Ecological Modernisation and Institutional Reflexivity: Environmental Reform in the Late Modern Age", Environmental Politics 5(no.2, 1996):302.

Molddan, Bedrich, and Billharz, Suzanne, eds. Sustainability Indicators: Report of the Project on Indicators of Sustainable Development. SCOPE Series No. 58. Chichester, UK: John Wiley & Sons, 1997. 400 pp. UK £ 65.00. This book is the only guide of its kind to indicators and assessment methodologies for sustainable development. Written by experts from a complementary variety of methodologies, it gives a comprehensive survey of the approaches influencing current policy and decision-making. The context is the multi-thematic program of the UN Commission of Sustainable Development (CSD), scheduled to conclude in 1997. The major divisions of the book are: Indicators and Their Use--Information for Decision-Making; The Big Picture--Comprehensive Approaches; Pieces of the Greater Picture; National Level Indicators; Research Needs. (v8,#3)

Molina, Edna. "Informal Non-Kin Networks among Homeless Latino and African American Men: Form and Functions," American Behavioral Scientist 43(No.4, 2000). Includes relations to environmental justice. (v.11,#1)

Moline, Jon N., "Aldo Leopold and the Moral Community," Environmental Ethics 8(1986):99-120. An important and original analysis of the central elements of Leopold's land ethic. Moline is interested in balancing ecosystemic holism with a concern for individual human rights. He argues that Leopold is an "indirect holist" who used ecological function as the value criterion for judging principles and rules, not individual acts in the environment. This interpretation of Leopold avoids the problems of extreme holism (loss of individual value autonomy) and extreme individualism (no value for species or systems). (Katz, Bibl # 1)

Moline, Jon N. "Aldo Leopold and the Moral Community." Environmental Ethics 8(1986):99-120. Aldo

Leopold's land ethic calls for an extension of ethical consideration to nonhuman components of the complex system he called "the land." Although the basis for this extension was holistic, interpretations of Leopold's holism leave one baffled at how he could see his land ethic as an extension of a system which recognizes individual human rights. Leopold's critics and exponents alike have focused on the holism expressed in his definition of right and wrong. Both regard it as a working criterion of morality to be applied directly to conduct, act by act. Both are mistaken. Leopold was an indirect holist, not a direct one. That is, he applied his holistic definition of right and wrong not as a rule for judging conduct directly, case by case, but as a principle for judging conduct only indirectly by judging the rules, tastes, predilections, practices, and attitudes which influence it. Moline is in the philosophy department, University of Wisconsin, Madison, WI. (EE)

Moll, Gary, and Sara Ebenreck, eds., Shading Our Cities: A Resource Guide for Urban and Community Forests. Washington, D.C: Island Press, 1989. Pp. xvii, 329. Published by the American Forestry Association, this a wide-ranging look at the role of trees in the urban landscape---i.e., in human life. Topics include a discussion of value (Sara Ebenreck, "The Values of Trees,"), the sense of "place," practical advice on citizen advocacy, and computer software. (Katz, Bibl # 2)

Moller, H. "Lessons for Invasion Theory from Social Insects", Biological Conservation 78(no.1/2, 1996):125.

Moltmann, Jürgen, God in Creation: A New Theology of Creation and the Spirit of God. San Francisco: Harper and Row, 1985. Published in the U.K. as God in Creation: An Ecological Doctrine of Creation. London: SCM Press, 1985. A Biblical theology of creation, in marked contrast to key themes in Moltmann's previous work. A trinitarian, messianic, eschatological theology of creation oriented by the concept of the Sabbath as the goal of creation. In contrast to monotheistic theology, trinitarian theology supports relatedness, participation, and interpenetration, and emphasizes God's immanence in creation. An ecological theology will turn away from anthropocentrism for a cosmological theocentrism in which the Sabbath, not humanity, is the crown of creation. Humans are the crown of creation only in and as a community that is part of nature.

Moltmann, Jürgen, Wolterstorff, Nicholas, and Charry, Ellen T., A Passion for God's Reign: Theology, Christian Learning and the Christian Self. Edited by Miroslav Volf. Grand Rapids, MI: Erdmans, 1998. 112 pages. Of interest here because Moltmann, the celebrated German theologian, calls for "a new theological/ecological architecture wherein we will realize "it is not the human being that is the measure of all things, but rather God, who created all life" (p. 20). Moltmann foresees "an ecological culture" in the next century (p. 28). Only so can humankind and the Earth survive. (v.10,#1)

Moltmann, Jürgen. God in Creation: A New Theology of Creation and the Spirit of God, trans. Margaret Kohl. San Francisco: Harper and Row, 1985.

Molvar, Erik, The Trail Guide to Bob Marshall Country. Helena, MT: Falcon Press, 1994. Paper, 294 pages. \$ 19.95. The first complete trail guide to the crown jewel of the American wilderness system, the vast two-million-acre Bob Marshall, Great Bear, and Scapegoat Wilderness Complex. Over 100 trails described in detail. Molvar, who studied wildlife biology at the University of Montana, has hiked more than a thousand miles in the Bob Marshalls, including all the trails in the book. (v5,#3)

Monamy, Vaughan, Animal Experimentation: A Guide to the Issues. New York: Cambridge University Press, 2000. The principal ethical issues and arguments in the debate over experimenting with animals. Monamy is at Australian Catholic University, North Sydney, Australia. (v.13,#4)

Monbiot, George, Manifesto For A New World Order. New York: The New York Press, 2003. In his review essay, "Which Way Forward?", David Orton calls it "an intelligently written and important book

with some new ideas by a progressive journalist of the British Left, although I do not agree with the overall thesis. The thesis urged on us is to take over and democratize globalization. [Monbiot] wants a 'free trade' world." The complete essay: http://home.ca.inter.net/~greenweb/New_World_Order.html.

Monday Morning, a periodical for Presbyterian pastors, has been running a series of short articles, "Restoring Creation: What the Churches Are Doing," that features specific local churches, for example the New Providence Presbyterian Church of Maryville, TN in the May 6, 1991 issue, and the Outdoor Ministries Unit of the Presbytery of Detroit at the Howell Conference and Nature Center, in the June 1991 issue. (v2,#2)

Mondt, Rod. "Real Work and Wild Vision," Wild Earth 5, no. 4 (Winter 1995): 68- . (v6,#4)

Monist, The, April 1992, vol. 72, no. 2, is on "The Intrinsic Value of Nature." The issue was released September 1992. J. Baird Callicott is the issue editor. Articles: John O'Neill, "The Varieties of Intrinsic Value," Robert Elliot, "Intrinsic Value, Environmental Obligation and Naturalness," Tom Regan, "Does Environmental Ethics Rest on a Mistake?" Eugene C. Hargrove, "Weak Anthropocentric Intrinsic Value," Bryan G. Norton, "Epistemology and Environmental Values" Jim Cheney, "Intrinsic Value in Environmental Ethics: Beyond Subjectivism and Objectivism," Anthony Weston, "Between Means and Ends," Holmes Rolston, III, "Disvalues in Nature." A copy of this single issue may be obtained for \$ 7.00 from The Monist, P. O. Box 600, La Salle, IL 61301. (v3,#3)

Monroe, MC; Long, AJ; Marynowski, S, "Wildland Fire in the Southeast: Negotiating Guidelines for Defensible Space", Journal of Forestry 101(no.3, 2003):14-19.

Monserud, Bruce, "Religion and Ecology: Visions for an Emerging Academic Field: Consultation Report," Worldviews 6(2002):81-93. Report of a consultation on a Ph.D. program with a specialization in religion and ecology at the University of Florida. Presentations of four speakers are summarized, with ensuing discussion, and an assessment of possibilities in the field. (v.13,#2)

Monsma, Stephen, ed. Responsible Technology: A Christian Perspective. Grand Rapids: Eerdmans, 1986. A Christian response to the technological innovations which have brought on much of our ecological crisis.

Montaigne, Fen, "Gorbachev: From Red to Green," Audubon 96 (no. 6, November-December, 1994):56-57, 98. Gorbachev, who is president of the newly formed Green Cross International, says the environment is the crucial issue of the post-Communist world. (v5,#4)

Montero, Maria, Lena, Lopez. "Scientific Productivity in Environmental Psychology in Mexico: A Bibliometric Analysis," Environment and Behavior 29(1997):169.

Montesinos, Miriam. "It May Be Silly, But It's An Answer: The Need To Accept Contingent Valuation Methodology In Natural Resource Damage Assessments." Ecology Law Quarterly 26(No. 1, 1999):48- . (v10,#4)

Montgomery, Claire A. Pollack, Robert A. "Economics and Biodiversity: Weighing the Benefits and Costs of Conservation." Journal of Forestry 94(no.2, Feb.1996):34. (v7,#1)

Montgomery, Claire A., Robert A. Pollak, and White, Denis. "Pricing Biodiversity." Journal of Environmental Economics and Management 38(No. 1, July 1999):1- . (v10,#4)

Montgomery, David R. *Dirt: The Erosion of Civilizations*. Berkeley: University of California Press, 2007.

We are and long have been losing soil. Cultivated soils erode bit by bit, slowly enough to be ignored in a single lifetime but fast enough over centuries to limit the lifespan of civilizations. Montgomery is in earth science at the University of Washington.

Montgomery, John D., "The Next Thousand Years," World Policy Journal 15(no.2, 1998), 77. (v.9,#4)

Montgomery, Mark A. "Reassessing the Waste Trade Crisis: What Do We Really Know?" The Journal of Environment and Development 4 (no. 1, 1995): 1- . (v6,#1)

Monti, Michael J., Origin and Ordering: Aristotle, Heidegger, and the Production of Nature, 1997, State University of New York at Binghamton, Ph.D. thesis. 332 pages. Aristotle's concept of nature in the light of Martin Heidegger's critique of technological thinking and the influence his works have in environmental ethics. The "positive terminus" of Heidegger's critique of nature lies in the forgotten Greek understanding of nature as phusis, or self-emergence. Heidegger's lectures on Aristotle's Physics focus on nature's self-emergence. Aristotle conceives nature without imposing anthropocentric models of artistic production. Moving beyond Heidegger, Monti argues that Aristotle's teleological understanding of natural production reveals nature as a source of intrinsic good. But Aristotle also has important and uncomfortable limits, seen in his concept of species; and ecology attempts to expand our understanding of nature's intrinsic good. One can make provisional links between Aristotle's understanding of self-emergence and Heidegger's attempts at providing a post-technological way of relating to the natural world, which he calls "dwelling." The advisor was Stephen David Ross. (v.10,#1)

Montrie, C, "Review of: Barbara Freese. Coal: A Human History", Environmental History 9 (no.1, 2004): 146.

Moody, Roger. "Mining the World: The Global Reach of Rio Tinto Zinc." The Ecologist 26(Mar. 1996):46. Over the past few years, a spate of mergers and takeovers among mining multinationals has enabled them to take maximum advantage of national mining assets being privatized worldwide. British company Rio Tinto Zinc is foremost among these global giants, its position resulting in large part from its self-serving, global political infrastructure. (v7,#2)

Moon, Bruce E.. Dilemmas of International Trade. Boulder, CO: Westview Press, 1996. 192 pages. \$49.95 hb, \$14.95 pb. In the post-Cold War world, trade is the new arena for competition--between nations, between groups, between ethical and theoretical ideas. Political economist Bruce Moon puts contemporary trade events--NAFTA, United States-Japan controversies, the Uruguay Round of GATT, China's Most Favored Nation status, the founding of the World Trade Organization--into historical and theoretical perspective with the British Corn Laws, the Great Depression, the Bretton Woods system, and the origins of the European Union. Economic theory, terms, and concepts are explained and contextualized with those from international relations. Three central dilemmas are examined: the unequal distribution of income and wealth created by international trade, the tradeoff among competing values that trade requires, and the difficult interrelationship between economic and foreign policy goals within and among trading nations. Though internationally framed, each dilemma has ramifications at a variety of levels all the way down to the individual's role in the global economy--as a consumer, as a citizen, and ultimately as a moral agent. Bruce E. Moon is professor of International Relations at Lehigh University. (v7,#1)

Mooney, Edward F., ed. Wilderness and the Heart: Henry Bugbee's Philosophy of Place, Presence, and Memory. Athens, GA: University of Georgia Press, 1999. 296 pp. \$45 cloth, \$19.95 paper. Sixteen essayists trace Bugbee's explorations of thought, emotion, and the need for a sense of place attuned to wilderness. Existential philosophy, religion, and environmental studies. (v.10,#1)

Mooney, Harold A., Hobbs, Richard J., eds. Invasive Species in a Changing World. Covelo, CA: Island Press, 2000. 352 pages. Cloth \$55. Paper \$30. Global change will exacerbate the invasive species problem; invasives are themselves a global change element that need to be considered in global change scenarios. (v.11,#4)

Moore, A, "Review of: Brendan Gleeson and Nicholas Low (eds.), Governing for the Environment: Global Problems, Ethics and Democracy," Environmental Politics 11(no.4, 2002): 135.

Moore, Bryan, "National Mining Association v. United States Army Corps of Engineers: The District of Columbia Circuit Drains Wetlands Protection from the Clean Water Act." Tulane Environmental Law Journal 12(No. 1, Winter 1998):235- . (v10,#4)

Moore, Bud, The Lochsa Story: Land Ethics in the Bitterroot Mountains. Missoula, MT: Mountain Press Publishing Co., 1996. The Lochsa country is a region of the Bitterroot Mountains, Idaho. Moore is a forester with the U.S. Forest Service. (v8,#3)

Moore, David, Evans, Shelley, Nauta, Marijke M., and Rotheroe, Maurice, eds., Fungal Conservation: Issues and Solutions. Cambridge: Cambridge University Press, 2001. Threats to fungi and fungal diversity throughout the world and how fungal diversity can be conserved, for the management of nature in ways beneficial to not only humans but to the fungi. The volume results from a symposium of the British Mycological Society. Moore is at the University of Manchester, UK. (v.13, #3)

Moore, Deborah. "Think Small to Solve the World Water Crisis." The Christian Science Monitor, 12 May 1994, p. 19. Moore is a scientist with the Environmental Defense Fund's International Program, focusing on reform of the World Bank, UN agencies, and development. The World Bank tends to fund big costly projects like dams and hydro-electric projects, which often displace populations and cause long-term agricultural disasters. Alternatively, Moore argues that the World Bank should fund basic services, such as, water conservation and reuse programs, waste-water treatment, and pollution prevention. (Thanks especially to Jack Weir for monitoring the Monitor, an excellent source of serious journalism about the environment.)

Moore, Dorothy P., and Moore, Jamie W. "Posthurricane Burnout: An Island Township's Experience," Environment and Behavior 28, no. 1 (Jan. 1996): 134- . (v6,#4)

Moore, Eric. "The Case for Unequal Animal Rights." I argue that the equal rights views of Tom Regan and Evelyn B. Pluhar must be rejected because they have unacceptable consequences. My objection is similar to one made in the literature by Mary Anne Warren, but I develop it in more detail and defend it from several plausible responses that an equal rights theorist might make. I formulate a theory, a moderate form of perfectionism, that makes a value distinction between moral agents and moral patients according to which although both have rights, these rights are not equal. This theory avoids the unacceptable consequences of the equal rights view and is immune to the marginal cases arguments that typical full-personhood theories succumb to. This moderate perfectionism generates an obligation for people to be vegetarians (in most cases) and to severely curtail animal experimentation. Environmental Ethics 24(2002):295-312. (EE)Brown, Donald A. Review of Privileged Goods: Commoditization and Its Impact on Environment and Society. By Jack Manno. Environmental Ethics 24(2002):313-316. (EE)

Moore, Eric. Review of The Politics of Zoos: Exotic Animals and Their Protectors. By Jesse Donahue and Erik Trump. Environmental Ethics 30(2008):107-108. (EE)

Moore, Jason W., "The Crisis of Feudalism: An Environmental History", Organization and Environment, 15, (No. 3, 2002): 301-22. Environmental history may help explain feudalism's demise and capitalism's

ascent in the 16th century. Medieval Europe was riven by profound socio-ecological contradictions. Feudalism's environmental degradation pivoted on the lord-peasant relationship, which limited the possibilities for reinvestment in the land. Consequently, feudalism exhausted the soil and the labour power from which it derived revenues, rendering the population vulnerable to disease. The Black Death decisively altered labour-land ratios in favour of Western Europe's peasantry. This new balance of class forces eliminated the possibility of feudal restoration and led the states, landlords and merchants to favour geographical expansion – an external rather than internal spatial fix to feudal crisis. This external fix, beginning in the Atlantic world, had capitalist commodity production and exchange inscribed within it. Capitalism differed radically from feudalism in that where earlier ecological crises had been local, capitalism globalized them. From this standpoint, the origins of capitalism may shed light on today's ecological crises. Moore is a world historian and graduate student at the Department of Geography, University of California, Berkeley. (v.13, #3)

Moore, Jason W. Review of John Bellamy Foster, "Marx's Ecology: Materialism and Nature", Organization and Environment 14 (No. 2, June 2001) pp. 240-45. Moore is a world historian and a graduate student in the department of geography at the University of California at Berkeley. (v.13,#2)

Moore, Jason W. Review of Walter L. Goldfrank, David Goodman, & Andrew Szasz, (Eds.) "Ecology and the World-System", Organization and Environment 14 (No. 1, March 2001) pp.117-20. Moore is a graduate student in sociology at Johns Hopkins University. (v.13,#2)

Moore, Jonathan W., "Animal Ecosystem Engineers in Streams," BioScience 56 (no.3, March 2006): 237-246 (10). An impressive array of animals function as ecosystem engineers in streams through a variety of activities, ranging from nest digging by anadromous salmon to benthic foraging by South American fishes, from the burrowing of aquatic insects to the trampling of hippos. Because ecosystem engineers can profoundly affect stream ecosystems, and because they themselves can be significantly affected by human activities, understanding ecosystem engineering in streams is increasingly important for the management of these ecosystems.

Moore, Kathleen Dean, "(Over)Stories: Examining the Philosophical Assumptions Behind Intensively Managed Forest Plantations," Journal of Forestry 103(no.2, March 2005):97-98(2).

Moore, Kathleen Dean, Holdfast: At Home in the Natural World. New York: The Lyons Press, 1999. "We professors, who should be studying connection, study distinctions instead. In white laboratories, biologists find it easy to forget that they are natural philosophers. Philosophers, for their part, pluck ideas out of contexts like worms out of holes, and hold them dangling and drying in bright light. When people lock themselves in their houses at night and seal the windows shut to keep out storms, it is possible to forget, sometimes for years and years, that human beings are part of the natural world. We are only reminded, if we are reminded at all, by a sadness we can't explain and a longing for a place that feels like home. Sitting on a boulder whitewashed by western gulls, watching the sliding surf, I resolve to study holdfasts" (rootlike structures of algae for attachment to the substrate). Moore is in philosophy at Oregon State University. (v.11,#3)

Moore, Kathleen Dean. "The Truth of the Barnacles: Rachel Carson and the Moral Significance of Wonder." Environmental Ethics 27 (2005):265-277. Beginning with Rachel Carson's small book, *The Sense of Wonder*, I explore the moral significance of a sense of wonder—the propensity to respond with delight, awe, or yearning to what is beautiful and mysterious in the natural world when it unexpectedly reveals itself. An antidote to the view that the elements of the natural world are commodities to be disdained or destroyed, a sense of wonder leads us to celebrate and honor the more-than-human world, to care for it, to protect its thriving. If this is so, then a sense of wonder may be a virtue, perhaps a keystone virtue in our time of reckless destruction, a source of decency and hope and restraint. (EE)

Moore, Kathleen Dean, Riverwalking. New York: Lyons and Burford Publishing, 1995. 164 pages. Building around the metaphors of rivers, symbolizing the flow of life, Moore finds that lives "come together on rivers, where biology and philosophy, body and mind, experience and idea, flow side by side until they cannot be distinguished in a landscape that is whole and beautiful and ambiguous." Reflections on her experiences over the years in and around rivers. With excellent notice in the New York Times Magazine and the Chronicle of Higher Education. Moore is in philosophy at Oregon State University. (v6,#4)

Moore, Mary Elizabeth, Ministering with the Earth. St. Louis, MO: Chalice Press, 1998. 226 pages. Moore is fond of the metaphor, suitably pastoral and feminist of ministering as "quilting a life in relation to God and God's creation." A collection of insightful stories, episodes, thoughts, sermonettes, pastoral ideas and opportunities. Examples: Stephen R. L. Clark's complaints about ecological theology, planting trees at Claremont, aboriginal peoples, St. Francis. A plea for caring whether human interactions complement or disrupt earth's processes. Moore is professor of theology and Christian education at Claremont School of Theology. (v10,#4)

Moore, Michael R., Mulville, Aimee, Weinberg, Marcia. "Water Allocation in the American West: Endangered Fish Versus Irrigated Agriculture", Natural Resources Journal 36(no.2, 1996):319. (v7,#4)

Moore, Peter D., "The Exploitation of Forests," Science and Christian Belief (Exeter: Paternoster Press) 2(1990):131-140. The disharmony between humans and the natural world is nowhere better illustrated than in the study of forest ecosystems. Since prehistoric times the removal of forest cover in temperate areas has led to retrogressive practices in vegetation and this form of destruction is now accelerating in the tropics, possibly creating global problems. The stewardship demanded of Christians in Genesis requires that Christians seek alternative ways of deriving sustenance from the forests, using sustainable harvesting. Peter Moore is an ecologist in the Division of Biosphere Sciences, King's College, London. (v2,#3)

Moore, Ronald. *Natural Beauty: A Theory of Aesthetics Beyond the Arts*. Peterborough, Ontario: Broadview Press, 2008. Moore presents a new philosophical account of the principles involved in making aesthetic judgments about natural objects. He weaves historical and modern accounts of natural beauty into a "syncretic theory" that centers on key features of aesthetic experience - specifically features that sustain and reward attention. In this way, Moore claims to set his account apart from both the purely cognitive and purely emotive approaches that have dominated natural aesthetics. Moore tries to show why the aesthetic appreciation of works of art and the aesthetic appreciation of nature can be mutually reinforcing and cooperative rather than rival. He also argues for how the experience of natural beauty can contribute to the larger project of living a good life.

Moore, W. Henson. "Endangered Species Act Must Be Enforced for the Benefit of All." The Christian Science Monitor 89.101 (21 April 1997): 19.

Mora, Camilo et al, "Coral Reefs and the Global Network of Marine Protected Areas," Science 312(23 June 2006):1750-1751. Existing marine reserves are largely ineffective and as a whole remain insufficient for the protection of coral reef diversity. Mora is in marine biology, University of Auckland, New Zealand.

More, Thomas A. "Forestry's Fuzzy Concepts: An Examination of Ecosystem Management." Journal of Forestry 94, no.8 (1996): 19. (v7, #3)

Morell, Virginia. "Can the Wild Tiger Survive?" Science Vol. 317, no. 5843 (7 September 2007): 1312-14. Wild tigers are on the verge of extinction in most of Asia, and perhaps 3,000 remain, reduced from 100,000 a century back. There are perhaps stable populations only in Nepal and Bangladesh. There are some 11,000 in captivity, often genetically depauperate. China is advocating reintroducing tigers into the wild from its breeding centers, but critics doubt the wisdom of this, doubting the genetic integrity of the captive tigers, and arguing that habitat loss and poaching is the main issue.

Moreno, Peter, "Ecotourism Along the Meso-American Caribbean Reef: The Impacts of Foreign Investment," Human Ecology 33(no.2, April 2005):217-244(28).

Morenosaiz, J., F. Lozano and H. Ollero, "Recent Progress in Conservation of Threatened Spanish Vascular Flora: A Critical Review," Biological Conservation 113(no. 3, 2003): 419-431. (v 14, #3)

Moretti, Laura A. "Reflections on the Normal Majority," The Animals' Agenda 17(no.4, 1997):19. Moretti tells of being exasperated by members of the movement's confrontational, intolerant "lunatic fringe"--and why she loves them. (v8,#3)

Moretti, Laura A. "Mission Possible: Ending Four Abusive Animal Attractions," The Animals' Agenda 17(no.3,1997):22. How to use existing momentum to rescue a chimpanzee, an orca, and several bears from abysmal lives at tourist attractions. (v8,#3)

Morey, Edward R., Waldman, Donald M., "Measurement Error in Recreation Demand Models: The Joint Estimation of Participation, Site Choice, and Site Characteristics," Journal of Environmental Economics and Management 35(no.3, 1998), 262. (v.9,#4)

Morgan, J. Mark, "Resources, Recreationists, and Revenues: A Policy Dilemma for Today's State Park Systems," Environmental Ethics 18(1996):279-290. Many state park systems across the U.S. are facing a controversial policy issue over the three R's: resources, recreationists, and revenues. It is becoming increasingly difficult for state parks to protect the resources and allow for public enjoyment, mainly because of political demands for increased revenue. As a result, many state park systems have built elaborate facilities for visitors. Are these park improvement projects motivated by a sincere desire to satisfy diverse user groups or simply another way of generating revenue for state governments? What are the 'hidden' costs of park development? I discuss the policy implications for state park management, along with some philosophical issues concerning the utilization of publicly owned natural resources. Morgan is in Horticulture, Forestry and Recreation Resources, Kansas State University. (EE)

Morgan, Marlo, Mutant Message Down Under. Lees Summit, MO: MM CO, 1991. 191 pages. New York: HarperCollins, 1994. 187 pages. Marlo Morgan, from Kansas, goes on a three-month barefoot walk with an Australian aboriginal tribe across the continent, learning their wisdom. A New York Times best-seller, seemingly appreciating the native wisdom of a tribe who sustain themselves in the desert by magical powers and mystical community, though more fiction than fact about actual aboriginal wisdom. But see a review by Val Plumwood in Environmental Ethics 18(1996):431-435.

Morgan, Marlo, Mutant Message Down Under and Jackson, Michael, At Home in the World. Reviewed by Val Plumwood. Environmental Ethics 18(1996):431-435. (EE)

Morgan, Paul A., and Scott J. Peters, "The Foundations of Planetary Agrarianism. Thomas Berry and Liberty Hyde Bailey," Journal of Agricultural and Environmental Ethics 19(2006):443-468. The challenge of pursuing sustainability in agriculture is often viewed as mainly or wholly technical in nature, requiring the reform of farming methods and the development and adoption of alternative technologies. Likewise, the purpose of sustainability is frequently cast in utilitarian terms, as a means of protecting a valuable resource (i.e., soil) and of satisfying market demands for healthy, tasty food. Paul B. Thompson has argued that the embrace of these views by many in the consumer/environmental movement enables easy co-optation by agribusiness. It also reflects a critical weakness in this movement: a lack of commitment to philosophical principles that depart from the utilitarian premises of the industrial model of agriculture. This paper draws on the writings of Thomas Berry and Liberty Hyde Bailey to identify the philosophical principles of what we call planetary agrarianism. From the perspective of planetary agrarianism, the pursuit of sustainability is a broad and challenging moral, educational, and political task. Berry helps us see that it is fundamentally a project of worldview transition, which requires a new cultural narrative that must rival, in form and appeal, the mythic power of the utilitarian industrial vision. Liberty Hyde Bailey, author of The Holy Earth (1915) and a leader in the land-grant education and nature-study movements, took up the project of worldview transition in his life work. While in some ways dated and flawed, Bailey's writings are a valuable source of guidance for developing and pursuing a viable philosophy of agriculture for the 21st century. Keywords: agrarian philosophy - agricultural ethics - Darwinism - land-grant education - Liberty Hyde Bailey - sustainable agriculture - Thomas Berry - US agricultural history - worldview transition.

Morgan is in the Department of Professional and Secondary Education, West Chester University, West Chester, PA. Peters is in the Department of Education, Cornell University, Ithaca, NY. (JAEE)

Morgan, Richard G., Miller, Thomas. "The 'Bad Guys' Program: EPA Enforcement Enters the Computer Age." Journal of Environmental Law and Practice 3(no.4, Jan. 1996):30. The EPA has developed a new weapon against the submission of false data by regulated companies. (v7,#1)

Morgenstern, RD; Pizer, WA; Shih, JS, "Jobs Versus the Environment: An Industry-Level Perspective," Journal of Environmental Economics and Management 43(no.3, 2002):412-436. (v.13, #3)

Morgenstern, Richard D. "Environmental Taxes: Is There a Double Dividend?" Environment 38, no.3 (1996): 110. Even though environmental taxes do not always offer the dual benefits of less pollution and more government revenues, they may still be the best policy choice. (v7, #3)

Morgenstern, Richard D., ed. Economic Analyses at EPA: Assessing Regulatory Impact. Washington, D. C.: Resources for the Future, 1997. 500 pp. \$49.95. What works and what does not and why in using economic analysis to improve environmental decision making. (v8,#3)

Morgenstern, Richard D., and William A. Pizer, eds. *Reality Check: The Nature and Performance of Voluntary Environmental Programs in the U.S., Europe, and Japan*. Washington, DC: Resources for the Future Press, 2007. Contents include: (1) "Introduction: The Challenge of Evaluating Voluntary Programs" by Richard D. Morgenstern and William A. Pizer, (2) "The U.S. 33/50 Voluntary Program: Its Design and Effectiveness" by Madhu Khanna, (3) "Japan's Keidanren Voluntary Action Plan on the Environment" by Masayo Wakabayashi and Taishi Sugiyama, (4) "Climate Change Agreements in the United Kingdom: A Successful Policy Experience?" by Matthieu Glachant and Gildas de Muizon, (5) "Evaluation of the Danish Agreements on Industrial Energy Efficiency" by Signe Krarup and Katrin Millock, (6) "Assessing Voluntary Commitments in the German Cement Industry: The Importance of Baselines" by Christoph Böhringer Manuel Frondel, (7) "Evaluating Voluntary U.S. Climate Programs: The Case of Climate Wise" by Richard D. Morgenstern, William A. Pizer, and Jhih-Shyang, and Shih, (8) "The Evaluation of Residential Utility Demand-Side Management Programs in California" by Alan H. Sanstad, and (9) "Concluding Observations: What Can We Learn from the Case Studies?" by Richard D. Morgenstern and William A. Pizer.

Moriarty, Paul Veatch and Mark Woods. "Hunting [does not equal] Predation." Environmental Ethics 19(1997):391-404. Holmes Rolston has defended certain forms of hunting and meat eating when these activities are seen as natural participation in the food chains in which we evolved. Ned Hettinger has suggested that some of Rolston's principles that govern our interactions with plants and animals might appear to be inconsistent with Rolston's defense of these activities. Hettinger attempts to show that they are not. We argue that Rolston's principles are not consistent with hunting, given Hettinger's modifications. In his defense of Rolston, Hettinger has challenged animal welfare ethicists to show that they can value animal predation while consistently condemning human hunting. We answer that hunting and meat eating by humans are "cultural" rather than "natural" activities. Moriarty teaches philosophy at Longwood College, Farmville, VA. Wood is in philosophy at the University of San Diego, CA. (EE)

Moriarty, Paul Veatch, Animal Cognition and Self-Awareness (Cognitive Ethology), 1997, University of Colorado, Boulder, Ph.D. thesis, Department of Philosophy. Most cognitive psychologists see no reason to suppose that animals are aware of their own thoughts; many philosophers view self-awareness as being fundamental to our humanity, making self-awareness a dividing line between humans and (other) animals. But there is empirical evidence that some animals are self-aware, and this has profound implications for moral duties toward animals. Self-awareness comes in degrees, and varies along three independent axes: complexity of self-concept, properties attributed to the self, and degree of awareness. Mirror-self-recognition experiments provide only a limited evidence that does not bear moral weight. Animal communication provides evidence that some animals are aware of their own mental states. One result of the study is to see how the human mind fits into the natural world. The thesis advisor was Dale Jamieson. Moriarty is now teaching philosophy at Longwood College, Farmville, Virginia. (v.10,#1)

Moriarty, Paul Veatch. "Nature Naturalized: A Darwinian Defense of the

Nature/Culture Distinction." *Environmental Ethics* 29(2007):227-246. (EE)

Morishima, Gary S., "Indian Forestry: From Paternalism to Self-Determination," *Journal of Forestry* 95(Nov. 1997):15-. (v.8,#4)

Morito, Bruce, "Intrinsic Value: A Modern Albatross for the Ecological Approach," *Environmental Values* 12(2003): 317-336. The idea and use of the concept of intrinsic value in environmental ethics has spawned much debate in environmental ethics/axiology. Although for many, it seems fundamental and necessary for formulating an ethic for environmental protection, it seems to confuse and even undermine such efforts. 'Intrinsic value' is, I argue, a concept born in the Western intellectual tradition for purposes of insulating and isolating those to whom intrinsic value can be attributed from one another and their environmental context. This is especially true from the Modern period onward. When used as a basis for determining moral considerability, these Modern foundations engender contradictory and self-defeating ways of thinking about the individual/ecosystem relationship. As a result, formulations of moral sensibilities and principles become self-defeating and, vis-a-vis the ecological context, incoherent. On the critique of this Modern residue, an alternative axiological framework is built, using Anthony Weston's idea of interdependent values as a preparation for a more ecologically coherent approach to environmental protection. This approach is dialectical and attempts to formulate an ecological foundation for moral considerability. (EV)

Morito, Bruce, "Aboriginal Right: A Conciliatory Concept," *Journal of Applied Philosophy* 13(No.2, 1996):123-. (v.10,#2)

Morito, Bruce, *Thinking Ecologically: Environmental Thought, Values and Policy*. Halifax, N.S., Canada: Fernwood Publishing, 2002. C\$27.95. Foundations in metaphysics, epistemology, and axiology for developing an "ethic of attunement." A sustained argument for a shift to an ecological paradigm and how this can be carried out in a rational and systematic manner by using major historical shifts in world view as models. How dominant Western traditions have valued the environment and understood values. With a focus on axiology and the ethics of attunement, Morito builds on ideas that remain inchoate in Holmes Rolston III's work, especially his ideas about following nature. A policy section applies these concepts to sustainability and conservation. Morito is in philosophy, Athabasca University, Athabasca, Alberta, CA.

Morito, Bruce. "Language, Sustainable Development, and Indigenous Peoples: An Ethical Perspective." *Ethics and the Environment* 5(2000):47--60.

ABSTRACT: Holistic language has been employed as little more than an honorific in environmental policy formulations guided by the principle of sustainable development. In preambles of sustainable development documents, holistic language has been used to underscore the imperative of preserving ecosystem integrity and acknowledging our dependency on these systems. It has also been used to call attention to the need for a new framework of policy making, a change in direction that has been recognized as necessary for formulating environmentally sound policy. Part of this new framework involves questioning traditional concepts of the human agent and value assumptions. Yet holistic principles play virtually no substantive role in the formulation of policy. The outcome of this omission is that holism has been co-opted, rather than incorporated into sustainable development initiatives. A practical consequence of this move is that some subscribers to sustainable development principles have their values and perspectives co-opted, rather than incorporated, since the analytical system through which problems are identified and solutions developed is determined by a dominant sector of society, not by a holistic understanding of society. Aboriginal peoples have been among those whose values and perspectives have been co-opted. In 1990, I argued this discrepancy allowed holistic language to be used as a motivating device for soliciting subscribers, but had nothing to do with actual policy. Today, the problem has deepened as sustainable development has become more ubiquitous and influential. I will try to show how sustainable development deeply entrenches a tolerance for contradiction, which in turn

engenders a co-opting of Aboriginal perspectives and values by those subscribing to the dominant economic (E&E)

Morito, Bruce. "Examining Ecosystem Integrity as a Primary Mode of Recognizing the Autonomy of Nature." *Environmental Ethics* 21(1999):59-73. Attempts to come to grips with what appears to be the autonomy of nature have developed into several schools of thought. Among the most influential of these schools is the ecosystem integrity approach to environmental ethics, management and policy. The philosophical arm of the approach has been spearheaded by Laura Westra and her work in *An Environmental Proposal for Ethics*. The emphasis that this school places on pristine wilderness to model ecosystem integrity and the arguments Westra devises to justify the application of what she calls the "principle of integrity," although clear in its goal and object of inquiry, could very well retrench dualistic thinking of the sort that environmental thinkers have been trying to undermine. More importantly, I argue that Westra misses an important implication for the way in which ecosystem integrity could be used to help develop an ethic not so confined by problems of justification in attaching values to facts and descriptions to prescriptions. (EE)

Morito, Bruce. "Value, Metaphysics, and Anthropocentrism," *Environmental Values* 4(1995):31-47. The lack of metaphysical grounding of environmental values, and impatience towards the enterprise of seeking such grounding, result in a superficial and wrongheaded view of anthropocentrism. Anthropocentrism is best understood as a limiting condition, a point from which we can begin to reformulate an understanding of ourselves, our values, and our relation to the environment. It is not principally a starting point for the existence of values, as is assumed under traditional theories of anthropocentrism. To demonstrate and elaborate on this position, the paper focuses on environmental values and how we traditionally assume them to be formed and legitimated. A critique of the analyses of two prominent figures in the field of environmental ethics, Bryan Norton and Eugene Hargrove, serves as the backdrop against which an alternative view is formed. This alternative is metaphysically grounded in an ecologically informed analysis of valuational activity. Against the tradition, the argument establishes two main points: 1) that attempts to ground environmental values on human preferences, agreements, traditions, or culturally driven commitments are liable to legitimate contrary values; and 2) that an ecologically driven analysis of values shows that valuations of the environment are not fundamentally conferred onto it by human beings. Positively, the paper attempts to show that our inclusion as members of the ecological community makes our valuational activity an integral and transformational element within more comprehensive ecological processes. As such, our moral commitment to the environment must be radically reshaped in order adequately to incorporate this renewed understanding. KEYWORDS: Ecology, legitimation, moral failure, preference, preservation, triangular value relation, value conferring. Morito is in the philosophy department, University of Guelph. (EV)

Morito, Bruce. Review of *Biodiversity and Environmental Philosophy: An Introduction*. By Sahotra Sarkar. *Environmental Ethics* 30(2008):101-104. (EE)

Moritz, Craig, and Jiro Kirrawa, eds., *Conservation Biology in Australia and Oceania*. Chipping Norton, N.S.W.: Surrey Beatty and Sons, 1994.

Moritz, Craig, Jiro Kikkawa, and David Dooley, eds., *Conservation Biology in Australia and Oceania*. 500 pages, hardbound, \$ 74.95. 1993. In Australia: Surrey Beatty and Sons. In the U.S. distributed by: University of Minnesota Press. (v4,#2)

Morowitz, Harold J., "Balancing Species Preservation and Economic Considerations," *Science*, August 16, 1991, "Once the term 'value' is introduced, the question moves to economics and ethics, both of which use that construct, but in very different senses. From a narrow economic point of view, we need a monetary metric of a species value to balance benefits against costs of preservation. View from

environmental ethics no such direct measure is possible." (v2,#3)

Morrell, Virginia. "Wolves at the Door of a More Dangerous World." *Science* Vol. 319, no. 5865 (15 February 2008): 890-92. As wolves were about to be delisted as endangered species, there was considerable controversy among biologists over whether the delisting was premature. A major concern was that this returned management to state levels and required each of the states (Idaho, Wyoming, Montana) to maintain a population of 100 wolves and 10 breeding pairs. This could mean a minimum population of 300 wolves, contrasted with the present recovered population of 1,500 wolves.

Morrell, Virginia. "Into the Wild: Reintroduced Animals Face Daunting Odds." *Science* Vol. 320, no. 5877 (9 May 2008): 742-43. Conservation biologists reintroducing wildlife battle hawks, habitat loss, and poachers to give animals a second chance. They often have a technical strategy, a scientific strategy, and a socioeconomic strategy, but find that the animals have a mind of their own. Less than half of reintroduction projects are successful; but there are notable successes, and biologists are resolute.

Morrill, R., "Inequalities of Power, Costs and Benefits across Geographic Scales: The Hanford (Washington) Reservation," *Political Geography* 18(1999):1-23. How federal mandates dominate a land-use decision; Morrill thinks that regional and federal governments and metropolitan intellectual and political elites push their agenda over the needs and desires of rural, small-town residents and their local governments. One such imposed agenda is making Hanford (long a nuclear site) into a wildlife reservation. But commentators think otherwise, especially:

-Martin, Deborah G., "Transcending the Fixity of Jurisdictional Scale," *Political Geography* 18(1999):33-38. Governments are fixed by scale but the other actors have interests fluid across many scales. Environmentalists with interests at stake in Hanford as a wildlife reservation are both local and regional, federal and state. Analysis of land-use conflicts must examine the power struggles and cross-scale alliances of multiple interests and social identities.

Morris, Bruce Allen. "The Oregon Misstep and the Texas Two Step: Two Appellate Cases Expand CWA Citizen Suits", *Natural Resources & Environment* 11(no.2, 1996):50.

Morris, C. and Winter, Michael, "Integrated farming systems: the third way for European agriculture?," *Land Use Policy*. 16(no. 4, Oct 01 1999):193- . (v.11,#1)

Morris, Carol, and Wragg, Amanda, "Talking about the Birds and the Bees: Biodiversity Claims Making at the Local Level," *Environmental Values* 12(2003): 71-90. This paper adopts a social constructionist perspective to examine how the biodiversity 'claim' is constructed and contested at local level. A framework is deployed which is based on Hannigan's (1995) ideas that certain factors need to be present for an environmental claim to be legitimised within the international arena (i.e. scientific authority; popularisers; media coverage; symbolic and visual dramatisation; economic incentives and institutional sponsorship). Empirical research into the production and implementation of Oxfordshire's Biodiversity Action Plan and Farm Biodiversity Action Plans in England and Scotland is used as a vehicle to explore the legitimisation of the biodiversity claim at the local scale. The two strands of research highlight the current importance of biodiversity as a focus for environmental planning partnerships (although the extent of public 'buy-in' to the claim is unclear) and the way in which biodiversity as a 'buzzword' has been adopted by farmers with some reluctance and mainly for financial reasons. There is strong evidence that the scientific basis of the claim is crucial in terms of engendering support, and that the rhetoric employed at the local level is positive rather than a 'rhetoric of loss'. However, the need for further popularisation of the biodiversity issue is identified. Potential future lines of research enquiry are also outlined. (EV)

Morris, Douglas D. "Alabama-Tombigbee Rivers Coalition v. Department of Interior: Giving Sabers to a 'Toothless Tiger,' the Federal Advisory Committee Act." *Environmental Law* 26, no.1 (1996): 393. Morris critiques the Eleventh Circuit's decision in Alabama-Tombigbee Rivers Coalition v. Department of

Interior. With a review of the Federal Advisory Committee Act and the law of injunctions, Morris concludes that the court erred in enjoining agency consideration of information submitted by a committee that had acted in violation of FACA. (v7, #3)

Morris, Douglas W., Heidinga, Lawrence. "Balancing the Books on Biodiversity," Conservation Biology 11(no.1, 1997):287. (v8,#2)

Morris, M. C., and Weaver, S. A., "Minimizing harm in agricultural animal experiments in New Zealand," Journal of Agricultural and Environmental Ethics 16(2003):421-437. Intrusive agricultural experiments published in New Zealand in the last five years are reviewed in terms of the degree of animal suffering involved, and the necessity for this suffering in relation to research findings. When measured against animal welfare criteria of the Ministry of Agriculture, thirty-six studies inflicted "severe" or "very severe" suffering. Many of these experiments had questionable short-term applications, had an application restricted to agricultural production or economic growth, or could have been modified to prevent or reduce suffering. KEY WORDS: animal ethics committees, animal welfare, New Zealand. (JAEE)

Morris, Mary Hallock. "The Political Strategies of Winning and Losing Coalitions: Agricultural and Environmental Groups in the Debate over Hypoxia." *Politics & Policy*, Vol. 35, no. 4 (2007): 836-71. This article presents a new typology that can be used to assess the political strategies used by winners and losers, ranging from mobilization to venue shifts and issue framing, of the debate over the dead zone of the Gulf of Mexico.

Morris, Mary Hallock. "The Political Strategies of Winning and Losing Coalitions: Agricultural and Environmental Groups in the Debate over Hypoxia." *Politics & Policy*, Vol. 35, no. 4 (2007): 836-71. This article presents a new typology that can be used to assess the political strategies used by winners and losers, ranging from mobilization to venue shifts and issue framing, of the debate over the dead zone of the Gulf of Mexico.

Morris, Michael C., "Issues associated with research on sheep parasite control in New Zealand - A descriptive ethic," Journal of Agricultural and Environmental Ethics 16(2003):187-207. New Zealanders generally oppose the use of animal experimentation where there is no demonstrable and immediate benefit for human, animal, or environmental health. Intrusive experiments on sheep internal and external parasites published between 1996 and 2000 are reviewed, and discussed in relation to these public sensibilities. All the experiments reviewed would be unacceptable according to the orthodox morality of the general public. Breeding programs, rotation of grazing, "low-tech" vaccination, and in vitro models of sheep can provide insights into preventing parasite infestation without intrusive experiments. Possible changes in New Zealand animal welfare legislation and its interpretation by Animal Ethics Committees are discussed. KEY WORDS: Animal Ethics Committees, flystrike, nematodes, parasites, sheep. (JAEE)

Morris, Michael C., and Weaver, Sean A., "Minimizing harm in possum control operations and experiments in New Zealand," Journal of Agricultural and Environmental Ethics 16(2003):367-385. Pest control operations and experimentation on sentient animals such as the brushtail possum can cause unnecessary and avoidable suffering in the animal subjects. Minimizing animal suffering is an animal welfare goal and can be used as a guide in the design and execution of animal experimentation and pest control operations.

The public has little sympathy for the possum, which can cause widespread environmental damage, but does believe that control should be as painless as possible. KEY WORDS: bovine tuberculosis, immunocontraception, New Zealand, pest control, possum, Trichosurus vulpecula. (JAEE)

Morris, Michael C., "The ethics and politics of the caged layer hen debate in New Zealand," Journal of Agricultural and Environmental Ethics 19(2006):495-514. Changes in attitudes toward animal welfare, with a greater emphasis on the importance of allowing animals to express normal patterns of behavior has led to an examination of the practice of keeping hens in battery cages. There is widespread scientific consensus that the conditions of confinement and the barren nature of battery cages severely restrict hens' behavioral repertoire, and are thus detrimental to their welfare. The New Zealand Animal Welfare Act 1999, stipulates that animals must have "the opportunity to display normal patterns of behaviour." In spite of this provision, the New Zealand government has not acted in phasing out battery cages, arguing instead that there is insufficient evidence that welfare will be improved by a phase-out. There is evidence of strong industry pressure on the government, and the use of tactics common in policy considerations where changes are resisted by powerful interests. It is important that policy processes are better managed so that welfare changes are based on both public preferences and scientific knowledge, and ways of doing this are discussed. Keywords: animal welfare - layer hens - New Zealand. Morris lives in Karori, Wellington, New Zealand. (JAEE)

Morris, Simon Conway, "Evolution: Bringing Molecules into the Fold," Cell 100(2000):1-11. Earth has evolved startling diversity of life, but this biodiversity is, in molecular terms, little more than skin deep. Most, perhaps all, of the basic building blocks necessary for organismal complexity were available long before the emergence of multicellularity. How and when the gene networks and regulatory mechanisms that led to complex organs and functioning organisms were assembled is largely obscure. Co-option of previous genes and products to novel and more complex functions is common, but unpredictable. Just as the phenotypic diversity of life excites the inspiration of a naturalist, so the range of molecules and the sophistication of their biochemistries impress the molecular biologist. We little understand the underlying constraints on form and whether and how far convergences are inevitable.

Biologists shy away from such studies for two reasons. (1) If evolution is in some sense channeled, then this reopens the controversial prospect of a teleology. The constrained and inevitable process is underpinned by a purpose, a sort of biological Anthropic Principle, which broadly sets boundary conditions for evolutionary history. (2) The study of evolution is strongly historical, and the prospect of a seemingly unique trajectory of circumstances for the history of life may be discouraging to those who are seeking general principles. Here convergences may be more common and more determinative than suspected; different genetic origins produce a similar complex result. The central conundrum of evolution is: how do we balance the process of change against the emergence of form. Conway Morris is a well-known paleontologist at Cambridge University, and this is an invited "millennium review" of the field. (v.13,#4)

Morrisette, PM, "Conservation Easements and the Public Good: Preserving the Environment on Private Lands," Natural Resources Journal 41 (no. 2, 2001):373-426. (v.13,#1)

Morrison, Clark. "The Endangered Species Act in an Era of Regulatory Reform," Journal of Environmental Law & Practice 3(no.3, Nov. 1995):13- . The Endangered Species Act may be trying to do too much; federal resources must be directed in a more cost-effective manner. (v6,#4)

Morrison, Keith, "Wilderness as the Kingdom of God," Ecotheology Vol 6 (Jul 01/Jan 02):23-41. morrison@lincoln.ac.nz The Eastern Orthodox Christian tradition has a spirituality that gives rise to ecotheological reflections. The reflections are couched in existential terminology describing mystical experience as well as historical and ecological praxis. The reflections have a realist theology of the Body of Christ considered to comprise the heavenly or uncreated, and the earthly or created.

The ecotheology developed in this paper interprets a realist theology of the Body of Christ through phenomenology and systems theory in an attempt to face the contemporary concrete issues of institutionalized materialism and severe environmental and social crises. Cross-traditional insights with Mahayana Buddhist traditions are commented upon in exploration of the challenges and opportunities of interculturalism and religious pluralism. The central thread in the paper is the contemporary symbol

wilderness, exploring how it is very effective in providing an image of community that to some speaks louder than kingdom. Further, the inherent relationships between the derivatives 'wild', 'wildness' and 'wilderness' are shown to reflect the paradoxical dynamics of the realist ecotheology developed. Paradoxical links are teased out between the material and spiritual, and also between the individual body and the cosmic body.

Morrison, Micah, Fire in Paradise: The Yellowstone Fires and the Politics of Environmentalism. New York: HarperCollins, 1993. The ecosystem paradigm has become a quasi-mystical idea, shifting out of the realm of rigorous scientific inquiry and into our culture without serious challenge, promoted by environmentalists as a religion. In 1988, Yellowstone paid the price for ecosystem management as fires played out their "naturally regulating" role in the ecosystem. The blazes eventually covered 1.2 million acres, cost the taxpayer \$ 120 million, and led to three deaths. We must begin redefining the ecosystem paradigm, arguing for mankind's [sic] proper role as a wise steward of the land, not as an enemy of its "natural functions." And part of wise stewardship means sometimes protecting the forest from its natural enemy, fire. Wise use also means ruling in favor of jobs over spotted owls in the Pacific Northwest, and in favor of middle-class development over gnatcatching birds in Southern California. Morrison finds Alston Chase a role model. Morrison is senior editor of Insight magazine. (v4,#2)

Morrison, Peter, Snetsinger, Susan, and Frost, Evan. "Preliminary Results of a Biodiversity Analysis in the Greater North Cascades Ecosystem," Wild Earth 5, no. 4 (Winter 1995): 43- . (v6,#4)

Morrison, Reg, The Spirit in the Genes: Humanity's Proud Illusion and the Laws of Nature. Ithaca, NY: Cornell University Press, 1999. Humans are the worst "plague mammal" (p. 96-98). Our illusory belief in human superiority and invincibility leads us to overpopulate the Earth, resulting in wanton habitat destruction throughout the glorious nonhuman world. Human growth, pursuing humans' self interest, often escalated and justified by religious motivations, causes repeated environmental disasters. Humans are unable to be concerned with their long term self-interest. Our painful ascent to civilization has been a plague on the Earth. "We conveniently contend that we alone of all earth's species are not normal animals, an extraordinary claim that demands extraordinary proof. And none exists. Not the slightest scrap of hard evidence, either morphological or genetic, exists to suggest that Homo sapiens is not, like all other animals, a natural product of evolution. ... The only irrefutable argument in favor of humanity's specialness is in fact purely mystical--and entirely circular. The myth lives on" (pp. xiii-xiv). (One might wonder whether such an animal, alone among all other species, operating with a view of its superiority that comes to jeopardize the planet, isn't some scrap of evidence of being special.)

Morrison, Ronald P. Review of No Man's Garden: Thoreau and a New Vision for Civilization and Nature. By Daniel B. Botkin: Environmental Ethics 24(2002):433-436. (EE)

Morrison, Roy, Ecological Democracy. Boston: South End Press, 1995. 250 pages. \$ 15, paper. A broadly based critique of industrialism, exploring currently emerging ecological democracies, such as the Mondragon Cooperative system in Spain, the Seikatsu Cooperative Clubs in Japan and Coop Atlantic in Canada. A dramatically revitalized participatory democracy, which includes community control of finances, a social wage, cooperative economies, demilitarization and a solar transition. Morrison is a longtime peace and anti-nuclear activist, living in Warner, New Hampshire. (v6,#4)

Mortensen, Viggo, ed., Concern for Creation: Voices on the Theology of Creation. Special issue of Tro & Tanke: Svenska Kyrkans Forskningsrad, 1995, no. 5. Fifteen articles, all in English, from authors in various nations, under the sponsorship of the Lutheran World Federation. Samples: Per Lonning (Norway), "Creation--How It Became an Ecumenical Challenge"; Bernard Przewpzny (Italy), "The Catholic Church and Ecological Concern"; Grace N. Ndyabahika (Uganda), "The Earth Belongs to God: Women's Place in Creation." Tro & Tanke, Svenska kyrkan, 751 70 Uppsala. Phone: 018/16 96 67

Mortensen is with the Lutheran World Federation, Geneva, Switzerland. (v7,#2)

Mortimer, MJ, "Legal and Ethical Components of Forester Licensing: An Insider's View," Journal of Forestry 100(no.8, 2002): 29-33.

Mortimer, MJ; Scardina, AV; Jenkins DH, "Policy Analysis and National Forest Appeal Reform", Journal of Forestry 102 (no.2, 2004): 26-32(7).

Mortimer-Sandilands, Catriona. Review of "Earthwork: Women and Environments." Special Issue of Women's Studies Quarterly. Environmental Ethics 26(2004):437-440. (EE)

Mortlock, Annette, At the Roots of Deep Ecology, Master's Thesis, Department of Philosophy, Lancaster University, September 1991.

Mortlock, Annette, At the Roots of Deep Ecology, Master's Thesis, Department of Philosophy, Lancaster University, September 1991. (v7,#1)

Morton, Adam, "A Note on Comparing Death and Pain", Bioethics, 2 (1988): 129-35. The purpose of this note is to describe a way in which pain and death can be used to explore the evils befalling individuals of different species. It follows that the death of an animal of one species can be compared to that of another, in terms of their different relations to comparable amounts of pain. Thus, pain is used as the common currency in comparing rather different evils in different species.

Morton, Andrew, Tree Heritage of Britain and Ireland: A Guide to the Famous Trees of Britain and Ireland. Shrewsbury, UK: Swan Hill Press, 1998. ISBN 1 85310 559 7. Some magnificent trees, with excellent photographs. Fear of the forest. Tree worship. Trees in art. Conservation of trees. (v.11,#3)

Morton, Brian. "Protecting Hong Kong's Marine Biodiversity: Present Proposals, Future Challenges." Environmental Conservation 23, no.1 (1996): 55. (v7, #3)

Morton, Oliver, "Is the Earth Alive?" Discover, October 1999, pp. 96-101. Profile of James Lovelock, and an update on the Gaia hypothesis. Lovelock, speaking at a recent Oxford conference: "Gaia is a theory of science and is therefore always provisional and evolving. It is never dogmatic or certain and could even be wrong. Provisional it may be but, being of the palpable Earth, it is something tangible to love and fear and think we understand. We can put our trust, even faith, in Gaia, and this is different from the cold certainty of purposeless atheism or an unwavering belief in God's purpose. ... I have put before you the proposition that Gaia, in addition to being a theory in science, offers a world view for agnostics. This would require an interactive trust in Gaia, not blind faith. A trust that accepts that, like us, Gaia has a finite life span and is provisional" (p. 102). (v.11,#1)

Morton, R., "Review of: What Works: A Guide to Environmental Education and Communication Projects for Practitioners and Donors, edited by Martha C. Monroe," Environment and Behavior 33(no.6, 2001): 853-55. (v.13,#2)

Morton, Timothy. *Ecology without Nature: Rethinking Environmental Aesthetics*. Cambridge, MA: Harvard University Press, 2007. To have a properly ecological view, we must relinquish, once and for all, the idea of nature. Morton provides a critique of the political and ethical meanings of "place" and "space" and argues for an environmentalism better suited politically to the realities of twenty-first century life. He champions a different vision of dwelling together on a vulnerable planet, with a focus on aesthetics.

Moseley, Albert G., ed., African Philosophy: Selected Readings. Englewood Cliffs, NJ: Prentice-Hall, 1995. (v6,#3)

Moses, Marion. Designer Poisons: How to Protect Your Health and Home from Toxic Pesticides. San Francisco: Pesticide Education Center, 1995.

Mosher, Steven W. *Population Control: Real Costs, Illusory Benefits*. New Brunswick, NJ: Transaction Publishers, 2008. Mosher critiques the failures of population control programs and policies and questions the conventional notion of "overpopulation," a term without a clear meaning. Those who argue that the world is overpopulated conjure up images of poverty to justify anti-natal policies and programs, but these cause what they predict—a world that is plagued with disease that is materially poorer and less economically advanced.

Moss, M.R., "Interdisciplinarity, Landscape Ecology And The `Transformation Of Agricultural Landscapes'," Landscape Ecology 15 (No. 3, Apr 01 2000): 303- . (v.11,#2)

Motavalli, Jim, "Coming: 95% Recyclable Cars," New York Times, Sept. 19, 2005.

<http://www.nytimes.com/2009/09/19/automobiles/19CARS.html>

The European Union, in a mandate known as the End-of-Life Vehicles Directive, will require 85% of a car's materials, by weight, to be recovered and reused. In 2007, networks set up by carmakers in the European Union must be ready to accept all scrap vehicles, regardless of age, at no cost to the car's last owner. In 2015, the portion of each vehicle that should be recycled increases to 95%. The 2007 Mercedes-Benz S-Class sedan, shown recently at a Frankfurt auto show, already complies with the 2015 regulation. Honda Motors Europe is planning how to take back, over the next few years, over half a million vehicles. The U.S. has such recycling nowhere on its agenda, relying largely on voluntary compliance, market-based approaches, disliking "command and control" solutions, also claiming to have amply landfill space, unlike Europe.

Moulden, Julia and Patrick Carson, Green Is Gold (Harper Business Publications, 1991). \$ 19.95. Billed as the first practical guide for companies going green. How to develop a green corporate strategy. Carson is the vice-president for environmental affairs for Loblaw's (a food supermarket), the company that launched G.R.E.E.N., said to be one of the most successful environmentally friendly product lines in North America. The authors claim that jumping on the green bandwagon is "the biggest opportunity for business for the coming decade and the next century." (v2,#3)

Moulton, Michael P., Wildlife Issues in a Changing World. Delray Beach, FL: St. Lucie Press, 1997. 352 pages. Includes discussion of accidentally or deliberately introduced exotic wildlife, increasingly a problem on contemporary landscapes. Moulton is at the University of Florida. (v8,#2)

Mount, John R. "Southern California Edison: Incorporating Social Values into Forest Management." Journal of Forestry 94(no.2, Feb.1996):21. (v7,#1)

Mountain, Alan, Paradise under Pressure (St. Lucia, Kosi Bay, Sodwana, Lake Sibaya, Maputoland) Johannesburg: Southern Book Publishing, 1990. ISBN 1 86812 277 8. 133 pages. The St. Lucia area includes a nature reserve, including a wilderness area (the Greater St. Lucia Wetland Park), on the shoreline of northern Natal and the Indian Ocean, threatened to be mined for the rutile in the sand dunes, now forested with a rather dense coastal forest. Mining has been in progress some years in a coastal area to the south. In a celebrated conservation victory, a 1994 government board decided not to proceed with the mining, not at least at present. (v6,#3)

Mountjoy, Daniel C. "Ethnic Diversity and the Patterned Adoption of Soil Conservation in the

Strawberry Hills of Monterey, California." Society and Natural Resources 9, no.4 (1996): 339. (v7, #3)

Moxnes, E, "Uncertain measurements of renewable resources: approximations, harvesting policies and value of accuracy", Journal of Environmental Economics and Management 45(no.1, 2003):85-108.

Moy, Russell. "Advanced Batteries for Electric Vehicles", Journal of Environmental Law & Practice 4(no.3, 1996):22. Battery technology is behind two of the major limitations of electric vehicles: their modest driving range and immodest cost.

Moyers, Bill, "A Question for Journalists: How Do We Cover Penguins and the Politics of Denial?" Keynote address to annual convention of the Society of Environmental Journalists, Austin, Texas, October 1, 2005. A startling indictment of how corporations (often enlisting with the religious right) have plotted behind the scenes to eviscerate environmental regulations. This includes Moyers' own experiences with his documentaries on PBS. In one called "Trade Secrets," he showed that for over 40 years big chemical companies have deliberately withheld from workers and consumers damaging information about toxic chemicals, and found himself the target of a classic smear campaign and pressure for PBS to pull the documentary. But it ran and a year later received an Emmy for outstanding investigative reporting. Moyers' keynote address has been circulating widely on the web. Online at: http://www.sej.org/confer/past_conferences.htm

Moyle, Peter B. and Moyle, Petrea R., "Endangered Fishes and Economics: Intergenerational Obligations," Environmental Biology of Fishes 43(no. 1, 1995):29-37. The diversity of fishes is declining worldwide, and may be lost to future generations. "The best arguments for protection of biodiversity, from our perspective, are the ethical and moral arguments ... e.g. Norton, 1987, Rolston 1994). Ultimately, if these arguments do not prevail, much of the world's biodiversity is likely to be lost. In the short run, however, the most effective arguments are probably economic arguments, ranging from those that point out the limits of the Earth's ability to sustain humanity to those that deal with local issues such as the value of protecting fisheries in a particular stream." (1) The humility principle: humans must accept that technological advances will not compensate for poor technological management. (2) The precautionary principle. (3) The reversibility principle. Irreversible changes to the environment should not be made. (4) The safe minimum standard. Err on the safe side. Peter Moyle is in the Department of Wildlife, Fish, and Conservation Biology, University of California, Davis. Petrea Moyle is with the Natural Heritage Institute, San Francisco. (v.10,#1)

Muchett, F.D. ed. Principles of Sustainable Development. 1996. 200pp. \$49.95 cloth. Written for professionals involved in industries faced with environmental issues, this book brings together the collective thinking and experience of several individuals from different disciplines. It includes a history and overview. (v8,#1)

Mueller, Frank G. "Does the Convention on Biodiversity Safeguard Biological Diversity?" Environmental Values 9(2000):55-80. Abstract:

This paper attempts to assess and evaluate some of the economic implications of the Convention on Biological Diversity. After outlining the main principles and the scope of this Convention, the following issues are addressed: the determination of the 'optimal' level of biodiversity loss, the meaning of incremental costs, and monetary evaluation problems of ecological resources and the problems it poses for the funding mechanism (GEF). The paper concludes with a discussion of the issues of commercialisation and access to genetic resources.

Keywords: Ecological economics, biological diversity, monetary evaluation, commercialisation. Mueller is in the Department of Economics

Concordia University, Montreal, Quebec, Canada H3G 1MB. (EV)

Mueller, Robert. "Central Appalachian Plant Distributions and Forest Types." Wild Earth 6, no.1 (1996): 37. (v7, #3)

Mugerauer Robert. Interpretations on Behalf of Place: Environmental Displacements and Alternative Responses. Review by Timothy Casey, Environmental Ethics 20(1998):429-32.

Mugerauer, Robert. Review of Deep Design: Pathways to a Livable Future. By David Wann. Environmental Ethics 22(2000):109-110.

Muir, John, Nature Writings. Edited by Cronon, William. New York: The Library of America, 1997. \$ 35. Over 800 pages of Muir's best. (v9,#2)

Muir, Star A., and Veenendall, Thomas L., eds., Earthtalk. London: Praeger Publishers, 1996. An anthology of environmental rhetoric. Language as both asset and downfall to environmental communication, alternative rhetorics. (v.8,#4)

Mukasa, Edward E. S. "Environmental Activities and Prospects in Uganda." Environmental Conservation 22, no.4 (1995): 368. (v7, #3)

Mukerjee, Madhusree, "Trends in Animal Research," Scientific American 276 (no. 2, 1997):86-93. (v.8,#4)

Mulcahy, Nicholas J., and Josep Call, "Apes Save Tools for Future Use," Science 312(19 May 2006):1038-1040. New research suggests that great apes can anticipate future needs. Particularly, they save tools for future use, over a timespan of up to fourteen hours. But how much does this differ from many animals that do things for the future, such as birds that build nests or beavers that build dams? It is difficult to separate associative learning from clear foresight, but these authors believe they have evidence for precursors skills for planning for the future. The authors are at the Max Planck Institute for Evolutionary Anthropology.

Mulgan, T, "Neutrality, Rebirth and Intergenerational Justice," Journal of Applied Philosophy 19(no.1, 2002):3-16. (v.13, #3)

Muller, Frank, "Mitigating Climate Change: The Case for Energy Taxes", Environment, 38(No.2, 1996):12- . Carbon and energy taxes are one powerful tool in the struggle to curb carbon dioxide emissions, but climate change policymakers need to reassess how to respond to their critics. (v7,#1)

Muller Rommel, F. and Meyer, H., "Social Sciences and Environmental Sciences: A State of the Art Review," Environmental Politics 10(no.4, 2001): 49-62. (v.13,#2)

Muller Rommel, F., "The Lifespan and the Political Performance of Green Parties in Western Europe," Environmental Politics 2002(no.11, 2002): 1. (v.13,#2)

Müller, JC 1991. Lof aan die Skepper (Ps 8). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 92-104. (Africa)

Mulligan, Shane P., "For Whose Benefit? Limits to Sharing in the Bioprospecting 'Regime'," Environmental Politics 8 (No. 4, 1999 Wint): 35- . (v.11,#4)

Mullins, G., Wahome, L., Maarse, L. "Impacts of Intensive Dairy Production of Smallholder Farm Women in Coastal Kenya." Human Ecology 24(Jun. 1996):231. (v7,#2)

Mulvaney, D. J., ed., The Humanities and the Australian Environment. Available from The Secretary, Australian Academy of the Humanities, GPO Box 93, Canberra, ACT, AUSTRALIA. Australian dollars \$ 14.95, posted \$ 17.95. From a symposium at the University of Melbourne, November 1990. Includes W. S. Ramson, "Wasteland to Wilderness: Changing Perceptions of the Environment"; R. M. Jones, "Landscapes of the Mind: Aboriginal Perceptions of the Environment"; M. M. Manion, "The Humanities and the Australian Environment"; R. E. Goodin, "A Green Theory of Value"; T. R. Griffiths, "History and Natural History: Conservation Movements in Conflict?"; D. J. Mulvaney, "Visions of Environment." (v2,#3)

Mulvaney, Dustin. Review of Environmental Ethics for a Postcolonial World. By Deane Curtin. Environmental Ethics 28(2006):327-330. (EE)

Mulvaney, Tony, An Explanation, and Analysis, of Heidegger's Concepts of 'Being' and 'Clearing' and Their Application to Environmental Philosophy, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Mulvaney, Tony, An Explanation, and Analysis, of Heidegger's Concepts of 'Being' and 'Clearing' and Their Application to Environmental Philosophy, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.

Mulvaney, Dustin. Review of Environmental Citizenship. Edited by Andrew Dobson and Derek Bell. Environmental Ethics 30(2008):209-212. (EE)

Mulvihill, P. R., Baker, D. C. and Morrison, W. R., "A Conceptual Framework for Environmental History in Canada's North," Environmental History 6(no.4, 2001): 611-26. (v.13,#2)

Mumme, Stephen P., and Duncan, Pamela. "The Commission on Environmental Cooperation and the U.S.-Mexico Border Environment." The Journal of Environment and Development 5, no.2 (1996): 197. (v7, #3)

Munda, Giuseppe, "Environmental Economics, Ecological Economics, and the Concept of Sustainable Development," Environmental Values 6(1997):213-233. ABSTRACT: This paper presents a systematic discussion, mainly for non-economists, on economic approaches to the concept of sustainable development. As a first step, the concept of sustainability is extensively discussed. As a second step, the argument that it is not possible to consider sustainability only from an economic or ecological point of view is defended. Issues such as economic-ecological integration, inter-generational and intra-generational equity are considered of fundamental importance. Two different economic approaches to environmental issues, i.e. neo-classical environmental economics and ecological economics, are compared. Some key differences such as weak versus strong sustainability, commensurability versus incommensurability and ethical neutrality versus different values acceptance are pointed out. Universitat Autònoma de Barcelona, Dept of Economics and Economic History, 08193 Bellaterra, (Barcelona), Spain, Email: ieh7@cc.uab.es

Mungall, Constance and Digby J. McLaren, eds., Planet under Stress: The Challenge of Global Change. Toronto: Oxford University Press, 1990. Sponsored by the Royal Society of Canada. (v1,#2)

Munnichs, Geert, "Whom to Trust? Public Concerns, Late Modern Risks, and Expert Trustworthiness," Journal of Agricultural and Environmental Ethics 17(2004):113-130. This article discusses the conditions under which the use of expert knowledge may provide an adequate response to public concerns about high-tech, late modern risks. Scientific risk estimation has more than once led to expert controversies. When these controversies occur, the public at large--as a media audience--faces a paradoxical situation:

on the one hand it must rely on the expertise of scientists as represented in the mass media, but on the other it is confused by competing expert claims in the absence of any clear-cut standard to judge these claims. The question then arises, what expertise can the public trust? I argue that expert controversies cannot be settled by appealing to neutral, impartial expertise, because each use of expert knowledge in applied contexts is inextricably bound up with normative and evaluative assumptions. This value-laden nature of expert contributions, however, does not necessarily force us to adopt a relativist conception of expert knowledge. Nor does it imply active involvement of ordinary citizens in scientific risk estimation—as some authors seem to suggest. The value-laden, or partisan, nature of expert statements rather requires an unbiased process of expert dispute in which experts and counter-experts can participate. Moreover, instead of being a reason for discrediting expert contributions, experts' commitment may enhance public trustworthiness because it enlarges the scope of perspectives taken into account, to include public concerns. Experts who share the same worries as (some of) the public could be expected to voice these worries at the level of expert dispute. Thus, a broadly shaped expert dispute, that is accessible to both proponents and opponents, is a prerequisite for public trust. Keywords: expert controversies, late modern risks, public trust. Munnichs is from Wageningen, The Netherlands. (JAEE)

Munson-Boyers, Laurel, "Wilderness Progress in Namibia," International Journal of Wilderness 2 (no. 3, December, 1996):42. Wilderness in a developing country, one with 35 to 40% unemployment, 30 to 40% illiteracy, and also with spectacular and silent expanses of wildlands. A symposium was held there with 100 participants on wilderness designation in Africa. (v8,#1)

Munthali, SM; Mkanda, FX, "The plight of Malawi's wildlife: Is trans-location of animals the solution?," Biodiversity and Conservation 11(no.5, 2002):751-768. (v.13, #3)

Munton, R, "Land and limits: interpreting sustainability in the planning process," Land Use Policy 19(no.4, 2002): 333-334.

Munton, Richard. "Engaging Sustainable Development: Some Observations on Progress in the UK," Progress in Human Geography 21(no.2, 1997):147. (v8,#3)

Muradian, R; MartinezAlier, J; Correa, H, "International Capital Versus Local Population: The Environmental Conflict of the Tambogrande Mining Project, Peru," Society and Natural Resources 16(no.9, 2003):775-792. (v.14, #4)

Murchison, Kenneth M., "Environmental Law in Australia and the United States: A Comparative Overview," Boston College Environmental Affairs Law Review 22 no. 3 (Spring 1995): 503- . (v6,#2)

Murphey, Nancy, and George F. R. Ellis, On the Moral Nature of the Universe. Minneapolis, MN: Fortress Press, 1996. How theology, ethics, and the sciences relate to each other. A search for an integrated view in a time of unprecedented complexity and uncertainty. The methods of inquiry and the contributions of each discipline in understanding nature. (v7,#4)

Murphy, Alexander B., "The role of geography in public debate," Progress in Human Geography 29(no.2, April 2005):165-193(29).

Murphy, Andrew R. "Environmentalism, Antimodernism, and the Recurrent Rhetoric of Decline." Environmental Ethics 25(2003):79-98. I explore the main features and historical pedigree of antimodern environmental declinism, a prominent family of contemporary critiques that ascribes responsibility for environmental ills to the legacy of the Scientific revolution or "modernity" more generally. I argue that each of its three central oppositions (to the human/nature dichotomy, the dominance of scientific method,

and industrialism and technology) are part of a long-standing rhetorical tradition, and are neither unique nor unprecedented. I stress the communicative, narrative, persuasive, and political nature of the environmental project, rather than its claims to have arrived at an objective description of unprecedented ecological damage in late modernity. This view is perhaps less convincing to an audience looking for certainty in an age of science, but it is more faithful to the attenuated, mediated ways in which we experience and make sense of the world around us. (EE)

Murphy, Brian L. and Robert D. Morrison, eds. *Introduction to Environmental Forensics*, 2nd ed. San Diego: Elsevier, Academic Press, 2007. Techniques and analysis of the possibilities, limits, bias, and misapplications of environmental forensics with case studies, including environmental disasters.

Murphy, Charles M. At Home on Earth: Foundations for a Catholic Ethic of the Environment (New York: Crossroad, 1989). (v1,#1)

Murphy, Dean E., "Study Finds Climate Shift Threatens California," New York Times, August 17, 2004, A 19. Temperatures rising could lead to a seven-fold increase in heat-related deaths in Los Angeles and imperil the state's wine and dairy industries. (v. 15, # 3)

Murphy, Dennis D., and Barry R. Noon. "The Role of Scientists in Conservation Planning on Private Lands." *Conservation Biology* Vol. 21, no. 1 (2007): 25-28. Ten rules.

Murphy, Glen E. et al., "Economics of Intensively Managed Forest Plantations in the Pacific Northwest," Journal of Forestry 103(no.2, March 2005):78-82(5).

Murphy Joseph, and Les Levidow, *Governing the Transatlantic Conflict over Agricultural Biotechnology*. Reviewed by Kate Getliffe and Jane Calvert, *Environmental Values* 16(2007):279-281.

Murphy-Lawless, Jo, "The Impact of BSE and FMD on Ethics and Democratic Process," Journal of Agricultural and Environmental Ethics 17(2004):385-403. The recent crises of BSE and FMD in the United Kingdom have revealed widespread concerns on the part of farmers and consumers about government regulations and handling of animal movements, animal welfare, and food safety. Both crises raised issues of government accountability and the lack of openness in public debate. The issues of democratic process and decision-making were especially strong in relation to the mass slaughter policy of the government to control FMD. This article explores public disquiet about these matters, as expressed through the reports of two public inquiries, and the perceived links between government decision-making and the needs of global agribusiness, to the detriment of family farms and animal welfare. In light of the growing evidence about the environmental and economic costs of agribusiness, the argument is made that strong programs of citizen action, such as the Devon Foot and Mouth Inquiry, that are grounded in an ethical stance on animal welfare can challenge the perspectives of central governments about concepts of cost, efficiency, and safety in agriculture. Keywords: citizen action, democratic process, epidemic animal illnesses, global agribusiness. The author is on the School of Nursing and Midwifery Studies, Trinity College, Dublin, Ireland. (JAEE)

Murphy, Liam, and Nagel, Thomas, The Myth of Ownership: Taxes and Justice. Oxford: Oxford University Press, 2002. Taxes can be evaluated only in the context of the overall system of property rights that they help to create; we need to reconsider how our tax policy shapes our system of property rights. The authors are at New York University.

Murphy, Michael, "Achieving Economic Security with Swords and Ploughshares: The Modern Use of Force to Combat Environmental Degradation," Virginia Journal of International Law 39(1999):1181-1220.

Murphy, Patrick D., ed., Literature of Nature: An International Sourcebook. Chicago: Fitzroy Dearborn Publishers, 1998. ISBN 1-57958-010-6. Essays, selections, analysis from U.S. and Canada, England, Ireland, Wales, Scotland, France, Germany, Malta, Romania, Russia, Australia, New Zealand, Japan, Korea, China, Taiwan, Africa, the Arab world, Brazil, the Caribbean, Latin America, the Arctic, Antarctica. (v.10,#2)

Murphy, Patrick D., "Rethinking the Relations of Nature, Culture, and Agency." Environmental Values Vol.1 No.4(1992):311-320. ABSTRACT: Beginning with a critique of the Enlightenment human/nature dualism, this essay argues for a new conception of human agency based on culturopoeia and an application of an ecofeminist dialogic method for analyzing human-nature relationships, with the idea of volitional interdependence replacing ideas of free will and determinism. Further, it posits that we need to replace the alienational model of otherness based on a psychoanalytic model with a relational model of anotherness based on an ecological model, and concludes by encouraging attention to developing bioregional natured cultures in place of nation states and multinational corporations. KEYWORDS: Bioregionalism, culturopoeia, dialogics, ecology, human agency. English Department, Indiana University of Pennsylvania, 110 Leonard Hall, Indiana, Pennsylvania 15705-1094, USA.

Murphy, Patrick D., Literature, Nature, and Other Ecofeminist Critiques. Albany: State University of New York Press, 1994. 226 pages. \$ 18.95 paper. \$ 57.50 hardcover. A theoretical framework for environmental analysis, developing a conception of environmental literature with an emphasis on works by women. We need to reconceptualize woman/nature and nature/culture associations and to critique problems of the male poetic sex-typing of the planet. There is analysis of the works of Hampl, Harjo, Snyder, and Le Guin, Native Americans, Chicanas, and others. Is agency possible in a postmodern era? Murphy directs the graduate program in literature and criticism at Indiana University of Pennsylvania. (v5,#4)

Murphy, Patrick D., Understanding Gary Snyder. Columbia, SC: University of South Carolina Press, 1992. Cloth. 186 pages. Murphy examines Snyder's poetry and prose, including the Pulitzer Prize-winning Turtle Island. An introduction summarizes Snyder's career and provides an overview of the three factors Murphy finds crucial to understanding Snyder's works: Buddhism, ecology, and "field-composition" poetics of contemporary free verse. Previous critics have not recognized the extent to which these interpenetrate. With an extensive bibliography on Snyder. Murphy is in the English Department at Indiana University of Pennsylvania, and specializes in environmental writing and writers. (v3,#3)

Murphy, Patrick D. Literature, Nature, and Other: Ecofeminist Critiques. Reviewed in Environmental Ethics 21(1999):217-219.

Murphy, Patrick D. "Sex-Typing the Planet: Gaia Imagery and the Problem of Subverting Patriarchy." Environmental Ethics 10(1988):155-168. The ecology movement has recently attempted to reinvigorate the image of Earth in terms of Lovelock's and Epton's "Gaia hypothesis." I analyze the shortcomings of using Gaia imagery in the works of Lovelock, deep ecologists, feminists, and ecological poets, and conclude that while the hypothesis serves to alter consciousness, naming it Gaia reinforces the oppressive hierarchical patterns of patriarchal gender stereotypes that it opposes. We are moving toward a new paradigm of nonpatriarchal pluralistic co-evolution, but if deep ecology is going to promote fully its development, it needs to recast or cast aside Gaia imagery. Murphy is at the English department, University of Pennsylvania, Indiana, PA. (EE)

A discussion of the dangers of using the mythic idea of Gaia--the Earth Goddess--as a guiding metaphor of deep ecology and a new environmental consciousness. The idea of a feminine Gaia

reinforces oppressive hierarchical and patriarchal thinking and prevents the development of a new pluralistic non-gender paradigm of the human relation to nature. (Katz, Bibl # 2)

Murphy, Raymond, Rationality and Nature: A Sociological Inquiry. Boulder, CO: Westview Press, 1994. 295 pages. In contemporary society, the belief that reason, a distinctive characteristic of humans, enables them to reshape and master nature is contested by an alternative belief that nature is not so plastic, hence humans must adapt to nature and render development sustainable, or even limit growth. Social ecology claims that environmental problems result from institutional hierarchies and suggests decentralized institutions and egalitarian ethics. Deep ecologists stress the intrinsic value of nature and feminists postulate that women are inherently closer to nature than men. Murphy assesses these theories and goes on to propose a theory of environmental debt as a source of capital accumulation. He develops a model of "environmental classes" to understand the political and economic bases of conflict over the environment. Murphy teaches sociology at the University of Ottawa. (v7,#2)

Murphree, Marshall W. "Articulating Voices from the Commons, Interpretation, Translation, and Facilitation: Roles and Modes for Common Property Scholarship." Society & Natural Resources 10(no.4, 1997):415. (v8,#3)

Murr, Andrew, "A River Runs Through It," Newsweek, July 12, 1999, p. 46. Dams are sometimes coming down, several dozens of the 75,000 dams built on U.S. rivers. Example: Main's Edwards Dam on the Kennebec River, which produced .1 percent of Maine's power, but blocked salmon, striped bass, shad, and six other species from reaching spawning grounds. (v.11,#1)

Murray, Geoffrey, and Ian G. Cook, Green China: Seeking Ecological Alternatives, Reviewed by Udo E. Simonis, Environmental Values 15(2006):127-129.

Murray, Ian. "Eco-Censorship: The Effort to Thwart the Climate Change Debate." *The New Atlantis* No. 14 (Fall 2006): 134-37. Global warming is a serious enough subject that it needs to be debated fully, subjecting every hypothesis to rigorous testing and hard-headed analysis. When alarmists, many of them respected scientists, say the debate is over and global warming an established fact demanding urgent response, responsible scientists and policymakers need to insist that the debate is still in progress. Murray is a senior fellow at the Competitive Enterprise Institute.

Murray, John A., ed., Out Among the Wolves: Contemporary Writings on the Wolf. Anchorage, AL: Alaska Northwest Books, 1993. \$ 14.95, paper. 247 pages. Twenty selections: Adolph Murie, Aldo Leopold, Sigurd Olson, Richard Nelson, Rick McIntyre, Paul Schullery, and others, scientists, naturalists, literary authors. Murray teaches English at the University of Alaska, Fairbanks. (v7,#1)

Murray, Robert, "The Cosmic Covenant," The Ecologist 30 (No. 1, Jan 01 2000): 25-. Robert Murray reveals the ecological or cosmic origins of the Judeo-Christian tradition. (v.11,#2)

Murray, Robert. The Cosmic Covenant: Biblical Themes on Justice, Peace and the Integrity of Creation. Heythrop Monographs 7. London: Sheed & Ward, 1992.

Murray, Scott Fitzgerald, Civic Virtue and Public Policy: Discerning the Particulars of Reforming the General Mining Law of 1872, 1997, University of Nevada, Las Vegas, M. A. thesis. 220 pages. Analysis of the General Mining Law of 1872 advocating reforms to this public lands law anachronism. Drawing from Aristotle and David Hume, individuals of good character, acting as citizens in pursuit of the public good through historically informed self-government deliberate best about public policy. Through the exercise of civic virtue, incremental and acceptable solutions are most likely to be found. In this way strong ethical arguments can be made for reforming the General Mining Law. (v.10,#1)

Musacchio, L. R., "Bryn Green and Willem Vos, Threatened Landscapes: Conserving Cultural Environments," Landscape Ecology 17(no.2, 2002): 190-91. (v.13,#4)

Musschenga, Albert W., "Naturalness: Beyond Animal Welfare," Journal of Agricultural and Environmental Ethics 15(no. 2, 2002):171-186. (JAEE)

Musschenga, AW, "Identity-Neutral and Identity-Constitutive Reasons for Preserving Nature", Journal of Applied Philosophy 21 (no.1, 2004): 77-88(12).

Musu, I. and D. Siniscalco, eds. National Accounts and the Environment. Reviewed by Walter Radermacher. Environmental Values 8(1999):524. (EV)

Muszynski, A, "Two Classical Concepts of Nature Revisited", Environments 30(no.3, 2002):75-78.

Muttit, E; Marriott, J, "Cynics or saviours? the facts behind oil companies' claims of research into alternative and renewable energies," Ecologist 31(no. 6, 2001):50-51. (v.13,#1)

Muttit, Greg. "Degrees of Involvement." The Ecologist 29(No. 5, August 1999):326- . UK universities, rather than using their expertise to find solutions to climate change, are instead acting to prop up the oil industry. (v10,#4)

Myers, H, "Changing Environment, Changing Times: Environmental Issues and Political Action in the Canadian North," Environment 43(no. 6, 2001):32-44. (v.13,#1)

Myers, Jeffrey, Converging Stories: Race, Ecology, and Environmental Justice in American Literature. Athens: University of Georgia Press, 2004. Racism and environmental destruction as convergent literary themes. Myers is in English, Manhattan College, Riverdale, NY.

Myers, M. D., M.A. Ayers, J.S. Baron, P.R. Beauchemin, K.T. Gallagher, M.B. Goldhaber, D.R. Hutchinson, J.W. LaBaugh, R.G. Sayre, S.E. Schwarzbach, E.S. Schweig, J. Thormodsgard, C. van Riper III, and W. Wilde. "USGS Goals for the Coming Decade." Science Vol. 318, no. 5848 (12 October 2007): 200-01. The United States Geological Survey (USGS) sets as major research goals "understanding ecosystems and predicting ecosystem change." Perhaps somewhat surprisingly, the geological agency, far from simply mapping rocks, mineral deposits, aquifers, and rivers, says: "USGS will develop and convey a fundamental understanding of ecosystem distributions and their components and dynamics.... USGS is the primary governmental agency responsible for wildlife research and has, for example, been heavily involved in tracking bird deaths from West Nile virus." One wonders how this is shared with the U.S. Fish and Wildlife Service. Meanwhile, the USGS concern for sustainability and environmental health is welcome.

Myers, N, "Biodiversity Hotspots Revisited," Bioscience 53(no.10, 2003):916-917. (v.14, #4)

Myers, N; Mittermeier, RA, "Impact and Acceptance of the Hotspots Strategy: Response to Ovadia and to Brummitt and Lughadha," Conservation Biology 17(no.5, 2003):1449-1450. (v.14, #4)

Myers, Nancy, "The Precautionary Principle Puts Values First," Bulletin of Science, Technology and Society 22(no. 3, June 2002):210-219. The precautionary principle is an emerging principle of international law but has only recently been proposed in North America as a new basis for environmental policy. On the surface it is a simple, common-sense proposition: in the face of possible harm, exercise precaution. But the enthusiasm the principle has stirred among public advocates suggests it has a deeper

appeal. It is, in fact, based on values related to "forecaring for life" and the natural world. The principle cannot effectively be invoked without stating these values up front. The principle makes it clear that decisions and developments in science and technology are based first of all on values and only secondarily on scientific and technological fact and process. Moreover, a precautionary approach is best carried out in the context of goals that embody the values of communities and societies. Myers is with the Science and Environmental Health Network. She a former managing editor and executive director of the Bulletin of the Atomic Scientists. (v. 15, # 3)

Myers, Norman, "The World's Forests: Need for a Policy Appraisal," Science 268 (May 12, 1995): 823-24. The World Commission on Forests and Sustainable Development is soon to be established and gives promise of a better appraisal of how forests can confer their manifold benefits on society. Forests once covered more than 40% of Earth's land surface, but their expanse has been reduced by one-third, mostly since 1950. Tropical forests have been reduced by half, the fastest vegetational change of this magnitude in human history. Forestry has so far been dominated by private interests, commercial for the most part. Certain of these interests could well have an expanded role in the future, but public interests deserve to be better represented in the policy arena, especially the fast-growing interests at a global level. Myers is an environmental consultant based in Oxford, UK. (v6,#2)

Myers, Norman, "Environmental scientists: advocates as well?" Environmental Conservation 26(no. 3, Sept 01 1999):163- . (v.11,#1)

Myers, Norman, on the challenge side, and Vincent, Jeffrey R. and Panayotou, Theodore on the distraction side, "Consumption: Challenge to Sustainable Development ... or Distraction," Science 276 (4 April, 1997):53-57. Myers maintains that the problem triad of population, environment, and development is now being joined by consumption, and that first world standards of escalating consumption cannot be extended to the rest of the world, nor even maintained in the first world. Vincent and Panayotou reply that there are no inherent limits to consumption, so long as there is substitutability and recycling. Countries with high consumption also have better environmental quality, lower pollution levels, and so on. Eastern Europe, the most polluted environment in the world, was a low-consumption society. Third World nations, with dramatic environmental degradation can also be low-consumption societies. Myers replies that the Vincent and Panayotou scenario depends on markets, overlooks market externalities, and the gross inequities in who benefits from marketed consumption, and cannot be extrapolated to a global range. Myers is an environmental consultant, at Oxford University. Vincent and Panayotou are at the Harvard Institute for International Development. (v8,#2)

Myers, Norman, and Kent, Jennifer. Environmental Exodus: An Emergent Crisis in the Global Arena. Washington, DC: The Climate Institute, 1995. 214 pages. \$ 15.00 ISBN 0-9623610-2-X. (Climate Institute, 324 Fourth St., NE, Washington, DC 20002. Phone 202/547-0104. Fax 202/547-0111. A startling study made by the Climate Institute, and funded by numerous authorities: The U.S. Department of State, the Environmental Protection Agency, the United Nations Environment Programme, the United Kingdom Overseas Development Administration, the Rockefeller Foundation, and others. About 25 million people have been uprooted for environmental causes, a number that exceeds the official total of 22 million refugees who have fled civil wars and persecution. Environmental refugees are those who are forced to leave traditional habitat that has been rendered temporarily or permanently unsuitable to support human life, usually through the depletion of water, soil, and forests. The primary exodus has been from portions of Africa's Sahel, India, China, Central America, and the Horn of Africa. Environmental breakdown rarely is the sole catalyst, but combines with poverty, repressive politics, and inequitable land tenure, in a struggle for the control of available resources. With a bibliography of over 1,000 references documenting the conclusions of the study. Myers is an environmental consultant and visiting fellow, Green College, Oxford University. Kent is a research assistant on this project. Commentary in: Douglas, David, "Environmental Eviction," Christian Century 113 (11-18 Sept. 1996): 839-41. (v7, #3)

Myers, Norman, The Gaia Atlas of Future Worlds: Challenge and Opportunity in an Age of Change (New York: Doubleday Anchor Books, 1990). \$15.95. 191 pages. The present forces for change, likely outcomes with their multiple interplays, and the routes to a sustainable and viable future. Myers is an international consultant on environment, conservation, and development. (v2,#1)

Myers, Norman. "Environmental Unknowns." Science 269(1995):358-360. The most important environmental problems will probably include many unknown to us now. It is important not only to have answers to recognized questions but to ask new questions. (v6,#3)

Myers, Norman. Ultimate Security: The Environmental Basis of Political Stability. New York: W. W. Norton, 1996. 319pp. \$14.95 paper. Environmental factors such as deforestation and global warming may result in conflicts and loss of stability in the decades ahead. Seven regional and five global case studies. (v8,#1)

Myers, Norman. Ultimate Security: (New York: W.W. Norton & Co., 1993). Reviewed by Udo Simonis in Environmental Values 4(1995):185-186. (EV)

Myers, O. Gene, Review of Kellert, Stephen R., Wilson, Edward O., eds. The Biophilia Hypothesis. Environmental Ethics 18(1996):327-330. (EE)

Myers, Robert, Ruark, Greg, and Backiel, Adela, "Developing an Enduring American Agriculture," Natural Resources and Environment 12 (Fall 1997):110-. (v.8,#4)

Myerson, Allen, "U.S. Splurging on Energy After Falling Off its Diet," New York Times (10/22/98): A1. America's splurging energy use. In the 1970s and early 80s, the U.S. reduced its energy consumption even while population grew and the economy expanded. People installed thicker insulation and tighter windows, appliances and engines were made more efficient, business cut its energy use, and people wore sweaters instead of turning up their thermostats. After falling dramatically in the 1970s and early 80s, average American energy use is back up to nearly record levels (despite some gains in energy efficiency). Here are some of the reasons why. Energy prices today are lower than they were 25 years ago. Adjusting for inflation, gas is \$1 a gallon today compared to \$1.10 in 1973. A gallon of gasoline is now cheaper than a gallon of bottled water! U.S. gas prices are half what they are in Europe and Japan and U.S. consumers use twice as much energy per person as do the Europeans or the Japanese. Although houses are more energy efficient per square foot, they are getting bigger. Since 1970, average household size shrunk by one sixth and average new home sizes has grown by a one third (from 1600 to 2100 square feet). Standard ceiling height has gone from eight to nine feet. Like the trend in sports utility vehicles (SUVs), we can't seem to make houses big enough. Furthermore, homes are now stuffed with energy-hungry features. Air conditioners are now in 80% of homes (up from 40%), 57% of homes now have dishwashers (up from 17%), plus many homes now have Jacuzzis, security systems, computers, an on and on. Many of these gadgets suck electricity full time; they are never really off (though dormant, they are ready at the push of a button). Today in the U.S., energy consumption per person in the home is the same as in 1973. Electric utilities are now cutting the reimbursements they used to give for installing more efficient heating, cooling, and lighting.

On the roads, next year Americans will burn more fuel per person than in 1973, before the government set automobile fuel efficiency standards. Today people are driving more. Suburbs continue to sprawl--the average commute has grown one third in the last dozen years (to eleven and a half miles). Nearly one in five households has three or more cars (up from one in twenty-five in 1970). More people are driving light trucks (minivans, SUV and pickups) which now account for 50% of auto purchases and are exempt from fuel efficiency and some pollution standards. In the 1990s, average fuel efficiency of autos has not increased (after rising for a decade and a half). Cars are becoming more powerful: Average

auto horsepower is up from one hundred to one hundred-fifty in the last dozen years. Only 5% of Americans ride mass transit and that number is declining. Business use of energy has also jumped up 37% in last dozen years, despite the economy's shift from smokestack industries to software and entertainment (business use of energy had dropped 18% from 1973 to 1983).

With greater energy use comes greater dependence on foreign oil (now 50%, up from 35% in 1973) and increasing military expense of defending access to it. The more energy we use, the more difficult it will be to try to stem possible global warming. The U.S. is committed to reducing our greenhouse gas output by 7% (from 1990) levels by the year 2010; this is a 33% cut in projected growth of our greenhouse emissions. Our energy use also is responsible for oil pipe lines and drilling platforms in environmentally sensitive areas, and thus this use contributes to oil spills and related environmental degradation. Finally, almost all of the energy we use comes from fossil fuels, which are not a renewable source of energy and hence such a lifestyle is not a sustainable one. (v.9,#4)

Myerson, George, and Rydin, Yvonne, The Language of Environment: A New Rhetoric. London: UCL Press, 1996. An extensive overview of styles of rhetoric concerning the environment. The environmental ethos, metaphorical argumentation, environmental irony, and the dialectic of catastrophe. (v.8,#4)

Myhr, Anne Ingeborg, and Traavik, Terje, "Genetically modified (GM) crops: Precautionary science and conflicts of interests," Journal of Agricultural and Environmental Ethics 16(2003):227-247. Risk governance of GM plants and GM food products is presently subject to heated scientific and public controversies. Scientists and representatives of the biotechnology industry have dominated debates concerning safety issues. The public is suspicious with regard to the motives of scientists, companies, and political institutions involved. The dilemmas posed are nested, embracing value questions, scientific uncertainty, and contextual issues. The obvious lack of data and insufficient information concerning ecological effects call for application of the Precautionary Principle (PP). One of our major conclusions is that precautionary GMP usage requires risk assessment criteria yet undeveloped, as well as broader and more long-term conceptions of risk, uncertainty, and ignorance. KEY WORDS: conflicts of interests, genetically modified (GM) plants, GM food, the Precautionary Principle, public trust, scientific uncertainty, substantial equivalence. (JAEE)

Myhr, Anne Ingeborg and Traavik, Terje, "Sustainable development and Norwegian genetic engineering regulations: Applications, impacts, and challenges," Journal of Agricultural and Environmental Ethics 16(2003):317-335. The main purpose of The Norwegian Gene Technology Act (1993) is to enforce containment of genetically modified organisms (GMOs) and control of GMO releases. Furthermore, the Act intends to ensure that "production and use of GMOs should take place in an ethically and socially justifiable way, in accordance with the principle of sustainable development and without detrimental effects to health and the environment." We have investigated the extent to which the sustainability criteria were decisive for the destiny of one approved and one declined application of genetically modified plant release. KEY WORDS: consensus conferences, GMO regulation, the Norwegian Gene Technology Act, the notion of equal distribution, the Precautionary Principle, public perception, scientific uncertainty, sustainable development. (JAEE)

Myhr, Anne Ingeborg, and Traavik, Terje, "The Precautionary Principle: Scientific Uncertainty and Omitted Research in the Context of GMO Use and Release," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):73-86. Commercialization of genetically modified organisms (GMOs) have sparked profound controversies concerning adequate approaches to risk regulation. Scientific uncertainty and ambiguity, omitted research areas, and lack of basic knowledge crucial to risk assessments have become apparent. The objective of this article is to discuss the policy and practical implementation of the Precautionary Principle. A major conclusion is that the void in scientific understanding concerning risks

posed by secondary effects and the complexity of cause-effect relations warrant further research. Initiatives to approach the acceptance or rejection of a number of risk-associated hypotheses is badly needed. Further, since scientific advice plays a key role in GMO regulations, scientists have a responsibility to address and communicate uncertainty to policy makers and the public. Hence, the acceptance of uncertainty is not only a scientific issue, but is related to public policy and involves an ethical dimension. KEY WORDS: extended consent, GMO, Precautionary Principle, omitted research, scientific uncertainty, secondary effects. Myhr and Traavik are with the Department of Microbiology and Virology, University of Tromsø and Norwegian Institute of Gene Ecology, Tromsø, Norway. (JAEE)

Myskja, Bjorn K., "The Moral Difference between Intragenic and Transgenic Modification of Plants," Journal of Agricultural and Environmental Ethics 19(2006):225-238. Public policy on the development and use of genetically modified organisms (GMOs) has mainly been concerned with defining proper strategies of risk management. However, surveys and focus group interviews show that although lay people are concerned with risks, they also emphasize that genetic modification is ethically questionable in itself. Many people feel that this technology "tampers with nature" in an unacceptable manner. This is often identified as an objection to the crossing of species borders in producing transgenic organisms. Most scientists reject these opinions as based on insufficient knowledge about biotechnology, the concept of species, and nature in general. Some recent projects of genetic modification aim to accommodate the above mentioned concerns by altering the expression of endogenous genes rather than introducing genes from other species. There can be good scientific reasons for this approach, in addition to strategic reasons related to greater public acceptability. But are there also moral reasons for choosing intragenic rather than transgenic modification? I suggest three interrelated moral reasons for giving priority to intragenic modification. First, we should respect the opinions of lay people even when their view is contrary to scientific consensus; they express an alternative world-view, not scientific ignorance. Second, staying within species borders by strengthening endogenous traits reduces the risks and scientific uncertainty. Third, we should show respect for nature as a complex system of laws and interconnections that we cannot fully control. The main moral reason for intragenic modification, in our view, is the need to respect the "otherness" of nature.

Keywords: biotechnology - ethics - intragenic - natural species - transgenic.

Myskja is in the Department of Philosophy, NTNU Trondheim, Trondheim, Norway. (JAEE)

Naar, Jon. Design for a Livable Planet: How You Can Help Clean Up the Environment, New York: Harper and Row, 1990. \$ 12.95. (v1,#2)

Nabhan, Gary Paul, ed., Counting Sheep: Twenty Ways of Seeing Desert Bighorn. Tucson: University of Arizona Press, 1993. 260 pages. \$ 16.95 paper. \$ 29.95 cloth. Twenty persons from different disciplines and cultures focus their attention on just one animal, the desert bighorn. (v4,#3)

Nabhan, Gary Paul, Cultures of Habitat. Washington, DC: Counterpoint, 1997. "The term habitat is etymologically related to habit, inhabit, and habitable, it suggest a place worth dwelling in one that has abinding qualities. ... culture implies that we learn from our elders and neighbors a way of living that is more refined or better adapted than our genes alone can offer" (p. 3). (v.11,#1)

Nabhan, Gary Paul, "The Parable of the Poppy Bee: Why Should We Save Those Spineless Critters?" Nature Conservancy 46 (no. 2, March/April 1996):10-15. "Spineless or not, native pollinators have consistently provided our croplands and wildlands with the kind of support that has kept our country fruitful. Let us remember them every time we smell a poppy, or take a bite into a delicious, red apple or munch on almonds. Let us now praise the not-so-famous pollinators, and honor our collective debt to them" (p. 15). A theme developed at more length in Nabhan and Buchmann, The Forgotten Pollinators. Nabhan is director of science at the Arizona-Sonora Desert Museum. (v7,#1)

Nabhan, Gary Paul and Holdsworth, Andrew. "State of the Sonoran Desert Biome." Wild Earth 9(No. 2,

Summer 1999):71- . (v10,#4)

Nabhan, Gary Paul. "The Pollinator and the Predator", Wild Earth 6(no.3, 1996):24. (v7,#4)

Nabhan, Gary Paul and Stephen Trimble, The Geography of Childhood: Why Children Need Wild Places. Boston: Beacon Press, 1994. \$ 22.00 hardcover. Eight essays about the importance for children of the connection to the natural world. The authors recall rural and urban children, their own childhood, their experiences as fathers with their children, fieldwork with Mexican and Indian children, and ask about the merits and demerits of nature for children on television. "A Child's Sense of Wildness," "The Scripture of Maps, the Names of Trees: A Child's Landscape," "Going Truant: The Initiation of Young Naturalists," "A Land of One's Own: Gender and Landscape," "Children in Touch, Creatures in Story," "A Wilderness with Cows: Working with Landscape," "Learning Herps," and "Sing Me Down the Mountain: A Father's Landscape." (v5,#3)

Nabhan, Gary Paul, "The Killing Fields: Monarchs and Transgenic Corn," Wild Earth 9 (No. 4, Wint 1999): 49- . (v.11,#2)

Naburrs, GJ; Paivinen, R; Schelhaas, MJ; Pussinen, A; Verkaik, E; Lioubimow, A; Mohren, F, "Nature-Oriented Forest Management in Europe: Modeling the Long-Term Effects," Journal of Forestry 99(no. 7, 2001):28-34. (v.13,#1)

Nadkarni, M.V. and V. Govindaru. "Nobody's Child: The Economic and Institutional Aspects of Soil Conservation in India." The Journal of Environment and Development 4 (no. 1, 1995):171- . (v6,#1)

Nadkarni, Nalini M., "Not Preaching to the Choir: Communicating the Importance of Forest Conservation to Nontraditional Audiences," Conservation Biology 18(no.3, 2004):602-606. (v. 15, # 3)

Nadkarni, Nolini M, ed. Monteverde: Ecology and Conservation of a Tropical Cloud Forest. New York: Oxford University Press, 1999. 560 pp. \$52, paper; \$104, cloth A guide to one of the most beloved ecotourist destinations in the world. Prominent researchers present a broad introduction to the biology of Monteverde. (v.10,#3)

Nadler, Steven. Review of Animal Consciousness. By Daisie Radner and Michael Radner. Environmental Ethics 13(1991):187-91.

Naess, Arne, Ecology, Community, and Lifestyle: Outline of an Ecosophy. New York: Cambridge University Press, 1989. Translated and revised by David Rothenberg from Ekologi, Samfunn og Livsstil. Oslo: Universitetsforlaget, 1974. (Norway)

Naess, Arne, "Living a Life that Reflects Evolutionary Insights," Conservation Biology 10(1996):1557-1559. A brief tribute to Michael Soulé. "The postulation of the inherent value of living beings and their diversity is contested by people who say that all value assertions are subjective. ... At our latest meeting it was refreshing to listen to Michael Soulé claim that conservation biology evidently is both a science and an assertion that biodiversity--a central concern of the science--is not an instrumental value but has value in itself. ... Why can't conservation biology announce the noninstrumental inherent value of biodiversity?" Naess originated the deep ecology movement and is professor emeritus, University of Oslo. (v7,#4)

Naess, Arne, "Beautiful Action: Its Function in the Ecological Crisis." Environmental Values Vol.2 No.1(1993):67-72. ABSTRACT: The distinction made by Kant between 'moral' and 'beautiful' actions is relevant to efforts to counteract the current ecological crisis. Actions proceeding from inclination may be

politically more effective than those depending on a sense of duty. Education could help by fostering love and respect for life. KEYWORDS: Beautiful actions, deep ecology, environmental education, Kant. Council for Environmental Studies, University of Oslo, PO Box 1116, Blindern 0317, Oslo 3, Norway.

Naess, Arne, "Should We Try To Relieve Clear Cases of Extreme Suffering in Nature?" Pan Ecology, vol. 6, no. 1, Winter 1991. Naess examines "the darker side of free nature." "Perseverance in the service of protecting nature, support of the deep ecology movement, does not imply any definite opinion on questions of unconditional goodness of nature as a set of ecosystems." "If adequate ecological knowledge were available, some of us would not hesitate to interfere on a large scale against intense and persistent pain." Naess would not interfere with most predation or parasitism, but thinks there are exceptions. He would, if he could, eliminate a reindeer parasite, Cephenomyia trompe, an insect whose larvae grow in the noses of reindeer and slowly suffocate them. "What do humans do when witnessing animals in what they think is unnecessary and prolonged pain? Those who intensively identify with the victims try to rescue them--provided it is not too late and a practical way is seen. Generalized, and made into a policy, rescue attempts would not amount to an attempt to interfere and reform nature." "Respect for the dignity of free nature and proper humility do not rule out planned interference on a greater scale, as long as the aim is a moderation of conditions of extreme and prolonged pain, human or nonhuman. Such pain eliminates the experience of a joyful reality. The higher levels of self-realization of a mature being require assistance to other living beings to realize their potentialities, and this inevitably actualizes concern for the sufferers." Naess is professor emeritus of philosophy at the University of Oslo and the founder of deep ecology. (v2,#1)

Naess, Arne, *The Selected Works of Arne Naess*. Volumes 1-10 Edited by Harold Glasser with assistance from Alan Drengson in cooperation with the author. The Netherlands, Spring, 2005. Publication made possible through a grant from the Foundation for Deep Ecology. The individual volumes are not available separately, the whole set must be purchased. The current price for all ten volumes from Springer is US \$1,900. ISBN: 1-4020-3727-9. Volumes:

Vol 1: Interpretation and Preciseness: A Contribution to the Theory of Communication.

Vol 2: Scepticism: Wonder and Joy of a Wandering Seeker.

Vol 3: Which World Is the Real One? Inquiry into Comprehensive Systems, Cultures, and Philosophies.

Vol 4: The Pluralist and Possibilist: Aspects of the Scientific Enterprise, Rich Descriptions, Abundant Choices, and Open Futures.

Vol 5: Gandhi and Group Conflict: Exploration of Nonviolent Resistance, Satyagraha.

Vol 6: Freedom, Emotion and Self-Subsistence: The Structure of a Central Part of Spinoza's Ethics.

Vol 7: Communication and Argument: Elements of Applied Semantics.

Vol 8: Common Sense, Knowledge, and Truth: Open Inquiry in a Pluralistic World, Selected Papers.

Vol 9: Reason, Democracy, and Science: Understanding Among Conflicting Worldviews, Selected Papers.

Vol 10: Deep Ecology of Wisdom: Explorations in Unities of Nature and Cultures, Selected Papers.

A critical appreciation of Naess and this ten volume set by David Orton is online at: http://home.ca.inter.net/~greenweb/Naess_Appreciation.html.

Naess, Arne, "The Third World, Wilderness, and Deep Ecology," in George Sessions, ed., Deep Ecology for the 21st Century (Boston: Shambhala Publications, 1994). Answers Ramachandra Guha's critique of wilderness as a first world luxury. (v7,#2)

Naess, Arne, "A Defence of the Deep Ecology Movement," Environmental Ethics 6(1984):265-270. An answer to the charges made by Watson (see 1983). Naess rests his case on the non-academical character of Deep Ecology philosophy--it is not a precise university exercise, and Watson is wrong to treat it as such. But that is just the problem with Deep Ecology: if it is to be accepted by the intellectual community, it needs to be more precise. (Katz, Bibl # 1)

Naess, Arne, Ecology, Community and Lifestyle: Outline of an Ecosophy. Translated and edited by David Rothenberg. Cambridge: Cambridge University Press, 1989. Pp. xiii, 223. This is an updated and revised version of Naess' 1976 Norwegian work of the same title; many sections have been re-written by Naess and Rothenberg, and it includes a new introduction by Rothenberg. This is the most complete expression of the philosophy of "deep ecology" by the leading thinker in the field; its availability in English is the most important development in recent years. Unlike the fragmentary articles by Naess that have been published previously, this book develops the full argument for Ecosophy T, the world-view that supports the practical platform of deep ecology. It is made clear that deep ecology is much less a system of ethics than a theory of ontology and epistemology: it is the use of ecological thinking in the construction and apprehension of the world. The central ecological insight is a relational ontology, combined with an epistemology of gestalt experience. Gestalt thinking permits the integration of fact, emotion, and value into our basic understanding of the world, and it sets the foundation for a wider identification with all of reality.

This, in turn, leads to the derivation of the key norm and ultimate goal of the system, Self-realization, where Self is conceived as "an unfolding of reality as a totality" (p. 84), with a goal of perfection. In three "less philosophical" chapters, Naess shows how this world-view can lead to practical programs in the fields of technology, economics, and politics. He concludes the book with a systematic sketch of the norms and basic principles of his personal variant of deep ecology, Ecosophy T: intrinsic value; unity, diversity, and complexity; identification with nature; and self-realization. This text greatly increases the philosophical rigor of the system of deep ecology, but the chief problem remains the starting point of immediate experience and intuition. Naess and Rothenberg each see this is an advantage, for it permits the development of personal ecosophies leading to the common practical platform of deep ecological action. Intuition is also the fundamental source of value in the total-view descriptions of the world. But it is unclear how the starting points of personal experiences/intuitions can avoid a relativity of value and world-view. Thus, fundamental differences in the practical platform should develop. (Katz, Bibl # 2)

Naess, Arne, "Comment: 'Man Apart' and Deep Ecology: A Reply to Reed," Environmental Ethics 12(1990):185-192. Naess comments on Peter Reed, "Man Apart: An Alternative to the Self-Realization Approach," Environmental Ethics 11 (1989):53-69. There is a lucid explanation of "identification" as the opposite of "alienation"---identification does not mean "resemblance."

Naess, Arne, "The Deep Ecological Movement: Some Philosophical Aspects" Philosophical Inquiry 8, nos. 1-2 (Winter-Spring 1986):10-31. A good summary of the major philosophical assumptions, arguments, and intuitions of Deep Ecology. (Katz, Bibl # 1)

Naess, Arne, "Helhetssyn, gronne kulturer og den okologiske krisen" ("Holism, Green Cultures and the Ecological Crisis). Tidsskrift for Alternativ Framtid (The Norwegian) Journal for an Alternative Future, no. 4, 1994.

Naess, Arne, "Deep Ecology" (Environmental Ethics), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 687-88. (v6,#2)

Naess, Arne. "Avalanches as Social Constructions." Environmental Ethics 22(2000):335-336.

Naess, Arne. "'Man Apart' and Deep Ecology: A Reply to Reed." Environmental Ethics 12(1990):185-92.

Naess, Arne. "A Defence of the Deep Ecology Movement." Environmental Ethics 6(1984):265-70. There is an international deep ecology social movement with key terms, slogans, and rhetorical use of

language comparable to what we find in other activist "alternative" movements today. Some supporters of the movement partake in academic philosophy and have developed or at least suggested philosophies, "ecosophies," inspired by the movement. R. A. Watson does not distinguish sufficiently between the movement and the philosophical expressions with academic pretensions. As a result, he falsely concludes that deep ecology implies setting man apart from nature--a kind of "anthropocentrism" in his terminology: humans and only humans have no right to interfere with natural processes. What the deep ecology movement insists on is rather that life on Earth has intrinsic value and that human behavior should and must change drastically--and soon. Naess is retired from the philosophy department, University of Oslo, Oslo, Norway. (EE)

Naess, Arne. Ecology, Community and Lifestyle: Outline of an Ecosophy. Reviewed in Environmental Ethics 13(1991):263-73.

Nagel, C, "Review Article: "Have we become posthuman?", N. Katherine Hayles, How We Became Posthuman," Research in Philosophy and Technology 21(no., 2001): 405-410.

Nagel, C, "Review of: Moss, P., editor Feminist Geography in Practice," Progress in Human Geography 27(no.5, 2003):671. (v.14, #4)

Nagel, Chris. Review of Merleau-Ponty and Environmental Philosophy: Dwelling on the Landscapes of Thought. Edited by Suzanne L. Cataldi and William S. Hamrick. *Environmental Ethics* 30(2008):111-112.

Nagiecki, Janusz. "Bread and Freedom: Agriculture in Poland." The Ecologist 26, no.1 (1996): 13. During the Communist era, Poland's farmers successfully resisted efforts to collectivize agriculture. As a result, small, family farms are still the norm in Poland and chemical use is rare. But market liberalization now threatens to succeed where Communism failed. In the name of increased "efficiency", the government--following the advice of the World Bank, IMF and other development agencies--aims to displace the peasantry with large, specialized farms geared towards export. (v7, #3)

Nagle, JC, "Biodiversity and Mom", Ecology Law Quarterly 30 (no.4, 2003): 991-1002.

Nagle, John Copland, and Ruhl, J. B., The Law of Biodiversity and Ecosystem Management. New York: Foundation Press, 2002. Four parts: Understanding Biodiversity. 2. The Endangered Species Act. 3. Protecting Ecosystem Diversity. 4. Protecting Global Biodiversity. Nagle is in law, University of Notre Dame. Ruhl is in law, Florida State University. (v.13,#4)

Nagpal, Tanvi. "Voices from Developing World: Progress Toward Sustainable Development," Environment 37(no.8, Oct. 1995):10- . In most of the developing world, sustainable development means first satisfying basic human needs. (v6,#4)

Nagy, Kelsi, Values in Action: A Philosophic Analysis of Moral Motivation in Two Classics of Environmental Literature. M.A. Thesis, Colorado State University, Fall 2005. Neither Kant's ethics nor utilitarianism gives a convincing account of how people are motivated to act as moral agents. Environmental literature is often a more successful way to motivate people to accept the environment as an object of moral concern. This thesis analyzes Thoreau's Walden and Leopold's A Sand County Almanac, using Harry G. Frankfurt's theory that a free action requires that a person engage in reflection, choose which value she wants, then is effectively motivated by the freely chosen value. Thoreau and Leopold use literature to engage the reader into reflection on values, specifically those economic and scientific values that have an effect upon our actions toward the environment. Narrative discourse can

lead people to reflect on values that effectively motivates action in a way that, while different than philosophic argumentation, may be an equally important discourse for moral motivation. The advisor was Holmes Rolston.

Naiman, Robert J., Rogers, Kevin H. "Large Animals and System-Level Characteristics in River Corridors," Bioscience 47(no.8, 1997):519. (v8,#3)

Naiman, Robert J., "Riparian Ecology and Management in the Pacific Coastal Rain Forest," Bioscience 50(no. 11, Nov. 1, 2000):996- . (v.12,#2)

Najam, A. et al, "From Rio to Johannesburg: Progress and Prospects," Environment 44(no.7, 2002): 26-37. (v.13,#4)

Najam, Adil, "Trade and Environment After Seattle: A Negotiation Agenda for the South," The Journal of Environment and Development 9(no.4, DEC 01 2000):405- . (EE v.12,#1)

Nakagoshi, N; Kondo, T, "Ecological land evaluation for nature redevelopment in river areas," Landscape Ecology 17(no.1SUPP, 2002):83-93. (v.13, #3)

Nakamura, Keigo; Tockner, Klement; Amano, Kunihiro, "River and Wetland Restoration: Lessons from Japan," BioScience 56 (no.5, May 2006): 419-429 (11). River and wetland restoration has emerged as a worldwide phenomenon and is becoming a highly profitable business. Researchers worldwide know a lot about restoration practices in Europe and the United States, but have only scant information about the activities in Japan, where more than 23,000 river restoration projects have been conducted during the past 15 years. Here we provide an overview of the various restoration activities in Japan and discuss the lessons that we can draw from them.

Nakamura, Masahisa. "Preserving the Health of the World's Lakes," Environment 39(no.5, 1997):16. Although the current state of the world's lakes is fairly alarming, a concerted international effort could reverse the trend toward degradation. (v8,#2)

Nally, Rm; Fleishman, E, "A Successful Predictive Model of Species Richness Based on Indicator Species," Conservation Biology 18(no.3, 2004):646-654. (v. 15, # 3)

Namkoong, Gene. "The Management of Genetic Resources: A Neglected Problem in Environmental Ethics." Environmental Ethics 4(1982):377-78.

Nanasi (Nánási), I. 1998. 1998. "Anthropological and ethical aspects of a sustainable society." Pages 57-74 in Susanne, Charles & Gallé, László eds. Ecotechnie and Sustainable Development. Szeged, Hungary: Officina, 1998. ISBN: 963-482-283-5 (v.12,#4)

Nantel, P., Bouchard, A., Hay, S. "Selection of Areas for Protecting Rare Plants with Integration of Land-Use Conflicts: A Case Study for the West Coast of Newfoundland, Canada. Biological Conservation 84(no.3, 1998):233- . (v9,#2)

Nantsou, Theodota, The Social Role of Modern Science and its Relation to the Natural World: a Critique, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.

Nantsou, Theodota, The Social Role of Modern Science and its Relation to the Natural World: a Critique, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Narayanan Vasuda, "'One Tree is Equal to Ten Sons': Hindu Responses to the Problems of Ecology, Population, and Consumption," Journal of the American Academy of Religion 65(1997):291-332. Narayanan is in religion at the University of Florida, Gainesville. (v8,#3)

Narayanan, Vasudha, "'One Tree is Equal to Ten Sons': Hindu Responses to the Problems of Ecology, Population and Consumption," Journal of the American Academy of Religion 65(1997):291-332. A reality check on India with overpopulation and dwindling reserves. Hindus of every stripe have participated in polluting the environment. An account of the resources and limitations within the many Hindu traditions to see how the interconnected problems of overpopulation, ecology, and consumption/consumerism can and have, to some extent, been addressed. The many Hindu theological texts and philosophical systems do contain engaging accounts of reality which, if understood and acted upon directly, could serve as fantastic resources for several social and moral problems. But, regrettably, in the Hindu contexts, these have limited power over ethical behavior. Narayanan is in religion at the University of Florida, Gainesville. (v.12,#2)

Narveson, Jan, Moral Matters: An Introduction. Lewiston, NY: Broadview Press, 1993. With a section on animal rights. A brief introduction for undergraduates. (v4,#1)

Narveson, Jan, Review of Tal Scriven, Wrongness, Wisdom and Wilderness. Albany: SUNY Press, 1997. Journal of Agricultural and Environmental Ethics 11(1998):58-61.

Narveson, Jan. "The Case for Free Market Environmentalism." Journal of Agricultural and Environmental Ethics 8(1995):145-156. Environmental Ethics is the ethics of how we humans are to relate to each other about the environment we live in. The best way to adjust inevitable differences among us in this respect is by private property. Each person takes the best care of what he owns, and ownership entails the free market, which enables people to make mutually advantageous trades with those who might use it even better. Public regulation, by contrast, becomes management in the interests of the regulators, or of special interests, such as lovers of rare species -not the people they're supposed to be serving. (JAEE)

Narveson, Jan. Response to Tony Smith. Journal of Agricultural and Environmental Ethics 8(1995):159-160. (JAEE)

Nasar, Jack L., ed. Environmental Aesthetics: Theory, Research, and Application. Cambridge: Cambridge University Press, 1988, 1992. 529 pages. Thirty two articles, sections include theory and method, architectural interiors, exteriors, urban scenes, natural and rural scenes, applications. Sample articles: D. Mark Fenton, "Dimensions of meaning in the perception of natural settings and their relationship to aesthetic response"; Thomas R. Herzog, "A cognitive analysis of preference for field-and-forest environments"; Kenneth T. Pearlman, "Aesthetic regulation and the courts"; Arnold Berleant, "Aesthetic perception in environmental design." Nasar is in city and regional planning, Ohio State University. (v6,#3)

Nash, J. R. and Revesz, R. L., "Markets and Geography: Designing Marketable Permit Schemes to Control Local and Regional Pollutants," Ecology Law Quarterly 28(no.3, 2001): 569-662. (v.13,#2)

Nash, James A. "Human Rights and the Environment: New Challenge for Ethics," 4(no. 2, 1992).

Nash, James A. "Ethics and the Economics-Ecology Dilemma: Toward a Just, Sustainable, and Frugal Future," Theology and Public Policy 6(no. 1, 1994).

Nash, James A., "Biotic Rights and Human Ecological Responsibilities," The Annual, Society of Christian Ethics, 1993, pages 137-162. Boston: The Society of Christian Ethics, 1993; distributed by

Georgetown University Press. The concept of biotic rights is the most interesting issue, and one of the most important, on the frontier of ethics. It points to the fundamental task of redefining responsible human relationships with the rest of the planet's biota, and grounding these human responsibilities not only, weakly, in human utility or even generosity, but also, strongly, in the just dues and demands imposed on us by the vital interests of other kinds. Biotic rights highlight the centrality of ecological justice, rather than solely benevolence. Nash is Director of the Churches' Center for Theology and Public Policy, Washington. (v4,#4)

Nash, James A. "Rio as a Political Event," (editorial), Theology and Public Policy 4(no. 1, 1992).

Nash, James A., "Toward the Ecological Reformation of Christianity," Interpretation: A Journal of Bible and Theology 50 (no. 1, January 1996): 5-15. Christian theology and ethics are largely inadequate to confront the ecological crisis of today. They are in need of reformation. At the center of Christian faith, we shall not find a mandate to pollute, plunder, and prey on the rest of nature. Instead, we shall discover that the core affirmations endow all life with a moral significance that entails human responsibility toward the whole of nature.

Nash, James A. "Ecological Integrity and Christian Political Responsibility," Theology and Public Policy 1(no.1, 1989).

Nash, James A., "The Politician's Moral Dilemma: The Moral Possibilities and Limits of Political Leadership in Confronting the Ecological Crisis," CTNS (Center for Theology and the Natural Sciences, Berkeley) Bulletin 16 (no. 1, Winter 1996):7-15. Albert Gore's Earth in the Balance reveals the moral dilemma of the politician, a prime example of both exemplary political courage and prudent political caution. Nash is director of the Churches' Center for Theology and Public Policy, Washington, DC. (v7,#2)

Nash, James A., Loving Nature: Ecological Integrity and Christian Responsibility. Nashville, Abingdon Cokesbury, 1991, 256 pages. Paper \$ 16.95. Outlines the major dimensions of today's ecological crisis and the accompanying ethical issues. Claims that the precepts of Christianity offer a strong foundation for a responsible environmental ethic. (v2,#4)

Nash, James A. Loving Nature: Ecological Integrity and Christian Responsibility. Reviewed in Environmental Ethics 15(1993):93-96.

Nash, L, "Finishing Nature: Harmonizing Bodies and Environments in Late-Nineteenth-Century California", Environmental History 8(no.1, 2003):25-52.

Nash, Madeline J., "The Fish Crisis," Time, August 11, 1997, pp. 65-67. The oceans that once seemed a bottomless source of high-protein, low-fat food are rapidly being depleted. (v8,#3)

Nash, Roderick Frazier, "Nature and Civilization: A Biocentric Solution," afterword in Jackson, William Henry and Fiedler, John, photographers, and Marston, Ed, text, Colorado 1870-2000. Englewood, CO: Westcliffe Publishers, 2000. A coffee table book with old and new photographs. Nash outlines "seven possible pillars that may help define a new wilderness philosophy." "Ours may be the last generation with the chance to make major course corrections in a mood of deliberation rather than desperation. Perhaps by tempering power with moral responsibility we can still be the capstone--not the cancer--of life on Earth" (p. 223). (v10,#4)

Nash, Roderick Frazer. *The Rights of Nature: A History of Environmental Ethics*. Translator:Yang Tongjin. (Qingdao: Qingdao Press, 1999 and 2005). (in Chinese)

Nash, Roderick, ed., American Environmentalism: Readings in Conservation History. New York: McGraw-Hill, 1990. The third, revised edition of an earlier work, the first edition was under the title: The American Environment: Readings in the History of Conservation, 1968; the second edition was in 1976. (v1,#4)

Nash, Roderick Frazier. The Rights of Nature: A History of Environmental Ethics. Reviewed in Environmental Ethics 12(1990):83-85. Also available in an Australian edition. (v1,#3)

Nash, Roderick Frazier, "Nature and Civilization: A Biocentric Solution," afterword in Jackson, William Henry and Fiedler, John, photographers, and Marston, Ed, text, Colorado 1870-2000. Englewood, CO: Westcliffe Publishers, 2000. A coffee table book with old and new photographs. Nash outlines "seven possible pillars that may help define a new wilderness philosophy." "Ours may be the last generation with the chance to make major course corrections in a mood of deliberation rather than desperation. Perhaps by tempering power with moral responsibility we can still be the capstone--not the cancer--of life on Earth" (p. 223). (v.11,#1)

Nash, Roderick Frazier, De ziran de quanli (The Rights of Nature: A History of Environmental Ethics), in Chinese translation. Yang Tonjin, translator. Qingdao: Qingdao Publishing House, 1999. (v.11,#1)

Nash, Roderick Frazier, The Rights of Nature: A History of Environmental Ethics. Madison: University of Wisconsin Press, 1989. Pp. xiii, 290. This is a work of intellectual history, not philosophy. It catalogues the growth of the idea that non-human nature deserves moral consideration, with a primary focus on American environmentalism and its antecedents in Great Britain. The book is a rich source of bibliographic and historical material, and it provides excellent summaries of the positions and arguments of philosophers, environmentalists, and other social reformers. The book has one major flaw: Nash commits himself to a model of "moral extensionism" based on the expansion of classical liberalism and "natural rights" theory. He attempts to explain all the moral positions concerning non-human nature as variations of the growth of individual human rights. But much of environmental ethics cannot be contained in such a restrictive, individualistic model, and Nash's text demonstrates this. He repeatedly cites positions that do not call for the rights of nature: "While Thoreau avoided the word 'rights'...(p. 37); "McGee was referring to the right of people to use nature, not the rights of nature..." (p. 50); Women "shy away from that staple of the liberal credo, individual rights" (p. 146). Because of this restrictive perspective, Nash mis-reads much of the current eco-philosophical literature (in Chapter 5, "The Greening of Philosophy," pp. 121-160). He conflates the ideas of individual rights, intrinsic worth, and communal holism, thus seemingly equating philosophers as diverse as Arne Naess, Paul Taylor, and Baird Callicott. Contains excellent notes and bibliographic essay. (Katz, Bibl # 2)

Nash, Roderick F., Wilderness and the American Mind, 3rd ed. New Haven: Yale University Press.

Nash, Roderick, "Soul of the Wilderness: A Wilderness Ethic for the Age of Cyberspace," International Journal of Wilderness 2 (no. 3, December, 1996):4-5. (v8,#1)

Nash, Roderick. Review of American Environmentalism: Values, Tactics, Priorities. By Joseph M. Petulla. Environmental Ethics 3(1981):375-76.

Nash, Roderick. Review of Sustaining the Earth. By John Young. Environmental Ethics 13(1991):281.

Nash, Roger, "Adam's Place in Nature: Respect or Domination?", Journal of Agricultural Ethics 3(1990):102-113. The creation story in Genesis speaks of humankind being given dominion over nature. Does this support the view that nature has solely instrumental value, and is of worth only insofar as it serves the necessities and conveniences of the human species? It is argued that these images, in their

qualification and enrichment of each other develop the idea that animals are of worth independently of their usefulness to us. Other key parts of the Bible, that at first may seem to promote unfettered domination, are shown to be more properly read as supporting an animal-benign religious ethics. Nash is in philosophy at Laurentian University, Ontario.

Nash S., "Desperately Seeking Charisma: Improving the Status of Invertebrates," BioScience 54(no.6, 1 June 2004):487-494(8). (v. 15, # 3)

Nash, S., "The Phantom Forest: Research On Gene-Altered Trees Leaps Ahead, Into a Regulatory Limbo," Bioscience 53(no. 5, 2003): 462-467. (v 14, #3)

Naskrecki, Piotr, The Smaller Majority: The Hidden World of the Animals that Dominate the Tropics. Cambridge, MA: Harvard University Press, 2005. The "non-charismatic" megafauna of tropic ecosystems, though most of the species would fit in a matchbox. Many, though photographed here, are unidentified or undescribed. The author hopes that the volume will help the public appreciate the beauty and importance of small animals, a first step toward their conservation.

Nasmyth, G, "Amazon Crime: Deep in the Amazon rainforest, a corrupt mayor and a band of pirate loggers are stealing impoverished settlers' land and stripping it of the trees on which they depend," Ecologist 34(no.4, 2004):24-29. (v. 15, # 3)

Nasr, Seyyed Hossein, "The Spiritual and Religious Background of the Environmental Crisis," The Ecologist 30 (No. 1, Jan 01 2000): 18- . The present environmental crisis is above all a conceptual and spiritual crisis. By adopting a worldview that separates humanity from Nature we have come to see what was previously a sacred Earth as a resource to be exploited for economic ends. (v.11,#2)

Nasr, Seyyed Hossein, Religion and the Order of Nature. New York: Oxford University Press, 1996. 320 pp. \$18.95 paper. The historical process through which Western civilization moved away from the idea of nature as sacred and embraced a world view that sees humans as alienated from nature and nature itself as a machine to be dominated and manipulated by humans. Nasr's goal is to negate the totalitarian claims of modern science and its reductionist view of nature and to re-open the way to the religious view of the order of nature, developed over centuries in the cosmologies and sacred sciences of the great religious traditions. Each tradition has a wealth of knowledge and experience concerning the order of nature. They have in common the conviction that nature is sacred. The recovery of this knowledge would allow religions all over the globe to enrich each other and cooperate to heal the wounds inflicted upon the Earth in the current environmental crisis. Nasr is in Islamic studies at George Washington University. (v7,#4)

Nasr, Seyyed Hossein. Religion and the Order of Nature. New York: Oxford University Press, 1996. 320pp. \$18.95 paper, \$65 cloth. Nasr argues that the devastation of our world has been exacerbated, if not actually caused, by the reductionist view of nature that has been advanced by modern secular science. He advocates the recovery of the truth that nature is sacred. (v8,#1)

Nassauer, Joan Iverson, ed. Placing Nature and Landscape Ecology. Washington, D.C.: Island Press, 1997. 179pp. Nassauer is in landscape architecture at the University of Minnesota, Minneapolis-St. Paul. Contains the following articles:

--Gorham, Eville. "Human Impacts on Ecosystems and Landscapes," pp. 15-32.

--Smiley, Jane. "Farming and the Landscape," pp. 33-43.

--Meine, Curt. "Inherit the Grid" (the environmental consequences of the U.S. mapping grid of townships and sections across the continent), pp.45-62.

--Nassauer, Joan Iverson. "Cultural Sustainability: Aligning Aesthetics and Ecology," pp. 65-83.

--Eaton, Marcia Muelder. "The Beauty That Requires Health," pp. 85-106. Eaton is in philosophy at the

University of Minnesota.

--Martin, Judith A., Warner, Sam Bass, Jr. "Urban Conservation: Sociable, Green, and Affordable," pp.109-122.

--Karasov, Deborah. "Politics at the Scale of Nature," pp. 123-137.

--Romme, William H. "Creating Pseudo-Rural Landscapes in the Mountain West," pp. 139-161.

--Nassauer, Joan Iverson. "Action Across Boundaries," pp. 163-169. (v8,#3)

Nassauer, Joan Iverson. "Messy Ecosystems, Orderly Frames." Landscape Journal 14, no. 2 (1995): 161-70. Many native ecosystems and wildlife habitats violate cultural norms for the neat appearance of landscapes in that they look "messy" and unkempt. Good landscape architecture can place these messy ecosystems in orderly cultural frames, that give "cues to care," like a neat white fence around a wildlife area. This makes them more culturally acceptable. Nassauer is in landscape architecture at the University of Minnesota. (v7, #3)

Nassauer, Joan Iverson. Placing Nature: Culture and Landscape Ecology. Reviewed by Allen Carlson. Environmental Ethics 22(2000):211-214.

National Academy of Sciences, Policy Implications of Greenhouse Warming. Washington, DC: National Academy Press, 1992.

National Audubon Society. *State of the Birds: Common Birds in Decline*. National Audubon Society Report, released June 14, 2007. See: <<http://www.audubon.org/bird/stateofthebirds/CBID/>>. There are alarming declines for many of the most common U.S. native birds. Since 1967, bobwhites have decreased 82%, evening grosbeaks 78%, northern pintails 77%, eastern meadowlarks 72%, loggerhead shrikes 71%, field sparrows 68%, and whip-poor-wills 57%. A few species, those that do well in the suburbs, have increased in number. The principal cause of decline is loss of habitat.

National Commission on the Environment, Choosing a Sustainable Future. Washington: Island Press, 1993. 200 pages. \$ 15.00 paper. \$ 25.00 hardcover. (v4,#3)

National Estuary Program: Bringing Our Estuaries New Life. A brochure describing one of the U.S. Environmental Protection Agency's foremost efforts in ecosystem management. National Clearinghouse for Environmental Publications and Information, 11029 Kenwood Road, Building 5, Cincinnati, OH 45242. (v6,#1)

National Fish and Wildlife Foundation. 1977 Directory of Birding Festivals. 30 pages. Some 80 premier events throughout North America celebrating birds, usually with field trips, such as seeing 20,000 sandhill cranes, or 300 bald eagles, or thousands of migrating hawks. Published by National Fish and Wildlife Foundation, 1120 Connecticut Ave., NW, Suite 900, Washington, DC 20036. 202/857-0166. Fax 202/857-0162. Also available at <http://www.nfwf.org> (v8,#1)

National Forum, Vol. 70, No. 1 (Winter 1990) is a special issue on "Preserving the Global Commons." This is the national magazine of the Honor Society of Phi Kappa Phi, Box 16000, Louisiana State University, Baton Rouge, LA 70893. Among other authors, Lester Brown lists the six most pressing environmental problems, while Julian L. Simon argues that population growth is not bad for humanity. (v1,#1)

National Geographic, September 2004, vol. 206, no. 3, is a theme issue on Global Warming. 74 pages by various authors, often featuring the effects of global warming on wildlands, wildlife, wilderness, biodiversity, ecosystem processes, in addition to the effects on people. (v.14, #4)

National Institute for the Environment (NIE) Newsletter. The Committee for the National Institute for the Environment puts out a newsletter on its activities and progress toward establishing a National Institute for the Environment, somewhat analogously to the National Institutes for Health. Address: 730 11th St., N. W., Washington, DC 20001-4521. Phone 202/628-4303. Fax: 202/628-4311. Congress is currently considering their proposal for establishing a National Institute for the Environment to guide and fund long-term scientific research on the environment. Story New York Times, March 8, 1994, Science Section.

National Parks and Protected Landscape Areas of Slovakia. Ekologia Bratislava, Ekologia Publishing House, 1992. ISBN 80-85559-08-0. 71 pages. Description of conservation areas, brief history, what is conserved, landscapes, endangered species. Color pictures and text. (v7,#2)

National Research Council. Valuing Ecosystem Services: Toward Better Environmental Decision-Making. Washington, DC: The National Academies Press, 2004.

National Research Council, Environmental Effects of Transgenic Plants: The Scope and Adequacy of Regulation. Washington: National Academy Press, 2002. A Report of the Committee on Environmental Impacts Associated with Commercialization of Transgenic Plants. One of the leading authors/committee members is Paul B. Thompson, Department of Philosophy, Purdue University. Modern agricultural practices have substantial negative aspects, but the current standards used by the federal government to assure the safety of transgenic plants is higher than the standards used in assuring safety of other agricultural practices and technologies. Still, this does not mean the standard for transgenics is too high. In general older practices and technologies were not scrutinized well enough. The measurement of both hazard and exposure involves a complex blend of ecological and social factors. There is a need for both rigorous scientific analysis and communication of these results to the public. The report is neither simple black nor white, but offers various ways in which a functioning system can be improved. (v.13,#2)

National Wildlife Federation, 2001 Conservation Directory. \$ 70.00. National Wildlife Federation, The Lyons Press, 123 West 18th St., New York, NY 10011. 800/836-0510. Fax: 212/920-1836. Over 3,000 entries, U. S. federal and state agencies, conservation groups, university programs, federally protected areas, state environmental education coordinators, sources of environmentally-focused audio materials, periodicals. And more. (EE v.12,#1)

Native Plants Journal is a new journal, concerned with native plant conservation, restoration, reforestation, landscaping, highway corridors, and, generally, with the appreciation and understanding of native plants on landscapes. The first issue appears Spring 2000. Contact: <http://www.its.uidaho.edu/nativeplants/> (v10,#4)

Native Plants Journal is a new journal, concerned with native plant conservation, restoration, reforestation, landscaping, highway corridors, and, generally, with the appreciation and understanding of native plants on landscapes. The first issue appears Spring 2000. Contact: <http://www.its.uidaho.edu/nativeplants/>

Natras, Brian, and Altomare, Mary, The Natural Step for Business: Wealth, Ecology, and the Evolutionary Corporation. Gabriola Island, BC: New Society Publishers, 1999 (P. O. Box 189, Gabriola Island, B.C. V0R 1X0; phone 250/247-9737). 240 pages. \$ 16.95. (v.9,#4)

Nature-Sciences-Sociétés is a new journal produced by the French Centre National de Recherche Scientifique. The Centre with the journal hopes to bring about greater interdisciplinary research and action between the natural and social sciences, with application to environmental issues. Papers will be in French and occasionally in English. Contact: Agnes Pivot, NSS Association, GRS/CNRS, Université Paris X - Bat G, 92001 Nanterre Cedex, France. (v3,#4)

Natureza & Conservação, Revista Brasileira de Conservação da Natureza, The Brazilian Journal of Nature Conservation. Biennial, bilingual (Portuguese and English) scientific journal. E-mail: natureza&conservaco@fundacaoboticario.org.br
ISSN 1679-0073 (v. 15, # 3)

Nau, R., E. Gronn, M. Machina, and O. Bergland, eds. Economic and Environmental Risk and Uncertainty: New Models and Methods. Review by Amitrajeet A. Batabyal, Journal of Agricultural and Environmental Ethics 14(2001):96-102. (JAEE)

Nau, Robert, Erik Gronn, Mark Machina and Olvar Bergland, eds. Economic and Environmental Risk and Uncertainty: New Models and Methods. Reviewed by Clive Spash. Environmental Values 8(1999):283. (EV)

NaughtonTreves (Naughton-Treves), Lisa, and Sanderson, Steven, "Property, Politics and Wildlife Conservation," World Development 23 (no. 8, 1995):1265-1275. Wildlife conservation and property rights. A summary of the historical development of wildlife property rights. The political determination of property regimes is critical to conservation, especially in regard to wild fauna. Property rights concerning wild fauna differ from other property rights claims, including landed property, intellectual property, and rights governing the use of wild flora. No single property form is adequate for wildlife conservation. Property as an institution is incomplete; the exceptional character of wild fauna and the property rights that govern it are organic. The authors are at the University of Florida, Gainesville. (v.10,#2)

Naveh, Zev, "The Total Human Ecosystem: Integrating Ecology and Economics," Bioscience 50 (No. 4, 2000 Apr 01): 357- . (v.11,#4)

Naves, J; Wiegand, T; Revilla, E; Delibes, M, "Endangered Species Constrained by Natural and Human Factors: the Case of Brown Bears in Northern Spain," Conservation Biology 17(no.5, 2003):1276-1289. (v.14, #4)

Nawa, Richard, "The Value of Wild Steelhead," Fly Rod and Reel, April 1991, pages 29-31, 76-77. "Government agencies have a price for everything but know the value of nothing." "The complex and dynamic nature of stream habitat is ignored in favor of management by numbers." (v2,#1)

Naylor, Raymond L., Williams, Susan L., and Strong, Donald R., "Aquaculture--A Gateway for Exotic Species," Science 294(23 November 2001):1655-1656. The farming of fish, shellfish, and aquatic plants is among the fastest growing segments of the food economy, taking place internationally and in all fifty U.S. states. Accidental escapes and purposeful releases create biological poison with irreversible and unpredictable biological impacts--seaweed in Hawaii, Asian carp established in rivers in the Mississippi basin, introduced salmon, alien mollusks, all these with parasites and alien species hitchhiking with them--are creating ecological havoc. Regulation is a quagmire, and a clear and enforced policy on exotic introduction is needed as aquaculture expands. Naylor is at the Center for Environmental Science and Policy, Stanford University; Williams and Strong at Bodega Marine Laboratory, University of California, Davis. (v.13,#1)

Naylor, RL; Eagle, J; Smith, WL, "Salmon Aquaculture in the Pacific Northwest: A Global Industry with Local Impacts," Environment 45(no.8, 2003):18-39. (v.14, #4)

Naylor, Rosamond, et al., "Losing the Links Between Livestock and the Land," Science 310 (9 December 2005): 1621-1622. The industrial livestock sector has become footloose, no longer tied to a local landscape base for feed inputs or to supply manure and fertilizers. Animals are raised in confinement

with no immediate links to the local landscape, as are 75% of the world's eaten poultry, 66% of its eggs, 40% of its pork. Livestock remains the biggest user of land, cows and sheep graze on the land where they live. But this is steadily shifting to feed crops that may be shipped hundreds or thousands of miles to the livestock that eat them. Naylor is in environmental science, Stanford University.

Naylor, S., "Historical geography: knowledge, in place and on the move," Progress in Human Geography 29(no. 5, 2005): 626-634.

Naylor, Simon. "Historical geography: natures, landscapes, environments." *Progress in Human Geography* Vol. 30, no. 6 (2006): 792-802.

Needham, E.A. & Lehman, Hugh, "Farming Salmon Ethically", Journal of Agricultural and Environmental Ethics 4(1991):78-81. Salmon farming is a rapidly expanding industry. In order for it to develop in an ethical manner, many ethical issues must be confronted. Among these are questions regarding the quality of life of salmon on farms. To develop reasonable answers to these questions considerable thought must be devoted to developing appropriate standards of care for salmon. If these questions are not addressed the results could be bad both for salmon and for salmon farmers.

Needleman, Herbert L., Landrigan, Philip J. Raising Children Toxic Free: How To Keep Your Child Safe from Lead, Asbestos, Pesticides and Other Environmental Hazards. New York: Farrar, Straus, Giroux, 1994.

Neely, Peter M. "On Food First: Beyond the Myth of Scarcity." Environmental Ethics 2(1980):95-96.

Nees, Dan, Valerie E. Green, Kim Treadway, John Lafferty, Michelle Vanyo, Paul Date, and Robert Hunt Sprinkle. "Activism, Objectivism, and Environmental Politics." Environmental Ethics 25(2003):295-312. Environmental activism, like all great activisms, is fundamentally normative, its principal beliefs contestable, its most powerful arguments rebuttable on the grounds that they are subjective. Environmental activists, as political tacticians with complex goals, have become skilled at presenting objectified versions of their own motivations when trying to broaden support for specific policies or take advantage of regulatory or legal opportunities. While instrumentally tempting and often expedient, this practice of objectifying moral arguments is in some respects disingenuous, and its successes as well as its failures bring with them characteristic risks, short-term and long-term. (EE)

Negri, Valeria, "Agro-Biodiversity Conservation in Europe: Ethical Issues," Journal of Agricultural and Environmental Ethics 18(2005):3-25.

Diversity in agro-ecosystems is under threat. This paper is focused on the biodiverse agro-ecosystems generated by landraces (LRs), i.e., farmer-developed populations of cultivated species that show among- and within-population diversity and are linked to traditional cultures. The aim of this work is to arouse concern about their loss, to explain how they can be conserved, and to discuss values that support maintaining and/or restoring on-farm agro-biodiversity. This is discussed with particular reference to the European situation. Keywords biodiversity - complexity - ethics - landraces - on-farm conservation - sustainability. Negri is in biology and agro-environmental biotechnology, Università del G. Studi, Perugia, Italy. (JAEE)

Neill, Warren, Review of Alex Wellington, Allan Greenbaum, and Wesley Cragg, eds., Canadian Issues in Environmental Ethics, Ethics and the Environment 6(no. 1, 2001):116-121. (E&E)

Neill, Warren, "An Interest-Satisfaction Theory of Value," Ethics and the Environment 3(1998):55-80. In this paper I argue that all value is rooted in the interests of valuing beings. If something satisfies an interest of a valuing entity by contributing to its well-being in some way, then it has value. Anything that

fails to satisfy any interests is entirely lacking in value. I defend this conception of value by showing that the usual arguments directed against this kind of view are lacking in force, and by considering various other theories of value and showing that they suffer from serious problems. Finally, I clarify some important distinctions between intrinsic, extrinsic, inherent, and instrumental value. Warren is in philosophy, State University of West Georgia, Carrollton, GA. (E&E)

Neill, Warren. "An Emotocentric Theory of Interests." Environmental Ethics 20(1998):163-82. Environmental Ethics 20(1998):163-82. It is plausible to hold that ethical obligations are concerned with bringing about the existence of things that have value, where something is of value if and only if it is in the interest of some entity. Here the notion of an interest may be defined as whatever contributes to the well-being of a morally significant entity. I argue that interests are limited to individuals with the capacity for affective response. After briefly distinguishing between various different types of value, I defend this emotocentric theory of interests against objections raised by Paul Taylor and Gary Varner, both of whom grant interests to a larger class of entities. I argue that there are serious problems with attempts to associate interests with mere goal-directedness or with the mere possession of biological functions. Neill is in philosophy, State University of West Georgia, Carrollton, GA. (EE)

Neilson, R. P., et al., "Forecasting Regional to Global Plant Migration in Response to Climate Change," Bioscience 55(no.9, September 2005): 749-760. The rate of future climate change is likely to exceed the migration rates of most plant species. The replacement of dominant species by locally rare species may require decades, and extinctions may occur when plant species cannot migrate fast enough to escape the consequences of climate change. Such lags may impair ecosystem services, such as carbon sequestration and clean water production. Thus, to assess global change, simulation of plant migration and local vegetation change by dynamic global vegetation models is critical, yet fraught with challenges.

Nelkin, Dorothy, Sands, Philippe and Stewart, Richard B., "The International Challenge of Genetically Modified Organism Regulation," New York University Environmental Law Journal 8(no.3, 2000):523- . (EE v.12,#1)

Nelson, Arthur C., "Comparing States with and without Growth Management. Analysis Based on Indicators with Policy Implications." Land Use Policy 16(No. 2, April 1999):121- . (v.11,#1)

Nelson, G. and Dempster, B., "Urban Living and Environmental Change: Fostering Urban Environmental Management through Civic Process," Environments 2001(no.29, 2001): 1-16. (v.13,#2)

Nelson, Gordon, Marsh, John. "The Heritage Estate in Canada and Ontario", Environments 24(no. 1, 1996):1.

Nelson, J. Gordon, Skibicki, Andrew, Lawrence, Patrick. "Land Use Change in the Southern Ontario Countryside: Significance, Response and Implications," Environments 24(no.3, 1997):22. (v8,#3)

Nelson, James Lindemann, "Moral Sensibilities and Moral Standing: Caplan on Xenograft 'Donors'", Bioethics, 7 (1993): 315-22. Interspecies transplantation - or xenograft - must answer the challenge that many nonhumans are on a moral par with mentally handicapped humans, and hence are equally immune from being unwilling sources of vital organs (the so-called "marginal cases" argument). Arthur Caplan has offered perhaps the most interesting counter to this argument, which appeals in part to differences in patterns of sensibility - in brief, humans would tend to suffer more if their children, handicapped or not, were used as organ sources than would nonhuman parents. It is argued that his defence cannot fully meet the weight of the strongest moral challenges to xenograft, in part because it does not address the distinction between what we "do" care about, and what we "should" care about.

Nelson, James Lindemann. "Health and Disease as 'Thick' Concepts in Ecosystemic Contexts." Environmental Values 4(1995):311-322. I consider what kind of normative work might be done by speaking of ecosystems utilising 'medical' vocabulary - drawing, that is, on such notions as 'health', 'disease', and 'illness'. Some writers attracted to this mode of expression have been rather modest about what they think it might purchase. I wish to be bolder. Drawing on the idea of 'thick' evaluative concepts as discussed by McDowell, Williams and Taylor, and resorting to a phenomenological argument for a kind of moral realism, I argue that the project of developing a robust understanding of the moral significance of recognising the health or illness of ecosystems is definitely a starter. KEYWORDS: Ecosystem health, intrinsic value, 'thick' evaluative concepts. Nelson is in the department of philosophy, University of Tennessee. (EV)

Nelson, Jon P., Anderson, William D., Passmore, David L. "Economic Development and Air Pollution Abatement: A State-Level Policy Simulation of the 1990 Clean Air Act," The Journal of Environment and Development 6(1997):61.

Nelson, Lance E., ed., Purifying the Earthly Body of God: Religion and Ecology in India. Albany: State University of New York Press, 1998. Religion and ecological concern in India from textual, theological, anthropological, feminist, and eco-activist approaches. The ecological implications of pilgrimage and sacred geography, earth and river goddesses, the beliefs and ritual practice of villagers, caste consciousness, and Vedanta, Tantra, and Goddess theologies. 12 articles. Samples: Harold Coward, "The Ecological Implications of Karma"; Christopher Key Chapple, "Toward an Indigenous Indian Environmentalism"; Ann Grodzins Gold, "Sin and Rain: Moral Ecology in Rural North India." Nelson is in theological and religious studies at the University of San Diego. Reviewed by Anne E. Monius in Journal of the American Academy of Religion 69(2001):716-719.

Nelson, Lance, ed., Purifying the Earthly Body of God: Religion and Ecology in Hindu India. Albany, NY: State University of New York Press, 1998. Includes:
--Nelson, Lance, "The Dualism of Nondualism: Advaita Vedanta and the Irrelevance of Nature" (pp. 61-88). "First, I will show the falsity of the suggestion that Advaita Vedanta finds spiritual value inherent in nature. I will then proceed to explain precisely how Shankara and his tradition devalue the natural world and how ... the world is not revered but rather tolerated until it passes completely away. My conclusion will be that this is not the kind of nondualism that those searching for ecologically supportive modes of thought might wish it to be" (p. 68). Nelson is in religious studies at the University of San Diego.

Nelson, Michael P., "Holists and Fascists and Paper Tigers...Oh My!," Ethics and the Environment 1(no.2, 1996):103-117. Over and over, philosophers have claimed that environmental holism in general, and Leopold's Land Ethic in particular, ought to be rejected on the basis that it has fascist implications. I argue that the Land Ethic is not tantamount to environmental fascism because Leopold's moral theory accounts for the moral standing of the individual as well as "the land," a holistic ethic better protects and defend the individual in the long-run, and the term "fascism" is misapplied in this case. Nelson teaches philosophy at the University of Wisconsin, Stevens Point. (E&E)

Nelson, Michael P. "A Defense of Environmental Ethics: A Reply to Janna Thompson." Environmental Ethics 15(1993):245-57. Janna Thompson dismisses environmental ethics primarily because it does not meet her criteria for ethics: consistency, non-vacuity, and decidability. In place of a more expansive environmental ethic, she proposes to limit moral considerability to beings with a "point of view." I contend, first, that a point-of-view centered ethic is unacceptable not only because it fails to meet the tests of her own and other criteria, but also because it is precisely the type of ethic that has contributed to our current environmental dilemmas. Second, I argue that the holistic, ecocentric land ethic of Aldo Leopold, as developed by J. Baird Callicott, an environmental ethic that Thompson never considers, nicely meets Thompson's criteria for acceptable ethics, and may indeed be the cure for our environmental woes.

Nelson is at the department of Philosophy, University of Colorado, Boulder, Colorado. (EE)

Nelson, Michael P. Book Review of *The World and the Wild: Expanding Wilderness Conservation Beyond its American Roots*. Edited by David Rothenberg and Marta Ulvaeus. Environmental Ethics 26(2004):107-110. (EE)

Nelson, Michael P. Review of Reconstructing Conservation: Finding Common Ground. Edited by Ben A. Minteer and Robert E. Manning. Environmental Ethics 27 (2005):329-332.

Nicholas, Warwick L.; Trueman, John W.H., "Biodiversity of marine nematodes in Australian sandy beaches from tropical and temperate regions," Biodiversity and Conservation 14(no.4, April 2005):823-839(17).

Nelson, Michael P., "Aldo Leopold, Environmental Ethics, and the Land Ethic," Wildlife Society Bulletin 26(no. 4, 1998):741-744. Leopold, though with no formal training in philosophy, made numerous contributions not only to environmental ethics but also to the concept of nature and the human relation to nature more broadly, the connection between a worldview and an ethics. Leopold is Darwinian, seeing humans as social animals in relation to their landscapes, biotic communities entwined with social communities. "Ecology represents nature as a biotic community; it reveals that humans are members of a nonanthropocentric, biotic community. For Leopold, the Land Ethic was the appropriate response to the recognition of biotic communities." Nelson is in philosophy at the University of Wisconsin-Stevens Point. (EE v.12,#1)

Nelson, Michael P., and Mati Grisko, Review of: Markku Oksanen and Juhani Pietarinen (eds), Philosophy and Biodiversity, Environmental Values 15(2006):124-127.

Nelson, Michael. "An Annotated Table of Contents of the Great New Wilderness Debate," Wild Earth 6(1996):81. (v8,#1)

Nelson, R. K., Make Prayers to the Raven: A Koyukon View of the Northern Forest. Chicago: University of Chicago Press, 1983.

Nelson, R. J. "Ethics and Environmental Decision Making." Environmental Ethics 1(1979):263-78. Environmental ethics tends to be dominated by the idea that the right environmental actions require a change in the value systems of many people. I argue that the "rebirth" approach is perverse in that moral attitudes are not easily changed by moral suasion. A properly ethical approach must begin where we are, as moderately moral people desiring the best for all. The real ethical problem is to develop procedures for collectively defining environmental ends that will be fair to the parties participating in the decision process. This idea is essentially utilitarian, and depends on the maximization of expected social utility. This type of environmental ethics is contrasted with current theories of social choice in welfare economics and with Rawls' theory of justice as fairness. Nelson is in the philosophy department, Case Western Reserve University, Cleveland, OH. (EE)

Nelson, Richard K., Heart and Blood: Living with Deer in America. New York: Alfred A. Knopf, 1997. 432 pages. \$ 27.50. Deer, deer hunting, and the dilemmas of booming deer populations. Nelson claims, from his Eskimo mentors, that what the true hunter sees is not entirely visible to the non-hunter. (v8,#3)

Nelson, Robert H. "The Gospel According to Conservation Biology." Philosophy and Public Policy Quarterly Vol. 27, no. 3/4 (2007): 10-16. The field of conservation biology presents itself as a science, but its policy prescriptions reflect a powerful set of values. Nelson argues that on closer examination these values turn out to be religious and specifically to be derived from Christian sources. Conservation biologists need to pay more attention to this theological side of their discipline.

Nelson, Robert H., "The Religion of Forestry: Scientific Management," Journal of Forestry 97(no. 11, Nov 01 1999):4- . The USDA Forest Service was established by progressive interests whose guiding philosophy was scientific management. This management strategy is no longer appropriate, requiring a basic rethinking of the place of the agency in American government. Commentary: Thomas, Jack Ward and Burchfield, James, "Comments on "The Religion of Forestry: Scientific Management," Journal of Forestry 97(no. 11, Nov 01 1999):10- . (v.11,#1)

Nelson, Robert H., "Unoriginal Sin: The Judeo-Christian Roots of Ecotheology," Policy Review, Summer 1990, no. 53. Environmental issues are becoming more important in the churches, but the new trends in environmental theology veer toward secularism, paganism, and Asian religions in a "pantheistic veneration of nature" "in which humanity must be understood as part of and not distinct from nature." But nature is red in tooth and claw, and at the same time, in "virtual self-contradiction" to the urged immersion of humans in nature, "the actual goal of environmentalism is the opposite: to inculcate a new morality with respect to the natural world that is found nowhere else in nature."

"The real source of the appeal of environmentalism may be that it offers traditional religious messages of the West in a new secular form--a form that, in an age of rampant secularism, lends these traditional messages great authority." Deep ecology is a kind of secular faith, with a version of the fall of humans from primitive innocence into technological greed and sin, alienated from an Eden Earth. For environmentalists, "save" means both "preserve" and "curb the influence of evil." "Reunion with nature for many in the current age has assumed the traditional meaning of reunion with God." The religious ascetic tradition also returns in environmental "preaching that material possessions and the good life are unnatural and to this extent evil." "Current environmental theology suggests that the poor should be content with their condition and are perhaps even better off for it." In fact, the Biblical stewardship theme, in which humans are distinct from and with dominion over nature, commissioned to tend and build a worldly residence, though disliked by deep environmentalists and ecotheologists, is the only adequate theological model for the protection and conservation of nature. Policy Review is published by the conservative think-tank, The Heritage Foundation, Washington. (v1,#4)

Nelson, Robert H., Public Lands and Private Rights: The Failure of Scientific Management. Lanham, MD: Rowman and Littlefield, 1995. \$ 27.95. Nelson proposes a new system of natural resource and land management based on a much greater decentralization of authority. (v7,#2)

Nemarundwe, N, "Social Charters and Organisation for Access to Woodlands: Institutional Implications for Devolving Responsibilities for Resource Management to the Local Level in Chivi District, Zimbabwe", Society and Natural Resources 17 (no.4, 2004): 279-291(13)

Nennen, Hans-Ullrich, Ökologie im Diskurs, Zu Grundfragen der Anthropologie und Ökologie und zur Ethik der Wissenschaften [in German: Ecology in discours; on the fundamental issues of antropology and ecology and ethics of science], Opladen: Westdeutscher Verlag, 1991. (v.11,#1)

Nepstad, D., et al., "Frontier Governance in Amazonia," Science (25 January 2002):629-631. Economic development in Amazonia, especially with the development of paved roads, seems inevitable, even desirable in the light of the needs of the 17 million people in the region. Recent Brazilian legislation and land use policy could at the same time conserve 70-80% of the rainforest. Whether this happens depends on developing better frontier governance. The fragile gains in conservation and sustainable development are threatened by institutional weaknesses and rural violence. But there are some positive signs. All of the authors are with the Instituto de Pesquisa Ambiental da Amazônia, Belém, Para, Brazil. (v.13,#1)

Nepstad, D., Shwartzman, S., eds. Non-Timber Products from Tropical Forests: Evaluation of a Conservation and Development Strategy. Bronx, NY: The New York Botanical Garden, 1992. 176 pp.

\$18.95 paper. An interdisciplinary array of studies on extractive products and extractive economies. Discussions of the biological, cultural, political, and economic contexts of non-timber forest product extraction and trade. Case studies from Amazonia, Africa, and Southeast Asia.

Nepstad, D., Shwartzman, S., eds. Non-Timber Products from Tropical Forests: Evaluation of a Conservation and Development Strategy. Bronx, NY: The New York Botanical Garden, 1992. 176 pp. \$18.95 paper. An interdisciplinary array of studies on extractive products and extractive economies. Discussions of the biological, cultural, political, and economic contexts of non-timber forest product extraction and trade. Case studies from Amazonia, Africa, and Southeast Asia. (v.7,#4)

Nepstad, D; Azevedoramos, C; Lima, E; McGrath, D; Pereira, C; Merry, F, "Managing the Amazon Timber Industry", Conservation Biology 18 (no.2, 2004): 575-577.

Nepstad, Daniel C., et al. (11 other authors), "Large-scale Impoverishment of Amazonian Forests by Logging and Fire," Nature 398(8 April 1999):505-508. Field surveys that map wood mills and forest burning areas in the Brazilian Amazon show that logging crews severely damage 10,000 to 15,000 square kilometers per year of forest that are normally not documented. In dry years this leaves up to 270,000 square kilometers vulnerable to future burning, and potentially doubles net carbon emissions during severe El Nino episodes. Nepstad is at the Woods Hole Research Center, Woods Hole, MA. (v.10,#1)

Nerlich, Brigitte, and Nick Wright, "Biosecurity and Insecurity: The Interaction between Policy and Ritual During the Foot and Mouth Crisis," Environmental Values 15(2006): 441-462. In 2001 a highly infectious animal disease, foot and mouth disease, broke out in the UK and spread rapidly. In May, when the spread seemed to be slowing down, new disease hotspots appeared in previously little affected regions, such as North Yorkshire. New biosecurity rules were imposed. Based on a series of semi-structured interviews with stakeholders, this article shows that the biosecurity measures farmers implemented during the epidemic meant more than just reducing the risk of spreading FMD. For many, cleansing and disinfecting became Foot and Mouth. Biosecurity actions became invested with symbolic values and, in particular, were ritualised as part of the symbolic spatial construction of an otherwise 'invisible' enemy. (EV)

Nesse, Randolph M., and George C. Williams, Why We Get Sick? : The New Science of Darwinian Medicine. New York: Times Books, Random House, 1994. Also New York: Vintage Books, 1996. Published in the U.K. as Evolution and Healing: The New Science of Darwinian Medicine. London: Weidenfeld and Nicolson, 1995. Human food habits and other behavioral propensities were shaped in the Pleistocene Period and this gets us in trouble in today's environment. For example, a predisposition to consume fat and sugar when available contributed to survival then, but to obesity, diabetes, and heart disease today. Various diseases result from a mismatch between our original environment and that in which we live today. In general, we have an evolved tendency to consume nature as we have opportunity, which spells ecological disaster today. Nesse is a physician in psychiatry at the University of Michigan Medical School. Williams is a well-known evolutionary biologist.

Nestle, Marion, Food Politics: How the Food Industry Influences Nutrition and Health. Berkeley: University of California Press, 2002. How the food industry turns wholesome natural ingredients into sweet, fatty and salty products. The American food supply is so abundant that we can feed everyone in this country twice over, even after subtracting food exports. The result forces food companies into fierce competition for consumer dollars. The foods most profitable to the industry are those that cater to our desires. The irony and tragedy is that this pattern, repeated in other developing countries, has resulted in the number of overweight people in the world, 1.1 billion, now equalling the number of undernourished people. Nestle is chair of nutrition studies at New York University and was an editor of the Surgeon General's Report on Nutrition and Health, 1988. (v.13, #3)

Nettle, Daniel and Romaine, Suzanne, Vanishing Voices: The Extinction of the World's Languages. New York: Oxford University Press, 2000. The last 500 years have seen the extinction of half the world's languages, and one of the remaining 6,000 disappears every week. How language becomes endangered and why the loss of linguistic diversity matters. (v.12,#2)

Neuhaus, Richard [J.]. In Defense of People: Ecology and the Seduction of Radicalism. New York: Macmillan, 1971.

Neumann, Christopher J. "Successor Liability and CERCLA: The Runaway Doctrine of Continuity of Enterprise," Environmental Law 27(no.4, 1997):1373- . The doctrine of successor liability and the corresponding continuity of enterprise exception in the context of CERCLA liability. Neumann criticizes the extensive use of the continuity of enterprise exception and argues that only the traditional successor liability doctrine should apply in CERCLA cases. (v9,#2)

Neumann, Roderick P., Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa. Berkeley: University of California Press, 1998. 271 pages. \$ 35 cloth. Arusha National Park in northern Tanzania illustrates all the political-ecological struggles in Africa. The roots of the ongoing struggle between the park on Mount Meru and the neighboring Meru peasant communities go much deeper than the issues of poverty, population growth, and ignorance usually cited. By imposing a European idea of pristine wilderness, establishing such national parks and protected areas displaced Africa meanings as well as material access to the land. An analysis of the symbolic importance of natural landscapes among various social groups and how it relates to conflicts between peasant communities and the state. Neumann is in international relations at Florida Atlantic University. (Africa). (v.9,#3)

Neumayer, Eric, Weak versus Strong Sustainability, Chinese translation, translator: Wang Yingtong. Publisher: Shanghai Translation Publishing House, 2002.

Neumayer, Eric, "Trade and the Environment: A Critical Assessment and Some Suggestions for Reconciliation," The Journal of Environment and Development 9 (No. 2, 2000 June 01): 138- . (v.11,#4)

Nevers, Patricia, Gebhard, Ulrich, and Billmann-Mahecha, Elfreide, "Patterns of Reasoning Exhibited by Children and Adolescents in Response to Moral Dilemmas Involving Plants, Animals and Ecosystems," Journal of Moral Education 26(no. 2, 1997):169-186. The values and attitudes that children and adolescents have toward nature has been insufficiently researched, despite the fact that there is a growing body of philosophical theory in environmental ethics that might provide a framework for such analysis. The authors outline basic positions in environmental ethics (largely from the English literature) and formulate survey questions addressed to German children and adolescents. One finding is widespread anthropomorphism (not anthropocentrism) in children up to 10-11 years of age, regarding plants as well as animals. Children's fascination with animals is striking. Children have difficulty weighing personal interests against those of certain animals, such as dogs and rabbits. Children and adolescents can defend the interests of other animals and plants (biocentric reasoning), but there is no unequivocal evidence that they can be ecocentric. Nevers and Gebhard are at the University of Hamburg, and Billmann-Mahecha at the University of Hanover, Germany. (v.13,#2)

New Formations Vol. 64 (2008). The topic of this special issue is "Earthographies: Ecocriticism and Culture." Contents include: (1) "Recent Critiques of Ecocriticism" by Terry Gifford, (2) "The Poverty of Ecocritical Theory: E.P. Thompson and the British Perspective" by John Parham, (3) "Ecocriticism, Ecopoetics, and a Creed Outworn" by Dana Phillips, (4) "Nature Post-Nature" by Patrick Curry, (5) "Sustaining Authentic Human Experience in Community" by Neol Keough, (6) "The Ecological Blind Spot in Postmodernism" by Jonathan Coope, (7) "On the Road: Robert Louis Stevenson's Views on

Nature” by William Gray, (8) “Stirring the Geopolitical Unconscious: Towards a Jamesonian Ecocriticism” by Adrian Ivakhiv, (9) “Learning from Temple Grandin, or, Animal Studies, Disability Studies, and Who Comes After the Subject” by Cary Wolfe, (10) “Heidegger’s Shepherd of Being and Nietzsche’s Satyr” by Ron Broglio, and (11) “Postscript on Biosemiotics: Reading Beyond Words—and Ecocriticism” by Wendy Wheeler.

New Formations Vol. 64 (2008). The topic of this special issue is “Earthographies: Ecocriticism and Culture.” Contents include: (1) “Recent Critiques of Ecocriticism” by Terry Gifford, (2) “The Poverty of Ecocritical Theory: E.P. Thompson and the British Perspective” by John Parham, (3) “Ecocriticism, Ecopoetics, and a Creed Outworn” by Dana Phillips, (4) “Nature Post-Nature” by Patrick Curry, (5) “Sustaining Authentic Human Experience in Community” by Neol Keough, (6) “The Ecological Blind Spot in Postmodernism” by Jonathan Coope, (7) “On the Road: Robert Louis Stevenson’s Views on Nature” by William Gray, (8) “Stirring the Geopolitical Unconscious: Towards a Jamesonian Ecocriticism” by Adrian Ivakhiv, (9) “Learning from Temple Grandin, or, Animal Studies, Disability Studies, and Who Comes After the Subject” by Cary Wolfe, (10) “Heidegger’s Shepherd of Being and Nietzsche’s Satyr” by Ron Broglio, and (11) “Postscript on Biosemiotics: Reading Beyond Words—and Ecocriticism” by Wendy Wheeler.

New Ground: A Journal of Development and the Environment has just been launched in South Africa as a journal with a black perspective on environmental conservation. The first issue was September 1990. Address: P. O. Box 62054, Marshalltown 2017, South Africa. (v1,#4)

New Ground: A Journal of Development and the Environment is a journal with a black perspective on environmental conservation and sustainable development. Published by an independent trust, the Environmental and Development Agency Trust. Address: P. O. Box 322, Newtown 2113, South Africa. ISSN 1016-8075. Editor: Dick Cloete. (v6,#3)

New Nietzsche Studies Vol. 5, no. 1/2 (2002). The topic of this special issue is “Nietzsche’s ecology.” Contents include: (1) “‘Did He Not Kiss the Horse?’ Nietzsche as Ecological Philosopher” by Wilhelm Schmid, (2) “Nietzsche and the Paradox of Environmental Ethics” by Martin Drenthen, (3) “A Banal Utopia or Tragic Recompense? Positivism, Ecology, and the ‘Problem of Science’ for Nietzsche” by Barry Allen, (4) “Nietzsche and Unamuno: The Meaning of the Earth” by Simón Royo Hernández, (5) “The Biopolitics of Art” by Steven T. Brown, and (6) “Nietzsche on the Disciplinary Practices of Western Culture” by David Michael Levin.

New Road, The is the bulletin of the World Wildlife Fund's Network on Conservation and Religion. Six issues each year. Internationally oriented. Short articles and news, names of contact persons, in attractive newspaper format. Contact: The New Road, 10 rue des Fosses, CH-110 Morges, Switzerland. (v1,#2) Now discontinued.

New York Times, "Cover-Up on Clean Air," October 6, 2004, editorial. The Bush administration has pushed the Environmental Protection Agency to reduce protection from industrial plants, here involving requirements to upgrade emissions protection when plants are upgraded. Congress asked for a review and an EPA inspector general, Nikki Tinsley, has issued a report quite critical of the administration. (v.14, #4)

New York Times, "Surrender in the Forests," July 18, 2004, p. 12. Lead Editorial. "The Bush Administration has taken apart so many environmental regulations that one more rollback should not surprise us. Even so, it boggles the mind that the White House should choose an election year to dismantle one of the most important and popular land preservations of the last 30 years--a Clinton administration rule that placed 58.5 million acres of the national forests off limits to new road building and development.

There are no compelling reasons to repudiate that rule and no obvious beneficiaries besides a few disgruntled Western governors and the timber, oil and gas interests that have long regarded the national forests as profit centers. It's not even a case of election-year pandering to Western voters; indeed, early returns suggest that most Westerners below the rank of governor do not like the Bush proposal at all." (v. 15, # 3)

New York Times, "Ocean Rescue," New York Times, August 6, 2004, p. A22. Editorial. Two landmark reports, one underwritten by the Pew Foundation and the other by Congress, identify three main threats to the oceans. (1) Deterioration of coastal wetlands and estuaries caused by agricultural runoff and relentless residential development. (2) Industrial overfishing. (3) Bureaucratic chaos. Several ocean rescue bills are in Congress. (v. 15, # 3)

New York Times, "Whales in the Way of Sonar," editorial, March 7, 2006.
<http://www.nytimes.com/2006/03/07/opinion/07tue2.html>

The debate over whether the Navy's use of sonar to detect submarines is harming whales continues in the waters off the southeastern United States, where the Navy hopes to establish a training area for sailors who need to practice their sonar skills in a shallow ocean environment. Evidence is mounting that sonar has been responsible for at least some of the whale strandings around the world.

New York Times, "Nature Besieged," August 2, 2004, A20. Editorial. A Bush Administration proposal to require each national forest to confine motorized off-road vehicles to designated trails, instead of allowing them to roam free, is commended. There are now 10 million such vehicles. (v. 15, # 3)

New York Times: "A New Way of Living With Nature." December 19, 1999. Editorial on "what can loosely be called the environmental ethic": "A century that will be remembered for material and scientific progress may also be remembered for something more modest--as a moment when mankind, realizing that the earth's resources were not finite and perhaps seeking expiation for years of predatory behavior, struck a truce with nature. For the first time since the dawn of the industrial age there was, at least in the West and certainly in America, a rough armistice between the forces of economic growth and the forces of preservation. ... Having discovered that we can actually change the way nature operates, we have also discovered that with this power comes a sacred obligation to restore what we once nearly ruined." (v10,#4)

New York Times, "Roadblock at Yucca Mountain," editorial, August 23, 2004, p. A22. How safe should nuclear waste storage be? A federal appeals court has overthrown the Environmental Protection Agency standard of 10,000 years (twice recorded human history) in favor of a standard of hundreds of thousands of years. In 1992 the U.S. Congress told EPA to set the standard based upon and consistent with the recommendations of the National Academy of Sciences, an unusual delegation of authority to a non-governmental agency. The NAS recommends hundreds of thousands of years for Yucca Mountain, a proposed underground storage site in Nevada. (v. 15, # 3)

New York Times, "Lost in the Haze," July 26, 2004, A 18. Editorial. Increasing pollution spillover destroys the visibility in national parks. (v. 15, # 3)

Newberry, Beatrice, "Running with gorillas," The Ecologist 30 (No. 4, 2000): 44-45. A unique conservation project in West Africa (Gabon) is turning the received wisdom about gorilla survival on its head, and may provide new hope for the survival of the great apes. (v.12,#3)

Newell, Josh and Emma Wilson, The Russian Far East: Forests, Biodiversity Hotspots, and Industrial Development. Tokoyo: Friends of the Earth-Japan, 1996. 200 pages. \$ 28.50. Overview of development and conservation issues in all regions of the Russian Far East. Friends of the Earth-Japan, 4-8-15 Naka Meguro, Meguro-ku-Takoyo, Japan 153. Phone 81-3-3760-3644. Fax 81-3-3760-6959. In

the U.S.: PERC. Pacific Environmental Resources Center, 1055 Fort Cronkhite, Sausalito, CA 94065. 415/332-8200. Fax 415/332-8167. (v7,#1)

Newell, Josh, Wilson, Emma. "The Russian Far East: Foreign Direct Investment and Environmental Destruction." The Ecologist 26(Mar.1996):68. Powerful multinational and national interests are turning Russia's Far East into a "resource colony" for the Pacific Rim economies. In a mad dash for cash, the region's timber, gold, coal, oil and gas are being exploited, causing widespread environmental destruction and a few local benefits. (v7,#2)

Newell, P., "Review of: Geoff Evans, James Goodman and Nina Lansbury (Eds.), Moving Mountains: Communities Confront Mining and Globalisation," Environmental Politics 12(no. 2, 2003): 162-163.

Newell, P., "Review of: David Korten, When Corporations Rule the World," Environmental Politics 12(no. 1, 2003): 253. (v 14, #3)

Newell, Patricia Brierley. "A Cross-Cultural Examination of Favorite Places," Environment and Behavior 29(no.4 1997):495. (v8,#3)

Newell, Peter. "Politics in a Warming World." Environmental Politics 4(Winter 1995):276. (v7,#2)

Newell, R., and W. Pizer, "Discounting the Distant Future: How Much Do Uncertain Rates Increase Valuations?," Journal of Environmental Economics and Management 46(no. 1, 2003): 52-71. (v 14, #3)

Newhart, Dave, "China's Crane Experiment," International Wildlife 31 (no. 1, Jan./Feb. 2001):20-27. When wealth trickles up, people's lives improve, and so do prospects for a revered bird. Controversies that were intense a few years ago between rural farmers in China and managers of reserves to protect the black-necked crane have moderated, and farmers and conservationists are now partners rather than enemies. A big part of the solution has been grants to increase education, food production, health care, tourism, and appreciation for one of China's most widely honored birds. (EE v.12,#1)

Newkirk, Ingrid, Save the Animals: 101 Easy Things You Can Do (New York: Warner Books, 1990). 192 pages. (v2,#1)

Newkirk, Ingrid, Save the Animals! 101 Easy Things You Can Do. New York: Warner Books, \$ 4.95 paper. Animals "are not inferior to human beings but rather just different from us, and they really don't exist for us nor do they belong to us." (v1,#4)

Newman, D., "Book Review: Blouet, B.W., Geopolitics and Globalization in the Twentieth Century," Progress in Human Geography 26(no.5, 2002): 683. (v.13,#4)

Newman, David, "The lines that continue to separate us: borders in our 'borderless' world," Progress in Human Geography 30 (no.2, April 2006): 143-161 (19).

Newman, Peter. "Greening the City: The Ecological and Human Dimensions of the City Can Be Part of Town Planning." Alternatives 22, no.2 (1996): 10. Making our cities more liveable entails making them both greener and more convivial--an opportunity to revitalize a rich tradition from the pre-modern era. (v7, #3)

Newmark, William D., "Insularization of Tanzanian Parks and the Local Extinction of Large Mammals," Conservation Biology 10(1996):1549-1556. The pattern of local extinction of large mammals in Tanzanian Parks strongly suggests that the increasing insularization of the parks as a result of habitat

alteration, human settlement, agricultural development, and the active elimination of wildlife on adjacent lands has been an important contributing factor. Newmark is at the Utah Museum of Natural History, University of Utah, Salt Lake City. (v7,#4)

Newmark, William D. and Hough, John L., "Conserving Wildlife In Africa: Integrated Conservation and Development Projects and Beyond," Bioscience 50 (No. 7, 2000 July 01): 585- . (v.11,#4)

--Newmyer, Stephen, Animals, Rights and Reason in Plutarch and Modern Ethics. New York: Routledge, 2005. Newmyer is at Duquesne University, Pittsburgh.

Newsweek, "Just for Kids: You and Your Environment." Special section in Newsweek, March 29, 1993. "The biggest challenge for our world and what kids can do about it." (v4,#2)

Newsweek, "Loved to Death: How the Fight to Save Endangered Species Can Backfire," April 12, 1993. Ways in which the attention give to endangered species can make them more desirable for poachers, hunters, or more liable to provoke retaliation and other takings that jeopardize the species further. (v4,#1)

Newton, B J, "Environmental Education and Outreach: Experiences of a Federal Agency," Bioscience 51(no.4, 2001):297-300. (v.12,#4)

Newton, Lisa H. and Catherine K. Dillingham, Watersheds: Classic Cases in Environmental Ethics. Belmont, CA: Wadsworth, 1993. 249 pages. Paper. Nine pivotal events that have much to tell us about our relationship with Earth: Love Canal, the ozone layer and its depletion, UNCED at Rio, the Exxon Valdez, the Northwest forests and the spotted owl, Chernobyl, Chico Mendez and the tropical rainforests, the global greenhouse and our changing climate, Bhopal. Environmental complexity, the biological, economic, and legal issues, damage done irrevocably to real people and the land they depend on. How such disasters could be prevented and what they teach us philosophically about how we do and ought to live on Earth. Impressive detail and documentation of the cases combined with insightful ethical analysis. Both authors are at Fairfield University. (v4,#3)

Newton, Lisa H. and Catherine K. Dillingham, Watersheds 3 : Ten Cases in Environmental Ethics. Belmont, CA: Wadsworth, 2002. Genetically altered crops, human population, global warming, great apes, legacy of Bhopal, pesticides and birds, antibiotic resistance, New England fisheries, old-growth forests, nuclear war.

Newton, Lisa H., Ethics and Sustainability: Sustainable Development and the Moral Life. Upper Saddle River, NJ: Prentice Hall, 2003. Chapter 1. Environmental Ethics as Virtue. Chapter 2. Technology: Living Lightly upon the Earth. Chapter 3. Stewardship: The Responsible Person. A refreshingly slim volume, 123 pages. A personal ethic of virtue must include a commitment to environmental preservation. Developments in technology make it truly possible to live and develop our communities sustainably on the earth. The traditional virtue of simplicity unifies environmental sensitivity with a focused and gracious life. Newton teaches ethics at Fairfield University, Fairfield, CT. (v.13, #3)

Newton, Lisa H., and Dillingham, Catherine K., eds. Watersheds: Classic Cases in Environmental Ethics. 2nd edition. Belmont, CA: Wadsworth Publishing Co., 1997. 272 pages. New to this edition: case on toxic wastes from nuclear weapons facilities; case on worldwide population growth and its consequences; case on pesticide use and the green movement; case on over-exploitation of fisheries; case on property rights. Newton and Dillingham are both at Fairfield University. (v7, #3)

Newton, Lisa H., and Catherine K. Dillingham. *Watersheds: Ten Cases in Environmental Ethics*. Translators: Wu Xiaodong and Wong Rui. (Beijing: Tsinghua University Press, 2005). (in Chinese)

Ng, Yew-Kwang. "Towards Welfare Biology: Evolutionary Economics of Animal Consciousness and Suffering", Biology and Philosophy 10(1995):255-285. Welfare biology is the study of living things and their environment and respect to their welfare, defined as net happiness minus suffering. Despite difficulties of ascertaining and measuring welfare and relevancy to normative issues, welfare biology is a positive science. Evolutionary economics and population dynamics are used to help answer basic questions in welfare biology. Ng is in economics at Monash University, Melbourne, Australia. (v7,#4)

Niazi, T, "Land Tenure, Land Use, and Land Degradation: A Case for Sustainable Development in Pakistan," Journal of Environment and Development 12(no.3, 2003):275-294. (v.14, #4)

Nicholas, JC, Juergensmeyer, JC, "Market Based Approaches to Environmental Preservation: To Environmental Mitigation Fees and Beyond", Natural Resources Journal 43 (no.3, 2003): 837-864.

Nichols, John, The Sky's the Limit: A Defense of the Earth, New York: W. W. Norton, 1990. \$ 14.95. Essays with photographs of Northern New Mexico by the author of The Milagro Beanfield War who is a passionate defender of the environment. "Today all landscape photography is an act of conscience and commitment." (v1,#4)

Nicholsen, Shierry Weber, The Love of Nature and the End of the World: The Unspoken Dimensions of Environmental Concern. Cambridge, MA: The MIT Press, 2001. Meditations and collages that portray emotional experience of the environment through the world's religious traditions and environmental philosophy and psychology. (v.12,#4)

Nicholson, Charles F., Robert W. Blake, and John Schelhas, "Environmental Impacts of Livestock in the Developing World," Environment 43(no.2, March, 2001): 7-. The combination of population growth and rising demands for meat and dairy products is increasing stress on the environmental and natural resources. How can the world produce enough food while minimizing deforestation, loss of biological diversity, and greenhouse gas emissions. (v.12,#3)

Nickel, James W., "Ethnocide and Indigenous Peoples," Journal of Social Philosophy, 25th Special Anniversary Issue, 1994, pp. 84-98. There is a qualified right against ethnocide (cultural genocide). A prohibition of ethnocide protects minorities and indigenous peoples against the inclination of mainstreamers to force them to abandon their distinctive ways of life and assimilate rapidly into the mainstream culture. Ethnocide is like genocide in being a means of getting rid of a group. Genocide involves the physical elimination of the group, whereas ethnocide could, in principle, leave all of the members of the group alive. Nickel is in philosophy at the University of Colorado. (v5,#4)

Nickel, James W. and Viola, Eduardo, "Integrating Environmentalism and Human Rights." Environmental Ethics 16(1994):265-273. The environmental and human rights movements have valuable contributions to make to each other. Environmentalists can contribute to the greening of human rights by getting the human rights movement to recognize a right to a safe environment, to see humans as part of nature, and to begin considering the idea that nature may have claims of its own. The human rights movement can contribute to environmentalism by getting environmentalists to recognize that they have strong reasons to support rights to political participation, freedom from violence, due process of law, education, and adequate nutrition. Nickel is with the Dept. of Philosophy, University of Colorado, Boulder. Viola is with the Dept. of Political Science and International Relations, University of Brasilia, Brazil. (EE)

Nickler, Patrick A., "A Tragedy of the Commons in Coastal Fisheries: Contending Prescriptions for Conservation, and the Case of the Atlantic Bluefin Tuna." Boston College Environmental Affairs Law

Review 26(No. 3, Spring 1999):549- . The Atlantic Ocean's population of bluefin tuna is under severe stress, and an international commission recommends no fishing for juvenile fish of this species for the indefinite future. But implementing this under the current management system is particularly ineffective. (v10,#4)

Nicklin, Christopher G. J., Moral Possibility After Nihilism: a Deconstruction of Ethics and Epistemology, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Nicklin, Christopher G. J., Moral Possibility After Nihilism: a Deconstruction of Ethics and Epistemology, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Nida-Rümelin, Julian, and Dietmar v. d. Pfordten, eds., Ökologische Ethik und Rechtstheorie (Ecological Ethics and Rights Theory). Baden-Baden: Nomos. 1995. 399 pages. ISBN 3-7890-4114-9. (v8,#2)

Nida-Rummelin, Julian, ed. Angewandte Ethik: Die Bereichsethiken und ihre theoretische Fundierung. Stuttgart: Kroner-Verlag, 1996. 883 pp. A collection on the applied ethics debate in Germany. Two important articles on environmental ethics, one by Angelika Krebs and the other by Anthony Leist. (v8,#3)

Niebuhr, Richard H., "Cosmic Patriotism," Religion and Values in Public Life: A Forum from Harvard Divinity School, vol. 2, no. 1, Fall 1992 (and mailed as a supplement to the Harvard Divinity Bulletin vol. 23, no. 1, 1993. "We seem to stand now at a fork in the path that we of the West have followed up to this point. One branch of the fork leads us toward continuing to treat the environment (and ourselves) as instrumental values. This is the path of prudence or prudential morality and religion. Evidently, it is the path on which both of our political parties wish to lead us. The other branch of the fork leads us into a future that we cannot forecast. All that we can dimly discern is that it leads to a way of conducting ourselves, a way of valuing our environment, our globe, not as instrumental to our desires but as beautiful and good: not a beauty and good belonging to us but a system of beauty and good to which we belong. Following this path would lead to a religious revolution, to a new attitude that William James called 'cosmic patriotism.'" With a long quotation from Aldo Leopold's "Thinking Like a Mountain." Niebuhr is professor of divinity at Harvard Divinity School. (v4,#4)

Nielsen, Annika Porsborg, Jesper Lassen and Peter Sandøe, "Democracy at its best? The consensus conference in a cross-national perspective," *Journal of Agricultural and Environmental Ethics* 20(2007):13-35. Over recent decades, public participation in technology assessment has spread internationally as an attempt to overcome or prevent societal conflicts over controversial technologies. One outcome of this new surge in public consultation initiatives has been the increased use of participatory consensus conferences in a number of countries. Existing evaluations of consensus conferences tend to focus on the modes of organization, as well as the outcomes, both procedural and substantial, of the conferences they examine. Such evaluations seem to rest on the assumption that this type of procedure has universally agreed goals and meanings, and that therefore consensus conferences can readily be interpreted and applied across national boundaries. This article challenges this approach to consensus conferences. The core of the article is a study of national differences in ideas about what constitutes legitimate goals for participatory arrangements. The study looks at three consensus conferences on GMOs, which took place in France, Norway, and Denmark. Drawing on this study, the article discusses the ways in which interpretations of the concept of participation; the value attributed to lay knowledge vs. technical expertise; as well as ideas about the role of the layperson, are all questions that prompt entirely different answers from country to country. Further, the article analyses these national differences within a theoretical framework of notions of democratic legitimacy. Keywords: Public participation - consensus conference - GMO - cross-national evaluation - participatory technology

assessment - TA - deliberative democracy - models of democracy - democratic legitimacy - lay and expert knowledge. The authors are at the Danish Centre for Bioethics and Risk Assessment, Royal Veterinary and Agricultural University, Copenhagen, Denmark.

Nielson, Kirk. "Florida's Froggy Fracas: Hunters Hopping Mad." The Christian Science Monitor, vol. 88, Oct. 1996, p. 3.

Nielson, Kirk. "Tribe Battled Park Service to Build in Everglades." The Christian Science Monitor, vol. 89, 9 Jan. 1997, p. 3.

Niemeijer, D. and Mazzucato, V., "Soil Degradation in the West African Sahel: How Serious Is It?," Environment 44(no.2, 2002): 20-31. (v.13,#2)

Niemela, Jari. "Invertebrates and Boreal Forest Management," Conservation Biology 11(no.3, 1997):601. (v8,#2)

Niemela, Pekka, Mattson, William J. "Invasion of North American Forests by European Phytophagous Insects," Bioscience. v.46(no.10, 1996):741.

Niemeyer, Simon. Review of Costanza, Perrings, and Cleveland, The Development Of Ecological Economics. Environmental Values 9(2000):113.

Nierenberg, William A., ed. Encyclopedia of Earth System Science. New York: Academic Press, 1991. Four volumes, 2,500 pages. \$ 165.00. (v2,#3)

Niesenbaum, Richard A., "A Review of: Barlett, Peggy F. and Geoffrey W. Chase, eds. Sustainability on Campus: Stories for Strategy and Change," Society and Natural Resources 18(no. 8, September 2005): 775-777.

Nieves, Evelyn, with Wald, Matthew L., "Park Service Plan Would Restore Wilderness to Yosemite," New York Times (3/28/00). Yosemite Plans to Take Out Human Structures. In an attempt to restore a wilder feeling to the Park, Yosemite National Park in California is proposing a major reduction in parking spaces, roads, bridges and buildings and planning to remove a dam obstructing the flow of the Merced River. The plan is a scaled back version of an earlier attempt to ban most private cars in Yosemite Valley, an attempt that led to major public opposition. With 4 million visitors last year, Yosemite suffers from overcrowding, traffic jams, and air pollution that almost violates U.S. Environmental Protection Agency standards. In the past, rangers have lowered the gates to the park to prevent more cars from entering. New parking lots outside the Park would be built from which visitors could take shuttle buses into the valley. U.S. Interior Secretary Bruce Babbitt claims the plan aims to "adapt visitors to the needs and forces of nature in the valley, rather than the other way around." The plan's goals are to reduce traffic congestion, reclaim natural beauty, allow natural processes to prevail, promote visitor understanding and enjoyment, and reduce overcrowding. Some conservation groups are critical of the plan, opposing the new parking spaces, additional restaurant space, and the diesel bus system. Says renowned conservationist David Brower, "This plan has smoke, mirrors and hesitation in it, and as we all know he who hesitates is lost, and is ready to make a down payment on the liquidation of the earth." (v.11,#1)

Nieves, Evelyn, "A Roundup of Wild Horses Stirs Up a Fight in the West," New York Times (2/25/02): A1. Wild horses in America: pest or symbol of the west? 46,000 wild horses and burros roam the American West. They are descendants of horses used by cowboys and Indians, pioneers and miners, ranchers and explorers. While some see these horses as a living legacy of the Wild West others view them as exotic pests who destroy the western range and steal grass from cattle and sheep. A decades old

debate rages between these two viewpoints. The Bureau of Land Management manages these horses and is trying to resolve the issue by capturing half the herd and putting them up for adoption. This is necessary, they say, so that the habitat can be preserved for all animals who graze on it, including cattle and sheep owned by private ranchers who pay for grazing rights on public lands.

Animal welfare advocates and the dozen or so wild horse protection organizations oppose this herd reduction program and have filed a lawsuit to prevent it. They object that the agency first factors in all the other users of the habitat before it comes up with its view of an "appropriate management level" for horses. They also view the adoption program as woefully inadequate, claiming that there are not enough takers for the horses, that public awareness of the program is insufficient, and that despite the BLM's regulations, adopted horses too often end up in slaughter houses. The Fund for Animals says its investigations show that most of the adopted horses end up in Canadian slaughterhouses for which there are no records. A 1997 investigation by the Associated Press found that BLM officials allowed the slaughter of hundreds of adopted wild horses and falsified records to thwart investigators.

Radical animal rights groups firebombed a BLM corral and tore down fences to protest the roundups. Wild horse opponents are fierce in their opposition as well. A spokesperson for the National Cattlemen's Beef Association says: "The problem with wild horses running around is they screw up improvements such as water tanks and water developments. They run down fences. With their broad feet, they destroy water springs and other things consistent with historical grazing use." One might also argue that because the horses were brought over by Europeans and have not co-evolved with the land for a sufficient period, they are exotics that do not belong on the range. (v.13,#2)

Nifong, Christina. "Traffic in the South Tests 'Car Is King' Mentality." The Christian Science Monitor 89 (8 July 1997): 4. Plans to build trains and light-rail systems in cities from Atlanta to Houston to Los Angeles. (v8,#2)

Nightingale, Paul C. "Negotiating Contracts for the Purchase and Sale of Contaminated Property." Natural Resources and Environment 10, no.4 (1996): 11. (v7, #3)

Niiniluoto, Ilkka, "Nature, Man, and Technology--Remarks on Sustainable Development," Arctic Centre Publications 6(1994):73-87, in a theme issue on The Changing Circumpolar North: Opportunities for Academic Development, Lassi Heininen, ed. Rovaniemi, Finland. The human responsibility for nature as related to sustainable development. The Brundtland Commission report does not make sufficiently explicit how its recommendations are based upon factual and value premises. Environmental research can give facts but the choice of environmental policy has to be derived from theories of justice and of environmental ethics. To save our planet for future generations, ethical concerns have to be extended beyond human-centered instrumental values toward communal and ecocentered intrinsic values. Niiniluoto is a faculty dean and philosopher at the University of Helsinki. (v5,#2) (Finland)

Nilssen, Esben A. "Should We Risk Any Catastrophes?" Pages 71-77 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Nilsson, A. Ultraviolet Reflections: Life Under a Thinning Ozone Layer. Chichester, U.K.: John Wiley and Sons, 1996. 152 pp. £ 14.99. The effects of increasing UV radiation on people, plants, and animals. Nilsson takes the reader on a journey from the Antarctic ozone hole to the Arctic birch forest to see how plants and microbes will fare against increasing UV radiation. He raises questions about the evolution of our immune system and uncovers scientific controversy over the causes of eye diseases.

Nilsson, Annika and Rose, Joanna, "Environmental Researchers Wait Anxiously for Salvation," Science 283(1999):924. Environment and environmental research in Sweden. Environmental research has long been eminent in Sweden, but a fierce debate is raging over who should control environmental science.

Researchers are waiting to see if their previously generous funding will be restored. (v.10,#1)

Nine, Cara. Review of Peter Hay. Main Currents in Western Environmental Thought. Environmental Ethics 25(2003):421-422. (EE)

Nisbet, Lee, ed., The Gun Control Debate: You Decide. Buffalo, N. Y. Prometheus Books, 1990. (v1,#4)

Nissani, M. "Brass-tacks Ecology." The Trumpeter 14, no. 3 (1997): 143-48. The author argues that environmentalists should focus their energies and resources on, and join other humanitarians in, an all-out campaign to eradicate private money from American politics. (v8,#3)

Nissani, Moti, "Brass-Tacks Ecology," The Trumpeter 14(no 3, 1997):1543-148. Environmental reform has failed, for two important reasons. First, the great majority of environmental thinkers ignore concrete political realities. Instead they are caught up in debates about the significance of one or another proximate cause of the environmental crisis (human domination of nature, overpopulation). The environmental movement is bereft of a core practical philosophy guiding its actions. Second, environmentalists misconstrue political realities, concentrating on this or that specific issue (the Endangered Species Act, water pollution), when the real problem is an economic and political system in which money counts as the bottom line. With some sobering illustrations from both business and politics. Nissani is in the Interdisciplinary studies Program, Wayne State University, Detroit. (v.8,#4)

Nissani, Moti "The Greenhouse Effect: An Interdisciplinary Perspective," Population and Environment: A Journal of Interdisciplinary Studies 17 (1996): 459-489. For a shorter, updated version, see "The Greenhouse Effect Revisited," in Theodore Goldfarb, ed., Taking Sides: Clashing Views on Controversial Environmental Issues. Guilford, CT: Dushkin, 1997, 7th edition. A typical current argument is that even if the greenhouse threat is real, even if temperatures rise and low-lying lands must be protected forever by an enormous system of dikes, such unlikely occurrences do not justify imposing vast costs on the present generation. We rather have, so the argument runs, a stronger obligation to help developing countries overcome the environmental problems that they are facing today. The author argues that anyone willing to cross disciplinary boundaries can easily ascertain that this surprisingly popular viewpoint is mistaken.

A case study in environmental history: the CFC ozone link is instructive. The nature of, evidence for, and the largely uncertain consequences of, the enhanced greenhouse effect on Earth are considered. For argument's sake, a conservative and arbitrary estimate is adopted, assuming that the chances of adverse greenhouse consequences within the next century are 10%; those of a cataclysm, 1%. Such chances should not be taken, because there is no conceivable reason for taking them. The steps that will eliminate the greenhouse threat will also save money and cut pollution, accrue many other beneficial consequences, and only entail negligible negative consequences. Humanity is risking its future for less than nothing. Claims that the greenhouse threat involves hard choices, that it is value-laden, or that it cannot be resolved by disinterested analysis, are tragically mistaken. Given the stakes of the greenhouse debate--the future of humanity--concerned scholars and citizens ought to understand this issue. (v7,#4)

Nitecki, Matthew H. and Doris V. Nitecki, eds., Evolutionary Ethics. Albany: State University of New York Press, 1993. 368 pages. \$ 16.95 paper. \$ 49.50 hardcover. Four sections: Historical. Sociobiological. Rejection of the Sociobiological. Further perspectives. (v4,#3)

Nixon, Will, "The Species Only a Mother Could Love," The Amicus Journal 21 (no. 2, Summer 1999):28-32. "Freshwater mussels are the most endangered order of animals in the country. Does anybody give a damn?" 10% of species are already extinct. 70% of the remaining 300 species are at risk. 69 species are formally protected under the Endangered Species Act. One problem: "It's hard to feel sorry for a mussel. It is simply not that easy to get worked up about a cold-blooded, gluey morsel of mollusk

flesh lodged in a drab brown shell at the bottom of a creek." Other problems: Dams and degraded rivers and streams. (v.12,#3)

Njoroge, Raphael Gerard, and G. A. Bennaars, Philosophy and Education in Africa: An Introductory Text for Students of Education. Nairobi: Transafrica Press, 1986, 1994. 259 pages. Includes a section on education and ethics. Both authors teach philosophy of education at Kenyatta University, Nairobi. (v6,#3)

Nkwanga, David. "The Uganda Biosphere Club." Environmental Conservation 22, no.4 (1995): 369. (v7, #3)

Noal, Fernando Oliveira, Reigota, Marcos, and Barcelos Valdo Hermes de Lima, compilers, Tendências da Educação Ambiental Brasileira (Trends in Brazilian Environmental Education). Santa Cruz do Sul (Brazil): EDUNISC, published by the University of Santa Cruz do Sul Press, 1998. In Portuguese. Website contacts: info@unisc.br; www@unisc.br. Publisher's address: Avenida Independência, 2293, 96815-900 Santa Cruz do Sul - RS, Brazil. Fax: (051) 717-1855. 14 articles by different contributors, including articles on Amazonia. (v10,#4)

Nobis, N, "Carl Cohens `Kind' Arguments For Animal Rights and Against Human Rights", Journal of Applied Philosophy 21 (no1, 2004): 43-59(17).

Noble, Ian R. and Rodolfo Dirzo, "Forests as Human-Dominated Ecosystems," Science 277(1997):522-525. See under theme issue, Science, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Noble, J. M., "Friends of the Earth V. Laidlaw and the Increasingly Broad Standard for Citizen Standing to Sue in Environmental Litigation," Natural Resources Journal 42(no.2, 2002): 415-32. (v.13,#4)

Nockles, Joan M. "Katie John v. United States: Redefining Federal Public Lands in Alaska." Environmental Law 26, no.2 (1996): 693. Nockles analyzes the Ninth Circuit's majority and dissenting opinions in *Alaska v. Babbitt*, the official name for what is referred to in Alaska as the Katie John dispute. She argues that the majority opinion should have held that waters in which the United States holds a navigational servitude are "federal public lands" to which the Alaska National Interest Lands Conservation Act's rural subsistence priority must attach. Absent that finding, she concludes that an administrative solution will rectify the court's errors. (v7, #3)

Noe, Egon, Niels Halberg and Jens Reddersen, "Indicators of Biodiversity and Conservational Wildlife Quality on Danish Organic Farms for Use in Farm Management: A Multidisciplinary Approach to Indicator Development and Testing," Journal of Agricultural and Environmental Ethics 18(2005):383-414.

Organic farming is expected to contribute to conserving national biodiversity on farms, especially remnant, old, and undisturbed small biotopes, forests, and permanent grassland. This objective cannot rely on the legislation of organic farming solely, and to succeed, farmers need to understand the goals behind it. A set of indicators with the purpose of facilitating dialogues between expert and farmer on wildlife quality has been developed and tested on eight organic farms. Combined with a dialogue process, using these indicators could be an important key component of a farm wildlife management advisory tool. Key words biodiversity - conservational wildlife quality -farm management - indicators - organic farming - weed. The authors are in the Department of Agroecology, Danish Institute of Agricultural Sciences, Tjele, Denmark. (JAEE)

Noel, Erin, "Foreword: Symposium: Power, Politics, and Place: Who Holds the Reins of Environmental

Regulation," Ecology Law Quarterly 25(No.4, 1999):559-. (v.10,#2)

Nogales, M; Martin, A; Tershy, BR; Donlan, CJ; Veitch, D; Puerta, N; Wood, B; Alonso, J, "A Review of Feral Cat Eradication on Islands", Conservation Biology 18 (no.2, 2004): 310-319.

Nolan, A 1992. Cosmic Spirituality. Searching for the spiritual roots of Africa and Asia. Challenge 1992:8, 2-4. (Africa)

Nolen, Kelly. "Residents at Risk: Wildlife and the Bureau of Land Management's Planning Process", Environmental Law 26(no. 3):771. Nolen evaluates the Bureau of Land Management's planning process under the Federal Land Policy and Management Act (FLPMA). After concluding that wildlife does not receive adequate consideration, she offers several solutions. (v7,#4)

Nollman, Jim. Spiritual Ecology (New York: Bantam Books, 1990). Paper, \$ 9.95. (v1,#1)

Nolt, John, A Land Imperiled: The Declining Health of the Southern Appalachian Bioregion. Knoxville: University of Tennessee Press, 2005. Detailed study of environmental loss and degradation in the Southern Appalachians; air, water, biota, population and urbanization, food, energy, consumption and waste, transportation, future prospects. At times Nolt writes with co-authors, specializing in particular areas, and always he writes with a philosopher's eye for ethical and value issues as he overlooks past and present in a region he loves. Nolt teaches philosophy at the University of Tennessee, Knoxville.

Nolt, John. "The Move from Good to Ought in Environmental Ethics." Environmental Ethics 28(2006):355-374. The move from good to ought, a premise form found in many justifications of environmental ethics, is itself in need of justification. Of the potential moves from good to ought surveyed, some have considerable promise and others less or none. Those without much promise include extrapolations of obligations based on human goods to nonsentient natural entities, appeals to educated judgment, precautionary arguments, humanistic consequentialist arguments, and justifications that assert that our obligations to natural entities are neither directly to those entities nor derived from our obligations to humans. Some arguments that extrapolate obligations based on goods involving sentience from humans to sentient animals are promising, but whether they are sufficient is controversial. Gandhian and Aristotlian arguments are also promising, provided we can justify their ought premises. (EE)

Noorman, K.J. and T.S. Uiterkamp, eds. Green Households? Domestic Consumers, Environment and Sustainability. Reviewed by Joerg Koehn. Environmental Values 8(1999):404.

Norberg-Hodge, Helena. "Reclaiming Our Food: Reclaiming Our Future." The Ecologist 29(no. 3, May 1999):209- . (v.11,#1)

Norberg-Hodge, Helena. "Bringing the Economy back Home: Towards a Culture of Place." The Ecologist 29(no. 3, May 1999):215- . (v.11,#1)

Norberg-Hodge, H, "Why ecovillages? The world needs people to set up sustainable communities," Ecologist 32(no.1, 2002):38- . (v.13, #3)

Norchi, D., and D. Bolze, Saving the Tiger: A Conservation Strategy. WCS Policy Report Paper No. 3. New York: Wildlife Conservation Society (at the Bronx Zoo), 1995. Trade in tiger parts and continuing human pressures on tiger habitats are the primary factors responsible for declining tiger numbers. Key recommendations are improved law enforcement, relocating humans out of tiger habitat, building walls and other deterrents to keep local people and their cattle out of tiger reserves, policing against poachers, and conservation education of consumers of tiger products and local communities living near tiger habitat. There is insufficient political commitment to tiger conservation. (v8,#2)

Nordenfelt, L., *Animal and Human Health and Welfare: A Comparative Philosophical Analysis*. Oxfordshire, UK:CABI, 2006. Reviewed by Richard P. Haynes in *Journal of Agricultural and Environmental Ethics* 21(2008):91-97.

Nordgren, A., ed. Science, Ethics, Sustainability: The Responsibility of Science in Attaining Sustainable Development. Uppsala: ACTA UNIVERSITATIS UPSALIENSIS Studies in Bioethics and Research 2, 1997, 282pp. Reviewed by Nick Clifford. Environmental Values 9(2000):392.

Nordgren, Anders, ed. Science, Ethics, Sustainability: The Responsibility of Science in Attaining Sustainable Development. Uppsala: Uppsala University, Centre for Research Ethics, 1997. 281 pp. Sustainable development, research ethics, bioethics, environmental ethics, environmentally history, sociology of science, environmental economics, environmental policy, science and responsibility. Contains:

--Sörlin, Sverker, "Problem Continents and Island Experiences: Environment and Science in the Past and in the Present," pp. 19-29.

--Jernelöv, Arne, "The Environmental Protection in Recent History," pp. 31-37.

--Lindén, Anna-Lisa, "Sociological Aspects on Man, Value Orientation, Behaviour and Sustainable Development," pp. 41-50.

--Sundqvist, Göran, "Keeping Science and Politics Apart? The Role of Science in Environmental Policy," pp. 51-61.

--Lidskog, Rolf, "The Reinvention of Politics? Science and Politics in the Development towards Sustainability," pp. 63-67.

--Corell, Elisabeth, "The Expert--Decision-maker Relationship: Science and Politics in International Environmental Negotiations," pp. 79-90.

--Randall, Alan, "Sustainability: Economics Does Not Have the Answers, But It Helps Clarify the Questions," pp. 93-104.

--Zylicz, Tomasz, "Economic Values and Policy Implications," pp. 105-114.

--Söderbaum, Peter, "Science, Ethics and Democracy: Ecological Economics as a Response," pp. 115-133.

--Rolston, Holmes III, "Environmental Science and Environmental Advocacy: From 'Is' in Science to 'Ought' in Ethics," pp. 137-153.

--Nordgren, Anders, "Science and Sustainability: Some Reflections on the Moral Responsibility of Scientists," pp. 155-177.

--Brom, Frans W. A., Vorstenbosch, Jan, Schroten, Egbert, "Public Policy and the Moral Responsibility of Science," pp. 179-188.

--Nitsch, Ulrich, "The Reluctant Scientist: Some Reflections on Scientists' Commitment to Sustainability Research," pp. 189-203.

--Buhlmortensen (Buhl-Mortensen), Lene, "TYPE-II Statistical Errors and the Precautionary Principle: A Case Study in Marine Biology," pp. 205-210.

--Rydén, Lars, "Faces of Sustainability," pp. 211-220.

--Low, Nicholas, and Gleeson, Brendan, "Finding Justice in the Environment," pp. 221-233.

--Molnár, László, "People or Penguins": Some Remarks on Criteria of Moral Considerability," pp. 235-241.

--Heeger, Robert, "Respect for Animal Integrity?" pp. 243-252.

--Gustafsson, Bengt, "The Value of Looking in Other Directions," pp. 255-263. The viewpoint of a concerned scientist.

--Thuridin, Gorel, "Ethics, Spiritual Values and a Political Will: Any Concern of Scientists?, pp. 267-273. The viewpoint of a concerned politician. (v9,#1)

Nordgren, Anders. Review of T. Wilkinson, Science under Siege: The Politicians' War on Nature and

Truth, Boulder, Co, USA: Johnson Books, 1998, Environmental Values 10(2001):423. (EV)

Nordhaus, William D. "To Tax or Not to Tax: Alternative Approaches to Slowing Global Warming." *Review of Environmental Economics and Policy* Vol. 1, no. 1 (2007): 26-44. Nordhaus discusses the differences between CO₂ taxes and cap and trade, particularly as part of an international agreement.

Nordhaus, William D. Managing the Global Commons. Reviewed by Christian Azar. Environmental Values 6(1997):106-108.

Nordhaus, William D. The Swedish Nuclear Dilemma: Energy and the Environment. Washington, D. C.: Resources for the Future, 1997. 184 pp. \$39. An analysis of an issue that has played a significant role in Swedish economic and energy policy for over fifteen years. (v8,#3)

Nordlund, AM; Garvill, J, "Value Structures Behind Pro-environmental Behavior," Environment and Behavior 34(no.6, 2002): 740-756.

Nordquist, Joan, Animal Rights: A Bibliography. Santa Cruz, CA: Reference and Research Services (511 Lincoln St., Santa Cruz, CA 95060), 1993. 71 pages. \$ 15. ISBN 0-937855-40-5 (v.9,#3)

Nordquist, Joan, Radical Ecological Theory: A Bibliography. Santa Cruz, CA: Reference and Research Services (511 Lincoln St., Santa Cruz, CA 95060), 1993. 71 pages. \$ 15. ISBN 0-937855-59-6

Nordstrom, Karl F., "Intrinsic Value and Landscape Evaluation," The Geographical Review 83 (no. 4, October 1993):473-476. The concept of intrinsic value in nature, as developed by philosophers, can provide geographers with a framework for examining both natural and human-altered landscape features in ways that do not appeal solely to human preference or utility. The concept can carry more weight in pragmatic decisions if it is defined and refined so that it retains its original meaning but is approximated by arguments in human terms. Three components of this meaning are: (1) essential or inherent, and not merely apparent, (2) originating or due to causes or factors within a body, (3) being good in itself or desired for its own sake, without regard to anything else. Accounts of intrinsic value, though they make objective reference, will also be of a subjective nature but this does not diminish the usefulness of the concept to geographers as a reference point in assessing changes in a landscape. Nordstrom is in geography and marine coastal science, Rutgers University. (v5,#4)

Nordstrom, Karl F., "The Concept of Intrinsic Value and Depositional Coastal Landforms," Geographical Review 80 (no. 1, 1990):68-81. Many recent studies in geography, ecology, and environmental ethics argue the need to manage natural resources in ways that do not appeal solely to human preference or utility. Nordstrom applies the concept of intrinsic value in nature to inanimate objects such as depositional landforms, comparing undeveloped coastal areas with those subjected to human modification. Such features as beaches and shoreline depositional forms can be dynamic landforms that are distinct from their surroundings and have symmetry and harmony, beginnings, endings, cycles with an integrity of place. Humans typically destroy these features with their alterations, but there can be enlightened management practices that respect such intrinsic values. An interesting blending of geography, marine science, and environmental ethics. Nordstrom is in geography and marine coastal science, Rutgers University. Philosophers who think that geographers don't do their philosophical homework should read the two preceding articles, or the next two. (v5,#4)

Norgaard, Kari Marie. "Moon Phases, Menstrual Cycles, and Mother Earth: The Construction of a Special Relationship between Women and Nature," Ethics and the Environment 4(1999):197-210. Norgaard is in sociology at the University of Oregon.

Preston, Christopher J. "Environment and Belief: The Importance of Place in the Construction of

Knowledge," Ethics and the Environment 4(1999):211-218.

In his popular first book, The Spell of the Sensuous, David Abram (1996) calls on us to recognize the encompassing earth "in all its power and its depth, as the very ground and horizon of all our knowing." By reemphasizing the connection between knowing and the earth, Abram hopes to encourage a more engaged existence with the flora, fauna, and landscapes among which we reside. Given that the earth is literally the ground and horizon of all our knowing, it makes sense--in fact, it is good for the senses--to consider for a while how the places in which we know come to exert their influence upon the constructions that we call knowledge. This paper is a sketch of a larger project to illustrate the epistemic significance of geography. Preston is in philosophy at the University of South Carolina, Columbia.

Sandilands, Catriona. "Raising Your Hand in the Council of All Beings: Ecofeminism and Citizenship," Ethics and the Environment 4(1999):219-234. Sandilands is in the faculty of environmental studies, York University, Toronto. (E&E)

Norgaard, Kari Marie. "Gender in the Cultural Lens: Ecological Feminism and the Enrichment of Human Ecology." Advances in Human Ecology, Vol. 5. Greenwich, CT: JAI Press, 1996. (v7, #3)

Norgaard, R. B., "Can Science and Religion Better Save Nature Together?," Bioscience 52(no.9, 2002): 842-46. (v.13,#4)

Norgaard, RB and Baer, P, "Collectively Seeing Climate Change: The Limits of Formal Models," BioScience 55 (no. 11, November 2005): 961-966. Understanding the risks posed by anthropogenic climate change and the possible societal responses to those risks has generated a prototypical example of the challenge of "collectively seeing complex systems." After briefly examining the ways in which problems like climate change reach the scientific and public agenda, we look at four different ways in which scientists collectively address the problem: general circulation models, integrated assessment models, formal assessments (e.g., the Intergovernmental Panel on Climate Change), and distributed learning networks. We examine strengths and limitations of each method, and suggest ways in which a greater awareness of the need for plural approaches could improve the basis for learning and decisionmaking.

Norgaard, RB, "Posthuman Enough?," BioScience 54 (no.3,2004): 255-259(5).

Norgaard, Richard B., Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future. New York: Routledge, 1994. 280 p. Economic development. Environmental problems. Sustainable development. An epistemological critique of modernity, with an explanation of the environmental crisis, and an alternative vision of the future.

Norgaard, Richard, B., Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future. New York: Routledge, 1994. \$ 18.95 paper. \$ 59.95, cloth. 280 pp. A critique of modernity's vision of progress. Modernity's naive construction of integrated planning is wrapped-up in an unrealistic, monistic model of progress that dooms it to failure. The betrayal of progress is in our choice of an unsound process of development, not in the goals themselves. Like King Midas, in our pursuit of real and significant fruits, we failed adequately to consider the negative side effects: significant environmental degradation, increasing difficulty satisfying even basic human needs, and failing strategies for addressing cultural diversity. Chapter 6 is "The Philosophical Roots of Betrayal": atomism, mechanism, monism, objectivism, and universalism. In the second half of the book, Norgaard proposes a coevolutionary cosmology, replacing atomism with holism, mechanism with the systems concept, universalism with contextualism, objectivism with subjectivism, and monism with conceptual pluralism. Reviewed by Harold Glasser in Environmental Values 5(1996):267-270. Norgaard is president-elect of the International Society of Ecological Economics.

Norgaard, Richard B., "Environmentalism as the Salvation of Materialism," CTNS (Center for Theology and the Natural Sciences) Bulletin 16 (No. 3, Summer 1996):10-17. Environmental problems are typically framed as problems of spoiling or running out of the stuff needed for people's material sustenance in the future. Al Gore's Earth in the Balance offers a provocative illustration of how insidious materialism is, even for the best intentioned reflections on the environment. How will we move beyond materialism if we navigate from a map provided by a materialist science? By addressing the moral issues related to our material realities, the churches can heal important wounds. Additionally, the churches can help us recreate a sense of community, and thereby facilitate a collective revisioning of the future. Norgaard teaches in the Energy and Resources Program at the University of California, Berkeley, and is president of the International Society for Ecological Economics, of which he is a founder. (v7,#4)

Norgaard, Richard B., Review of Pearce, David, Edward Barbier, Anil Markyanda, Scott Barrett, R. Kerry Turner and Timothy Swanson, Blueprint 2: Greening the World Economy. Environmental Values Vol.1 No.2(1992):173.

Norgaard, Richard, "Sustainable Development: A Co-evolutionary View," Futures, December 1988. 606-619. (v5,#1)

Norgaard, Richard B., Development Betrayed: The End of Progress and A Coevolutionary Revisioning of the Future. Reviewed by Harold Glasser. Environmental Values 5(1996):267-270. (EV)

Norgaard, Richard B., Review of Common, Michael, Sustainability and Policy. Environmental Values 6(1997):105-106. (EV)

Norgbey, Segbedzi W. "Control of Onchocerciasis (River Blindness) in West Africa: Ecology, Risk and Resettlement," The Journal of Environment and Development 6(1997):6.

Norlock, Kathryn, "The Atrocity Paradigm Applied to Environmental Evils," Ethics and the Environment 9(no. 1, 2004):85-93. "While I am persuaded both by the theory of evil advanced by Claudia Card in "The Atrocity Paradigm" and by the idea that there are evils done to the environment, I argue that the theory of evil she describes has difficulty living up to her claim that it `can make sense of ecological evils in the victims of which include trees and even ecosystems.'" Norlock is in philosophy St. Mary's College of Maryland. (E&E)

Norman Myers and Julian L. Simon, Scarcity or Abundance: A Debate on the Environment. New York: W. W. Norton, 1994. 254 pages. Julian Simon continues his famous offer to bet that "just about any trend pertaining to material human welfare will improve rather than get worse," and challenges betters to "pick the index." Myers replies that there are twice as many people on the planet as there were forty years ago, with many more now living in poverty and suffering, and 1.5 billion in absolute poverty. The betting is inappropriate, for the wealthy North, one-fifth of the world consuming four-fifths of its goods; human deprivation is quite evident for the four-fifths of the world that consumes one-fifth of its goods. Maybe environmentalists should bet this situation will worsen, and hope that they lose their bets. (v6,#4)

Norman, Myers, Jennifer Kent. Perverse Subsidies: How Misused Tax Dollars Harm the Environment and the Economy. Covelo, CA: Island Press, 2000. 240 pages. Cloth \$40. Paper \$20. Subsidies worldwide with a particular focus on the extent, causes, and consequences of perverse subsidies. Dramatic illustrations of the scale and dimensions of the problem. (v.11,#4)

Norman, Richard, "Interfering with Nature," Journal of Applied Philosophy 13(No.2, 1996):1-. (v.10,#2)

Normile, Dennis and Charles C. Mann, "Asia Jockeys for Stem Cell Lead," Science 307(4 February 2005):660-664. A major reason why Asian scientists are advancing in stem cell research is that "Asian countries are less encumbered by the ethical dilemmas that have hamstrung research in the West."

Normile, Dennis. "Driven to Extinction." *Science* Vol. 319, no. 5870 (21 March 2008): 1606-09. Rinderpest, an animal disease that devastated cattle and other animals and their human keepers across Eurasia and Africa for millennia, may join smallpox as the only viral diseases to have been eradicated. This would be, some say, the most remarkable achievement in veterinary medical history. In one epidemic, cattle shipped from India to feed an Italian army carried the virus to the horn of Africa in 1897. The virus soon reached Cape Town, killing about 90% of the cattle as well as large populations of sheep and goats. Domesticated oxen died, leaving farmers unable to plow fields. The virus also decimated populations of buffalo, giraffe, and wildebeest. A vaccine became available in the 1950s, but it has been difficult to achieve widespread vaccination and surveillance and to eliminate all the loci of infection.

Norris, Kathleen, Dakota: A Spiritual Geography. Ticknor and Fields, 224 pages. \$ 19.95. Norris is from Lemmon, South Dakota, 1,600 people, the largest town in an area twice the size of Massachusetts. Though reared first in New York, she has lived there twenty years, and knows both worlds. She finds the great plains a world where things are timeless and deep, offering gifts of grace and revelation, despite the usual perception that the Dakotas are stuck in an earlier, less relevant age. The plains are a sanctuary. Norris is a lay preacher in the Presbyterian Church, also an associate in a community of Benedictine monks, as well as an environmentalist and citizen. A very sensitive book, with a marvelous sense of place. (v4,#2)

Norris, Ken, and Pain, Deborah, J., eds., Conserving Bird Biodiversity: General Principles and their Application. Cambridge: Cambridge University Press, 2002. Norris is at the University of Reading, UK. Pain is with the Royal Society for the Protection of Birds, Bedfordshire, UK. (v.13, #3)

Norris, S, "Only 30: A Portrait of the Endangered Species Act as a Young Law", BioScience 54 (no.4, 2004): 288-294(7).

Norris, S, "Neutral Theory: A New, Unified Model for Ecology", Bioscience 53(no.2, 2003):124-129.

Norris, S., "Creatures of Culture? Making the Case for Cultural Systems in Whales and Dolphins," Bioscience 52(no.1, 2002): 9-14. (v.13,#2)

Norris, Scott, "A Year for Biodiversity," Bioscience 50 (No. 2, Feb 01 2000): 103- . (v.11,#2)

Norris, Scott. "Madagascar Defiant." *BioScience* Vol. 56, no. 12 (2006): 960-65. Conservationists have long proclaimed the economic value of biodiversity and the services it provides. The point may be proved in Madagascar, where a determined president and an international conservation coalition are struggling to transform a country noted for its past environmental mismanagement into a new role model for green development.

Norris-York, Dover A. "The Federal Advisory Committee Act: Barrier or Boon to Effective Natural Resource Management." Environmental Law 26, no.1 (1996): 419. Norris-York analyzes the role of the Federal Advisory Committee Act in the management of natural resources by reviewing pertinent case law and examining its application to the Department of the Interior's Rangeland Management Plan. Finding the status quo inadequate, Norris-York concludes with suggestions for achieving more meaningful public participation in natural resource management issues. (v7, #3)

Norse, Elliott A., Global Marine Biological Diversity: A Strategy for Building Conservation into Decision Making. Washington, DC: Island Press, 1993. 350 pages. \$ 27.95. Builds on the work of

more than 100 expert contributors. What is marine biological diversity and how is it important? How is it similar and different to terrestrial diversity? Life in the sea and ways to save, study, and use that life sustainably. Norse is chief scientist at the Center for Marine Conservation, also attached to the University of Washington. (v4,#2)

Norse, Elliott A., Ancient Forests of the Pacific Northwest Corvella CA: Island Press, 1990. \$ 19.95 paper. \$ 34.05 hardbound. (v1,#3)

Norstrom, Karl F., "The Concept of Intrinsic Value and Depositional Coastal Landforms," Geographical Review 80(1990):68-81. Norstrom is a research professor at the Center for Coastal and Environmental Studies at Rutgers University. (v2,#1)

North American Conference on Christianity and Ecology, The. publishes Firmament: A Quarterly of Christian Ecology and holds conferences and publishes proceedings and videotapes. It will sponsor some sixty events in 1988 and 1990. The most recent conference proceedings is a book, Christian Ecology: Building an Environmental Ethic for the Twenty-First Century, available for \$ 12 plus \$ 3 postage and handling. For information contact Eleanor Rae, President, North American Conference on Christianity and Ecology, P. O. Box 14305, San Francisco, CA 94114-0305. (v1,#1)

Northcott, Michael S., "Ecology and Christian Ethics," in Robin Gill, ed., Cambridge Companion to Christian Ethics. Cambridge: Cambridge University Press, 2001. (EE v.12,#1)

Northcott, Michael S., The Environment and Christian Ethics. Cambridge: Cambridge University Press, 1996. 379 pp. \$59.95 (hb); \$21.95 (pb). Of the books on environmental ethics written from a perspective of Christian ethics, Northcott's survey best knows the philosophical literature, in addition to having a thorough familiarity with the theological literature. Northcott sums up his argument: "The resolution of the environmental crisis requires the rediscovery of the existence of value and moral significance in the objective world prior to human acts of valuing, an independence which Western theists have traditionally located in the original act of divine beneficence in the creation of the world. . . . Without a recovery of this traditional recognition of the moral order and purposiveness of the world, prior to its processing by human perception, I do not believe it will be possible for modern societies ultimately to reduce their impacts on the ecological integrity of the nonhuman world" (pp. 92-93). In this search, Northcott is especially interested in philosophical arguments for intrinsic value in nature, which are congenial with this divine creation of value.

Northcott recognizes amply that Christians have sometimes been the cause of environmental degradation; but he also believes that the primal Hebrew vision was "earth friendly" (p. 198), and that early Christianity with its understandings of the redemption of creation was also. The Christ is the Lord of nature, as well as of persons. Northcott argues for what he call a "restitution" of such worldviews (p. xiii, p. 239, p. 255). He has a soft spot for indigenous peoples, of whom he paints a rather rosy picture, and thinks that they were closer to the Hebrew mind than often realized. A central emphasis is on natural law, which Northcott hopes to recover. Northcott teaches Christian ethics at the University of Edinburgh. (v8,#3)

Northcott, Michael S., "From Environmental U-topianism to Parochial Ecology: Communities of Place and the Politics of Sustainability," Ecotheology No 8 (Jan 2000):71-85.

Northcott, Michael S. *A Moral Climate: The Ethics of Global Warming*. London: Darton, Longman and Todd, 2007. Responses to the challenge of global warming require very large changes, locally, globally, individually, corporately, and fundamentally. A central change is learning to put the common good ahead of selfish interests. That requires weaving together the physical climate and the moral climate. There are opportunities for relieving the worst from climate change, but equally for facing and solving other

problems: world poverty, the rich/poor divide, overuse of resources, and the appreciation and conservation of the non-human creation. Northcott teaches Christian ethics at New College at the University of Edinburgh.

Northcott, Michael S., "Do Dolphins Carry the Cross? Biological Moral Realism and Theological Ethics," New Blackfriars (monthly review edited by the English Dominicans) vol. 84, no. 994, December 2003. "Christians who own that dolphins reveal aspects of the cruciform shape of biological and social reality will also wish to shun foods gotten at the expense of the casual destruction of this wondrously rich exemplar of God's created order. ... Dolphins and porpoises, which are so close to humans in many aspects of their flourishing, ... are the victims of this lack of virtue amongst modern fisherfolk." (p. 552). Northcott is in theological ethics, New College, University of Edinburgh.

Northcott, Michael S. The Environment and Christian Ethics. New York: Cambridge University Press, 1996. 280 pages. \$59.95 cloth, \$21.95 paper. The extent, origins and causes of the environmental crisis. The author claims to provide an important corrective to secular approaches to environmental ethics, including utilitarian individualism, animal rights theories and deep ecology. Northcott is at the University of Edinburgh. (v7, #3)

Northeast Regional Agricultural Engineering Service. A Guide to Logging Aesthetics: Practical Tips for Loggers, Foresters and Landowners. 1993. 27pp. \$6 paper. This describes the cost-effective and proven practices that minimize negative impacts during and immediately after harvest, while enhancing other values.

Northeast Forestry University, Social Ecology and Ecological Philosophy Research Editorial Committee, Social Ecology and Ecological Philosophy Research. In Chinese. Harbin, China: Northeast Forestry University Press, 1992. 264 pages. ISBN 7-81008-318-X/B.9 An anthology of about three dozen papers, grouped in six parts: Part I: Theoretical Research Regarding Humans and Nature. Part II. The Methodological Problem of Ecological Research. Part III. Rational Use of Natural Resources and the Problem of Environmental Protection. Part IV. The Problem of Development and the Use of Recycled Resources. Part V. Cooperative and Developmental Principles and Strategies of Ecology, Economics, and Society. Part VI. On Recognized Opinions of Ecology, Ecological Culture, and Problems in Ecological Ethics. A contact here, and contributor to the volume, is Professor Ye Ping, Social Science Department, Northeast Forestry University, 150040 Harbin, P. R. CHINA. (v4,#3) (China)

Norton argues on pragmatic "Deweyan" grounds that we should cease to ask scientists for value neutral definitions of "sustainability," developed independently of moral and social values, to guide our environmental policy making debates. "Sustainability," like human "health," is a normative concept from the start - one that cannot be meaningfully developed by scientists or economists without input by all the stake holders affected. While I endorse Norton's approach, I question his apparent presumption that concern for *sustainability* for the future is at odds with and ought to trump concern for *enhancement* in the present of public opportunities to access the goods nature represents. I argue that the two are not separable in practice. I argue for Passmore's position that unless we take care to enhance equitable access to the good and services nature represents in the present, we cannot succeed in promoting sustainability for future generations. Welchman is Department of Philosophy, University of Alberta, Edmonton, AB, Canada.

Norton, Bryan G. Sustainability: A Philosophy of Adaptive Ecosystem Management. Chicago: University of Chicago Press, 2005. Beginning with his experiences as a philosopher working at the Environmental Protection Agency, Norton argues that the central problem of environmentalism and environmental protection is a lack of effective communication. Following his interpretation of Aldo Leopold as an anthropocentric holist, environmental pragmatist, and adaptive manager, Norton critiques both

environmental economics and intrinsic value approaches to environmental ethics and, in their place, develops a theory of environmental values as community commitments and a normative vocabulary that will encourage interdisciplinary communication and social learning about environmental problems. Norton's adaptive ecosystem management is an American pragmatist-inspired account of experience, truth, and language motivated by the social values of democratic communities. He defines sustainability as "a relationship between generations such that the earlier generations fulfill their individual wants and needs so as not to destroy, or close off, important and valued options for future generations" (p. 363). Environmental philosophers should no longer articulate values but instead should only offer heuristics and linguistic choices to help improve communication among the stakeholders of democratic communities. The field of environmental ethics becomes a subfield of adaptive management science.

Norton, Bryan G. "Biodiversity and Environmental Values: In Search of a Universal Earth Ethic," Biodiversity and Conservation 9(no. 8, 2000):1029-1044. Abstract. While biodiversity protection has become a widely accepted goal of environmental protectionists, no such agreement exists regarding why it is important. Two, competing theories of natural value here called "Economism" and "Intrinsic Value Theory" - are often cited to support the goal. Environmentalists, who have recently proposed the articulation of a universal "Earth Charter" to express the shared values humans derive from nature, have cited both of these theories as support for biodiversity protection. Unfortunately, these theories, which are expressed as polar opposites, do not work well together and the question arises: is there a shared value that humans place on nature? It is argued that these two value theories share four questionable assumptions: (1) a sharp distinction between "intrinsic" and "instrumental" value; (2) an entity orientation; (3) moral monism; and (4) placeless evaluation. If these four assumptions are denied, an alternative value system emerges which recognizes a continuum of ways humans value nature, values processes rather than only entities, is pluralistic, and values biodiversity in place. An alternative theory of value, which emphasizes protecting processes rather than protecting objects, and which values nature for the creativity of its processes, is proposed as a more attractive theory for expressing the universal values of nature that should motivate an Earth Charter and the goal of biodiversity protection. Key words: biodiversity, creativity, social values, value theories.

Norton Bryan G., "Biodiversity and environmental values: In search of a universal earth ethic," Biology and Conservation 9(2000):1029-1044. Abstract. While biodiversity protection has become a widely accepted goal of environmental protectionists, no such agreement exists regarding why it is important. Two, competing theories of natural value - here called 'Economism' and 'Intrinsic Value Theory' - are often cited to support the goal. Environmentalists, who have recently proposed the articulation of a universal 'Earth Charter' to express the shared values humans derive from nature, have cited both of these theories as support for biodiversity protection. Unfortunately these theories, which, are expressed as polar opposites, do not work well together and the question arises: Is there a shared value that humans place on nature? It is argued that these two value theories share four questionable assumptions: (1) a sharp distinction between 'intrinsic' and 'instrumental' value; (2) an entity orientation; (3) moral monism; and (4) placeless evaluation. If these four assumptions are denied, an alternative value system emerges which recognizes a continuum of ways humans value nature, values processes rather than only entities, is pluralistic, and values biodiversity in place. An alternative theory of value, which emphasizes protecting processes rather than protecting objects, and which values nature for the creativity of its processes, is proposed as a more attractive theory for expressing the universal values of nature that should motivate an Earth Charter and the goal of biodiversity protection. Key words: biodiversity, creativity, social values, value theories. Norton is in the School of Public Policy, Georgia Institute of Technology, Atlanta, GA. (v.13,#1)

Norton, Bryan G. "Environmental Ethics and Nonhuman Rights." Environmental Ethics 4(1982):17-36. If environmentalists are to combat effectively the continuing environmental decay resulting from more and more intense human exploitation of nature, they need a plausible and coherent rationale for

preserving sensitive areas and other species. This need is illustrated by reference to two examples of controversies concerning large public projects in wilderness areas. Analyses of costs and benefits to presently existing human beings and the utilitarian theory which supports such theories are inadequate to provide such a rationale, as other writers have shown. A number of environmentalists have suggested that ascriptions of rights to nonhuman animals, plants, and other natural objects may provide the necessary rationale. I argue that such ascriptions can only be effective if they are supported by a general theory of rights. Although no such general theory is developed, I state four minimal conditions which must be fulfilled by all rights holders as entailments of the concept of a right and, hence, as necessary conditions on rights holding, regardless of the general theory of rights espoused. I then argue that no appeals to rights of nonhumans can simultaneously fulfill these four minimal conditions and, on the other hand, satisfy the need for a coherent rationale for environmental preservation. In the central argument of the essay I exploit the distinction between the concern of vegetarians and antivivisectionists who rest their case for animal rights on the analogy of animal suffering to human suffering and the concern of environmentalists to protect the integrity of holistic ecosystems. I then conclude that even if the case for nonhuman rights can be made convincingly, the rights defended are insufficient for the development of a complete and coherent rationale for environmental preservation. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)

Norton, Bryan G. "Environmental Ethics and the Rights of Future Generations." Environmental Ethics 4(1982):319-37. Do appeals to rights and/or interests of the members of future generations provide an adequate basis for an environmental ethic? Assuming that rights and interests are, semantically, individualistic concepts, I present an argument following Derek Parfit which shows that a policy of depletion may harm no existing individuals, present or future. Although this argument has, initially, an air of paradox, I show that the argument has two intuitive analogues--the problem of generating a morally justified and environmentally sound population policy and the problem of temporal distance. These problems are shown both to resist solutions in individualistic terms and to embody difficulties similar to those raised by Parfit. Since utilitarianism and modern deontology are individualistic in nature, they cannot provide the basis for an adequate environmental ethic and they do not rule out policies such as that of depletion, which is clearly unacceptable environmentally. I close with an exploratory but generally pessimistic assessment of the possibility that rights and interests can be reconstrued as nonindividualistic. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)

Norton, Bryan G. and Robert E. Ulanowicz, "Scale and Biodiversity Policy: A Hierarchical Approach," Ambio 21 (no. 3, May 1992): 244-249. A hierarchical approach to natural systems, which assumes that small subsystems change according to a faster dynamic than do larger systems of which they are a part, is a useful means to conceptualize problems of scale in determining biodiversity policy. Conservation biology is a normative science that, like medicine, is shaped by a goal of protecting and healing ecosystems. The goal of sustaining biological diversity over multiple human generations implies that biodiversity policy must be set at the landscape level of the ecosystem. Since ecosystems can be described at many levels of organization, conservation biologists must model ecosystems on a scale appropriate to the crucial dynamic that supports the sustainability goal. This dynamic, the autopoietic feature of ecosystems, supports and sustains species across generations. The value of these ecosystem processes is measured as the avoided costs of sustaining species in zoos or highly managed habitats. The protection of the health of these landscape-level processes should therefore be the central goal of biodiversity policy. Norton is in the school of public policy, Georgia Institute of Technology. Ulanowicz is at the Chesapeake Biological Laboratory in estuarine science. (v5,#4)

Norton, Bryan G. and Bruce Hannon. "Environmental Values: A Place-Based Theory." Environmental Ethics 19(1997):227-245. Several recent authors have recommended that "sense of place" should become an important concept in our evaluation of environmental policies. In this paper, we explore aspects of this concept, arguing that it may provide the basis for a new, "place-based" approach to environmental values.

This approach is based on an empirical hypothesis that place orientation is a feature of all people's experience of their environment. We argue that place orientation requires, in addition to a home perspective, a sense of the space around the home place and that this dual aspect can be modeled using a "hierarchical" methodology. We propose a "triscalar," place-oriented system for the analysis of environmental values, explore the characteristics of place-orientation through several examples, and employ these characteristics to distinguish acceptable and unacceptable aspects of the NIMBY (not-in-my-backyard) idea. Norton is in the School of Public Policy, Georgia Institute of Technology, Atlanta. Hannon is in geography at the University of Illinois, Urbana. (EE)

Norton, Bryan G. "Environmental Ethics and Weak Anthropocentrism." Environmental Ethics 6(1984):131-48. The assumption that environmental ethics must be nonanthropocentric in order to be adequate is mistaken. There are two forms of anthropocentrism, weak and strong, and weak anthropocentrism is adequate to support an environmental ethic. Environmental ethics is, however, distinctive vis-a-vis standard British and American ethical systems because, in order to be adequate, it must be nonindividualistic. Environmental ethics involves decisions on two levels, one kind of which differs from usual decisions affecting individual fairness while the other does not. The latter, called allocational decisions, are not reducible to the former and govern the use of resources across extended time. Weak anthropocentrism provides a basis for criticizing individual, consumptive needs and can provide the basis for adjudicating between these levels, thereby providing an adequate basis for environmental ethics without the questionable ontological commitments made by nonanthropocentrists in attributing intrinsic value to nature. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)

Norton, Bryan G. "Why I am Not a Nonanthropocentrist: Callicott and the Failure of Monistic Inherentism." Environmental Ethics 17(1995):341-358. I contrast two roles for environmental philosophers--"applied philosophy" and "practical philosophy"--and show that the strategy of applied philosophy encourages an axiological and monistic approach to theory building. I argue that the mission of applied philosophy, and the monistic theory defended by J. Baird Callicott, in particular, tends to separate philosophers and their problems from real management issues because applied philosophers and moral monists insist that theoretical exploration occurs independent of, and prior to, applications in particular situations. This separation of theory and practice suggests that philosophers are likely to be effective in policy discussions only to the degree that they can offer unquestioned theories that adjudicate real problems. Callicott offers his monistic, ontological approach as universal guidance to environmental activists and decision makers, arguing that ecosystems and communities are moral subjects that can "own" their own inherent value. Callicott's theory, however, faces a crucial, unanswered theoretical dilemma which illustrates the impossibility of the dual task Callicott has set for his theory "to provide a single, ontological unification of ethics under nonanthropocentric holism and to capture the fine nuances of ethical obligations as experienced in varied communities." I also show that monistic assumptions have led to an unfortunate interpretation of Aldo Leopold's land ethic and that a pluralist and pragmatist direction is likely to provide a more efficacious and theoretically defensible direction for further study of environmental philosophy in a more practical mode. Norton is at the School of Public Policy, Georgia Institute of Technology. (EE)

Norton, Bryan G., Michael Hutchins, Elizabeth F. Stevens, and Terry Maple, eds., Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation. Washington, DC: Smithsonian Institution Press, 1995. 432 pages. \$ 32.50 cloth. Values underlying the conservation of nature in captivity. Zoos are not, or should not be, institutions for gawking at caged animals. They have been undergoing a metamorphosis from a menagerie symbolizing human mastery over the beasts to vital sites of ex situ species conservation. But does this self-redefinition morally justify their continued existence? The zoo question pits individualistic animal welfare ethics against holistic environmental ethics, a concern for specimens against a concern for species. Part I. The Future of Zoos. Part II. The Targets of Protection: Genes or

Individuals or Populations or Species or Ecosystems. Part III. Captive Breeding and Wild Populations.
Part IV. Good Stewardship. (v6,#4)

Norton, Bryan G. Review of In Defense of the Land Ethic. By J. Baird Callicott. Environmental Ethics 13(1991):181-86.

Norton, Bryan G., *Sustainability: A Philosophy of Ecosystem Management*. Reviewed by Marilyn Holly, *Journal of Agricultural and Environmental Ethics* 20(2007):335-352.

Norton, Bryan G., "Conservation and Preservation: A Conceptual Rehabilitation," Environmental Ethics 8(1986):195-220. A deep analysis of conservation and preservation as theoretical models of environmental policy. Norton is critical of the traditional way (following John Passmore) that conservation is viewed as anthropocentric while preservation is considered non-anthropocentric. The definitions of the policies need not include anthropocentric or nonanthropocentric motivations. Given a long time scale, these two motivations converge; what is good for a whole range of human values is also good for nature itself. (Katz, Bibl # 1)

Norton, Bryan G., Why Preserve Natural Variety? Princeton: Princeton University Press, 1987. Pp. xiii, 281. Norton focuses on the problem of justifying policies of species preservation as a paradigm for all environmental issues. The book has four basic parts. First, Norton shows the failure of economic "demand" values as a basis of preservationist policy. Second, he examines the problems in attributing intrinsic value to natural entities and systems. The third section, which is the heart of the book, is a presentation of Norton's theory of "weak anthropocentrism" or "transformative value." Nature preservation is justified because it leads to the fostering of specific values in human life and culture worth preserving. These higher order values are not reducible to any array of demand or preference values, but they are crucial in the development of an ecological world view. In the final section, Norton shows how a concern for transformative value can be translated into specific policy proposals. Norton's argument is a kind of "fall-back" position, a pragmatic recognition that arguments over the intrinsic non-anthropocentric value of nature only delay and obstruct policies of preservation. As such, it is the best expression of a compromise between an economically based resource environmentalism and the more radical biocentric versions of environmental ethics. But advocates of a deeper environmental ethic will be concerned that Norton's "transformative value" is just a higher order contingent instrumental value designed for the satisfaction of human interests. (Katz, Bibl # 2) Reviewed in Environmental Ethics 10(1988):275-78.

Norton, Bryan G., "On What We Should Save: The Role of Culture in Determining Conservation Targets," pages 23-29 in P. L. Forey, C. J. Humphries, and R. I. Vane-Wright, eds., Systematics and Conservation Evaluation, The Systematics Association, Special Volume No. 50 (Oxford: Clarendon Press, 1994). No one questions that we have a moral obligation to conserve biodiversity for future generations, but there is no consensus how to make this operational. There is no objective scientific definition of diversity, since all knowledge is theory-bound, and since natural systems are irreducibly complex. We need a post-modern, post-positivist account. "Diversity measures are constructs by human individuals who undertake their studies for many different motives." Given certain purposes, hierarchy theory is useful to minimize human alteration of natural systems, focussing on ecosystem health and structures and processes that perpetuate natural systems. Ecological economics is a bridging discipline to link ecology and culture. Norton is in the school of public policy, Georgia Institute of Technology. (v5,#4)

Norton, Bryan, Review of Rolston, Holmes, III, Conserving Natural Value. Environmental Ethics 18(1996):209-214. (EE)

Norton, Bryan G., "Environmental Ethics and Weak Anthropocentrism," Environmental Ethics

6(1984):131-148. The third in a series by Norton, all appearing in this journal. Norton contrasts "strong" anthropocentrism--where all value is translated into felt human preferences--with "weak anthropocentrism"--where all value is derived either from felt human preferences or an ideal world view that is the source of preferences (see p. 134). Environmentalism is then justified on the basis of weak anthropocentrism: environmental protection is not based on the dubious ontological commitment to intrinsic value in natural entities, but rather on the continuation of a resource base for ongoing human consciousness. But Norton has to explain why the continuation of human consciousness is a good. He does not even attempt to justify this claim (p. 143). (Katz, Bibl # 1)

Norton, Bryan G. "Convergence and Contextualism: Some Clarifications and a Reply to Steverson." Environmental Ethics 19(1997):87-100. The convergence hypothesis asserts that, if one takes the full range of human values--present and future--into account, one will choose a set of policies that can also be accepted by an advocate of a consistent and reasonable nonanthropocentrism. Brian Steverson has attacked this hypothesis from a surprising direction. He attributes to deep ecologists the position that nonhuman nature has intrinsic value, interprets this position to mean that no species could ever be allowed to go extinct, and proceeds to show that my commitment to contextualism prohibits me from advocating the protection of species universally. In response, I show, by reference to recent scientific findings, how difficult it is to defend species preservation in all situations. In particular, I argue that Steverson's appeal to a possible world in which we have nearly complete biological knowledge misses the point of the convergence hypothesis. It is an empirical hypothesis, with significant indirect, and some direct, evidence to support it. Although it is a falsifiable hypothesis about real-world policies, it cannot be falsified by a contrary-to-fact case. Norton is in the Schol of Public Policy, Georgia Institute of Technology, Atlanta. (EE)

Norton, Bryan G. Review of Ecological Ethics and Politics. By H. J. McCloskey. Environmental Ethics 7(1985):71-74.

Norton, Bryan G. "Thoreau's Insect Analogies: Or, Why Environmentalists Hate Mainstream Economists." Environmental Ethics 13(1991):235-51. Thoreau believed that we can learn how to live by observing nature, a view that appeals to modern environmentalists. This doctrine is exemplified in Thoreau's use of insect analogies to illustrate how humans, like butterflies, can be transformed from the "larval" stage, which relates to the physical world through consumption, to a "perfect" state in which consumption is less important, and in which freedom and contemplation are the ends of life. This transformational idea rests upon a theory, of dynamic dualism in which the animal and the spiritual self remain in tension, but in which the "maturity" of the individual--transcendence of economic demands as imposed by society--emerges through personal growth based on observation of nature. Thoreau's dynamic theory of value, and its attractiveness to environmentalists, explains why environmentalists reject the mainstream, neoclassical economic paradigm. This paradigm accepts consumer preferences as "givens" and treats these preferences as the source of all value in their model. Because Thoreau insists that there is value in transformations from one preference set to another, the neoclassical paradigm cannot capture this central value, and cannot account for the environmentalists' emphasis on public "education" to reduce consumptive demands of humans on their environment. Norton is at the School of Public Policy, Georgia Institute of Technology, Atlanta, GA. (EE)

Norton, Bryan G., "Should Environmentalists Be Organicists?" Topoi (Netherlands) 12(1993):21-30. "Should environmentalists be minimal holists or should they follow their 'spiritual' leader, Muir, in adopting strong, teleological and spiritualistic organicism? First, note that one might consistently say, 'both,' provided the differing interpretations are reconciled as fulfilling different functions. Environmentalists might, in discussing whether to accept a new, less mechanistic worldview let their rhetoric soar with Muir, for example; but they might also, with Leopold, the practitioner who must forge a new management philosophy that will have broad appeal, recognize that such rhetorical flourishes raise

issues that lie beyond easy resolution and content themselves with less difficult intellectual entanglements. My concern here is not with rhetoric, but with forging a vocabulary and set of principles of management that are scientifically respectable and adequate to recognize the dynamic and creative processes that maintain and shape natural systems. Given this goal, a minimal holism points a more promising direction for the future of environmental ethics and environmental policy" (pp. 27-28). A minimal holism will recognize nature as a self-organizing system. Norton teaches philosophy and policy at Georgia Tech. (v6,#4)

Norton, Bryan G., "A Reply to My Critics," *Journal of Agricultural and Environmental Ethics* 20(2007):387-405. Critics of my book, *Sustainability*, have raised many objections which are addressed. In general, I emphasize that the book is an integrative work; it must be long and complex because it attempts a comprehensive treatment of problems of communication, of evaluation, and of management action in environmental discourse. I explain that I depend upon the pragmatists and on work in the pragmatics of language because the current language of environmental policy discourse is inadequate to allow deliberative processes that can reach consensus and cooperative actions. I revise my account of risk analysis somewhat, and defend my broad approach to the concept of sustainability. Finally, I discuss applications of my book to the current situation in environmental policy discourse. Norton is School of Public Policy, Georgia Institute of Technology, Atlanta, GA.

Dawson, Angus, "Food And The Public's Health," *Journal of Agricultural and Environmental Ethics* 20(2007):225-229. Introduction to a theme issue.

Norton, Bryan, Review of Daniel W. Bromley, *Sufficient Reason: Volitional Pragmatism and the Meaning of Economic Institutions*, *Environmental Values* 16(2007):125-129.

Norton, Bryan G. "Politics and Epistemology: Inclusion and Controversy in Adaptive Management Processes." *Environmental Ethics* 29(2007):299-306. Kevin Elliott has argued that I defend two "conceptions" of adaptive management processes in my book, *Sustainability: A Philosophy of Adaptive Ecosystem Management*, calling the conceptions "political" and "metaphysical," respectively. Elliott claims that I must choose between them. Elliott has not sufficiently explained how he proceeds from the claim that I provide two separable arguments for my adaptive management process to his conclusion that I have two conceptions of this process. Once this confusion is clarified, it becomes clear that adapting a pragmatist grounding for the process (which Elliott refers to as my "metaphysical" conception) is compatible with an open and inclusionary process. Pragmatism, in other words, does not exclude those who adopt ideological approaches to value from the adaptive process; it merely urges them, once in the process, to propose testable hypotheses rather than resort to ideological rhetoric. (EE)

Norton, Bryan G., *Sustainability*. Reviewed by Markku Oksanen, *Environmental Values* 16(2007):272-277.

Norton, Bryan G., ed., The Preservation of Species: The Value of Biological Diversity. Princeton: Princeton University Press, 1986. Pp. xi, 305. A collection of essays written under the auspices of the Center for Philosophy and Public Policy, University of Maryland. An important interdisciplinary collection focused on one of the central problems in environmental ethics: why preserve endangered species? Part I contains articles by Thomas E. Lovejoy, Geerat J. Vermeij, and Stephen R. Kellert which investigate the scientific and social nature of the extinction problem. Part III contains articles by Lawrence B. Slobodkin, Terry L. Leitzell, and Robert L. Carlton that examine concrete management decisions regarding species preservation. The essays in Part II are of the most philosophical interest, for they deal with the ethical justification of species preservation. An economist, Alan Randall, "Human Preferences, Economics, and the Preservation of Species," (pp. 79-109), analyzes species preservation as a problem in resource allocation. Unlike many economic approaches, Randall is sensitive to many

different kinds of human preferences and values that might lead to preservation decisions. Bryan Norton, "On the Inherent Danger of Undervaluing Species," (pp. 110-137), argues that the instrumental reasons for valuing a particular species transcend its inherent properties: there are instrumental reasons for preserving any species in an ecosystem. The diversity of the biosphere is a good that ought to be preserved; thus questions of the extinction of a particular species are not really isolated decisions. J. Baird Callicott, "On the Intrinsic Value of Nonhuman Species," (pp. 138-172), surveys several axiologies that could lend support to the value of nonhuman entities, and decides that the only legitimate basis for an environmental ethic is a kind of Humean/ Darwinian theory based on "bio-empathy." Eliot Sober, "Philosophical Problems for Environmentalism," (pp. 173-194), criticizes a number of rationales for the intrinsic value of natural entities and species, and then offers an argument based on aesthetic properties: nature, like art, should not be destroyed because of our interest in the beautiful--"But it is unclear, then, why we preserve ugly species or ecosystems." Donald Regan, "Duties of Preservation," (pp. 195-220), presents an argument that owes much to G. E. Moore. Regan wants to base the preservation of natural entities on a notion of intrinsic value, but he wants to deny that intrinsic value exists outside of consciousness. His solution is to claim that what has intrinsic value are certain "complexes": a natural entity, a conscious valuer's knowledge of the entity, plus a conscious evaluator's pleasure in that knowledge. Being obligated to preserve such complexes would lead derivatively to preserving natural entities.--"A provocative idea, but clearly based on a major ontological commitment." Bibliography. (Katz, Bibl # 1) Reviewed in Environmental Ethics 10(1988):91-94.

Norton, Bryan, "From Environmental Ethics to Environmental Public Policy: Ethicists and Economics." Pages 374-407 in Tietenberg, T., and Folmer, H., eds., The International Yearbook of Environmental and Resource Economics. Cheltenham, UK: Edward Elgar, 2002. (v.14, #4)

Norton, Bryan G. "Conservation and Preservation: A Conceptual Rehabilitation." Environmental Ethics 8(1986):195-220. Philosophers have paid little attention to the distinction between conservation and preservation, apparently because they have accepted John Passmore's suggestion that conservationism is an expression of anthropocentric motives and that "true" preservationism is an expression of nonanthropocentric motives. Philosophers have therefore concentrated their efforts on this distinction in motives. This reduction, however, is insensitive to important nuances of environmentalist objectives: there are a wide variety of human reasons for preserving natural ecosystems and wild species. Preservationist policies represent a concern to protect biological diversity from the simplifying effects of human management and are motivated by the full range of values (consumptive, aesthetic, scientific, and moral) attached to a diverse biota. Conservationists and preservationists differ mainly in their emphasis on resilience measures versus predictability measures of stability, respectively. The distinction between anthropocentric and nonanthropocentric motives loses importance as emphasis is placed on the longest term values humans place on the protection of biological diversity. Norton is at the Division of Humanities, New College of the University of South Florida, Sarasota, FL. (EE)

Norton, Bryan, "Sustainability, Human Welfare, and Ecosystem Health." Environmental Values Vol.1 No.2(1992):97-112. ABSTRACT: Two types of sustainability definitions are contrasted. 'Social scientific' definitions, such as that of the Brundtland Commission, treat sustainability as a relationship between present and future welfare of persons. These definitions differ from 'ecological' ones which explicitly require protection of ecological processes as a condition on sustainability. 'Scientific contextualism' does not follow mainstream economists in their efforts to express all effects as interchangeable units of individual welfare; it rather strives to express sensitivity to different types and scales of impacts that present activities can exert on the future. We can therefore express the moral obligation to act sustainably as an obligation to protect the natural processes that form the context of human life and culture, emphasizing those large biotic and abiotic systems essential to human life, health, and flourishing culture. Ecosystems, which are understood as dynamic, self-organizing systems humans have evolved within, must remain 'healthy' if humans are to thrive. The ecological approach to

sustainability therefore sets the protection of dynamic, creative systems in nature as its primary goal. KEYWORDS: Sustainability, ecological management, obligations to future, welfare, intergenerational equity, irreversibility. School of Public Policy, Georgia Institute of Technology, Atlanta, GA 33032, USA.

Norton, Bryan G., "Change, Constancy, and Creativity: The New Ecology and Some Old Problems," Duke Environmental Law and Policy Forum 7(1996):49-70. "How are we to conceptualize the rich mix of change and constancy that we encounter in the world of experience?" "The New Ecology emphasizes change and dynamism in ecological systems, claiming that ecology has under-emphasized these features of natural systems. ... (T)he readiness of ecologists to embrace equilibrium theories and to find constancy in ecology events may have deep--perhaps even nonrational--sources. Equilibrium theories may not be empirical theories at all, but rather may represent pre-theoretical assumptions, which are perhaps rooted in a deep, psychological need for stability in the face of threatening changes. ... The intellectual question then becomes one of how to characterize stability and how to reconcile it with the empirically obvious change we experience everywhere. ...

Old Ecologists over-emphasized grand and speculative theory while New Ecologists pay less attention to general principles of ecosystem organization and study particular, local ecological interactions and their outcomes. ... (But) New Ecologists, acting in reaction to the prior over-emphasis on the grand theory of stability in ecological systems, sometimes over-emphasize the importance of change in ecological systems. ... It is not a good idea to pose the question of change versus stability in nature as if there may be an all-or-nothing answer, as if it might turn out that the world is either entirely changing or entirely stable. ... The truth surely is somewhere in between" (pp. 49-55, passim). Norton is in philosophy and public policy at the Georgia Institute of Technology. (v.10,#3)

Norton, Bryan G. Review of Respect for Nature. By Paul W. Taylor. Environmental Ethics 9(1987):261-67.

Norton, Bryan and Hannon, Bruce, "Democracy and Sense of Place Values in Environmental Policy," Philosophy and Geography 3 (1998):119-145. Norton is professor of public policy at the Georgia Institute of Technology. (P&G)

Norton, Bryan, "Which Morals Matter: Freeing Moral Reasoning from Ideology," U.C. Davis Law Review 37(2003):81 - . Simultaneously published in Environs Environmental Law and Policy Journal 27(2003):81 - .

Norton, Bryan G. Review of Price, Principle, and the Environment. By Mark Sagoff. Environmental Ethics 27 (2005):319-322.

Norton, Bryan G. and Anne C. Steinemann. "Environmental Values and Adaptive Management," Environmental Values 10(2001):473-506. The trend in environmental management toward more adaptive, community-based, and holistic approaches will require new approaches to environmental valuation. In this paper, we offer a new valuation approach, one that embodies the core principles of adaptive management, which is experimental, multi-scalar, and place-based. In addition, we use hierarchy theory to incorporate spatial and temporal variability of natural systems into a multi-scalar management model. Our approach results in the consideration of multiple values within community-based ecosystem management, rather than an attempt to maximise a single variable such as economic efficiency. We then offer two heuristics - one procedural and one evaluative - to guide a community toward shared goals, and to develop indicators to measure progress toward these goals. We illustrate our approach by application to environmental and developmental decisions in the Southern Appalachians. Keywords: Adaptive management, environmental evaluation, management, multi-criteria analyses, sense of place values. Bryan G. Norton is at the School of Public Policy, Georgia Institute of Technology, Atlanta, GA. Anne C.

Steinemann is in the City Planning Program, Georgia Institute of Technology, Atlanta, GA. 30332-0155 (EV)

Norton, Bryan, et al, "The Moral Case for Saving Species," Defenders: The Conservation Magazine of Defenders of Wildlife 73 (no. 3, Summer 1998):6-15. Thirteen philosophers, theologians, and ethicists explain why society should give high priority to the Endangered Species Act. Contributors are Joseph Bruchac, J. Baird Callicott, Calvin B. DeWitt, Dale Jamieson, Holmes Rolston, Lenn J. Goodman, Ernest Partridge, Lily-Marlene Russow, Max Oelschlaeger, Bernadine Grant McRipley, David Saperstein, Mark Sagoff, Don Swearer. (v9,#2)

Norton Bryan, Costanza, Robert, and Bishop, R., "The Evolution of Preferences: Why 'Sovereign' Preferences May Not Lead to Sustainable Policies and What To Do about It," Ecological Economics 24(1998):193-211. (v.10,#2)

Norton, Bryan G. "Pragmatism, Adaptive Management, and Sustainability." Environmental Values 8(1999):451-466. ABSTRACT: The pragmatic conception of truth, anticipated by Henry David Thoreau and developed by C.S. Peirce and subsequent pragmatists, is proposed as a useful analogy for characterising "sustainability". Peirce's definition of "truth" provides an attractive approach to sustainability because (a) it re-focuses discussions of truth and objectivity from a search for "correspondence" to an "external world" (the "conform" approach) to a more forward-looking ("transform") approach; and (b) it emphasises the crucial role of an evolving, questioning community in the conduct of inquiry. Any successful definition of sustainability must share these characteristics with Peircean truth. While Peirce and John Dewey never reconciled their disagreements regarding the nature and task of "inquiry", a pragmatist resolution of their differences is offered, arguing that we need both a logic of management sciences (*logica utens*) and a logic of pure science (*logica docens*), which (perhaps among other differences) respond very differently to uncertainty. It is shown that adaptive management - an important approach to environmental management - can be understood as a first approximation of a *logica utens* for social learning in pursuit of solutions to environmental problems, and it is suggested that a pragmatist, transform approach to inquiry such as Dewey's may provide a way around the "fact-value" gulf. KEYWORDS: Defining sustainability, sustainable communities, pragmatism, adaptive management, truth. Bryan G. Norton, School of Public Policy Georgia Institute of Technology Atlanta, GA 30332, USA (EV)

Norton, Bryan G., Toward Unity Among Environmentalists. New York: Oxford University Press, 1991. Norton wants to unite environmentalists in the common cause of environmental protection and appreciation, even though the many environmentalists and environmental groups may have multiple and varied value systems. Despite diverging worldviews, there can be converging policies (the title of a concluding chapter). There are historical chapter studies of Muir, Pinchot, and Leopold, and issue chapters: growth, pollution, biodiversity, and land use, illustrating this thesis. Norton is professor of philosophy at the Georgia Institute of Technology. (v3,#1) Reviewed in Environmental Ethics 14(1992):283-87.

Norton, Bryan G., "Economists' Preferences and the Preferences of Economists." Environmental Values 3(1994):311-332. Economists, who adopt the principle of consumer sovereignty treat preferences as unquestioned for the purposes of their analysis. They also represent preferences for future outcomes as having value in the present. It is shown that these two characteristics of neoclassical modelling rest on similar reasoning and are essential to achieve high aggregatability of preferences and values. But the meaning and broader implications of these characteristics vary according to the arguments given to support these methodological choices. The resulting ambiguities raise questions regarding economists' attitudes towards the study of preference formation and reformation. Under a strong, positivist interpretation (which is philosophically problematic), consumer sovereignty represents a rejection of any

meaningful study of these subjects; under a weaker, methodological understanding, consumer sovereignty merely draws a boundary between economics and other disciplines. The weaker version is argued to be more defensible, and economists are urged to engage in interdisciplinary work that will clarify how preferences are formed, criticized and reformed. KEYWORDS: Consumer sovereignty, economic explanation, preference formation, preferences, value neutrality. Norton is at the School of Public Policy, Georgia Institute of Technology. (EV)

Norton, Bryan, Review of Tobin, Richard, The Expendable Future. Environmental Values Vol.1 No.4(1992):366.

Norton, Bryan G. "Population and Consumption: Environmental Problems as Problems of Scale." Ethics and the Environment 5(2000):23-46. ABSTRACT: Almost every time I teach environmental topics to undergraduate students, at least one student confidently states the opinion that environmental problems are most basically caused by human population growth, and that if we could control population growth, that would be the end of the problems. Although I try never to show how appalled I am by ignorance among students-especially when they are volunteering opinions in a process of thinking through problems-I admit that in these cases I must consciously restrain myself from rebuking the student aloud. What is more appalling is that I fear that this belief is shared by many adults in the United States and perhaps throughout the developed world. This woefully oversimplified formula for understanding environmental problems is not just oversimplified, it is also morally dangerous. When used in conjunction with the apparent fact that industrially developed nations are bringing their population growth under control, the reduction of environmental problems to population problems brings about a not-so-subtle shift of responsibility for existing and emerging environmental problems to the less-developed world. In class, I try to shake the students' complacency about their own role, pointing out to them that, if the blame for environmental damage can be located in the act of parenting, they should realize that each American child born (given current consumption patterns) has 40 to 50 times the environmental impact of a child born in poorer nations. Huge proportions of that consumption are made possible by material flows from less-developed nations of the South into the industrialized North. Even when these material flows bring rapid economic growth, as in Indonesia, for example, the environmental and cultural costs are enormous, and it is often the case that only elites benefit from this growth. (E&E)

Norton, Bryan and Minter, Ben A., "From environmental ethics to environmental public policy: Ethicists and economists, 1973-future." Pages 373-407 in Tom Tietenberg and Henk Folmer, eds., The International Yearbook of Environmental and Resource Economics 2002/2003: A Survey of Current Issues (Cheltenham UK: Edward Elgar, 2002). Environmental ethics has developed with a puzzling ambiguity about the nature of the independence that is asserted for natural intrinsic value and about what types of being can have intrinsic value. "Environmental ethicists have made few contributions to actual discussions about what to do to improve the environment" (p. 374) A more community-based, pluralist approach is needed, centering in "communal values", and worked out with democratic processes and deliberative institutions within which environmental values as communal goods may be advanced. Rich opportunities may open up for collaborations between economists and philosophers, as well as collaborations among these, together with cognitive psychologists, to engage in interdisciplinary research on the development and formation of social values in deliberative situations.

"We ... consider a more radical conceptual innovation, the rejection of moral individualism and the recognition that important environmental values may unfold on the communal scale, a scale that cannot be reduced to individual goods. This more radical innovation encourages a shift in the way we think about environmental values and valuation, shifting attention from ontological questions regarding the nature and measurement of values toward a more politically oriented process approach"(p. 375), specifically C. S. Holling's "adaptive management" (p. 395).

Norton is in philosophy and public policy, Georgia Institute of Technology. Minter is in public policy there.

Norton, Bryan G., "Environmental Values: An Appreciation," *Environmental Values* 17(2008):303-306. Review of John O'Neill, Alan Holland and Andrew Light, *Environmental Values* (London: Routledge, 2007).

Norton, Bryan G., "Convergence, Noninstrumental Value and the Semantics of 'Love': Comment on McShane," *Environmental Values* 17(2008):5-14. Katie McShane, while accepting my 'convergence hypothesis' (the view that anthropocentrists and nonanthropocentrists will tend to propose similar policies), argues that nonanthropocentrism is nevertheless superior because it allows conservationists to have a deeper emotional commitment to natural objects than can anthropocentrists. I question this reasoning on two bases. First, McShane assumes a philosophically tendentious distinction between intrinsic and instrumental value - a distinction that presupposes a dualistic worldview. Second, I question why McShane believes anthropocentrists - weak anthropocentrists, that is - cannot 'love' or 'feel awe' toward natural objects. Her argument, that is, only works against strong anthropocentrism, which I never advocated.

Norton, Bryan G. *Sustainability: A Philosophy of Adaptive Ecosystem Management*. Chicago: University of Chicago Press, 2005. Beginning with his experiences as a philosopher working at the Environmental Protection Agency, Norton argues that the central problem of environmentalism and environmental protection is a lack of effective communication. Following his interpretation of Aldo Leopold as an anthropocentric holist, environmental pragmatist, and adaptive manager, Norton critiques both environmental economics and intrinsic value approaches to environmental ethics and, in their place, develops a theory of environmental values as community commitments and a normative vocabulary that will encourage interdisciplinary communication and social learning about environmental problems. Norton's adaptive ecosystem management is an American pragmatist-inspired account of experience, truth, and language motivated by the social values of democratic communities. He defines sustainability as "a relationship between generations such that the earlier generations fulfill their individual wants and needs so as not to destroy, or close off, important and valued options for future generations" (p. 363). Environmental philosophers should no longer articulate values but instead should only offer heuristics and linguistic choices to help improve communication among the stakeholders of democratic communities. The field of environmental ethics becomes a subfield of adaptive management science.

Norton, Bryan. "Objectivity, Intrinsicity and Sustainability: Comment on Nelson's Health and Disease as 'Thick' Concepts in Ecosystemic Contexts." *Environmental Values* 4(1995):323-332. Ecosystem health, as James Nelson argues, must be understood as having both descriptive and normative content; it is in this sense a 'morally thick' concept. The health analogy refers (a) to the similarities between conservation ecology and medicine or plant pathology as normative sciences, and (b) to the ability of ecosystems to 'heal' themselves in the face of disturbances. Nelson, however, goes beyond these two aspects and argues that judgements of illness in ecosystems only support moral obligations to protect them if they are attributed a 'good of their own'. But this latter extension of the analogy flies in the face of ecological science, which has been forced to abandon organicism. If one separates the question of the warranted assertibility of environmentalists' goals from the question of where values in nature are located, the search for an objective realm of value realism can be seen to be unnecessary. KEYWORDS: Ecosystem health, intrinsic value, objectivity, organicism. Norton is in the School of Public Policy, Georgia Institute of Technology. (EV)

Norton, Bryan. *Searching for Sustainability: Interdisciplinary Essays in the Philosophy of Conservation Biology*. New York: Cambridge University Press, 2003. 27 of Norton's essays, some with co-authors. Philosophical and environmental pragmatism. Environmental policy with an eye toward sustainability. If we properly treat human values and concerns for future generations, including our desire for their opportunities, then we arrive at policies that are essentially identical to those advocated by defenders of

intrinsic value in nature (Norton's "convergence hypothesis"). Adaptive environmental management and hierarchy theory (smaller more dynamic ecosystems are embedded within larger, more stable systems). Conservation biologists should see themselves as engaged in a normative science. (v. 15, # 3)

Norton, Tony W., and Stephen R. Dovers, eds. Ecology and Sustainability of Southern Temperate Ecosystems. Canberra, CSIRO (Commonwealth Scientific and Research Organization), 1994, 133 pages. Australia's southern temperate forest ecosystems, the science and management of their conservation. (v8,#2)

Norva, Y.S. Lo, Review of: Kirkman, Robert, Skeptical Environmentalism: The Limits of Philosophy and Science. Bloomington: Indiana University Press, 2002. Environmental Values 14(2005):519-522.

Norway. A bibliography of environmental ethics and conservation in Norway is in the ISEE newsletter, vol. 4, no. 4, Winter 1993.

Norwood, Vera. Made from this Earth: American Women and Nature. Chapel Hill: University of North Carolina Press, 1993. (v7,#1)

Noske, B., Beyond Boundaries: Humans and Animals. Montreal/New York: Black Rose, 1997.

Noske, Barbara, Beyond Boundaries: Humans and Animals. Montreal: Black Rose Books, 1997. 253 pages. Chapters: The Road toward Domestication. Domestication under Capitalism. The Animal Industrial Complex. The Devaluation of Nature. The Question of Human-Animal Continuity. Human-Animal Discontinuities. Meeting the Other: Toward an Anthropology of Animals. Postscript: Andropocentrism or Androcentrism. Noske is a Ph.D. in philosophy from the University of Amsterdam, currently at the Faculty of Environmental Studies, York University. (v8,#3)

Noske, Barbara, Humans and Other Animals: Beyond the Boundaries of Anthropology (London: Pluto Press, 1989). Available in the U. S. from Paul and Company Publishers Consortium, Inc., P. O. Box 442, Concord, MA 01742. Noske is a free lance writer in the Netherlands. (v2,#1)

Noss, R. and Hunter, M, "From Assemblage to Community," Conservation Biology 15(no.5, 2001): 1201-02.

Noss, R. F., Carroll, C., VanceBorland, K., and Wuerthner, G., "A Multicriteria Assessment of the Irreplaceability and Vulnerability of Sites in the Greater Yellowstone Ecosystem," Conservation Biology 16(no.4, 2002): 895-908. (v.13,#4)

Noss, Reed F., "Forest fragmentation in the Southern Rocky Mountains," Landscape Ecology 16(no. 4, 2001):371-372. (v.13,#1)

Noss, Reed F., "Toward a Pro-Life Politics," Conservation Biology 15(no. 4, 2001):827-828. (v.13,#1)

Noss, Reed F., O'Connell, Michael A., Murphy, Dennis D. The Science of Conservation Planning. Covelo, CA: Island Press, 1997. 272 pp. \$40 cloth, \$25 paper. Three of the nation's leading conservation biologists explore the role of the scientist in the planning process and present a framework and guidelines for applying science to regional habitat-based conservation planning. (v9,#2)

Noss, Reed F. "Values Are a Good Thing in Conservation Biology." Conservation Biology_Vol. 21, no. 1 (2007): 18-20. "The way to win respect and influence for science in society is to boldly proclaim its most compelling values: commitment to truth, rationality, full consideration of evidence, self-correction,

openness, and critical discourse.Underlying all these concerns about credibility, there is something more fundamental that should concern us: the intrinsic value of nonhuman beings - the voiceless, non-voting creatures for whom biologists are best equipped to speak.”

Noss, Reed F. and Allen Y. Cooperrider, Saving Nature's Legacy: Protecting and Restoring Biodiversity. Washington, DC: Island Press, 1994. 448 pages. Paper, \$ 27.50. Land management as this conserves biological diversity. A framework for inventorying biodiversity, selecting areas for protection, designing regional and continental reserve networks, establishing a monitoring program, and setting priorities for getting the job done. Noss is the editor of Conservation Biology, Cooperrider was long with the Bureau of Land Management. (v5,#1)

Noss, Reed F. "What Should Endangered Ecosystems Mean to The Wildlands Project?" Wild Earth 5, no. 4 (Winter 1995): 20- . (v6,#4)

Noss, Reed F. "Conservation or Convenience?" Conservation Biology 10, no.4 (1996): 921. (v7, #3)

Noss, Reed F. "Values Are a Good Thing in Conservation Biology." Conservation Biology Vol. 21, no. 1 (2007): 18-20.

Noss, Reed F. "Conservation Biology, Values, and Advocacy." Conservation Biology 10, no.3 (1996): 904. (v7, #3)

Noss, Reed F.; Quigley, Howard B.; and Paquet, Paul C. "Conservation Biology and Carnivore Conservation in the Rocky Mountains." Conservation Biology 10, no.4 (1996): 949. (v7, #3)

Noss, Reed F. "In Defense of Earth First!" Environmental Ethics 5(1983):191-92.

Noss, Reed F. "Science Grounding Strategy," Wild Earth 5, no. 4 (Winter 1995): 17- . (v6,#4)

Noss, Reed, and Peters, Robert L., Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife. Washington, DC: Defenders of Wildlife, 1995. (v8,#3)

Noss, Reed. "Equal Rights for Parasites." Conservation Biology 9 (no. 1, 1995): 1-2. "Parasites and their hosts evolved--better, co-evolved--together. They really do deserve each other. Parasites are part of our biosphere and, we, as biologists, must accord them the same respect we exhibit for their hosts. If we truly appreciate biological diversity, we must advocate that all species are precious, even parasites." Another good editorial for classroom discussion. Noss is editor of Conservation Biology. (v6,#1)

Noss, Reed. "Soul of the Wilderness: Biodiversity, Ecological Integrity, and Wilderness." International Journal of Wilderness 2, no. 2 (August 1996): 5-8. Wilderness, and natural areas in general, should be evaluated primarily in terms of their contribution to the broad goals of protecting and restoring native biodiversity and ecological integrity. Noss is the editor of Conservation Biology. (v7, #3)

Noss, RF, "A Checklist for Wildlands Network Designs," Conservation Biology 17(no.5, 2003):1270-1275. (v.14, #4)

Noss, RF, "Beyond Kyoto: Forest Management in a Time of Rapid Climate Change," Conservation Biology 15(no.3, 2001):578-590. (v.12,#4)

Nottingham, S. Eat Your Genes: How Genetically Modified Food is Entering Our Diet. London and New York: Zed Books, 1998, 212pp. Reviewed by Anders Biel. Environmental Values 9(2000):249.

Novak, Barbara, *Nature and Culture: American Landscape Painting 1825-1875*. New York: Oxford University Press, 1980. American landscape painting in the great era in its own cultural context--philosophical, spiritual, and scientific. Novak is an art historian.

Nováková, Jana, "Retreat of Halophytes in the Czech Republic: Agricultural, Mining, and Urbanization Effects [The Case of Dentated Melilot--Melilotus dentata (Fabaceae)]," Journal of Agricultural and Environmental Ethics 10(1997):69-78. As a result of expanding human pressures, the heterogeneity of a formerly diverse landscape has been reduced and the richness of animal and plant species has decreased. Some particular stand types and their species are especially connected with impoverishment caused by man's activities. Halophyte Dentated Melilot (Melilotus dentata) is one of such species, which is vanishing apparently as a result of intensive agriculture, surface mining, and urbanization. The data on its distribution were compiled from herbarium specimens, literature, and the author's own field observations. (JAEE)

Novak, Joel. "Environmental Impact Assessment and Sustainable Development: Case Studies of Environmental Conflict," Society & Natural Resources 8(no.2, Mar. 1995):145- . (v6,#4)

Nowak, DJ, et al., "The Increasing Influence of Urban Environments on US Forest Management," Journal of Forestry 103 (no. 8, December 2005): 377-382.

Nowak, DJ and Walton, JT, "Projected Urban Growth (2000-2050) and Its Estimated Impact on the US Forest Resource," Journal of Forestry 103 (no. 8, December 2005): 383-389.

Nowak, Martin A. and Karl Sigmund, "Evolution of Indirect Reciprocity," Nature 437(27 October 2005):1291-1298. Natural selection is typically assumed to favor selfishness. But many biological systems, and especially human societies, are organized around altruistic, cooperative interactions. This seems to evolve through indirect reciprocity: I help you and somebody else helps me. This leads to reputation building, morality judgment and complex social interactions with ever-increasing cognitive demands. Nowak is in biology and mathematics, Harvard University. Sigmund is in mathematics, University of Vienna.

Nozick, Robert, The Examined Life (New York: Simon and Schuster, 1989). "Something has intrinsic value, I suggest, to the degree that it is organically unified. Its organic unity is its value. ... The common structure of value across different areas, and the major dimension that underlies almost all value, is the degree of organic unity. Given this, we can understand why we hold other particular things to be valuable in themselves--for example, whole ecological systems with their complexly interrelated equilibria." (p. 164) Nozick also finds organic unity in works of art. Nozick is in philosophy, Harvard University. (v1,#2)

Nugent, Rachel A.; Wellman, Katharine F.; and Lebovitz, Allen. "Developing Sustainable Salmon Management in Willapa Bay, Washington." Society and Natural Resources 9, no.3 (1996): 317. (v7, #3)
Nunes, Pald; Riyanto, YE, "Information as a regulatory instrument to price biodiversity benefits: certification and ecolabeling policy practices," Biodiversity and Conservation 14 (no. 8, July 2005): 2009-2027.

Nunez, Theodore W., Holmes Rolston, Bernard Lonergan, and the Foundations of Environmental Ethics. Ph.D. Thesis, 1999, Catholic University of America, Washington. The ecophilosophy of Holmes Rolston in dialogue with the thought of Canadian Jesuit philosopher Bernard Lonergan in an attempt to clarify and develop the foundations of a contemporary environmental ethic.

Part I. An interpretive analysis of Rolston's major writings. His meta-ethical positions in the areas of

epistemology, metaphysics, axiology, and philosophical anthropology. Rolston's interpretive natural history and its relation to his theology of nature. Rolston defends a critical-realist epistemology as the meta-ethical basis for a science-based, ecocentric ethic. His most important epistemological claim is that human beings are capable of worldview-formation, moral oversight, and planetary altruism.

Part II. Aspects of Lonergan's philosophy relevant to environmental ethics: cognitional theory, transcendental method, and critical-realist epistemology. Cognitive and moral objectivity is the fruit of authentic subjectivity. Lonergan's theory of emergent probability and the related notions of development and finality. Lonergan's dialectic of progress, decline, and redemption in history and society. Lonergan's view of the humanity-nature relationship clarified and developed by drawing on Robert Doran's related notions of an ecological differentiation of consciousness, an integral dialectic of culture, and psychic conversion.

Part III. In a mutually critical dialogue between Rolston and Lonergan on foundational issues in environmental ethics, each thinker complements and corrects the other in several ways. (1) Critical realism offers the most adequate epistemological grounding for environmental ethics. (2) Meeting the eco-social crisis requires a new, nonanthropocentric ethic that is scientifically informed and religiously based (a theocentric ethic). (3) It is both necessary and possible for a new environmental ethic to integrate a nonanthropocentric theory of values in nature with a humanistic value theory. (4) A new ethic must include, as a central component, a character ethic informed by an evolutionary epic and a normative vision of sensitive earth residence.

A summary argument, with commentaries, appears as "Rolston, Lonergan, and the Intrinsic Value of Nature," Journal of Religious Ethics 27 (no. 1, Spring, 1999):105-128. See that entry. (v.10,#2)

Nunez is now teaching ethics, including environmental ethics, at Villanova University.

Available from UMI Dissertation Services, 300 North Zeeb Road, P. O. Box 1346, Ann Arbor, MI 48106-1346. Phones: 800-521-0600; 734-761-4700. <http://www.bellhowell.infolearning.com> Or: www.umi.com (v.10,#3)

Nunez, Theodore W., "Land Use Policy and the Ecological Common Good: Responding to the Problem of Urban Sprawl." Pages 1-36 in Eigo, Francis A., ed. Ethical Dilemmas in the New Millennium (II). Villanova, PA: Villanova Univ. Press, 2001. (v.12,#3)

Nunez, Theodore W., "Can a Christian Environmental Ethic Go Wild? Evaluating Ecotheological Responses in the Wilderness Debate," pages 329-349 in Kelsay, John and Twiss, Sumner B., eds., The Annual of the Society of Christian Ethics 2000, vol. 20. (Washington, DC: Georgetown University Press, 2000). Postmodern ecophilosophers argue that the wilderness idea, specifically the Euro-American conception of pristine nature derived from Muir and inscribed in the 1964 Wilderness Act, is ethnocentric, elitist, androcentric, and unjust. Although the value of existing wilderness areas is not questioned, the background assumptions and policy implications of the received wilderness concept are. This essay first reviews several postmodern critiques of and alternatives to the wilderness idea, and then examines the responses of two leading ecotheologians, Larry Rasmussen and Sallie McFague, to postmodern themes in contemporary ecophilosophy. It concludes by outlining what it might mean for a Christian environmental ethic to go wild. Nunez teaches ethics at Villanova University. (EE v.12,#1)

Nunez, Theodore W. Review of Genes, Genesis and God: Values and Their Origins in Natural and Human History. By Holmes Rolston, III. Environmental Ethics 22(2000):111-112.

Nunez, Theodore W., "Rolston, Lonergan, and the Intrinsic Value of Nature," Journal of Religious Ethics 27 (no. 1, Spring, 1999):105-128. In recent metaethical debate over ways to justify the notion of intrinsic natural value, some neopragmatists have challenged realist conceptions of scientific and moral truth. Holmes Rolston defends a critical-realist epistemology as the basis for a metaphysics of "projective nature" and a cosmological narrative--both of which set up a historical ontology of objective natural value. Pure ecological science informs the wilderness experience of Rolston's ideal epistemic subject, the

"sensitive naturalist." Nunez argues that Rolston's account of the relation between knowing and valuing can be clarified and strengthened by appropriating Bernard Lonergan's transcendental method. Conversely, Lonergan's view of moral self-transcendence can be developed further in light of Rolston's virtue epistemology, which is embodied in the figure of the sensitive naturalist. Key words: critical realism, environmental ethics, epistemology, intrinsic value, value theory.

The commentaries are:

--Frankenberry, Nancy, "On Empty Compliments and Deceptive Detours: A Neopragmatist Response to Theodore W. Nunez," Journal of Religious Ethics 27 (no. 1, Spring, 1999):129-136. Neopragmatist reasons for repudiating metaphysical realism's notions of intrinsicity and subject-independent reality. Following the holism of Donald Davidson and Richard Rorty rather than the epistemological premises of Holmes Rolston and Bernard Lonergan, coping with the ecological crisis does not require conjuring up an epistemic crisis. Environmental ethics in neopragmatist hands would seek procedures for bringing about agreement in improving our practices, not our epistemology. Frankenberry is in religion at Dartmouth College, Hanover, NH.

--Jackson, Timothy P., "Ambivalences about Nature and Naturalism," Journal of Religious Ethics 27 (no. 1, Spring, 1999):137-144. A "die-hard supernaturalist," someone "at two with nature" who would be "at one with God" has mixed feelings about Theodore Nunez's defense of naturalism. Unlike neopragmatists, Jackson is not troubled by Nunez general realism about value; he takes exception not to Nunez theoretical account of truth, but to his specific axiology. Jackson does not share Nunez's confidence that Rolston's "projective nature" can provide reliable moral inspiration. Instead such inspiration can arise only from the holiness of God. Jackson teaches ethics at Candler School of Theology, Emory University, Atlanta.

--Nunez, Theodore W., "The Author Replies," Journal of Religious Ethics 27 (no. 1, Spring, 1999):145-148. (v.10,#2)

Nunez, Theodore, W., "Can a Christian Environmental Ethic Go Wild? Evaluating Ecotheological Responses to the Wilderness Debate." Pages 329-348 in Twiss, Sumner B., and Kelsay, John, eds., The Annual, Society of Christian Ethics 2000 (Washington, DC: Georgetown University Press, 2000). Postmodern ecophilosophers, such as J. Baird Callicott, argue that the wilderness idea, specifically the Euro-American conception of pristine nature derived from Muir and inscribed in the 1964 Wilderness Act, is ethnocentric, elitist, androcentric, and unjust. The value of existing wilderness areas is not questioned, but rather the background assumptions and policy implications of the received wilderness concept. This essay first reviews several postmodern critiques of and alternatives to the wilderness idea, and then examines the responses of two leading ecotheologians, Larry Rasmussen and Sallie McFague, to postmodern themes in contemporary ecophilosophy. I conclude by outlining what it might mean for a Christian environmental ethic (in Holmes Rolston's phrase) to "go wild." Nunez is in ethics at Villanova University. (v.11,#4)

Nunez, Theodore W., "Catholic Social Ecology: A Reply to Bookchin," Providence: Studies in Western Civilization 5: 3/4 (Fall/Winter 2000): 115-129. (v.12,#3)

Nurden, Robert, "Baka Beyond," The Ecologist 31(no.4, 2001 May 01): 54-. Robert Nurden shows how central Africa's Baka pygmies are suffering both from 'development' and from well-meaning attempts to help them. (v.12,#3)

Nürnberg, K 1987. "Ecology and Christian ethics in a semi-industrialised and polarised society." In: Vorster, WS (ed) 1987. Are We Killing God's Earth? Pretoria: University of South Africa, 45-67. (Africa)

Nussbaum, Martha, Glover, Jonathan, eds., Women, Culture and Development: A Study of Human Capabilities. Oxford, UK: Oxford University Press, 1995. Includes Crocker, David A., "Functioning and Capability: The Foundations of Sen's and Nussbaum's Development Ethic, Part 2." Reviewed by Daniel

Little. Ethics and the Environment 2(1997):91-94. (E&E)

Nussbaum, Martha C., Women and Human Development: The Capabilities Approach. New York: Cambridge University Press, 2000. How we should understand the quality of life in a nation, and the basic minimum that all governments should provide for their citizens. Calls for a new international focus for feminism and claims that philosophical arguments about justice really do connect with the practical concerns of public policy. Nussbaum is at the University of Chicago. (v.12,#4)

Nussbaum, Martha C. *Frontiers of Justice: Disability, Nationality, and Species Membership*. Cambridge, MA: Harvard University Press, 2006. Nussbaum's third new frontier in justice is the moral status of nonhuman animals.

Nussbaum R.H.; Hoover P.P.; Grossman C.M.; Nussbaum F.D., "Community-Based Participatory Health Survey of Hanford, WA, Downwinders: A Model for Citizen Empowerment," Society and Natural Resources 17(no.6, July 2004):547-559(13). (v. 15, # 3)

Nutzinger, Hans, ed., Naturschutz-Ethik-Ökonomie (Nature Protection--Ethics--Economics) . Marburg: Metropolis. 1996. 205 pages. ISBN 3-89518-123-4. (v8,#2)

Nye, David E. Consuming Power: A Social History of American Energies. Cambridge, MA: MIT Press. 1997, 300 pp. \$25. Nye uses energy as a touchstone to examine the lives of ordinary people engaged in normal activities. He looks at how these activities changed as new energy systems were constructed, from colonial times to recent years. He shows how as Americans incorporated new machines and processes into their lives, they became ensnared in power systems that were not easily changed and resulted in a consumer culture. (v.9,#4)

Nye, DE, "Technology, Nature, and American Origin Stories", Environmental History 8(no.1, 2003):8-24.

Nygren, A, "Contested Lands and Incompatible Images: The Political Ecology of Struggles Over Resources in Nicaraguas Indio-Maiz Reserve", Society and Natural Resources 17 (no.3, 2004): 189-205(17).

Nygren, Anja, "Environment as Discourse: Searching for Sustainable Development," Environmental Values 7(1998): 201-222. This study analyses the social and political discourses related to environment and sustainable development in Costa Rica. The central interest is on those development institutions and ideologies that promote social interventions in the name of sustainable development, and on those social processes and economic relations on which the discursive formation of environment and sustainability is articulated. Four different kinds of ideologies of environmental sustainability are analysed: Environmentalism for Nature, Environmentalism for Profit, Environmentalism for the People, and Alternative Environmentalism. The study highlights the complexity of political discourses that construct the relationship between nature and society, and the multiplicity of the means by which the control over natural resources, within the internally differentiated development apparatus, is defined. KEYWORDS: sustainable development, environmentalism, Costa Rica, access over resources. Anja Nygren is at the University of Helsinki, Finland. (EV)

Nygren, Anja, "Representations of Tropical Forests and Tropical Forest-Dwellers in Travel Accounts of National Geographic," Environmental Values 15(2006): 479-504. As one of the most widely read genres of literature, travel writing plays a crucial role in forming popular images and understandings of foreign

places and foreign peoples. This essay examines the dominant images of rainforests and rainforest peoples portrayed in accounts of travels in tropical America published in National Geographic. Special attention is paid to the issues of how particular representations are privileged in this magazine's travel accounts and how these representations relate to questions of authority and power. The analysis shows that the prevailing representations of the tropical forests and tropical forest-dwellers in the travel accounts of National Geographic rely on historically changing, but equally categorical distinctions between 'good' and 'bad', and 'natural' and 'unnatural'. (EV)

Nyland, Ralph D., "Exploitation and Greed in Eastern Hardwood Forests: Will Foresters Get Another Chance?" *Journal of Forestry* 90 (no. 1, January 1992):33-37. Nyland is professor, SUNY College of Environmental Science and Forestry, Syracuse, NY. (v3,#1)

Nylund, Are, Arne Selvik, Gunnar Skirbekk, Andreas Steigen, and Audfinn Tjonneland, The Commercial Ark: A Book on Evolution, Ecology, and Ethics. Oslo: Scandinavian University Press, 1992; distributed elsewhere by Oxford University Press). (In English) Hardcover. 150 pages. ISBN 82-00-21602-0. A project of the Norwegian Academy of Arts and Sciences. A modern fable about the survival of life on earth, with the basic idea of the earth as our common ark. Sometimes lighthearted and amusing, always with a serious purpose. Dealing with such topics as ecology, economy, and ethics, the authors introduce the Commercial Ark, her crew, her passengers, and what happened to them. There can be no doubt, should the Great Flood threaten us today, things would be handled quite differently than in old Noah's time. "Our Commercial Ark is still afloat. It remains our only home in a silent universe, as it is the only home, oikos, of all other species, our common oiko-sphere. Should it end like a ship of fools? Or should it become an oiko-logical ark? To this question there is no answer in Holy Scripture. The answer lies in our hands" (p. 148). (Norway)

O'Neil, Sean Samuel, Review of John Hart, *Sacramental Commons: Christian Ecological Ethics* (Lanham, MD: Rowman and Littlefield, 2006). *Journal of Agricultural and Environmental Ethics* 21(2008):491-494.

O'Neill, John, Alan Holland, and Andrew Light. *Environmental Values*. London: Routledge, 2008. In order to address value conflicts, the authors begin with an explication and critique of utilitarianism which, through welfare economics and cost-benefit analysis, has dominated much public policy making. They find utilitarianism problematic for a number of reasons, including utilitarianism that relies upon moral monism. They also problematize nonanthropocentric approaches to environmental ethics that rely upon a form of moral monism—including biocentric moral considerability and realist accounts of intrinsic value. The authors defend a pluralistic alternative that is rooted in the everyday relations of humans to the environment; this allows human needs to be integrated with environmental protection through an understanding of the history and narrative of particular places. They conclude with the implications of their theory of environmental values for biodiversity conservation, sustainability, and public decision-making.

O'Neill, John, "Without Finality" (editorial in tribute to Val Plumwood), *Environmental Values* 17(no. 3, 2008).

O'Neill, John, "Happiness and the Good Life," *Environmental Values* 17(2008):125-144. Holland argues that environmental deliberation should return to classical questions about the nature of the good life, understood as the worthwhile life. Holland's proposal contrasts with the revived hedonist conception of the good life which has been influential on environmentalism. The concept of the worthwhile life needs to be carefully distinguished from those of the happy life and the dutiful life. Holland's account of the worthwhile life captures the narrative dimension of human well-being which is revealed but inadequately addressed by hedonic research. Environmental concerns are better understood from a non-hedonist

perspective. An Aristotelian version of this perspective also offers the institutional focus which Holland suggests is required in environmental deliberation.

O'Neill, John, Alan Holland, and Andrew Light. *Environmental Values*. London: Routledge, 2008. In order to address value conflicts, the authors begin with an explication and critique of utilitarianism which, through welfare economics and cost-benefit analysis, has dominated much public policy making. They find utilitarianism problematic for a number of reasons, including utilitarianism that relies upon moral monism. They also problematize nonanthropocentric approaches to environmental ethics that rely upon a form of moral monism—including biocentric moral considerability and realist accounts of intrinsic value. The authors defend a pluralistic alternative that is rooted in the everyday relations of humans to the environment; this allows human needs to be integrated with environmental protection through an understanding of the history and narrative of particular places. They conclude with the implications of their theory of environmental values for biodiversity conservation, sustainability, and public decision-making.

Oates, David, Earth Rising: Ecological Belief in An Age of Science. Corvallis: Oregon State University Press, 1989. Pp. 255. A well-written explanation and analysis of the fundamental features of ecological thinking and their philosophical implications. Oates explains the basic scientific foundations of the ecological world view and how these lead to the development of an environmental ethic. The end of the book contains a criticism of deep ecology, for its alleged rejection of scientific thinking, and for the theoretical quibbling that merely splinters the green movement. Oates is concerned that environmental philosophers exhibit "intellectual imperialism---the insistence that there is only one correct position" (p. 206). This attitude does not bother philosophers, who accept it as part of the business; but it is useful to see how serious non-philosophers view the process of philosophical argument and analysis which we perceive as the search for truth and clarity. (Katz, Bibl # 2)

Oates, J. F., and the IUCN/SSC Primate Specialist Group. Status Survey and Conservation Action Plan, revised edition. Gland: Switzerland, IUCN, 1996. (v.10,#1)

Oates, JF, Book Review: Politicians and Poachers The Political Economy of Wildlife Policy in Africa. By Clark C. Gibson. Cambridge University Press, Cambridge, UK, 1999. Human Ecology 30(no.2, 2002):272-273. (v.13, #3)

Obasi, GOP, "Embracing Sustainability Science: The Challenges for Africa," Environment 44(no.4, 2002):8-19. (v.13, #3)

Oboler, Regina Smith. "Whose Cows Are They, Anyway?: Ideology and Behavior in Nandi Cattle 'Ownership' and Control." Human Ecology 24(Jun. 1996):255. (v7,#2)

Obregon-Salido, Francisco J., Corral-Verdugo, Victor. "Systems of Beliefs and Environmental Conservation Behavior in a Mexican Community." Environment and Behavior 29(1997):213. (v8,#1)

OBriant (O'Briant), Walter H. "Leibniz's Contribution to Environmental Philosophy." Environmental Ethics 2(1980):215-20. In this essay I survey the philosophy of the seventeenth-century German thinker Gottfried Leibniz as a preliminary to eliciting some of the implications of his views for environmental philosophy. Reference is also made to the views of the ancient atomists, Bacon, Descartes, Hobbes, Locke, and Spinoza. O'Briant is at the department of philosophy and religion, University of Georgia, Athens, GA. (EE)

OBrien (O'Brien), Stephen J. and Ernst Mayr, "Bureaucratic Mischief: Recognizing Endangered Species and Subspecies," Science, March 8, 1991. The Florida panther, the gray wolf, the red wolf, and the dusky seaside sparrow (now extinct) all involve hybrid populations and there is confusion about species,

subspecies, and hybrids. O'Brien and Mayr claim that the biological species concept, species as "groups of actually or potentially interbreeding populations that are reproductively isolated from other such groups" can be applied to subspecies to formulate a hybrid policy. "Biological species do not form hybrids that disintegrate population genetic organization, but subspecies may. The Hybrid Policy of the Endangered Species Act should discourage hybridization between species, but should not be applied to subspecies because the latter retain the potential to freely interbreed as part of ongoing natural processes. Upon the discovery of coyote DNA in Midwest wolves last year, State Farm Bureaus in Idaho, Montana, and Wyoming petitioned the United States Fish and Wildlife Service to remove the grey wolf from the endangered species list, since it was a hybrid species, not protected under the Endangered Species Act. The petition was turned down, and the Service is drafting a policy as to what is and what is not a hybrid. O'Brien is a geneticist with the National Cancer Institute and Mayr is professor of zoology at Harvard University. See entry below in "Issues" on Florida panthers. (v2,#1)

O'Brien (O'Brien), Mary, "How Rachel Carson Changed Lives," Reflections 9 (Number 2, Spring, 2002):28-30. Carson "used sympathy to evoke ethics" and treated her readers with respect-the keys to her success. (v.13,#2)

O'Brien (O'Brien), James F. "Teilhard's View of Nature and Some Implications for Environmental Ethics." Environmental Ethics 10(1988):329-46. Teilhard's cosmological speculation is a valuable basis for an environmental ethics that perceives individual natural objects as good in themselves and the world as good in itself. Teilhard perceives man as fundamentally part of a cosmic environmental whole that is greater than mankind taken individually or collectively. His holistic views on human biological and psychological and social evolution are, I argue, compatible with a biocentric environmental ethics. I discuss some similarities and differences with the views of the deep ecology movement. I show that Teilhard's hierarchical system is not humanistically oriented in a way that need be interpreted by Teilhardians as contrary to environmental well-being. I argue that Teilhard's sympathy toward transportation technology, including the automobile, can be interpreted in his holistic manner. I conclude that Teilhard's theocentric views are also a basis for supporting an environmental ethics which is both optimistic and not anthropocentric. O'Brien is in the philosophy department, Villanova University, Villanova, PA. (EE)

O'Brien (O'Brien), Karen, Sacrificing the Forest: Environmental and Social Struggles in Chiapas. Boulder: Westview Press, 1998.

O'Brien (O'Brien), Marianne, "The Aesthetic Significance of Nature's Otherness," Environmental Values 15(2006): 99-111. In this article I consider and reflect upon the aesthetic significance of Simon Hailwood's conception of nature as articulated in an earlier volume of this journal in his paper 'The Value of Nature's Otherness' (Hailwood 2000: 353-72). I provide a brief elucidation of Hailwood's conception of nature as other and I maintain that recognition of the value of nature's otherness and respect for nature's otherness requires as a necessary condition that one know and perceive that nature is other. I then go on to consider Hailwood's concerns over the possibility of locating nature's value as other in aesthetic responses to nature. I argue that such reservations are warranted insofar as they focus on an inadequate 'subjectivist' account of aesthetic experience but are not warranted for all accounts of aesthetic experience, in particular, I will argue that such reservations do not apply to the 'cognitive' model of aesthetic appreciation proposed by Allen Carlson as the 'environmental model' and developed in the work of Yuriko Saito. I conclude this paper by claiming that aesthetic value is a necessary component of otherness as a ground of nature's value and that this needs to be conceded if we are to be able to acknowledge the reality of something other than ourselves, to treat it appropriately and with respect. (EV)

O'Brien, Mary, Making Better Environmental Decisions An Alternative to Risk Assessment. Cambridge, MA: MIT Press, 2000. Proposes to replace "risk assessment" with "alternatives assessment." We should

not ask: "How much of a hazardous activity is safe, of insignificant harm, or 'acceptable'?" But: "What are our options for least harm, and the greatest restoration?" This book is not based on the academic risk assessment literature, but on the actual experiences of crucial public environmental decisions based on risk assessment, without looking at the pros and cons of a full range of reasonable alternatives. We should all take a "consumer reports" approach to decision-making. Just as the well-known consumer magazine examines a range of available options before recommending a particular toaster or TV, all decision-makers (public and private) should examine a full range of options before committing to a new project or new technology. The least-damaging option should be chosen. But that is not how decisions are made in the industrialized world. Instead of examining a full range of alternatives, decision-makers generally decide what they want to do, then they hire a risk assessor to convince everyone that the damage they are about to do is "acceptable." By the time damage becomes apparent, they are hauling loot to the bank. At that point, stopping them is almost impossible. The cumulative result of this "risk-based decision-making" is a severely degraded and stressed global ecosystem. O'Brien is a consultant on alternatives to risk assessment and to the use of toxic chemicals. She has been a staff scientist for the Environmental Research Foundation and for the U.S. office of the Environmental Law Alliance. (v.11,#4)

O'Brien, T, "Factory farming and human health. It is not small food production, but large-scale factory farming, that presents a threat to our health," The Ecologist 31(no.5, 2001):30-34. (v.12,#4)

O'Brien, WE, "The Nature of Shifting Cultivation Stories of Harmony, Degradation, and Redemption," Human Ecology 30(no.4, 2002): 483-502.

O'Connell (O'Connell), M. and Yallop, M., "Research Needs in Relation to the Conservation of Biodiversity in the UK," Biological Conservation 103(no.ER2, 2002): 115-23. (v.13,#2)

O'Connell-Rodwell, C.E., Rodwell, T., and Hart, L.A., "Living with the modern conservation paradigm: can agricultural communities co-exist with elephants? A five-year case study in East Caprivi, Namibia," Biological conservation 93 (No. 3, 2000): 381- . (v.11,#4)

O'Connor (O'Conner), Martin, ed. Is Capitalism Sustainable? Political Economy and the Politics of Ecology. Review by Andrew Dobson, Environmental Values 7:(1998):488.

O'Connor (O'Connor), Martin, "Valuing Fish in Aotearoa: The Treaty, the Market, and the Intrinsic Value of the Trout." Environmental Values 3(1994):245-265. New Zealand fisheries management reforms are being conducted in terms of 'balancing' of interests and reconciliation of conflicting claims over ownership and use. Fisheries legislation seeks efficient levels of fishing effort, while establishing 'environmental bottom lines' for stock conservation; resource management law requires, alongside efficiency of resource use, consideration for species diversity and 'the intrinsic values of ecosystems' (notably the 'protection of the habitat of trout and salmon'); and the Treaty of Waitangi safeguards customary practices and life-support requirements (including fisheries) for the Maori people. This paper analyses these antinomies in terms of contrasting ethical positions - utilitarian (self-interested, instrumental) rationality, versus an ethic of reciprocal hospitality - and shows how fisheries management policies can be formulated on this basis. KEYWORDS: Aotearoa, fisheries legislation, habitat protection, hospitality, Treaty of Waitangi. O'Connor is at the University of Auckland, New Zealand. (EV)

O'Connor (O'Connor), James. Natural Causes: Essays in Ecological Marxism. Reviewed by Steven Vogel. Environmental Ethics 22(2000):315-318.

O'Connor (O'Conner), Martin, ed. Is Capitalism Sustainable? Political Economy and the Politics of Ecology. New York: Guilford Publications, 1994. 283 pages. Paperback \$17.95. (v7, #3)

O'Connor (O'Connor), James, Natural Causes: Essays in Ecological Marxism, Chinese translation, translator: Tang Zhengdong and Dai Peihong, Publisher: Nanjing Uni. Press, 2003.

Oddie, Richard James, "The Living Tissue: Environmental Phenomenology and Acoustic Ecology," Call to Earth, vol. 2, no. 1, 2001, pp. 8-12. A slower pace of life and the development of one's capacity to listen sensitively rather than speak forcefully. Stop and listen to the world around us and respond to the imperative for change that can be heard beneath the surface noise of our present existence. (v.12,#2)

Odell, J., Mather, M. E. and Muth, R. M., "A Biosocial Approach for Analyzing Environmental Conflicts: A Case Study of Horseshoe Crab Allocation," Bioscience 55(no. 9, September 2005): 735-748. Ambiguous legislation, insufficient science, jurisdictional disputes, and conflicting values of stakeholders have contributed to the increasing frequency of natural resource conflicts. The allocation of horseshoe crabs in Delaware Bay and Cape Cod Bay can serve as a model system for understanding resource conflicts, because relationships among biophysical and human systems in this example typify many environmental controversies. Herein, we use an interaction web to build a conceptual framework for identifying potential conflicts. Specifically, we identify four subconflicts involving horseshoe crabs, human shellfishers, commercial fishers, the biomedical industry, birdwatchers, and environmental interest groups. Stakeholders hold different attitudes concerning the horseshoe crab and thus advocate competing policy preferences in the political process. An important step in understanding environmental conflicts is to clarify differences in social meanings, attitudes, and values. The integrated approach described here, by depicting and graphically displaying biosocial relationships, can provide a generalized approach for understanding a broad range of environmental conflicts.

Odenbaugh, Jay, Values, "Advocacy and Conservation Biology," Environmental Values 12(2003): 55-69. I examine the controversy concerning the advocacy of ethical values in conservation biology. First, I argue, as others have, that conservation biology is a science laden with values both ethical and non-ethical. Second, after clarifying the notion of advocacy at work, I contend that conservation biologists should advocate the preservation of biological diversity. Third, I explore what ethical grounds should be used for advocating the preservation of ecological systems by conservation biologists. I argue that conservation biologists should defend their preservationist positions on instrumentalist grounds alone if the context of discussion and debate is a scientific one. (EV)

Odin, Steve. "The Japanese Concept of Nature in Relation to the Environmental Ethics and Conservation Aesthetics of Aldo Leopold." Environmental Ethics 13(1991):345-60. I focus on the religio-aesthetic concept of nature in Japanese Buddhism as a valuable complement to environmental philosophy in the West and develop an explicit comparison of the Japanese Buddhist concept of nature and the ecological world view of Aldo Leopold. I discuss the profound current of ecological thought running through the Kegon, Tendai, Shingon, Zen, Pure Land, and Nichiren Buddhist traditions as well as modern Japanese philosophy as represented by Nishida Kitaro and Watsuji Tetsuro. In this context, I present the Japanese concept of nature as an aesthetic continuum of interdependent events based on a field paradigm of reality. I show how the Japanese concept of nature entails an extension of ethics to include the relation between humans and the land. I argue that in both the Japanese Buddhist concept of nature and the thought of Aldo Leopold there is a hierarchy of normative values which grounds the land ethic in a land aesthetic. I also clarify the soteric concept of nature in Japanese Buddhism by which the natural environment becomes the ultimate locus of salvation for all sentient beings. In this way, I argue that the Japanese Buddhist concept of nature represents a fundamental shift from the egocentric to an ecocentric position--i.e., a de-anthropocentric standpoint which is nature-centered as opposed to human-centered. Odin is in the philosophy department, University of Hawaii at Manoa, Honolulu, HI. (EE)

Odum, Eugene, Ecological Vignettes: Ecological Approaches to Dealing with Human Predicaments.

Amsterdam, The Netherlands: Harwood Academic Publishers, 1998. 1. What we learn from ecology about growth. 2. What we learn from ecology about energy. 3. What we learn from ecology about organization. 4. What we learn from ecology about change. (There are checks and balances but no equilibria in nature). 5. What we learn from ecology about behavior. 6. What we learn from ecology about diversity. 7. Human ecology: What we don't learn from nature. (Money is a very incomplete measure of wealth.) 8. Bottom lines. An introductory section followed by twenty-six essays, some co-authored, a few by other authors, mostly previous published. Sample: "How to prosper in a world of limited resources: Lessons from coral reefs and forests on poor soils." Odum is with the University of Georgia Institute of Ecology. This and Frank Golley's A Primer for Ecological Literacy (Yale University Press), see previous newsletter, offer two of the most famous ecologists at the University of Georgia in a philosophical turn of mind. This worth getting in your college or university library and it might not show up there through the usual purchasing channels. (v.10,#1)

Odum, Eugene P., Ecology and Our Endangered Life Support Systems. Second edition. Sunderland, MA: Sinauer Associates, 1993. 329 pages. \$ 18.95 pages. The revision includes more emphasis on a holistic, big-picture look at ecology, global scales. The epilogue includes sections on "Environmental Ethics and Aesthetics," "Dominion vs. Stewardship," and "An Ethics Survival Model." Odum is distinguished professor emeritus of ecology at the University of Georgia. (v4,#2)

Odum, Eugene P. Ecology and Our Endangered Life-Support Systems. Reviewed in Environmental Ethics 12(1990):375-78.

Oechsli, Lauren, and Eric Katz. "Moving beyond Anthropocentrism: Environmental Ethics, Development, and the Amazon." Environmental Ethics 15(1993):49-59. We argue for the rejection of an anthropocentric and instrumental system of normative ethics. Moral arguments for the preservation of the environment cannot be based on the promotion of human interests or goods. The failure of anthropocentric arguments is exemplified by the dilemma of Third World development policy, e.g., the controversy over the preservation of the Amazon rain forest. Considerations of both utility and justice preclude a solution to the problems of Third World development from the restrictive framework of anthropocentric interests. A moral theory in which nature is considered to be morally considerable in itself can justify environmental policies of preservation, even in the Third World. Thus, a nonanthropocentric framework for environmental ethics should be adopted as the basis for policy decisions. Katz and Oechsli are at the Center of Technology Studies, New Jersey Institute of Technology, Newark, NJ. (EE)

Oelhaf, Robert C. "Environmental Ethics: Atomistic Abstraction or Holistic Affection?" Environmental Ethics 1(1979):329-39. For conventional economics things have value only to the degree that they give pleasure to individual human beings. In response to continuing environmental deterioration several alternatives have been offered for valuing resources and allocating them between generations. Most of these approaches are highly abstract. The deterioration of the Earth and the mistreatment of its inhabitants will not be stemmed by abstractions. Neither will abstract ideas direct us to the best use of our resources. We need to foster personal relationships between human beings and particular portions of the Earth. Oelhaf is at the Kimberton Farms School, Kimberton, PA. (EE)

Oelschlaeger, Max, ed., Postmodern Environmental Ethics. Albany: State University of New York Press, 1995. Reprinted from the journal Environmental Ethics, these fifteen essays show that a postmodern movement is well underway within the ecophilosophical community. (v5,#3)

Oelschlaeger, Max, ed. The Wilderness Condition. Reviewed in Environmental Ethics 15(1993) 355-58.

Oelschlaeger, Max, ed., The Wilderness Condition: Essays on Environment and Civilization. San Francisco: Sierra Club Books, 1992. 345 pages. Paper. \$16.00. Essays by Gary Snyder, Paul Shepard,

George Sessions, Curt Meine, Erazim Kohák, Michael P. Cohen, Delores LaChapelle, Michael Zimmerman, and Max Oelschlaeger. (v3,#3)

Oelschlaeger, Max, ed., After Earthday: Continuing the Conservation Effort. Denton, TX: University of North Texas Press, 1992. Cloth \$ 24.50. Paper \$ 15.95. Essays by Robert Paehlke, George Sessions, Pete A. Y. Gunter, Curt Meine, Cheryl Brooks, Kenneth Daugherty, Neil Evernden, Kenneth L. Dickson, Andrew Schoolmaster, Samuel Atkinson, Jenny Cheek, E. E. Spitler, Michael Nieswiadomy, Dolores LaChapelle, E. C. Hargrove, Michael Zimmerman, Elinor Gadon, Susan Bratton. (v3,#3)

Oelschlaeger, Max, The Idea of Wilderness from Prehistory to the Present. New Haven: Yale University Press, 1991. 500+ pages. An intellectual history drawing evidence from philosophy, anthropology, theology, literature, ecology, cultural geography and archaeology. Chapters: 1. The Idea of Wilderness, from Paleolithic to Neolithic Culture. 2. Ancient Mediterranean. 3. Modernism: Transmutation of Wilderness into Nature. 4. Wild Nature: Critical Responses to Modernism. 5. Thoreau. 6. Muir. 7. Leopold. 8. Robinson Jeffers and Gary Snyder. 9. Contemporary Wilderness Philosophy, from Resourcism to Deep Ecology. 10. Cosmos and Wilderness, A Postmodern Wilderness Philosophy. Oelschlaeger is in the Department of Philosophy, University of North Texas. A work continuing, enlarging, and sometimes correcting the tradition of Roderick Nash, Wilderness and the American Mind, one of Yale's all time best sellers. (v1,#4)

Oelschlaeger, Max, "The Politics of Wilderness Preservation and Ecological Restoration," Natural Resources Journal 42(no.2, 2002): 235-46. (v.13,#4)

Oelschlaeger, Max, ed., The Company of Others: Essays in Celebration of Paul Shepard. Durango, CO: Kivaki Press (Way of the Mountain Center), 1995. \$ 30.00. 304 pages. The twenty seven contributors include contributions by Gary Snyder, J. Baird Calicott, John B. Cobb, Jr., George Sessions, Dolores LaChapelle, Jimmy Cheney, Laura Westra, and Elizabeth Lawrence. Oelschlaeger is in philosophy at the University of North Texas. (v6,#3)

Oelschlaeger, Max, "Soul of the Wilderness: The Wild, the Tame, and the Folly of Sustainable Development," International Journal of Wilderness 1(no. 2, December):5-7. (v7,#1)

Oelschlaeger, Max, Caring for Creation: An Ecumenical Approach to the Environmental Crisis. New Haven, CT: Yale University Press, 1994. 296 pages. \$ 30.00. Argues that only the churches, as the repository of moral values that lie outside the economic paradigm, can provide the social and political leadership and power to move our society to ecological sustainability. All faiths have an emphasis on caring for creation on which we can draw, and religion is necessary if we are to solve the environmental crisis politically. Oelschlaeger is professor of philosophy and religious studies at the University of North Texas. (v5,#1)

Oelschlaeger, Max. Review of Gary Snyder: Dimensions of a Life. Edited by John Halper. Environmental Ethics 14(1992):185-90.

Oelschlaeger, Max. Caring for Creation: An Ecumenical Approach to the Environmental Crisis: (New Haven, Conn.: Yale University Press, 1994). Reviewed by Harold Glasser in Environmental Ethics 17(1995):221-224. (EE)

Oelschlaeger, Max. "On the Conflation of Humans and Nature." Environmental Ethics 21(1999):223-224.
Oelschlaeger, Max. "Religion and the Conservation of Biodiversity", Wild Earth 6(no.3, 1996):12. (v7,#4)

Oelschlaeger, Max. Review of The Once and Future Goddess: A Symbol of Our Time. By Elinor W. Gadon. Environmental Ethics 13(1991):275-80.

Oelschlaeger, Max. Review of The Practice of the Wild. By Gary Snyder. Environmental Ethics 14(1992):185-90.

Oesterle, Dale A. "Public Land: How Much Is Enough?" Ecology Law Quarterly 23, no.3 (1996): 521. (v7, #3)

Officer, Charles B., and Page, Jake, Tales of the Earth: Paroxysms and Perturbations of the Blue Planet. New York: Oxford University Press, 1993. 226 pages. The Earth-shattering events that have changed the course of history. The Tambora volcanic eruption of 1815 in Indonesia, which, a year later, caused snow to fall brown, blue, and red halfway around the world. The Lisbon earthquake of 1755, which sparked the famous clash between Voltaire and Rousseau over the meaning of disaster. The Earth is still hot and mobile, and its surface moves around. Flooding events. Visitors from outer space. On rare occasions there are big changes in Earth's community of living things.

The closing section are on the human capacity for wreaking equally great changes on a global scale. "The most fundamental question facing mankind today is whether man can evolve to live in harmony with nature" (Chapter 9) "Human beings, and, in particular, in the last couple of centuries of their existence, have brought about a new type of environmental stress. The most outstanding characteristic of this stress is the rapidity with which it has grown. Virtually nothing in the geological record can compare with these rapid changes: we are changing the Earth's environment far faster than natural forces have done in the past" (p. 205). "The time has come to recognize that the most pressing need is to learn to live in harmony with the planet and its resources, not simply to plunder and overrun it" (pp. 212). But too many still operate with an "ethics of ignorance" (p. 209). (v.9,#4)

Official World Wildlife Fund Guide to Endangered Species of North America, in two volumes totalling 1200 pages. An expensive, authoritative set (\$ 195) for library reference with a photograph or drawing and descriptions of all 547 U. S. species listed at the time it was written. Plants, birds, and insects are in Volume 1; mammals, herpetofauna, fish, mussels, snails, and crustaceans are in Volume 2. Another book is a softcover list of sources for the photographs of endangered species, \$ 9.00. Contact Beacham Publishing, Inc. 2100 S Street, N. W. Washington, D. C. 20008. Phone 202/234-0877. (v1,#2)

Ogden, John C., "Maintaining Diversity in the Oceans: Issues for the New U.S. Administration," Environment 43(no.3, April, 2001): 28-. The notion of the ocean as an inexhaustible resource is being exploded by the realities of overfishing, habitat destruction, coastal population growth, and ocean warming. Cooperation among nations, states, and organizations is essential to maintain marine diversity. (v.12,#3)

OGrady (O'Grady), John P., Pilgrims to the Wild: Everett Ruess, Henry David Thoreau, John Muir, Clarence King, Mary Austin. Logan: University of Utah Press, 1993. Paper. \$ 16.95. "A series of meditations focused upon literary excursions into 'the wild' ... The fundamental assumption I employ--call it a perception--is that the wild is erotic space, and the pilgrimages I am concerned with are journeys through that space." O'Grady is professor in a wilderness literature program at the University of California, Davis. (v4,#2)

Ogrin, Dusan, ed., Nature Conservation Outside Protected Areas/ Varstvo narave zunaj zavarovanih obmocij: Proceedings of the International Conference on the Occasion of the European Year of the Environment, 1995. Ljubljana, Slovenia: Ministry of Environment and Physical Planning, Republic of Slovenia, and Institute for Landscape Architecture, Biotechnical Faculty, University of Ljubljana 1996. 247pp. ISBN 961-90033-9-X. All articles are in both Slovenian and English. Contents: Pavle Gantar,

"Introductory Speech"; Mario Pavan, on a political democracy of the environment for a better Europe (in French); Holmes Rolston, III, "Nature, Culture, and Environmental Ethics"; Ivan Marusic, "Towards a General Conservation Theory"; Peter Jacobs, "Environmental Parentheses and Design Metaphors"; Kazuhiko Takeuchi, "Planning for the Recovery of Nature in Rural and Urban Areas"; Harald Plachter, "A Central European Approach for the Protection of Biodiversity"; Hans Kiemstedt, "Landscape Planning and Impact Regulation as Instruments of Integrated Nature Conservation in Germany"; Olav Skage, "Nature Conservation Through Landscape Planning"; Carl Steinitz, "Landscape Planning and the Management of Biodiversity"; Shumel Burmil, "Protection of Nature Outside Protected Areas in Israel"; Martin Schneider-Jacoby, "Nature Conservation Efforts for Rivers in Central Europe"; Mladen Berginc, "The Nature Conservation System in Slovenia"; Margita Jancic, "The Role of Physical Planning Instruments in Guaranteeing Conservation Interests"; Jana Vidic, "Natural Values Outside Protected Areas"; Zivzn Veselic, Saso Golob, "Nature Conservation Represents an Integral Part of Forest Managing in Slovenia"; Dusan Ogrin, "Dilemmas in an Approach to Conservation Planning"; Ana Kucan, "The Green System of Ljubljana in the Social, Ecological and Morphological Role"; Davorin Gazvoda, "A Conservation of Urban Open Space in a Perspective of Persistent Urban Landscapes." Ogrin teaches landscape architecture at the University of Ljubljana, Slovenia. This conference was held under the auspices of the Council of Europe. (v7,#4)

Ohara (O'Hara), Sabine U., "Sustainability: Social and Ecological Dimensions," Review of Social Economy 53(no. 4, 1995):529-551). Sustainability has generated many and often conflicting definitions. An overlooked dimension is the importance of the "informal" or household sector. To move toward sustainability it is imperative to regain a broader understanding of economics. Three principles are needed for this expansion of understanding: concreteness rather than abstraction; connectedness rather than isolation; and diversity rather than homogeneity. All three are informed by feminist theory. O'Hara is at Rensselaer Polytechnic Institute, Troy, NY. (v.10,#2)

O'Hear, Anthony, "The Myth of Nature." Pages 69-80 in Barnett, Anthony and Scruton, Roger, eds., Town and Country (London: Jonathan Cape, 1998). The vexed and complex question of our relationship to the natural world is not helpfully addressed by reliance on a naive sense of the natural as opposed to the human or the artificial. Nature is accorded a religious aura and the artificial is suspect. That some activity or thing is more natural than some other is no cause to value it more highly. "The invocation of the natural does evoke a powerful quasi-religious aura: we are dealing with a myth which for once really does need deconstruction" (p. 71)

"For Aristotle, man is by nature a political animal, meaning that only in a city or polis will certain activities, fundamental to human flowering take place, and this, of course, requires artifice" (p. 72). But Aristotle lived in a cosmos with an overall end, and that is no part of current Darwinian understanding of nature. "The picture which biology paints of nature and the natural world is in stark contrast to the idea which captivates the popular mind--namely that what is natural is in some sense pure and normal, and that we should aspire to this condition" (pp. 74-75). Present human population levels can be supported only with much technology and artifice.

"We are of course interested in the survival of our children and their children, and in the survival of the human race. Equally for aesthetic, utilitarian and moral reasons, biodiversity and conservation are important. But do not let us deceive ourselves or our children into thinking that there is anything 'natural' about these latter concerns, or that promoting them though conservation demands that we adopt a mystical or sentimental or unscientific attitude to 'nature,' marked off in some Manichean way from science and human intervention. In fact, rather to the contrary, the truth is that only an intelligent, informed and interventionist approach to nature will promote either conservation or the other goals we have" (pp. 78-79). O'Hear is in philosophy, University of Bradford, UK. (v.13, #3)

Ohio Humanities Council, The, has published, "Environmental Crisis and Morality," a reading program written by Norman S. Care, professor of philosophy at Oberlin College. The pamphlet is addressed to

literate nonphilosophical persons and is especially good for making the crossover from popular concern for nature and environmental issues into a more philosophical approach to environmental ethics. Care introduces five books: Thoreau's Walden, Leopold's Sand County Almanac, Partridge's Responsibilities to Future Generations, 's Philosophy Gone Wild, and Regan's Earthbound. Designed for a discussion evening and useful as a take-home handout to get persons started in environmental ethics. The Council has also produced two other pamphlets: "American Environmental History" by Clayton Koppes and "Readings in Environmental Literature" by Lawrence Buell. For single copies, contact the Ohio Humanities Council, P. O. Box 06354, Columbus, OH 43206-0354. Phone 614/461-7802. (v1,#2)

Ohio Humanities Council, The, has also produced a series of twelve posters under the general title Upstream/Downstream in Ohio. Each poster focuses the viewer's attention on key environmental issues and questions. 1. Upstream/Downstream in Ohio. The river major rivers in Ohio, and the name Ohio derived from a native American term for "beautiful river." 2. The Changing Face of Ohio. Natural history reshaped by agriculture and industry. 3. Earthly Visions. Anticipations of the early settlers. 4. The Cost of Coal. Degradation of land and air from mining. 5. A Sense of Nature's Limits. Floods and waste in the waters. 6. Individual Choices on Common Ground. The exercise of individual freedom and environmental responsibility. 7. After the Harvest. Wetlands and water pollution from agriculture. 8. Shared Resources, Common Concerns. Lake Erie and the Great Lakes. 9. Prospects for Renewal. Restoring the Cuyahoga River. 10. The Stress of Growth. The quality of life in cities depends on intelligent use of land, water, air. 11. The Toll of Transportation. The benefits and costs of car and rail. 12. A Time for Choices. Past decisions have reshaped the landscape. What of the future? In a sense we all live both upstream and downstream from other generations that pass before and after us on the river of time. The poster series is quite well done and serves to stimulate thought, either by individual viewers or in discussion groups. There is a discussion guide. An excellent example of imaginative use of posters for environmental education, which might well be imitated in other regions, especially in more developed areas. (v1,#2)

Ohmagari, Kayo, Berkes, Fikret. "Transmission of Indigenous Knowledge and Bush Skills Among the Western James Bay Cree Women of Subarctic Canada," Human Ecology 25(no.2 1997):197. (v8,#3)

Okajima, Shigeyuki, Americano Kannkyo Hogo Unndou (The United States Environmental Movement. Tokyo: Iwanami Shinsho, 1990. 212 + 21 pages. paper. ISBN 4-00-430142-4 C0229 P580E. Chapters open with Earth Day and the spotted owl controversy, then survey the origins of environmentalism in the U.S. Emerson, Thoreau, Muir. Muir and the Sierra Club. Hetch Hetchy. The growth of environmentalism as a citizen's movement. An increasing maturing and professionalism of environmental organizations. David Brower. Leopold and the growth of the wilderness movement. Robert Marshall, William Douglas. The Wilderness Act. The development of ecology. Rachel Carson. From nature conservation to environmental protection. Frazer Darling, Stephen Mather. Increasing global problems. Alaska issues. Is environmentalism an elite movement? International issues. Debt for nature swaps. Lovejoy. Jessica Mathews. The growth of the environmental education movement. Shigeyuki Okajima is a journalist with The Yomiuri Shimbun, a Tokyo newspaper, who has recently been an Eisenhower Fellow in the United States. See notes above in the General Announcements Section. (v4,#2)

Oki, Taikan, and Shinjiro Kanae. "Global Hydrological Cycles and World Water Resources." *Science* Vol. 313, no. 5790 (25 August 2006): 1068-72. Although there is enough fresh water globally, its distribution and availability is problematic, and one-third of the people on Earth live in water-stressed environments, with either a lack of water or polluted water. This is a lead article in a series of water articles about pollutants in aquatic systems, waterborne infectious diseases (the authors are optimistic that such diseases can be eliminated on Earth), water in the Middle East, desalinization, and shifts in arctic and subarctic freshwater cycles.

Okochi, Riogi, "Nietzsches Naturbegriff aus östlicher Sicht" [in German, Nietzsche's concept of nature from a eastern point of view], Nietzsche Studien 17(1988):108-124.

Okoth-Ogendo, H. W. O., and J. B. Ojwang, eds., A Climate for Development: Climate Change Policy Options for Africa. Nairobi: African Centre for Technology Studies. ISBN 9966-41-090-2. Also published by the Stockholm Environment Institute, Stockholm. Accurate predictions of the effects of global climate change in Africa are not available, but are likely to be significant, and there are many actions that can now be taken to mitigate these impacts. Climate change brings the urgency of sustainable development into clearer focus. (v6,#3)

Oksanen, M, "Review of: Susan Board, Ecological Relations: Towards an Inclusive Politics of the Earth," Environmental Politics 11(no.4, 2002): 136.

Oksanen, Markku, The Moral Considerability of Nature: An Analysis of Current Discussion in Environmental Ethics (in Finnish), a licentiate at the University of Turku, 1992. (v5,#2)

Oksanen, Markku and Marjo Rauhala-Hayes, eds., Ympäristöfilosofia (Environmental Philosophy) (Helsinki: Gaudeamus Books/Oy Yliopistokustannus Finnish University Press Ltd., 1997). 350 pages. An anthology in Finnish. Chapter I: History of Western Attitudes, readings from Lynn White, John Passmore, Robin Attfield, Eugene Hargrove. Chapter II: Constructing Environmental Ethics: Aldo Leopold, Arne Naess, Richard Routley, Joel Feinberg, Kenneth Goodpaster. Chapter III: Value of Nature, Value of Human Beings. Holmes Rolston, Paul Taylor, Janna Thompson, John O'Neill, Thomas E. Hill, Jr., Donald VanDeVeer. Oksanen is a graduate student in philosophy at the University of Turku, Finland. Rauhala-Hayes, also a graduate student there, is a researcher at the National Research and Development Centre for Welfare and Health in Finland, also with some graduate work at the City University of New York. (v8,#2)

Oksanen, Markku, Review of: Light, Andrew, and de-Shalit, Avner, eds., Moral and Political Reasoning in Environmental Practice. Cambridge, MA: The MIT Press, 2003. Environmental Values 14(2005):271-274.

Oksanen, Markku, The Moral Status of Animals: A Critical Analysis of Tom Regan's Theory (in Finnish), a M. A. thesis at the University of Turku, 1989, under the direction of Juhani Pietarinen. Oksanen, who studied a year under Robin Attfield in Wales, is finishing a Ph.D. thesis in English under Pietarinen on environmental ethics and property rights. (v5,#2)

Oksanen, Markku, Nature as Property: Environmental Ethics and the Institution of Ownership. Turku, Finland: Reports from the Department of Practical Philosophy, University of Turku, Volume 10, 1998. ISSN 0786-8111. ISBN 951-29-1191-4 This is Oksanen's Ph.D. thesis, done under the supervision of Juhani Pietarinen of the Department of Philosophy, University of Turku, Finland, Summer 1998. A study of the conceptual and practical implications of the institution of ownership, when ecological concerns are profoundly taken into account. The Western understanding of, and the attitude to, nature are changing and the change may extend to concern the institution of ownership. Particularly land ownership is in many cases directly related to the emergence of ecological problems. What is at stake in environmental ethics is primarily the same as what is at stake in the philosophy of ownership: the use of the physical environment, the goods and services nature provides.

We can identify in two complementary ways the points of contradiction between the advocates of the environment and those of private property. Firstly, the conflict centres upon the ideas of proper human attitudes to, and treatment of the natural world. Can natural things be owned? On what grounds are they ownable? Secondly, assuming that natural objects are ownable, we face the issue of how to apply these norms in practice and how to resolve a conflict between these two sets of norms. In sum, how

is the natural world to be treated?

Oksanen, Markku, Review of: William Throop (ed.), Environmental Restoration, and Paul H. Gobster and R. Bruce Hull (eds.), Restoring Nature: Perspectives from the Social Sciences and Humanities, Environmental Values 11(2002):249-250.

Oksanen, Markku and Elisa Aaltola, "Species Conservation and Minority Rights: The Case of Springtime Bird Hunting in Åland," Environmental Values 11(2002):443-460. The article examines the case of springtime bird hunting in Åland from a moral point of view. In Åland springtime hunting has been a cultural practice for centuries but is now under investigation due to the EU Directive on the protection of birds. The main question of the article is whether restrictions on bird hunting have a sound basis. We approach this question by analyzing three principles: The animal rights principle states that if hunting is not necessary for survival, it cannot be morally justified. Therefore hunting merely to engage in a cultural custom is morally suspect. In the light of the species conservation principle the hunting is questionable due to the fact that it seems to have a diminishing effect on the species populations. The formal principle of justice makes up a more difficult question since the special position of the minorities in regard to the use of natural resources is generally recognised so that they have the right to maintain their cultural practices. We claim, however, that even though cultural practices have substantial value and can be the object of special rights, they should be coherent with other principles. The springtime bird hunt in Åland does not accord with the relevant moral principles and for this reason we conclude that the basis for its continuation is weak. (EV)

Oksanen, Markku, "The Moral Value of Biodiversity," Ambio (Royal Swedish Academy of Sciences) 26(no. 8, Dec. 1997):541-545. How the preservation of biodiversity is morally justified in some of the key texts on environmental ethics. Whether or not biodiversity can be justified as a moral end in itself. Views are classified according to the criteria which they hold to be the ultimate moral beneficiaries; positions are named as anthropocentrism, biocentrism and ecocentrism. In general, they are not in favor of regarding biodiversity as intrinsically valuable, but think its moral value is derivative. This means that the myriad characters of life on Earth are to be maintained as diverse because of their instrumental value for the constituents. It seems that Naess's deep ecology is the only major position that argues for biodiversity's intrinsic value, but this view has proved to be problematic. Oksanen is completing a Ph.D. in environmental ethics and property rights at the University of Turku, Turku, Finland. (v9,#1)

Oksanen, Markku, and Juhani Pietarinen, eds., Philosophy and Biodiversity. Cambridge: Cambridge University Press, 2004. The nature and importance of biodiversity. What is worthy of protection or restoration and what is the acceptable level of costs? Is it permissible to kill sentient animals to promote native populations? Can species be reintroduced if they have disappeared a long time ago? How should the responsibilities for biodiversity be shared. Contributors: Markku Oksanen, Julia Koricheva, Helena Siipi, Yrjö Haila, Juhani Pietarinen, Kim Cuddington, Michael Ruse, Gregory M. Mikkelsen, Finn Arler, Keekok Lee, Peter R. Hobson, Jed Bultitude, Kate Rawles, Christian Gamborg, Peter Sandoe, Robin Attfield.

Oksanen, Markku, Review of Bryan G. Norton, *Sustainability*, Environmental Values 16(2007):272-277.

Oksanen, Markku. Review of M. Wissenburg, Green Liberalism: The Free and the Green Society. London: UCL Press, 1998. Markku Oksanen, Environmental Values 10(2001):550. (EV)

Oksanen, Markku, Review of: Jamieson, Dale, Morality's Progress: Essays on Humans, Other Animals and the Rest of Nature. Environmental Values 13(2004):261-263. (EV)

Olatubi, WO; Hughes, DW, "Natural resource and environmental policy trade-offs: a CGE analysis of the

regional impact of the Wetland Reserve Program," Land Use Policy 19(no.3, 2002): 231-241.

Olaughlin, J, "Policy Analysis Framework for Sustainable Forestry: National Forest Case Study", Journal of Forestry 102 (no.2, 2004): 34-41(8).

OLaughlin (O'Laughlin), Jay, James G. MacCracken, David L. Adams, Stephen C. Bunting, Keith A. Blatner, and Charles E. Kegan, III, Forest Health Conditions in Idaho. Moscow, ID: University of Idaho, College of Forestry, Idaho Forest, Wildlife and Range Policy Analysis Group, Report No. 11, December 1993. (Phone 208/885-5776, FAX 208/885-6226) 244 pages. An executive summary is available, 37 pages. If forest health is a statement about trees at risk of mortality from insects, disease, and wildfire, then much of Idaho's forest land is either unhealthy or on the verge of poor health, especially in the national forests that represent two-thirds of the state's timberlands. Firs are the most prevalent trees in Idaho's forests, which were predominantly pines before European settlers arrived in Idaho. Firs are less resistant than pines to many insects and diseases as well as wildfire. Prolonged drought in southern Idaho has weakened forests, making them even more susceptible to insect epidemics and wildfires. In northern Idaho, root diseases are affecting the growth potential of mature stands. In forests throughout the state, environmental, ecological, economic, and social values are at risk. The situation can be changed by using forest management practices favoring pines instead of firs and reducing competition between trees by thinning, while protecting other forest values. Two obstacles to this course of action are public policy and public trust.

The report is philosophically interesting for its discussion of forest health, and reveals many limitations of this metaphor as applied to forests. A tree (like a person) is not healthy when it dies, but is a forest unhealthy when its trees age and die? Or burn? Or are beset with insect blights? The renewal and regenerative processes in a forest system have no clear analogue in bodily health. The report concludes that forest health is significantly a cultural construction. O'Laughlin is Director of the Policy Analysis Group, and teaches natural resource policy at the University of Idaho. (v5,#4)

Oldfield, JD, "Russia, Systemic Transformation and the Concept of Sustainable Development," Environmental Politics 10(no, 3, 2001):94-110. (v.13,#1)

Oldfield, Margery L. and Janis B. Alcorn, eds., Biodiversity: Traditional Management and Diversity of Biological Resources. Dual themes of conservation of biological resources and rural development. 320 pages, \$ 30.95. Boulder, CO: Westview Press, 1990. (v1,#2)

Oldfield, S., Lusty, C., and MacKinven, A., eds. The World List of Threatened Trees. Cambridge, U.K.: World Conservation Press, 1998. (v.10,#1)

Olds, K., Hudson, R. and Dicken, P., "Dicken, P. 1986: Global shift: industrial change in a turbulent world," Progress in Human Geography 28(no. 4, 2004): 507-515(9). (v.14, #4)

Olds, Kris; Hudson, Ray; Dicken, Peter, "Review of: Dicken, P. 1986: Global shift: industrial change in a turbulent world", Progress in Human Geography 28(no.4, 1 August 2004):507-515(9).

OLeary (O'Leary), Rosemary, Environmental Change: Federal Courts and the EPA. Philadelphia, PA: Temple University Press, 1995 in paper, earlier 1993 in hardback. \$ 19.95 paper. A survey of over 2,000 federal court cases on environmental policy--water quality, pesticides, toxic substances, air quality, hazardous waste. Compliance with court orders has become one of the EPA's top priorities, at times overshadowing congressional mandates and the authority of EPA administrators. Because the EPA is often caught between White House and Congressional agendas, judicial decision is especially important in the public policy process. O'Leary is in public and environmental affairs at Indiana University, Bloomington. (v6,#4)

O'Leary (O'Leary), Rosemary, Environmental Change: Federal Courts and the EPA. Philadelphia: Temple University Press, 1993, 1995. \$ 19.95 paper. Surveys over 2,000 federal court cases on water quality, pesticides, toxic substances, air quality, and hazardous waste. Because the EPA is often caught between White House and congressional agendas, the competing interests of industry and environmental groups, and turf battles with other agencies, O'Leary argues for the importance of judicial decision in the public policy process. O'Leary teaches public and environmental affairs at Indiana University, Bloomington. (v6,#4)

O'Leary (O'Leary), Rosemary, Environmental Change: Federal Courts and the EPA. Philadelphia: Temple University Press, 1993. 224 pages. \$ 34.95. The impact of hundreds of federal court decisions on the policies and administration of the Environmental Protection Agency, since its beginning in 1970. Five areas of focus: water quality, pesticides, toxic substances, air quality, hazardous wastes. O'Leary is in the Department of Public Administration in the Graduate School of Public Affairs, Syracuse University. (v4,#3)

Olen, Jeffrey and Vincent Barry, eds., Applying Ethics: A Text with Readings, 4th ed. Belmont, CA: Wadsworth, 1992. 470 pages. 5th ed. 1996. Introductory text. Chapter 9 is "Animal Rights." Readings are Peter Singer, "All Animals are Equal;" Tom Regan, "The Case for Animal Rights"; Christina Hoff, "Immoral and Moral Uses of Animals"; Bonnie Steinbock, "Speciesism and the Idea of Equality." Chapter 10 is "Environmental Ethics." Readings are Aldo Leopold, "The Land Ethic"; Paul W. Taylor, "The Ethics of Respect for Nature"; William F. Baxter, "People or Penguins"; J. Baird Callicott, "An Ecocentric Environmental Ethic" (an extract from "The Search for an Environmental Ethic" in Regan, ed., Earthbound). The chapter on environmental ethics is new to the fourth edition. Other issues are sexual morality, pornography, abortion, euthanasia, capital punishment, job discrimination, and corporate responsibility. (v2,#4)

Oliver, C., "Sustainable Forestry: What Is It? How Do We Achieve It?," Journal of Forestry 101(no. 5, 2003): 8-17. (v 14, #3)

Oliver, Harold H., "The Neglect and Recovery of Nature in Twentieth-Century Protestant Thought," Journal of the American Academy of Religion 60 (no. 3, 1992):379-404. Protestants neglected a long heritage of theology of nature and, in the first part of the twentieth century "'nature' became the ward of science and technology, with little interference--and less wisdom--from the Church." The Protestant theological giants, Barth, Brunner, and Bultmann, willfully rejected a theology of nature, though Tillich sought to be more inclusive. The theologians overvalued world history and devalued nature. The ecological crisis has had an awakening effect, especially when blame for the ecological crisis was laid at the door of Christianity itself. More recent proposals for an integral theology have the criteria of wholeness, mutuality, responsiveness, and mystery. Oliver is professor of philosophical theology at Boston University School of Theology. (v4,#2)

Oliveri, Paula, and Eric H. Davidson. "Built to Run, Not Fail." *Science* Vol. 315, no. 5818 (16 March 2007): 1510-11. Networks of genes that control organism development are highly conserved across processes and species. There is often "overlayered" circuit engineering, with multiple fail-safe and backup circuits. "We may interpret this as we like as over-engineering; or as design deluxe, replete with bells and whistles; or as the expected result of an evolutionary process in which individual regulatory modules have been added in and overlain at different times." So it turns out that organisms are well designed after all, only this design is produced by the grim pressures of natural selection. The authors are in biology at California Institute of Technology, Pasadena.

OliverSmith, Anthony, and Hoffman, Susanna, eds., The Angry Earth: Disaster in Anthropological

Perspective. New York: Routledge, 1999. How various cultures in different historical times have responded to calamity, offering new insights into the complex relationship between society and the environment. (v.12,#4)

Olivier, DF 1987. "'God's rest': the core and Leitmotif of a Christian holistic view of reality?" In: Vorster, WS (ed) 1987. Are We Killing God's Earth? Pretoria: University of South Africa, 100-118. (Africa)

Olivier, DF 1989. The role of eschatology and futurology in the quest for a future in the light of the ecological crisis. Theologia Evangelica 22:1, 24-33. (Africa)

Olivier, DF 1991. Die aarde vir die sagmoediges (Mat 5:5). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 198-215. (Africa)

Olivier, DF 1991. Ecology and mission: Notes on the history of the JPIC process and its relevance to theology. Missionalia 19:1, 20-32. (Africa)

Olney, P. J. S., Mace, G. M., and A. T. C. Feistner, eds., Creative Conservation: Interactive Management of Wild and Captive Animals. London: Chapman and Hall, 1994. 517 pages. \$95.00. Reintroduction and captive breeding. (v8,#2)

OLoughlin (O'Loughlin), Thomas, "Ecotheology and Eschatology," Ecotheology No 7 (July 1999):71-80.

Olsen, Florence, "Bellesiles Resigns from Emory after University Report Questions his Research for Book on Guns," Chronicle of Higher Education, Daily News (daily on line edition), October 28, 2002 (<http://chronicle.com>). Bellesiles misfired and fired. Michael A. Bellesiles published Arming America: The Origins of a National Gun Culture (New York: Alfred A. Knopf, 2000) (ISEE Newsletter v. 12,#2) claiming that gun ownership in early America was not as widespread as believed and largely a myth cultivated by the gun industry. The book won the Bancroft Prize and was praised in The New York Review of Books and The New York Times Book Review. But prominent historians have been challenging Bellesiles' scholarship since, for example in a forum in The William and Mary Quarterly in February 2002. Emory University, where he teaches, convened an independent investigative report, which found it difficult to verify his archival records either "because the source does not exist, because the citation is inaccurate, or because the citation, though correct, refers to a source that has been misplaced." One commentator said that among scholars of early American history, Bellesiles' book was widely considered to be "marred by unusually careless and disorganized scholarship." Under pressure, Bellesiles has resigned from Emory University, though he says the charges are unfair and that he will correct errors in a second edition.

Olsen, Jonathan. Review of Bioregionalism. Edited by Michael Vincent McGinnis. Environmental Ethics 23(2001):433-436. (EE)

Olsen, Len. "Contemplating the Intentions of Anglers: The Ethicist's Challenge." Environmental Ethics 25(2003):267-277. There are theoretical difficulties involving the intentions of anglers that must be faced by anyone who wants to argue that sport fishing is ethically impermissible. Recent arguments have focused on what might be called the sadistic argument. This argument is fatally flawed because sport fishing is not a sadistic activity. (EE)

Olsen, W. Scott, Cairns, Scott, eds. The Sacred Place: Witnessing the Holy in the Physical World. Salt Lake City: University of Utah Press, 1996. 360 pp. \$49.95 cloth, \$19.95 paper. With renewed urgency, serious writers are undertaking an un-abashedly metaphysical discourse as they describe how the experience of standing near the hilltop, the stream bank, or the village park provides an empowering sense

of encounter. (v8,#1)

Olson, DM; Dinerstein, E; Wikramanayake, ED; Burgess, ND; Powell, GVN; Underwood, EC; Damico, JA; Itoua, I; Strand, HE; Morrison, JC, "Terrestrial Ecoregions of the World: A New Map of Life on Earth," Bioscience 51(no. 11, 2001):933-938. A global biodiversity map with sufficient resolution accurately to reflect the complex distribution of the Earth's natural communities. Copies are being placed in all public and private schools in the U.S. (v.13,#2)

Olson, Elizabeth, "Target Practice in Geneva on the Global Trade Body," New York Times, May 16, B1, B2. The World Trade Organization has come under attack from critics who say it ignores environmental and social issues in settling trade disputes. At the center of the issue is a ruling against the United States favoring a challenge from developing countries to the United States Law that protects sea turtles from shrimp's nets. Interest groups are accusing the WTO of gutting environmental laws in the name of unfettered trade. In this case environmentalists and the U.S. are taking the same side in a turtle fight. (v9,#2)

Olson, MD, "Development Discourse and the Politics of Environmental Ideologies in Samoa," Society and Natural Resources 14(no.5, 2001):399-410. (v.12,#4)

Olson, Molly Harriss. "Charting a Course for Sustainability." Environment 38(May 1996):10. This overview of the President's Council on Sustainable Development's recently released report highlights its major policy recommendations and spells out the future directions of U.S. sustainable development policy. (v7,#2)

Olson, Robert, and David Rejeski, eds. *Environmentalism and the Technologies of Tomorrow: Shaping the Next Industrial Revolution*. Washington, DC: Island Press, 2005. This anthology consists of seventeen essays that attempt to answer the question "what's next?" in technology and environmental studies. Essays are grouped into three sub-themes of the transition to sustainability, new technologies, and new governance. The authors are from academic institutions, government, and business, and the anthology stems from an agreement between the Environmental Protection Agency and the Woodrow Wilson International Center of Scholars.

Olsson, Anna S., Christian Gamborg and Peter Sandhoe, "Taking Ethics into Account in Farm Animal Breeding: What Can the Breeding Companies Achieve?" Journal of Agricultural and Environmental Ethics 19(2006):37-46. Animal welfare and the ethical issues it raises have been discussed for a couple of decades. The emphasis has been on the direct effects of housing and husbandry, but more attention is now being given to problems originating in selective breeding. European attempts to adjust animal welfare legislation to deal with these problems have been largely unsuccessful, but the fact that selective breeding can introduce welfare problems continues to place an ethical responsibility on the animal breeding industry. This is likely to be embedded in an international agreement. some kind of ethical code. Results from recent projects involving commercial breeding enterprises are presented. The authors are with the Institute for Molecular and Cell Biology, Porto, Portugal. (JAEE)

Olsson, I. Anna S., Axel K. Hansen, and Peter Sandoe. "Ethics and Refinement in Animal Research." *Science* Vol. 317, no. 5845 (21 September 2007): 1680. Science journals that publish research resulting from animal studies should ensure that referees evaluating such manuscripts seriously consider whether submitted the studies were carried out with the smallest achievable negative impact on the research animals. If not, the papers should be rejected.

Olupona, Jacob K., "African Religions and the Global Issues of Population, Consumption, and Ecology" (Africa). (v.11,#1)

OMahoney (O'Mahoney), Patrick, ed., Nature, Risk and Responsibility: Discourses of Biotechnology. London and New York: Routledge, 1999. 232 pages. Eleven contributors. Biopolitics and risks, genetic issues, reproductive technology, biotechnology in the press, transgenic plants and animals, biopatenting. O'Mahoney is Director, Centre for European Social Research, University College, Cork, Ireland. (v.11,#1)

OMahony (O'Mahony), Patrick, ed., Nature, Risk and Responsibility. London: Routledge, 1999. 224 pages. \$ 25.00. Ethical issues in biodiversity. Whether sufficient consensus exists or is emerging to enable biotechnology to occupy a significant role in the techno-economic, social and cultural order. The implications of biotechnology for nature, life and social organization. O'Mahony is at University College, Cork, Ireland. (v10,#4)

OMalley, Robin, and Wing, Kate, "Forging A New Tool For Ecosystem Reporting," Environment 42 (No. 3, Apr 01 2000): 20- . Investigating the state of U.S. ecosystems involves a continuing commitment to developing national indicators and presenting coherent data. Only then can a reasoned debate about natural resources ensue. (v.11,#2)

Omar, Samira A. S. Range Management in Arid Zones: Proceedings of the Second International Conference on Range Management in the Arabian Gulf. New York: Columbia University Press, 1996. 307 pp. \$161.50 cloth. Twenty-eight papers by experts addressing the following topics: Rangeland Inventories and Evaluation; Range Plants and Forage Crops--Potential and Production; Animal Production and Conservation; and Technological Range Improvements. (v7,#4)

Omeje, Kenneth, ed. *Extractive Economies and Conflicts in the Global South: Multi-Regional Perspectives on Rentier Politics*. Burlington, VT: Ashgate Publishing, 2008. Contents include: (1) "Extractive Economies and Conflicts in the Global South: Re-Engaging Rentier Theory and Politics" by Kenneth Omeje, (2) "Rentier Politics, Extractive Economies and Conflict in the Global South: Emerging Ramifications and Theoretical Exploration" by Usman A. Tar, (3) "Anatomy of an Oil Insurgency: Violence and Militants in the Niger Delta" by Michael Watts, (4) "Nationalization versus Indigenization of the Rentier Space: Oil and Conflicts in Nigeria" by Ukoha Ukiwo, (5) "Greed or Grievance? Diamonds, Rent-Seeking and the Recent Civil War in Sierra Leone" by John Kabia, (6) "Politics and Oil in Sudan" by Peter Woodward, (7) "São Tomé and Príncipe: The Troubles of Oil in an Aid-Dependent Micro-State" by Gerhard Siebert, (8) "Rentier Politics and Low Intensity Conflicts in the DRC: The Case of Kasai and Katange Provinces" by Germain Tshibambe Ngoie and Kenneth Omeje, (9) "Thugs' Paradise, Agencies' Guinea Pig and the Natural Resource Intrigue: The Civil War in Liberia" by T. Debey Sayndee, (10) "Resource Exploitation, Repression and Resistance in the Sahara-Sahel: The Rise of the Rentier State in Algeria, Chad and Niger" by Jeremy Keenan, (11) "Oil Sovereignties in the Mexican Gulf and Nigerian Niger Delta" by Anna Zalik, (12) "Extractive Resources and the Rentier Space: A South American Perspective" by Julia Buxton, (13) "Rentier States and War-Making: The United Arab Emirates and Iraq in Comparative Perspective" by Rolf Schwarz, and (14) "Rethinking the Rentier Syndrome: Oil and Resource Conflict in the Persian Gulf" by Dauda Abubakar.

Omundson, Bruce K., "Pluralism and Prospects for a Land Ethic," Michigan Academician 23(1991):191-200. Omundson doubts whether Callicott's basis for a land ethic is viable and proposes that many versions of a land ethic can grow out of what Stuart Hampshire calls "ways of life" by coupling them to a sustainability factor. A useful model is found in Wendell Berry's model of the farmer, developing an analogy between farming and marriage. Omundson teaches philosophy at Lansing Community College, Michigan. (v2,#2)

On the Other Hand: News from the Russian Environment has published volume 1, no. 3, May 1993. The

current issue includes: Irene Khalyi, "The Environmental Movement in Russia: Contemporary Trends"; Yu S. Kamalov, "The Rights of the Aral Sea"; A. Tulokhonov, "Sustainable Development for Baikal." The U. S. editor is Ernest Partridge, Northland College, Wisconsin; the Russian editor is Anton Struchkov, Academy of Sciences, Moscow. (v4,#2)

Onate, J.J., Andersen, E., and Primdahl, J., "Agri-Environmental Schemes And The European Agricultural Landscapes: The Role Of Indicators As Valuing Tools For Evaluation," Landscape Ecology 15 (No. 3, Apr 01 2000): 271- . (v.11,#2)

ONeil (O'Neil), Rick. "Intrinsic Value, Moral Standing, and Species." Environmental Ethics 19(1997):45-52. Environmental philosophers often conflate the concepts of intrinsic value and moral standing. As a result, individualists needlessly deny intrinsic value to species, while holists falsely attribute moral standing to species. Conceived either as classes or as historical individuals, at least some species possess intrinsic value. Nevertheless, even if a species has interests or a good of its own, it cannot have moral standing because species lack sentience. Although there is a basis for duties toward some species (in terms of their intrinsic value), it is not the one that the holists claim. O'Neil is in philosophy at Transylvania University, Lexington, KY. (EE)

ONeil (O'Neil), Rick. "Animal Liberation versus Environmentalism: The Care Solution." Environmental Ethics 22(2000):183-190. Animal liberationism and environmentalism generally are considered incompatible positions. But, properly conceived, they simply provide answers to different questions, concerning moral standing and intrinsic value, respectively. The two views together constitute an environmental ethic that combines environmental justice and environmental care. I show that this approach is not only consistent but defensible. (EE)

Oneill (O'Neill), John. The Market: Ethics, Knowledge and Politics. London: Routledge 1998, 224pp. Reviewed by Alfonso Salinas. Environmental Values 9(2000):111.

ONEill (O'Neill), John, "Wilderness, cultivation and appropriation," Philosophy and Geography 5 (No. 1, 2002): 35-50. 'Nature' and 'wilderness' are central normative categories of environmentalism. Appeal to those categories has been subject to two lines of criticism: from constructivists who deny there is something called 'nature' to be defended; from the environmental justice movement who point to the role of appeals to 'nature' and 'wilderness' in the appropriation of land of socially marginal populations. While these arguments often come together they are independent. This paper develops the second line of argument by placing recent appeals to 'wilderness' in the context of historical uses of the concept to justify the appropriation of land. However, it argues that the constructivist line is less defensible. The paper finishes by placing the debates around wilderness in the context of more general tensions between philosophical perspectives on the environment and the particular cultural perspectives of disciplines like anthropology, in particular the prima facie conflict between the aspirations of many philosophers for thin and cosmopolitan moral language that transcends local culture, and the aspirations of disciplines like anthropology to uncover a thick moral vocabulary that is local to particular cultures. O'Neill is Professor of Philosophy at Lancaster University. (P&G)

ONEill (O'Neill), John. "Managing without Prices: The Monetary Valuation of Biodiversity," Ambio (Royal Swedish Academy of Sciences) 26(no. 8, Dec. 1997):546-550. (v9,#1)

ONEill (O'Neill), John, Ecology, Policy and Politics: Human Well-Being and the Natural World. London: Routledge, 1993. 227 pages. paper. A broadly Aristotelian account of welfare that reveals the relation between the good of non-humans and future generations and our own well-being. Welfare and liberal justifications of market-based approaches to environmental policy fail, and this has implications for debates about market, civil society, and politics. Chapter titles: Nature, Intrinsic Value and Human Well-

Being; Future Generations and the Harms We Do Ourselves; Justifying Cost-Benefit Analysis: Arguments from Welfare; Pluralism, Liberalism, and the Good life; Pluralism, Incommensurability, Judgement; Authority, Democracy and the Environment; Science, Policy and Environmental Value; Market, Household and Politics. This book is in the series, Environmental Philosophies, edited by Andrew Brennan. O'Neill is lecturer in philosophy at Lancaster University, Lancaster, UK. (v5,#1)

ONeill (O'Neill), Onora, "Environmental Values, Anthropocentrism and Speciesism," Environmental Values 6(1997):127-142. ABSTRACT: Ethical reasoning of all types is anthropocentric, in that it is addressed to agents, but anthropocentric starting points vary in the preference they accord the human species. Realist claims about environmental values, utilitarian reasoning and rights-based reasoning all have difficulties in according ethical concern to certain aspects of the natural world. Obligation-based reasoning can provide quite strong if incomplete reasons to protect the natural world, including individual non-human animals. Although it cannot establish all the conclusions to which anti-speciesists aspire, it may establish many of them with some clarity. Newnham College, Cambridge CB3 9DF, UK. (EV)

ONeill (O'Neill), John. "Humanism and Nature." Radical Philosophy 66 (Spring 1994): 21-30. Those who aim to construct links between Marxism and the green movement often link to Marx's early work on alienation as a source for a green Marxism. There is an immediate apparent problem with any such attempt to marry the early Marx and the greens, viz. that Marx's early works are humanist. Doesn't humanism necessarily entail that only humans, their states and achievements, have value? And isn't this immediately incompatible with modern green thought which allows that non-humans, their states and achievements, also have intrinsic value? This argument as it stands is too hasty. The term "humanism" is an ambiguous one and it need not immediately entail that only the states and achievements of humans have value. Humanism can have other meanings. O'Neill is in philosophy, University of Lancaster. (v6,#1)

ONeill (O'Neill), John, Hayward, Tim, eds. Justice, Property, and the Environment: Social and Legal Perspectives. Brookfield, VT: Ashgate, 1997. 200pp. \$59.95 cloth. The first part of this book considers the questions about justice raised by a number of environmental crises. The second part examines the ramifications environmental conflicts have for the political theory of property and markets. The third part considers the implications of these and other developments of environmental law. (v8,#1)

ONeill (O'Neill), RV, "The Economic Analysis of Self-Destruction: Why Should Biologists Care?," Bioscience 52(no.10, 2002): 872.

ONeill (O'Neill), C., "Risk Avoidance, Cultural Discrimination, and Environmental Justice for Indigenous Peoples," Ecology Law Quarterly 30(no. 1, 2003): 1-58. (v 14, #3)

ONeill (O'Neill), Helen and Toye, John, eds. A World Without Famine?: New Approaches to Aid and Development. New York: St. Martin's Press, 1998. (v.9,#3)

ONeill (O'Neill), John, "Humanism and Nature," Radical Philosophy (Canterbury, UK), no. 66, 1994, pages 21-29. Those who seek to construct an green Marxism often turn to Marx's early works. There can be either an anthropocentric or a biocentric humanism. Unfortunately, there are central components of Marx's early thought, inherited from Hegel, which cannot be incorporated into a defensible ecological political theory. What is often taken to be of value in Marx's early work is just that part of his thought that should be abandoned. O'Neill is in philosophy, University of Sussex, Brighton, UK. (v.10,#1)

ONeill (O'Neill), John. Ecology, Policy, and Politics: Human Well-Being and the Natural World: (London: Routledge, 1993). Reviewed by Brian Barry in Environmental Values 4(1995):181-182. (EV)

ONeill (O'Neill), John. "Public Choice, Institutional Economics, Environmental Goods," Environmental Politics 4(no.2, Summer 1995):197- .

ONeill (O'Neill), Robert V., Hunsaker, Carolyn T., Riitters, Kurt H. "Monitoring Environmental Quality at the Landscape Scale," Bioscience 47(no.8, 1997):513. Using landscape indicators to assess biotic diversity, watershed integrity, and landscape stability. (v8,#3)

ONeill (O'Neill), Karen M. "The International Politics of National Parks," Human Ecology 24(1996):521. (v8,#1)

ONeill (O'Neill), John, Clive L. Spash. Appendix: "Policy Research Brief Conceptions of Value in Environmental Decision-Making." Environmental Values 9(2000):521-536. Abstract: Environmental problems have an ethical dimension. They are not just about the efficient use of resources. Justice in the distribution of environmental goods and burdens, fairness in the processes of environmental decision-making, the moral claims of future generations and non-humans, these and other ethical values inform the responses of citizens to environmental problems. How can these concerns enter into good policy-making processes? Two expert-based approaches are commonly advocated for incorporating ethical values into environmental decision-making. One is an 'economic capture' approach, according to which existing economic methods can be successfully extended to include ethical concerns. For example, stated preference methods, especially contingent valuation, have been developed to try and capture ethical responses as 'non-use values' of the environment, in particular 'existence values'. The other is a 'moral expert' approach which confines economic methods to the analysis of welfare gains, and assumes committees of ethical experts will complement economic expertise. Both approaches face problems in terms of addressing many widely held ethical values about the environment. Furthermore, both face problems concerning the democratic legitimacy of their procedures. How can policy-making be made responsive to different ethical values? What role is there for new deliberative and participatory methods? How far do existing decision-making institutions have the capacities to incorporate different modes of articulating environmental values? This policy brief examines the limitations of current attempts to capture ethical values within existing economic instruments and considers how these limitations might be overcome. Section 1 examines the assumptions that standard economic theory makes about individuals when they express values and make choices about the environment. The current models of agents that inform policy-making are seen to be ill-suited to incorporating the ethical responses of agents and this reveals some of the policy failures that may result. Section 2 shows how the physical and social properties of many environmental goods prevent their being treated as commodities. Section 3 considers the problems surrounding conceptions of fairness and legitimacy in processes for environmental valuation. Section 4 raises questions concerning the capacities of policy-making institutions to take cognisance of the results of different methods for articulating environmental values. (EV)

ONeill (O'Neill), John, "Environmental Virtues and Public Policy," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):125-136. The Aristotelian view that public institutions should aim at the good life is sometimes criticized on the grounds that it makes for an authoritarian politics that is incompatible with the pluralism of modern society. The criticism seems to have particular power against modern environmentalism, that it offers a local vision of the good life which fails to appreciate the variety of possible human relationships to the natural environment, and so, as a guide to public policy, it leads to green authoritarianism. This paper argues to the contrary that an Aristotelian position which defends environmental goods as constitutive of the good life is consistent with recognition of the plurality of ways our relations to the natural world can be lived. It is compatible with the recognition of distinct cultural expressions of such relations and of the special place particular histories of individuals and social groups have in constraining environmental policy. (v.13,#2)

ONeill (O'Neill), Karen M., "Can Watershed Management Unite Town and Country?," Society and Natural Resources 18(no.3, March 2005):241-253(13).

ONeill (O'Neill), John, R. Kerry Turner, and Ian J. Bateman, eds., Environmental Ethics and Philosophy. Cheltenham, UK, Northampton, MA, US: Edward Elgar Publishing, 2001. With the subtheme: Managing the Environment for Sustainable Development. A reference collection of 32 articles: equality and justice, future generations, moral considerability of the non-human world, environmental justice, economic valuation, sustainability, sustainability and nature. O'Neill is in philosophy, University of Lancaster, UK. Turner and Bateman are in environmental sciences and decisionmaking, University of East Anglia, UK.

ONeill, J., and Walsh, M., "Landscape Conflicts: Preferences, Identities And Rights," Landscape Ecology 15 (No. 3, Apr 01 2000): 281- . (v.11,#2)

ONeill, Robert V. and Kahn, James R., "Homo economus as a Keystone Species," Bioscience 50 (No. 4, 2000 Apr 01): 333- . (v.11,#4)

Ondorff, Keith A. "What the Weitzenhoff Court Got Wrong." Journal of Environmental Law and Practice 4, no.1 (1996): 14. Even though ignorance cannot be bliss, the author argues that criminal jurisprudence should not penalize environmentally benign conduct. (v7, #3)

Ondorff, Keith A., North, Karis L. "EPA Seeks to Reinvent Itself--Yet Again: Part II," Journal of Environmental Law & Practice 4(no.6, 197):32. Recommendations for stakeholders affected by the EPA's National Performance Measures Strategy," Journal of Environmental Law & Practice 4(no.6, 197):32. (v8,#3)

Ooi, GL, "The Role of the State in Nature Conservation in Singapore," Society and Natural Resources 15(no.5, 2002):455-460. (v.13, #3)

Oosthuizen, GC 1991. The death of the soul and the crisis in ecology. Universiteit van Pretoria, Nuwe Reeks No 274. (Africa)

Opdam, Paul, "Book Review of: Drafting a conservation blueprint. A Practitioner's Guide to Planning for Biodiversity Craig R. Groves. Island Press, Washington, DC, 2003", Biodiversity and Conservation 13 (no. 12, November 2004):2587-2588(2).

Opel, Andy, and Jason Smith, "ZooTycoon: Capitalism, Nature, and the Pursuit of Happiness," Ethics and the Environment 9(no. 2, 2004):103-120. This paper is a cultural studies analysis of the Microsoft computer video game, ZooTycoon, which creates virtual theme parks with virtual animals, and also teaches capitalist business strategy and managerial skills. The role of wildlife and implicit and explicit messages about contemporary attitudes toward the environment are explored. Opel is in communications, Florida State University. Smith is a Ph.D. student there. (E&E)

Ophuls, William, and A. Stephen Boyan, Jr., Ecology and the Politics of Scarcity Revisited. New York: W. H. Freeman, 1992. 314 pages. A new edition of a well-known book.

Ophuls, William. Ecology and the Politics of Scarcity. Reviewed in Environmental Ethics 4(1982):85-87.

Ophuls, William. "On Hoffert and the Scarcity of Politics." Environmental Ethics 8(1986):287.

Opie, John. Review of Managing the Environment, Managing Ourselves: A History of American

Environmental Policy. By Richard N. L. Andrews. Environmental Ethics 23(2001):219-222. (EE)

Opie, John. Review of Explorations in Environmental History. By Samuel P. Hays. Environmental Ethics 22(2000):325-326.

Opie, John. Review of Encyclopedia of World Environmental History. Edited by Shepard Krech III, J. R. McNeill, and Carolyn Merchant. Environmental Ethics 27 (2005):323-328.

Opocenska, Jane, "Lifestyle: Nuclear Energy Protests: A Story from Southern Bohemia," Ecotheology Vol 7 (No. 1, July 2002):91-94.

Oppel, S; Stock, M, "Reconsidering Species Extinctions in National Parks: Reply to Berger," Conservation Biology 18(no.3, 2004):845-846. (v. 15, # 3)

Oppenheimer, Michael, Brian C. O'Neill, Mort Webster, and Shardul Agrawala. "The Limits of Consensus." Science Vol. 317, no. 5844 (14 September 2007): 1505-06. The pressures to reach consensus (and scientific credibility) in the Intergovernmental Panel on Climate Change (IPCC), in its recent Fourth Assessment Report may mean that the report underestimates the risks. Consensus may now be less important than a full exploration of the uncertainties (which scientists de-emphasize with their consensus) and policies that result from facing such risks.

Opsahl, RW, "Chronic Wasting Disease of Deer and Elk: A Call for National Management", Environmental Law 33 (no.4, 2003): 1059-1092.

Oraezie Vallino (Oräzie Vallino), Fabienne-Charlotte. "Alle radici dell'etica ambientale: pensiero sulla natura, wilderness et creatività artistica negli Stati Uniti del XIX secolo" (The Roots of Environmental Ethics: Thoughts on Nature, Wilderness, and Artistic Creativity in the United States in the 19th Century). Part I, Storia dell' Arte (History of Art), no. 78, 1993, pp. 183-257; Part II, no. 79, 1993, pp. 355-410. In Italian, an extensive treatment of the roots of environmental ethics in American Romantic aesthetics of nature, includes color reproductions of American artists. Oräzie Vallino is a French/Italian professor at the Universita' Degli Studi Della Tuscia in Viterbo, near Rome, who teaches art, geography, and ecology and has studied extensively in the United States. She edited an Italian version of George Perkins Marsh, Man and Nature. (Marsh was the first U. S. ambassador to the unified Italy.) Address: 1 Largo Amba Aradam, 00184 Rome, Italy. (v6,#1)

Oravec, Christine L. and James G. Cantrill, The Conference on the Discourse of Environmental Advocacy. Papers from a conference, published by the University of Utah Humanities Center, University of Utah, Salt Lake City, UT 84112. Released February 1992. Four dozen papers: Examples: Bruce Piasecki, Rensselaer Polytechnic Institute, "Environmental Management and the Public's Expectation for Fact: Reflections on the Rhetoric of Environmental Advocacy"; Elise Bedsworth Scott, San Francisco State University, "The Rhetoric of Eco-tage"; Susan Senecah, University of Minnesota, "The Sacredness of Natural Places: How a Big Canyon Became a Grand Icon." (v3,#1)

Orbuch, Paul M., Singer, Thomas O. "International Trade, the Environment and the States: An Evolving State-Federal Relationship," The Journal of Environment and Development 4, no. 2 (Summer 1995): 121-131. (v6,#4)

Orenstein, Gloria Feman, "The greening of Gaia: Ecofeminist artists revisit the garden," Ethics and the Environment 8(no. 1, 2003):103-111. Ecofeminism is a different kind of political movement, for instead of viewing the arts as adjuncts to political activity or as distractions from political activism, ecofeminism considers the arts to be essential catalysts of change. In the eighties and early nineties, ecofeminist artists

often invoked the symbol of The Great Mother, The Goddess, or Gaia in order to emphasize the interconnectedness of three levels of creation, all imaged as female outside of patriarchal civilization: cosmic creation, procreation, and artistic creation. Ecofeminists today feel less of a need to examine the past. It is more urgent for them to concentrate on the work that needs to be done to regenerate the earth today. Orenstein is in comparative literature and gender studies, University of Southern California. (E&E)

Oreskes, Naomi, "The Scientific Consensus on Climate Change," Science 306(3 December 2004):1686. "Policy-makers and the media, particularly in the United States, frequently assert that climate science is highly uncertain. Some have used this as an argument against adopting strong measures to reduce greenhouse gas emissions. ... Such statements suggest that there might be substantive disagreement in the scientific community about the reality of anthropogenic climate change. This is not the case." All the major study groups concur that the present warming trends are human-caused. In a review of 928 papers, 75% either explicitly or implicitly endorsed the consensus view, 25% took no position. Not one paper disagreed with the consensus position. Oreskes is in the Department of History and Science Studies Program, University of California, San Diego.

Oreskes, Naomi, Kristin Shrader-Frechette, and Kenneth Belitz, "Verification, Validation, and Confirmation of Numerical Models in the Earth Sciences," Science 263(February 4, 1994):641-646. Verification and validation of numerical models of natural systems is impossible. This is because natural systems are never closed and because model results are always nonunique. Models can be confirmed by the demonstration of agreement between observation and prediction, but confirmation is inherently partial. Complete confirmation is logically precluded by the fallacy of affirming the consequent and by incomplete access to natural phenomena. Models can only be evaluated in relative terms, and their predictive value is always open to question. The primary value of models is heuristic. Oreskes and Belitz are in earth science at Dartmouth College, Shrader-Frechette is in philosophy at the University of South Florida. (v5,#1)

Organization & Environment, Vol. 15, March, 2002, is a theme issue on environmental sociology. (v.13,#2)

Organization and Environment, Vol. 15, No. 3 includes a debate over democracy, environmental decision making, the Internet and digital technology. Participants are Michael Howes, Sylvia N. Tesh, David Schlosberg & John S. Dryzek, Stephen Zavestoski & Stuart W. Shulman. (v.13, #3)

Organization and Environment is a new journal devoted to discussion of the social roots and consequences of environmental problems. The aim is to develop new perspectives on organizations and organizing, perspectives that encourage environmentally sensitive reflection, inquiry, and practice. The editors are: John Bellamy Foster, University of Oregon; John M. Jernier, University of South Florida; and Paul Shrivastava, Bucknell University. Papers to: John M. Jernier, College of Business, University of South Florida, Tampa, FL 33520-5500. Phone 813/974-1757. Fax 813/974-3030. Sage Publications is the publisher. (v8,#1)

Orians, F. Barbara, "Animal Well-Being." Chapter 12 in Emily Baker and Michael Richardson, eds., Ethics Applied, edition 2 (New York: Simon & Schuster, 1999), pages 439-471. ISBN 0-536-01867-7. Five positions regarding nonhuman animals: animal exploitation, animal use, animal welfare, animal rights, animal liberation. Moral standing of animals: the utilitarian case, the natural rights argument. The case against moral consideration of animals. Use of animals in education. Biomedical research. Animals as food. Animal testing. Blood sports. Greyhound racing. Zoos, Marine Mammal Exhibits. Orians is a Senior Research Fellow, Kennedy Institute of Ethics, Georgetown University. (v.10,#2)

Orians, GJ; Soule, ME, "Whither Conservation Biology Research?" Conservation Biology 15(no. 4, 2001):1187-1188. (v.13,#1)

Orians, Gordon, "Aesthetic Factors," Encyclopedia of Biodiversity 1: 45-54. Aesthetic factors are those characteristics of a given object or situation that evoke a certain emotional response, either a sense of beauty, attractiveness, pleasure, symmetry, order, and so on, or, conversely, of ugliness, disorder, menace, disgust, or the like. Generally speaking, the aesthetic preferences that humans display in response to their environment, in such contexts as mate choice, food patterns, and habitat selection, have been shaped by evolutionary experience and reflect suitable solutions for survival and reproductive success. (v.11,#4)

Orians, Gordon H. "Thought for the Morrow: Cumulative Threats to the Environment," Environment 37(no.7, Sept. 1995):6- . Seemingly insignificant actions can add up to some major threats to the environment. (v6,#4)

Orians, Gordon, and Judith Heerwagen, "Evolved Responses to Landscapes," Pages 555-579, in a section on "Environmental Aesthetics," in Jerome Barkow, Leda Cosmides and John Tooby, eds., The Adapted Mind: Evolutionary Psychology and the Generation of Culture. Oxford University Press, 1992. (v7,#1)

ORiordan (O'Riordan, Tim, Review of: Roger Siddaway, Resolving Environmental Disputes, Environmental Values 15(2006):532-533.

ORiordan (O'Riordan), T., "1976: Environmentalism." With commentary 1: by James L. Wescoat Jr, Commentary 2: by David Pepper, and Author's response: by Tim O'Riordan. Progress In Human Geography 23(no. 4, 1999):589- . (v.11,#1)

ORiordan (O'Riordan), Timothy, and Cameron, James, eds. Interpreting the Precautionary Principle. London: Earthscan Publications, Ltd., 1994. 315 pages. O'Riordan is in the School of Environmental Sciences, University of East Anglia, Norwich. Includes:

--Bodansky, Daniel, "The Precautionary Principle in US Environmental Law," pages 203-228. (v.9,#3)

ORiordan (O'Riordan), Timothy. "Frameworks for Choice: Core Beliefs and the Environment," Environment 37(no.8, Oct. 1995):4- . Environmental attitudes and actions often reflect deeper beliefs about the world. (v6,#4)

ORiordan (O'Riordan), T., Jordan, A. "British Environmental Politics in the 1990s." Environmental Politics 4(Winter 1995):237. (v7,#2)

ORiordan (O'Riordan), Timothy and Stoll, Susanne, eds., Protecting Beyond the Protected: Biodiversity, Sustainable Development and Human Communities. Cambridge: Cambridge University Press, 2002. O'Riordan is at the University of East Anglia, Norwich, UK. Stoll is at the Potsdam Institute for Climate Impact Research, Germany. (v.13, #3)

ORiordan (O'Riordan), Timothy, and Andrew Jordan. "The Precautionary Principle in Contemporary Environmental Politics." Environmental Values 4(1995):191-212. In its restless metamorphosis, the environmental movement captures ideas and transforms them into principles, guidelines and points of leverage. Sustainability is one such idea, now being reinterpreted in the aftermath of the 1992 Rio Conference. So too is the precautionary principle. Like sustainability, the precautionary principle is neither a well defined principle nor a stable concept. It has become the repository for a jumble of adventurous beliefs that challenge the status quo of political power, ideology and civil rights. Neither concept has much coherence other than it is captured by the spirit that is challenging the authority of science, the hegemony of cost-benefit analysis, the powerlessness of victims of environmental abuse, and the unimplemented ethics of intrinsic natural rights and inter-generational equity. It is because the mood

of the times needs an organising idea that the precautionary principle is getting a fair wind. However, unless its advocates sharpen up their understanding of the term, the precautionary principle may not establish the influence it deserves. Its future looks promising but it is not assured. KEYWORDS: Precaution, precautionary principle, environmentalism, sustainability, environmental ethics. O'Riordan and Jordan are at the School of Environmental Sciences, University of East Anglia. (EV)

O'Riordan (O'Riordan), Tim and James Cameron, eds., Interpreting the Precautionary Principle. London: Cameron May, Ltd., 1994. The precautionary principle, especially applicable in environmental issues, states that public and private interests should act so as to prevent harm, even where there is no scientific proof that an activity does cause damage to the environment. This has serious implications for risk evaluation and assessment. Sample article: Robin Attfield, "The Precautionary Principle and Moral Values."

O'Riordan (O'Riordan), Tim, Review of Mintzer, Irving M. and Leonard, J. A., Negotiating Climate Change: The Inside Story of the Rio Convention. Environmental Values 7(1998):115.

O'Riordan (O'Riordan), Tim, "Valuation as Revelation and Reconciliation," Environmental Values 6(1997):169-184. ABSTRACT: Valuation is portrayed here as a dynamic and interactive process, not a static notion linked to willingness to pay. Valuation through economic measures can be built upon by creating trusting and legitimising procedures of stakeholder negotiation and mediation. This is a familiar practice in the US, but it is only beginning to be recognised as an environmental management tool in the UK. The introduction of strategic environmental and landuse appraisal plans for shorelines, estuaries, river catchments and rural landscapes, combined with the mobilisation of protest around landuse proposals that are not seemingly justified on the basis of need (incinerators, landfills, quarries, reservoirs, roads) suggest that a more legitimate participatory form of democracy is required to reveal valuation through consensual negotiation. School of Environmental Sciences, University of East Anglia, Norwich NR4 7TJ, UK. (EV)

Orlans, F. B., In the Name of Science: Issues in Responsible Animal Experimentation. New York: Oxford University Press, 1993.

Ornstein, Robert and Paul Ehrlich, New World, New Mind: Moving toward Conscious Evolution. New York: Doubleday, 1989. 302 pages. Humans were, from evolutionary natural selection, a good fit in the circumstances under which they evolved. But "there is now a mismatch between the human mind and the world people inhabit. This mismatch interferes with the relationships of human beings with each other and with their environment" (9). The rapid pace of cultural changes requires us "to take our evolution into our hands and create a new evolutionary process, a process of conscious evolution . . . We need to replace our old minds with new ones" (12). Ornstein is a well-known science writer; Ehrlich is a biologist at Stanford University and active conservationist. (v6,#2)

O'Rourke (O'Rourke), Annie, "Caring-About Virtual Pets: An Ethical Interpretation of Tamagotchi," Animal Issues (University of Sydney, Australia) 2, no. 1, 1998. (v.10,#1)

Orr, David W., The Nature of Design: Ecology, Culture, and Human Intention. New York: Oxford University Press, 2002. Re-designing society--politics, buildings, economics, lifestyles--so as to recalibrate what humans do in the world according to how the world works. Orr is at Oberlin College.

Orr, David W. "The Not-So-Great Wilderness Debate." Wild Earth 9(No. 2, Summer 1999):74- . . . (v10,#4)

Orr, David W., Ecological Literacy: Education and the Transition to a Postmodern World. Albany: State

University Press of New York, 1992. \$29.95 hardcover, \$14.95 paper. What schools, colleges, and universities can do to help in the transition to an ecologically sustainable world. (v3,#1)

Orr, David W., Earth in Mind: On Education, Environment, and the Human Prospect. Washington, DC: Island Press, 1994. \$ 16.95 paper; \$ 29.95 hardcover. "Educators must become students of the ecologically proficient mind and of the things that must be done to foster such minds. In time this will mean nothing less than the redesign of education itself." These essays, previously published, are here gathered and compounded in their power to provoke and to stimulate thinking about the role of the college and university in teaching ecological literacy. Sample chapters: What is Education for? The Dangers of Education. Rating Colleges (as environmental models and for teaching environmental responsibility). Agriculture and the Liberal Arts. Love It or Lose It: The Coming Biophilia Revolution. A World That Takes Its Environment Seriously. Prices and Life Exchanged: Costs of the U.S. Food System. Refugees or Homecomers? Conjectures About the Future of Rural America. Orr directs environmental studies at Oberlin College. (v5,#4)

Orr, David W. "Slow Knowledge." Conservation Biology 10, no.3 (1996): 699. (v7, #3)

Orr, David W. "Architecture as Pedagogy II," Conservation Biology 11(no.3, 1997):597. The worst thing we can do to our children is to convince them that ugliness is normal (citing Rene Dubos). Where learning about conservation takes place, also teaches about conservation. One criteria is that beauty here must cause no ugliness somewhere else or at some later time. The experience of Oberlin College, where Orr teaches. (v8,#2)

Orr, David W., "The Liberal Arts, the Campus, and the Biosphere," Harvard Educational Review 60 (1990): 205-16. Where does the campus fit into the biosphere? What role should universities play in the struggle to save the environment? Although critics, such as Allan Bloom, have recently accused liberal arts institutions of failing to educate college youth properly, few have addressed the question of how colleges and universities might make students more aware and responsible about their place in the natural world. Orr offers a rationale for incorporating environmental concerns into the curriculum of higher education and suggests examples of curricular innovations, including programs for restructuring the ways colleges procure food, deal with waste, and use energy. A focus on the ecosystem of the college campus can broaden students' visions of the natural world in which they live. Orr teaches environmental studies at Oberlin College. (v6,#2)

Orr, David W. "Education for Globalisation." The Ecologist 29(no. 3, May 1999):166- . (v.11,#1)

Orr, David. "Rethinking Education." The Ecologist 29(no. 3, May 1999):232- . (v.11,#1)

Orr, David. Review of: Martin Lewis, Green Delusions, Environmental Ethics 16(1994):329-332.

Orr, DW, "Four Challenges of Sustainability," Conservation Biology 16(no.6, 2002): 1457-1460.

Orr, Matthew, "Environmental Decline and the Rise of Religion," Zygon: Journal of Religion and Science 38(2003):895-910. Some responses to the planet's environmental crisis share the characteristics of a religious revitalization movement and an incipient religion. They call for a science-based cosmology and an encompassing reverence for nature, and thus differ from responses to environmental decline offered by tradition religions. As environmental problems deepen, historical precedent suggests that religious shifts in affected cultures may follow. Orr is in biology, University of Oregon, Branch Program, Bend, Oregon. (v.14, #4)

Ortega-Baes, Pablo; Godinez-Alvarez, Hector, "Global Diversity and Conservation Priorities in the Cactaceae," Biodiversity and Conservation 15 (no.3, March 2006): 817-827 (11).

Orth, Robert J. Tim J.B. Carruthers, William C. Dennison, Carlos M. Duarte, James W. Fourqurean, Kenneth L. Heck Jr., A. Randall Hughes, Suzanne Olyarnik, Susan L. Williams, Gary A. Kendrick, W. Judson Kenworthy, Frederick T. Short, and Michelle Waycott. "A Global Crisis for Seagrass Ecosystems." *BioScience* Vol. 56, no. 12 (2006): 987-96. Seagrasses, marine flowering plants, have a long evolutionary history but are now challenged with rapid environmental changes as a result of coastal human population pressures. Seagrasses provide key ecological services, including organic carbon production and export, nutrient cycling, sediment stabilization, enhanced biodiversity, and trophic transfers to adjacent habitats in tropical and temperate regions. They also serve as "coastal canaries," global biological sentinels of increasing anthropogenic influences in coastal ecosystems, with large-scale losses reported worldwide. Multiple stressors, including sediment and nutrient runoff, physical disturbance, invasive species, disease, commercial fishing practices, aquaculture, overgrazing, algal blooms, and global warming, cause seagrass declines at scales of square meters to hundreds of square kilometers. Reported seagrass losses have led to increased awareness of the need for seagrass protection, monitoring, management, and restoration. However, seagrass science, which has rapidly grown, is disconnected from public awareness of seagrasses, which has lagged behind awareness of other coastal ecosystems. There is a critical need for a targeted global conservation effort that includes a reduction of watershed nutrient and sediment inputs to seagrass habitats and a targeted educational program informing regulators and the public of the value of seagrass meadows.

Ortiz, Sara Elizabeth Gavrell, "Beyond Welfare: Animal Integrity, Animal Dignity, and Genetic Engineering," *Ethics and the Environment* 9(no. 1, 2004):94-120. Bernard Rollin argues that it is permissible to change an animal's telos through genetic engineering, if it doesn't harm the animal's welfare. Recent attempts to undermine his argument rely either on the claim that diminishing certain capacities always harms an animal's welfare or on the claim that it always violates an animal's integrity. I argue that these fail. However, respect for animal dignity provides a defeasible reason not to engineer an animal in a way that inhibits the development of those functions that a member of its species can normally perform, even if the modification would improve the animal's welfare. Ortiz is a Ph.D. candidate at the University of Wisconsin, Madison. (E&E)

Ortner, Sherry B., Life and Death on Mt. Everest: Sherpas and Himalayan Mountaineering. Princeton, NJ: Princeton University Press, 1999, paper 2001. \$ 18. 392 pages. An anthropologist assesses the evolving relationship between the mountaineers and the Sherpas, a relationship of mutual dependence and cultural conflict played out in an environment of mortal risk. Ortner is in anthropology at Columbia University. (EE v.12,#1)

Orton, David, "Deep Ecology Perspectives," Synthesis/Regeneration, no. 32, Fall 2003. The importance of deep ecology, and some of its contradictions. Available online at: <http://www.greens.org/s-r/index.html>

Orton, David. "Industrial Forestry and a Critique of Natural Resource Management." Green Web Bulletin #66. Available to activists by contacting the Green Web. About 4,500 words (28 kb) long, it is based on a lecture by David Orton to students at Mount Allison University in Nebraska (USA) in early November 1998 for a course called "Natural Resource Management." The lecture, given from a left biocentric deep ecology perspective, used philosophical and practical examples situated in a Maritimes and larger context. Included are: a critique of "resourcism," which treats nature as an object to commodify for human and corporate use; descriptions of forestry conflicts like Nova Nada, the Christmas Mountains, and Clayoquot Sound; discussion of the human-centered language of industrial capitalist forestry; criticism of Elizabeth May's recent forestry book At The Cutting Edge; and an analysis of the industrial forestry situation, how it is getting worse and why, and the need to get involved. Contact Helga Hoffmann at the Green Web: greenweb@fox.nstn.ca

Orts, Eric W., "A Reflexive Model of Environmental Regulation," Business Ethics Quarterly 5(1995):779-794. We should begin to consider a new model of reflexive environmental law. This regulatory strategy aims to provide more reflective as well as more efficient environmental regulation.

Orts, Eric W., "Reflexive Environmental Law," Northwestern University Law Review 89(1995):1227-1340. Most environmental law is regulation, command and control of business by outside law, imposed by political authorities. A better approach is reflexive environmental law, where businesses from within adopt systematic ways of thinking and operating in an environmentally responsible manner. This creates a climate in which businesses voluntarily adopt procedures to encourage environmentally sound decision making and to monitor environmental progress. Long article with much detail and nearly 500 legal-style footnotes. Orts is in law, The Wharton School, University of Pennsylvania. (v.10,#2)

Orts, Eric W., and Strudler, Alan, "The Ethical and Environmental Limits of Stakeholder Theory," Business Ethics Quarterly 12 (no. 2, 2002):215-233. We argue that though stakeholder theory has much to recommend it, particularly as a heuristic for thinking about business firms properly as involving the economic interests of other groups beyond those of the shareholders or other equity owners, the theory is limited by its focus on the interests of human participants in business enterprise. Stakeholder theory runs into intractable philosophical difficulty in providing credible ethical principles for business managers in dealing with some topics, such as the natural environment that do not directly involve human beings within a business firm or who engage in transactions with a firm. Corporate decision-making must include an appreciation of these ethical values even though they cannot be captured in stakeholder theory. Orts is in law, The Wharton School, University of Pennsylvania. (v.13, #3)

Orts, Eric W., and Alan Strudler, "The Ethical and Environmental Limits of Stakeholder Theory," Business Ethics Quarterly 12(no. 2, 2002):215-233. Stakeholder theory has much to recommend it, but is limited to human participants in the business enterprise. It runs into intractable problems in providing credible ethical principles for business managers dealing with the natural environment. Orts and Strudler are at Wharton School, Environmental Management Program, University of Pennsylvania, Philadelphia.

Orika, H. Odera, ed. Philosophy, Humanity and Ecology. Volume 1: Philosophy of Nature and Environmental Ethics. Nairobi, Kenya: African Centre for Technology Studies, 1994. US\$20.00 (ISBN 9966-41-086-4). This volume contains papers presented at the World Conference of Philosophy held in Nairobi, Kenya, in July 1991. Papers by 40 contributors, mostly short papers. Two more volumes are anticipated. The general theme of the conference was Philosophy, Humanity and the Environment. Attracting almost six hundred participants and observers, representing 55 countries, the papers in this volume incorporate contributions from Europe, North America, Asia and Africa, including Evandro Agazzi, Wolfgang Kluxen, Jerzy Pelc, Richard T. De George, S.S. Rama Pappu, Tomonobu Imamichi, Ali Mazrui, Kwasi Wiredu and Thomas R. Odhiambo. Chair of the organizing committee of the World Conference, H. Odera Orika is Professor of Philosophy, University of Nairobi, and founder chair of the Philosophical Association of Kenya. To order, send a cheque or money order to either of the institutions below. If out of Kenya, add US \$8.00 for airmail postage (or US \$2.00 for surface postage) and US \$5.00 for bank charges. African Centre for Technology Studies, P.O. Box 45917, Nairobi, Kenya. Tel. 254-2-565173, 569986 Or: African Academy of Sciences, P.O. Box 14798, Nairobi, Kenya. Tel. 254-2-884401/6. (v6,#3)

Osborn, Lawrence, "Archetypes, Angels and Gaia," Ecotheology No 10 (Jan 2001):9-22.

Osborne, K, "Review of: The U.S.-Mexican Border Environment: Economy and Environment for a Sustainable Border Region: Now and in 2020 by Paul Ganster (Ed.)," Journal of Environment and Development 12(no.3, 2003):345-348. (v.14, #4)

Oskamp, Stuart, "Apply Social Psychology to Avoid Ecological Disaster," Journal of Social Issues, vol. 51, no. 4, Winter 1995. (v8,#2)

Oslund, K, "Review of: Susan Kollin, Nature's State: Imagining Alaska as the Last Frontier", Environmental History 8(no.1, 2003):154.

Ost, F., La nature hors la loi. L'écologie à l'épreuve de droit. Paris: La Découverte, 1995. 346 pages.

Ostergren, D., "Review of: Dispossessing the Wilderness: Indian Removal and the Making of the National Parks, by Mark David Spence," Natural Resources Journal 41(no.3, 2001): 766-67. (v.13,#2)

Ostergren, David M. and Hollenhorst, Steven J., "Convergence in Protected Area Policy: A Comparison of the Russian Zapovednik and American Wilderness Systems, Society & Natural Resources 12(no. 4, 1999):293- . (v10,#4)

Ostfeld, Richard S.; Jones, Clive G.; and Wolff, Jerry O. "Of Mice and Mast." Bioscience 46, no.5 (1996): 323. Ecological connections in eastern deciduous forests. (v7, #3)

Ostrom, Elinor, Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press, 1990. (v3,#4)

Ostrom, Elinor, *Understanding Institutional Diversity*. Reviewed by Janne Hukkinen, *Environmental Values* 16(2007):129-132.

Ostrom, Elinor, et al. (4 co-authors), "Revisiting the Commons: Local Lessons, Global Challenges," Science 284(9 April 1999):278-282. Garrett Hardin argued in 1968 the tragedy of the commons. New insights about such problems and the conditions likely to sustain uses of common-pool resources. The most difficult challenges concern the management of large-scale resources that depend on international cooperation, such as fresh water in international basins or large marine ecosystems. Institutional diversity may be as important as biological diversity for our long-term survival. Ostrom is at the Center for the Study of Institutions, Population, and Environmental Change, Indiana University, Bloomington. (v.10,#1)

OToole (O'Toole) Jr., Laurence J. "Hungary: Political Transformation and Environmental Challenge." Environmental Politics 7(no.1, Spring 1998):93- . (v10,#4)

OToole (O'Toole), J. Mitchell, "An Ecological Approach to Environmental Ethics," International Research in Geographical and Environmental Education 11 (no. 1, 2002):48-52. (International Geographical Union, Channel View Publications, Clevedon, UK). ISSN 1038-2046. Introduces a Forum on Environmental Ethics, with nine papers (really 3-4 page summaries) from a forum held at the 10th Pacific Science Inter-Congress, held at the University of Guam, June 1-6, 2001. Sample papers:
--Sellman, James D., "Living on the Edge in Micronesian Ecological Philosophy," pages 54-57.
--Rolston, Holmes, III, "Enforcing Environmental Ethics: Civic Law and Natural Value," pages 76-79.
--Rowe, Sharon, "Returning to What Matters: Daoist Lessons for Ecofeminism," pages 63-67.
--Parks, N., "Measuring Climate Change," Bioscience 52(no.8, 2002): 652.
--Paul, E., "Science: The Newest Political Football in the Endangered Species Game," Bioscience 52(no.9, 2002): 792-856.

OToole, L., Fielding, A. H. and Haworth, P. F., "Re-Introduction of the Golden Eagle into the Republic of Ireland," Biological Conservation 103(no.ER2, 2002): 303-12. (v.13,#2)

Ott, Konrad, "Eine Theorie 'starker' Nachhaltigkeit. (A theory of 'strong' sustainability)" In German. Natur und Kultur 2(no. 1, 2001):55-75. Abstract: This article outlines a theoretical approach towards sustainability. Such approach should be ethically reflective, normatively sound and conceptually clear-cut. Any theory of sustainability must encompass a reasonable choice between the two competing concepts of 'weak' and 'strong' sustainability. It will be argued that strong sustainability should be favored. Some policy implications of this choice will be outlined. (v.12,#2)

Ott, Konrad, Ökologie und Ethik: Ein Versuch praktischer Philosophie (Ecology and Ethics: An Attempt at Practical Philosophy). Tübingen: Attempto Verlag, 1993. 188 pages. DM 38,--. ISBN 3-89308-162-3. Ott's book has three main parts: 1. The Concept of Ecology. 2. Critical Theory and Nature. 3. Ecoethical Arguments. In part one, he discusses the history of the discipline of philosophy and various ecological approaches to environmental philosophy, such as human ecology, speculative ecology, including Schorsch's mystical holism, Roszak's subversive ecology,, Hösle's objective idealism, and Christian ecology. In part two, he finds that we can learn from Adorno's and Horkheimer's views on nature, the early Habermas' view in Knowledge and Human Interests, and the later Habermas' view in his discourse ethical writings. Part three presents a taxonomy of ecoethical arguments: a) utilitarianism, b) aestheticism, c) the human right to nature, d) ethics of compassion and ecological pathognomics, e) objective and subjective theories of value in nature, and f) evolutionism. Ott is widely read and draws on both German and English sources. He himself opts for a teleologically grounded physiocentric position, which he calls "ecological pathognomics" (p. 144, pp. 153-155). He believes that we should further the good of teleological nature for its own sake. Ott did his dissertation with Habermas in Frankfurt and is about to finish his habilitation (teaching qualification) in Tübingen. (Thanks to Angelika Krebs, University of Frankfurt.)

Ott, Konrad. Ipsa Facto, Zur ethischen Rekonstruktion normativer Implika wessenschaftlicher Praxis. Frankfurt: Suhrkamp-Verlag, 1997. 820 pp. (v8,#3)

Ott, Wayne R. Environmental Statistics and Data Analysis. Boca Raton, FL: St. Lucie Press, 1995. 336 pp. \$79.95. An introduction to the areas of probability theory and statistics that are important in environmental monitoring, data analysis, research, environmental field surveys and environmental decision making. (v8,#3)

Ottinger, Richard and the Pace University Center for Environmental Legal Studies. Environmental Costs of Electricity: The Pace Study. Dobbs Ferry, NY: Oceana Publications, 1990. \$75.00 hardbound. The "real costs" to society of the operation of electrical power plants. (v5,#2)

Ouderkirk, Wayne and Jim Hill, eds. Land, Value, Community: Callicott and Environmental Philosophy. Reviewed in Environmental Ethics 25(2003):427-430. (EE)

Ouderkirk, Wayne, and Hill, Jim, eds., Land, Value, Community: Callicott and Environmental Philosophy. Albany, NY: State University of New York Press, 2002. An anthology devoted to the work of J. Baird Callicott and the Land Ethic. Contains:

- Ouderkirk, Wayne, "Introduction: Callicott and Environmental Philosophy," pages 1-18.
- Partridge, Ernest, "Ecological Morality and Nonmoral Sentiments", pages 21-35.
- Barkdull, John, "How Green Is the Theory of Moral Sentiments?", pages 37-58.
- McIntosh, Robert P., "Ecological Science, Philosophy, and Ecological Ethics," pages 59-83.
- Shrader-Frechette, Kristin, "Biocentrism, Biological Science, and Ethical Theory", pages 85-95.
- Donner, Wendy, "Callicott on Intrinsic Value and Moral Standing in Environmental Ethics," pages 99-105.
- Rolston, Holmes, III, "Naturalizing Callicott," pages 107-122.

- Norton, Bryan, "Epistemology and Environmental Values," pages 123-132.
- Hargrove, Eugene C., "Environmental Ethics without a Metaphysics," 135-149.
- Larrère, Catherine, "Philosophy of Nature or Natural Philosophy? Science and Philosophy in Callicott's Metaphysics," pages 151-170.
- Palmer, Clare, "Quantum Physics, 'Postmodern Scientific Worldview,' and Callicott's Environmental Ethics," pages 171-183.
- Wenz, Peter S., "Minimal, Moderate, and Extreme Moral Pluralism," pages 185-195.
- Light, Andrew, "Callicott and Naess on Pluralism," pages 197-217.
- Gruen, Lori, "Beyond Exclusion: The Importance of Context in Ecofeminist Theory," pages 219-226.
- Taylor, Angus, "Environmental Ethics and Respect for Animals," pages 229-236.
- Bratton, Susan Power, "J. Baird Callicott's Critique of Christian Stewardship and the Validity of Religious Environmental Ethics," pages 237-251.
- Hester, Lee, McPherson, Dennis, Booth, Annie, and Cheney, Jim, "Callicott's Last Stand," pages 253-278.
- Ouderkirk, Wayne, "The Very Idea of Wilderness," pages 279-288.
- Callicott, J. Baird, "Callicott Responds: My Reply," pages 291-329. (v.13,#1)

Ouderkirk, Wayne, "Mindful of the Earth: A Bibliographical Essay on Environmental Philosophy," The Centennial Review (College of Arts and Letters, Michigan State University) 42(no. 1, Winter, 1998):353-392. A shorter version was published in Choice: Current Reviews for Academic Libraries 35, no. 3 (Nov. 1997). Excellent introductory overview, useful with students, the full length version published in a place likely to be overlooked by many environmental philosophers. Ouderkirk is at Empire State Collge, SUNY, Cobleskill, NY. (v.13, #3)

Ouderkirk, Wayne, "Review of Gary L. Comstock, Vexing Nature? On the Ethical Case against Agricultural Biotechnology," Ethics and the Environment 7(no. 2, 2002):185-193. (E&E)

Ouderkirk, Wayne and Jim Hill, eds., Land, Value, Community: Callicott and Environmental Philosophy. Reviewed by Y. S. Lo. Environmental Values 13(2004):130-132. (EV)

Ouderkirk, Wayne. "Can Nature be Evil? Rolston, Disvalue, and Theodicy." Environmental Ethics 21(1999):135-150. Holmes Rolston, III's analysis of disvalue in nature is the sole explicit and sustained discussion of the negative side of nature by an environmental philosopher. Given Rolston's theological background, perhaps it is not surprising that his analysis has strong analogues with traditional theodicies, which attempt to account for evil in a world created by a good God. In this paper, I explore those analogues and use them to help evaluate Rolston's account. Ultimately, I find it more satisfactory than traditional theodicy in its own context, but I also raise two problems: a weighting and a counseling problem. First, once Rolston acknowledges the reality and role of disvalue in nature, he discounts its significance too greatly. Second, his account is less useful in helping those who have been harmed by the destructive activity of nature. I claim that we can usefully regard Rolston's analysis as a deconstruction of the anthropocentric, non-ecological view of nature. Finally, I argue that the two problems and a related issue, the objectivity/subjectivity of values, point in the direction of a pragmatist account of value in nature. (EE)

Ouderkirk, Wayne. Review of Kate Soper, What Is Nature? Culture, Politics and the Non-Human. Environmental Ethics 20(1998):105-08.

Oudshoorn, Frank W., Reint Jan Renes and Imke J. M. De Boer. "Systems In Organic Dairy Production," Journal of Agricultural and Environmental Ethics 21(2008):205-228. The aim of this study was to explore stakeholder perceptions of the contribution of an Automatic Milking System (AMS) to

sustainable development of organic dairy production in Denmark and the Netherlands. In addition, reasons for the current difference in AMS use on organic dairy farms between both countries were explored. To answer above mentioned aims, farmers and advisors in both countries were interviewed using a focus group approach. Questions of the interviews were based on a literature review on sustainability issues affected by introduction of AMS. Participants expressed no moral problems regarding AMS use. They, however, pointed out uncertainty about the economic gain, difficulties with grazing, adaptation problems to technology, and image problems towards consumers. The latter results from a reduction in grazing time affecting both animal welfare and product quality. The participants did not recognize eutrophication, as result of high stocking density on farmstead lots, as a problem caused by AMS. The milk quality problem related to AMS use, although acknowledged as crucial towards consumers, was not prioritized very highly, especially not by the farmers in both countries. All groups were, however, unanimous in their perception of how important image was as far as the consumers are concerned. The perception analysis revealed that Dutch participants were more concerned about the economic payoff of AMS use, and showed more reluctance towards enlargement than Danish ones. In addition, they acknowledged the small-scale naturalness of organic production. These differences in perception could possibly explain observed differences in AMS use in organic dairy production between Denmark and the Netherlands. The authors are in the Department of Agricultural Engineering, University of Aarhus, Research Centre Bygholm, Denmark.

Oughton, Deborah, "Protection of the Environment from Ionising Radiation: Ethical Issues," Journal of Environmental Radioactivity 66(2003):3-18. Some main ethical issues concerning the protection of the environment from radiation. Issues of harm and monetary valuation. Difficulties with scientific uncertainty and applications of the precautionary principle. Issues concerned with the distribution of risk and its relevance for participation in decision-making. There are strong ethical grounds to provide for the protection of the environment and, all other things being equal, there is no reason to treat ionising radiation differently from other environmental stressors. Well-grounded in ethical theory. Oughton is in chemistry and biotechnology, Agricultural University of Norway, Aas.

Oughton, Deborah H. "Ethical Issues in Communication and Management of Radiation Risks." Pages 1-11 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and the Environment, University of Oslo, 1995. (v6,#4)

Our Changing Planet. The FY 1995 U.S. Global Change Research Program. 132 pages. This is a report by the Committee on Environment and Natural Resources Research of the National Science and Technology Council, a supplement to the President's Fiscal Year 1995 Budget. 300 D St., S.W., Suite 840, Washington, DC 20024. (v6,#1)

Ouzman, S, "Review of: What Place for Hunter-Gatherers in Millennium Three? Edited by Thomas N. Headland and Doris E. Blood. SIL International Museum of Cultures Publications in Ethnography 38, Dallas, TX, 2002", Human Ecology 32 (no.2, 2004): 275-278(4).

Ovadia, O, "Ranking Hotspots of Varying Sizes: a Lesson from the Nonlinearity of the Species-Area Relationship," Conservation Biology 17(no.5, 2003):1440-1441. (v.14, #4)

Overall, Christine, "Public Toilets: Sex Segregation Revisited," *Ethics and the Environment* 12(no. 2, 2007):71-92. Public toilets are a key part of the urban environment. This paper examines and evaluates the pervasive sex segregation, throughout North America, of public toilets. The issue is situated within a larger contextthe design and management of the urban environment; larger assumptions about sexuality, reproduction, and privacy that govern that environment; and continuing compulsory sex identification and segregation which still define key areas of "public" space. I examine seven groups of arguments in favor of sex segregation, arguing that all of them are inadequate. I then present reasons showing why ending the

sex segregation of public toilets is justified. Overall is in philosophy, Queen's University, Kingston, Ontario.

Overdeest, Christine, Green, Gary P. "Forest Dependence and Community Well-Being: A Segmented Market Approach," Society and Natural Resources 8(no.2, Mar.1995):111- .

Overdeest, Christine, "Participatory Democracy, Representative Democracy, and the Nature of Diffuse and Concentrated Interests: A Case Study of Public Involvement on a National Forest District," Society & Natural Resources 13(no.7, OCT 01 2000):685- . (EE v.12,#1)

Overpeck, Jonathan T., et al., "Paleoclimatic Evidence for Future Ice-Sheet Instability and Rapid Sea-Level Rise," Science 31 (24 March 2006): 1747-1750. Sea-level rise from melting of polar ice sheets is one of the largest potential threats of future climate change. Polar warming by the year 2100 may reach levels similar to those of 130,000 to 127,000 years ago that were associated with sea levels several meters above modern levels. The record of past ice-sheet melting indicates that the future melting and related sea-level rise could be faster than widely thought. Overpeck is in geoscience and atmospheric science, University of Arizona, Tucson.

Overton, JM; TheoStephens, RT; Leathwick, JR; Lehmann, A, "Information pyramids for informed biodiversity conservation," Biodiversity and Conservation 11(no.12, 2002): 2093-2116.

Owen, D, "Prescriptive Laws, Uncertain Science, and Political Stories: Forest Management in the Sierra Nevada", Ecology Law Quarterly 29(no.4, 2003):747-804.

Owens, Mark and Delia, "Can Time Heal Zambia's Elephants?" International Wildlife 27(no. 3, May/June 1997):28-35. Poaching's legacy. Though illegal slaughter for ivory has all but ended, young elephants are still paying a biological toll. Young elephants learned from older individuals in their groups where to find food and water. By killing mature elephants, poachers created a new society of younger elephants lacking such knowledge. Their ability to bounce back has been impaired. In the study area, poachers had wiped out 93% of the elephants, leaving many unnatural social groupings. (v8,#2)

Owens, Susan and Cowell, Richard, Land and Limits: Interpreting Sustainability in the Planning Process. London: Routledge, 2001. Reviewed by Anna R. Davies, Environmental Values 12(2003):136-138. (EV)

Owens, Susan, "Land, Limits and Sustainability: A Conceptual Framework and Some Dilemmas for the Planning System," Transactions of the Institute of British Geographers 19(1994):439-456. Opportunities and contradictions in applying concepts of sustainable development to land use policy. The conceptual framework is provided by "stock maintenance" models of sustainability. A distinction is made between material, postmaterial, and non-instrumental dimensions of sustainability. Though concepts of sustainability are gaining ground in planning, translating theory into practice remains problematic. There are problems in value theory. With attention to questions of intrinsic value in nature. Owens is in geography, Cambridge University. (v.10,#1)

Owsley, Richard, Review of Zimmerman, Michael, Contesting Earth's Future. Environmental Ethics 18(1996):425-429. (EE)

Oxford Declaration on Global Warming. Climate scientists and Christian leaders call for action. Some 70 climate scientists, policy-makers, and Christian leaders from six continents gathered for "Climate Forum 2002" in Oxford, England, St. Anne's College, to address the growing crisis of human-induced

climate change. The Forum recognized the reality and urgency of the problem, which particularly affects the world's poorest peoples and the very fabric of the biosphere. The Forum also recognized that the Christian community has a special obligation to provide moral leadership and an example of caring service to people and to all God's Creation. The Forum produced a statement declaring how human-induced climate change is an ethical and a religious problem. The Forum was sponsored by the John Ray Initiative (U.K.) and the AuSable Institute of Environmental Studies (U.S.). Website: <http://climateforum2002.org>

Ozkaynak (Özkaynak), Begüm, Pat Devine and Dan Rigby, "Operationalising Strong Sustainability: Definitions, Methodologies and Outcomes," *Environmental Values* 13(2004):279-303. While acknowledging the absence of a single definition or theory of sustainability, this paper argues that a discussion of sustainability which refers only to definitions is pointless without an understanding of how the definitions are operationalised. In this context, the paper considers the operationalisation of strong sustainability.

The definitions and operationalisation of strong sustainability most closely associated with (i) neoclassical environmental economics and (ii) ecological economics are discussed and compared. This analysis raises questions about the extent to which ecological economics has been able to influence real-world decisions and policy. The paper ends by considering whether the economic and political power structure taken as given by ecological economics is compatible with its policy perspective. Özkaynak is at the Universitat Autònoma de Barcelona. Devine and Rigby are in economics, University of Manchester, UK. (EV)

Paasi, A, "Place and region: regional worlds and words," *Progress in Human Geography* 26(no.6, 2002): 802-811.

Paasi, A., "Place And Region: Looking Through the Prism of Scale," *Progress in Human Geography* 28(no. 4, 2004): 536-546(11). (v.14, #4)

Paasi, Anssi, "Place and region: looking through the prism of scale", *Progress in Human Geography* 28(no.4, 1 August 2004):536-546(11).

Paavola, Jouni, "Towards Polyvocal Environmental Debates," *Environmental Values* 17(no., 4, 2008). *Environmental Values* as a journal that can foster dialogue about key environmental issues and debates across research traditions.

Pacala, S. W., et al., "False Alarm over Environmental False Alarms," *Science* 301(28 August 2003):1187-1188. In face of uncertainty, many, even most of the environmental alarms may be false, or overestimated. But many of the alarms will be correct, often underestimated; and resulting mitigation, if it takes place, will bring considerable benefits. Critics have been saying that we have too many false alarms. But, these authors conclude, "The balance of the evidence indicates that we are receiving substantial benefits from our response to environmental alarms. These benefits range from aesthetic (such as our joy at the bald eagle's recovery) to the savings of millions of lives (for example, regulation of air and water pollutants). Still, the critical quality determining whether there are too many false environmental alarms is the marginal benefit of the alarms." On balance, they find that "given the potential to save millions of lives, this is no time to turn down the sensitivity of our environmental alarms." Pacala is in ecology and evolutionary biology, Princeton University. (v 14, #3)

Pace, Norman R., "A Molecular View of Microbial Diversity and the Biosphere," *Science* 276(1997):734-740. "Microbial organisms occupy a peculiar place in the human view of life. Microbes receive little attention in our general texts of biology. They are largely ignored by most professional biologists and are virtually unknown to the public except in the contexts of disease and rot. Yet, the workings of the biosphere depend absolutely on the activities of the microbial world. Our texts articulate biodiversity in

terms of large organisms: insects usually top the count of species. Yet, if we squeeze out any one of these insects and examine its contents under the microscope, we find hundreds of thousands of distinct microbial species. A handful of soil contains billions of microbial organisms, so many different types that accurate numbers remain unknown. We know so little about microbial biology, despite it being a part of biology that looms so large in the sustenance of the planet." "Members of some of these lineages are only distantly related to known organisms but are sufficiently abundant that they are likely to have an impact on the chemistry of the biosphere." One interesting development: There now appears to be a flourishing subterranean life, a biological world not based on photosynthesis; some even speculate that most of the biomass on Earth is subterranean. Pace is in microbial biology at the University of California, Berkeley. See also Richard A. Kerr entry. (v8,#2)

Packard, Stephen, and Mutel, Cornelia, eds. The Tall Grass Restoration Handbook: For Prairies, Savannas, and Woodlands. Washington, D.C.: Island Press, 1996. 432 pages. \$50 cloth, \$25 paper. A hands-on manual that provides a detailed account of what has been learned about the art and science of prairie restoration and the application of that knowledge to restoration projects throughout the world. (v7, #3)

Packenham, Thomas, Remarkable Trees of the World. New York: Norton, 2002. 60 individual trees and groups of trees from around the world that are especially dramatic, with some focus on the American West. (v.14, #4)

Paden, Roger, "The two professions of Hippodamus of Miletus," Philosophy and Geography 4 (No. 1, 2001): 25-48. According to Aristotle, both urban planning and political philosophy originated in the work of one man, Hippodamus of Miletus. If Aristotle is right, then the study of Hippodamus's work should help us understand their history as interrelated fields. Unfortunately, it is difficult to determine with any degree of precision exactly what Hippodamus's contributions were to these two fields when the two fields are studied separately. In urban planning, Hippodamus was traditionally credited with having invented the "grid pattern" in which straight streets intersect each other at right angles to form regular city blocks. However, as grid patterned cities have been discovered that were built before Hippodamus' birth, this traditional attribution must be false. In political philosophy, Hippodamus was credited with having written the first utopian "constitution". However, Aristotle's account of this constitution is so brief that it is difficult to determine what philosophical position lies behind it and, as that account makes clear, several of the laws governing Hippodamus's ideal city seem contradictory. In this paper, I argue that Hippodamus did significant work in both fields but that his intentions can only be seen clearly if his philosophical and architectural works are read together. This reading not only makes clear the unique contribution that Hippodamus made to both disciplines, but it shows how they were –and perhaps how they should be –related. Paden is Associate Professor of Philosophy in the Department of Philosophy and Religious Studies at George Mason University. (P&G)

Paden, Roger, "Against Grand Theory in Environmental Ethics." Environmental Values 3(1994):61-70. Environmental ethics has been strongly influenced by biological ideas. This essay traces a number of these influences. Unfortunately, environmental ethicists have tended to produce moral theories on a grand scale. This tendency is criticized. It is argued that environmental ethicists should allow the ecological conception of the complexity of biological communities to influence their conception of the moral community. If this were to happen, it is argued, they would have to turn away from grand theories to 'theories of the middle range' while adopting a more 'empirical' approach to moral philosophy. KEYWORDS: Moral community, moral considerability, evolution, environment, ecology, grand theories. Paden is in philosophy and religious studies at George Mason University, Va. (EV)

Paden, Roger, "Wilderness Management," Philosophy and Geography 1 (1997): 175-187. Paden is associate professor of philosophy at George Mason University. (P&G)

Paden, Roger. "Urban Planning and Multiple Preference Schedules: On R.M. Hare's 'Contrasting Methods in Environmental Planning'". Environmental Values 8(1999):55-73. ABSTRACT: This essay presents a critical analysis of Hare's article "Contrasting Methods in Environmental Planning". It argues that Hare has drawn an important distinction between two "methods" used in both urban and environmental planning, and that Hare is correct in the conclusion of his argument that one of these methods, "the trial-design method", is superior to the other, "the means-end method". However, this paper presents a new argument in support of that conclusion. This new argument is important for two reasons. First, it points to the existence of at least two different kinds of preference schedule. Second, it supports a type of decision making procedure to be used in "multiple-client situations" different from the one envisioned by Hare. This procedure, oddly enough, resembles the procedures outlined by both Habermas and Rawls. However, it can be defended on recognisably utilitarian grounds. KEYWORDS: Hare, Rawls, Habermas, urban planning, design, preference schedules, utilitarianism. Roger Paden, Department of Philosophy and Religious Studies George Mason University Fairfax, Virginia 22030-4444, USA (EV)

Paden, Roger. "Nature and Morality." Environmental Ethics 14(1992):239-51. In their attempt to develop a nonanthropocentric ethic, many biocentric philosophers have been content to argue for the expansion of the moral community to include natural entities. In doing so, they have implicitly accepted the idea that the conceptions of moral duties developed by anthropocentric philosophers to describe the moral relationships that hold between humans can be directly applied to the human/nature relationship. To make this expansion plausible, they have had to argue that natural entities have traits that are similar to the morally relevant traits of human beings, e.g., interests, the capacity to experience pleasure and pain, or "purpose." Not only are these arguments often unconvincing, but it seems implausible that the same moral concepts and principles that govern human relationships also should govern human/nonhuman relationships. Many nonanthropocentric ethics, I argue, are (mistakenly) anthropomorphic. They anthropomorphize nature and they anthropomorphize our relationship with nature. To go beyond this relationship I recommend the development of a nonanthropomorphic biocentric ethic. Such an ethic requires us to understand better what nature is and what role nature plays in moral experience and action. In such an ethic, I argue, nature is viewed as a transcendent "thing" with a transcendental moral significance. Paden is in Philosophy and Religious Studies, George Mason, University, Fairfax, VA. (EE)

Padgett, B, "The Greening of Cultural Discourse and Environmental Ethics," review article, Rom Harré, Jens Brockmeier, and Peter Mühlhäusler, Greenspeak: A Study of Environmental Discourse, " Research in Philosophy and Technology 21(no., 2001): 411-412.

Padilla, Emilio, "Climate Change, Economic Analysis and Sustainable Development," Environmental Values 13(2004):523-544. This paper discusses the limitations, omissions and value judgements of the application of conventional economic analysis in the evaluation of climate change mitigation policies. It is argued that these have biased the result of the assessment models towards the recommendation of less aggressive mitigation strategies. Consequently, this paper questions whether they provide appropriate policy recommendations. The unequal distribution of rights implicitly assumed in conventional economic analyses applied to climate change is questioned and an alternative approach considering a distribution of rights consistent with sustainable development is put forward. Finally, the points that an analysis consistent with sustainable development should take into account are presented. Padilla is in Applied Economics, Universitat Autònoma de Bellaterra, Bellaterra, Spain. (EV)

Paehlke, R., "Environmental Politics, Sustainability and Social Sciences," Environmental Politics 10(no.4, 2001): 1-22. (v.13,#2)

Paehlke, Robert C. Environmentalism and the Future of Progressive Politics (New Haven: Yale

University Press, 1989). A historical, philosophical, and political analysis, arguing that an environmentally informed progressive movement can be a political response to neo-conservatism in the 1990's. (v1,#1)

Paehlke, Robert, "Environmental Harm and Corporate Crime," in Frank Pearce and Laureen Snider, eds., Corporate Crime: Contemporary Debates. Toronto: University of Toronto, 1995. (v7,#4)

Paehlke, Robert, "Democracy, Bureaucracy, and Environmentalism," Environmental Ethics 10(1988):291-308. Environmental policies will not require a loss of democracy, for most environmental legislation creates processes which enhance citizen participation. To be successful, environmentalism must be based on a decentralized and sustainable economic policy. This article is based on Paehlke's book, Environmentalism and the Future of Progressive Politics. (Katz, Bibl # 2)

Paehlke, Robert, ed., Conservation and Environmentalism: An Encyclopedia. New York: Garland Publishing Co., 1995. 771 pages. Nicely indexed. A quite useful volume for any college library. Entries are useful first introductions to the area, especially suitable for undergraduates. Contains the following entries, among some 500 others:

- Fox, Warwick, "Anthropocentrism"
- Fox, Warwick, "Deep Ecology: Emergence"
- Fox, Warwick, "Deep Ecology: Meaning"
- Fox, Warwick, "Ecophilosophy and Ecopsychology"
- Fox, Warwick, "Naess, Arne"
- Hargrove, Eugene C., "Animal Rights"
- Hargrove, Eugene C., "Environmental Ethics" (the field)
- Hargrove, Eugene C., "Environmental Ethics" (the journal)
- Orr, David, "Environmental Education"
- J. Baird Callicott, "Intrinsic Value"
- J. Baird Callicott, "Asian Environmental Thought"
- Steven C. Rockefeller, "Religion and Environmental Protection"
- Karen J. Warren, "Ecofeminism"
- Robyn Eckersley, "Ecoanarchism"
- Bron R. Taylor, "Eco-Spirituality"
- Bron R. Taylor, "Radical Environmentalism"
- Max Oelschlaeger, "Appropriate Technology"
- Max Oelschlaeger, "Postmodernism and the Environment"
- Max Oelschlaeger, "Wilderness"
- Robert D. Bullard, "Environmental Justice Movement"
- Yrjö Sepänmaa, "Environmental Aesthetics"
- Lester W. Milbraith, "Sustainability"
- Kenneth A. Dahlberg, "Sustainable Agriculture"
- Paehlke, Robert, "Sustainable Development"
- Rosenbaum, Walter A., "Risk Analysis"
- John E. Carroll, "Environmental Diplomacy"

Also entries on Thoreau, Abbey, Carson, Leopold, Muir, etc. (v7,#4)

Paehlke, Robert C., Environmentalism and the Future of Progressive Politics. New Haven: Yale University Press, 1989. Pp. 325. This is a book about political theory and public policy, about environmentalism as a new wide-ranging political ideology, comparable to the classical political ideologies of liberalism, conservatism, and socialism. Paehlke's basic argument is that the values which underlie an environmental world-view have implications for public policy that transcend standard "environmental" issues. Environmentalism can thus serve as the basis of a new ideology in progressive

politics. The book offers a good overview of the development of a politically aware environmental consciousness through the issues of pollution, population, and the energy crisis, and the necessary connection of environmental thought to environmental science. The ideology of environmentalism is also contrasted with the traditional ideologies of liberalism, conservatism, and socialism. (Katz, Bibl # 2)

Paehlke, Robert C. Environmentalism and the Future of Progressive Politics. Reviewed in Environmental Ethics 14(1992):81-86.

Paehlke, Robert. "Democracy, Bureaucracy, and Environmentalism." Environmental Ethics 10(1988):291-308. Several prominent analysts, including Heilbroner, Ophuls, and Passmore, have drawn bleak conclusions regarding the implications of contemporary environmental realities for the future of democracy. I establish, however, that the day-to-day practice of environmental politics has often had an opposite effect: democratic processes have been enhanced. I conclude that the resolution of environmental problems may well be more promising within a political context which is more rather than less democratic. Paehlke is in Political Studies/ Environmental and Resource Studies Trent University, Ontario, Canada. (EE)

Pagdee, A; Kim, Y; Daugherty, PJ, "What Makes Community Forest Management Successful: A Meta Study From Community Forests Throughout the World," Society and Natural Resources 19 (no. 1, January 2006): 33-52.

Page, Edward A., *Climate Change, Justice and Future Generations*. Reviewed by Axel Michaelowa, *Environmental Values* 16(2007):404-406.

Page, II, Charles R., Jesus and the Land. Nashville: Abingdon Press, 1995. The life of Jesus reconstructed on insights from the land, and Jesus' attitudes to the land. Page is at the Jerusalem Center for Biblical Studies, Jerusalem. (v.10,#2)

Page, Kerri, "Inquiry Turns into OK Corral for U.K. Primate Research," Science 298(6 December 2002):1862-1863. Protests over primate lab at Cambridge. Cambridge University plans a \$ 36 million neuroscience center bringing all the university's primate research under one roof. But there has been much protest and a final decision is still pending.

Page, Robin and Shoard, Marion, "Should we have a legal right to roam unhindered across the British countryside?," The Ecologist 30(no.7, OCT 01 2000):20- . Leading conservationists Robin Page and Marion Shoard defend their corners. (EE v.12,#1)

Page, Ruth, "The Animal Kingdom and the Kingdom of God." Pages 1-9 in The Animal Kingdom and the Kingdom of God, Occasional Paper No. 26, Centre for Theology and Public Issues, New College, University of Edinburgh, 1991. Co-published by the Church and National Committee of the Church of Scotland. ISBN 1 870126 17 3.

Page, Ruth, God and the Web of Creation. London: SCM Press, 1996. 188 pages. Unexamined anthropocentrism is a bad thing, even though some measure of human centeredness is inescapable among humans. But the Biblical concept of nature is not straightforward. The Bible is too varied in what it says on creation, and in many places too far removed from what is taken for granted in contemporary science and society, for there to be a "biblical" doctrine of creation which does not exercise selectivity and the fudging of issues. Page argues that what God created was possibility, with creatures free to use it as they could. All creation is by its very being a response to the divine gift of possibility. God does not so much "make" or "design" creation as give the possibility of letting the creatures make themselves, and this allows for the contingent better and worse uses of these possibilities by creation as it comes into being,

flourishes, and dies. Page portrays what she calls a "companioned world" (pp. 81ff). "The picture involved in this doctrine of creation is not one of God setting up the initial conditions with the express design to produce complexity and human consciousness and intelligence, but rather one of God letting be whatever would and could emerge from that freedom, and enjoying all responses of all kinds, with their various qualities, of which intelligence is only one" (p. 80). Page teaches systematic theology at New College, University of Edinburgh, and is the first woman Principal of that College.

Pagiola, Stefano, Konrad von Ritter, and Joshua Bishop. "Assessing the Economic Value of Ecosystem Conservation." World Bank: World Bank Environment Department Papers, 2004.

Paice, Di, "Power Hungry: An Electricity Grid for Sub-equatorial Africa," Africa - Environment and Wildlife 3(no. 2, March/April 1995):65-68. An interview Charles Dingley, lecturer at the University of Cape Town, who claims that on the lower reaches of the Zaire River, with a series of water falls, there is enough power potential to supply the whole of Africa twice over. By the year 2025 the whole of sub-equatorial Africa could be linked in a power grid that would change the face of the region, bring an end to chronic poverty and environmental degradation resulting from overuse of fuel and from burning coal to make electricity. Paice is a free lance journalist. (v6,#3)

Pain, Rachel, "Social geography: seven deadly myths in policy research," Progress in Human Geography 30 (no.2, April 2006): 250-259 (10).

Painter, M., "Book Review: Water Rights and Empowerment. Rutgerd Boelens and Paul Hoogendam, Eds. (Van Gorcum, Amsterdam, 2002)," Human Ecology 31(no. 3, 2003): 494-497.

Pakarinen, Terttu, "Sustainable Development: A New Call for Multidisciplinary Research," in Life and Education in Finland 2/1992. Pakarinen, an architect and planner, heads a multidisciplinary cooperative effort between Tampere University and the Tampere University of Technology, teaching at the latter. One of their projects is called "The Ecological City." New Finnish building legislation requires that the principle of sustainable development be taken account of in all building work, and the Finnish Academy and the Ministry for the Environment have funded a considerable research program to implement this. (v5,#2) (Finland)

Pakarinen, Terttu, Leena Vilkka, and Eija Luukkanen, eds., Näkökulma yhteiskuntatieteelliseen ympäristötutkimukseen (A Viewpoint on Research in the Social Sciences). Tampere: Tampereen yliopisto (University of Tampere), 1991. Acta Universitatis Tampereensis, Series B., vol. 37. Seven articles, including Britta Koskiahho, "The Philosophy of Science and New Environmental Research"; Juha Varto, "The Philosophy of Nature and the Philosophy of Technology"; and Leena Vilkka, "What Is It Like To Be a Yellow Ladyslipper Orchid?" (in Finnish). (v5,#2) (Finland)

Pakenham, Thomas, Meetings with Remarkable Trees. London: Weidenfeld and Nicolson, 1996. Remarkable pictures of remarkable trees, all over the world. (v.8,#4)

Palamar, Colette R. "Wild, Women, and Wolves: An Ecological Feminist Examination of Wolf Reintroduction." Environmental Ethics 29(2007):63-75. Despite the successes, and the considerable and continuing ethical disputes regarding wolf reintroduction in the United States, no clear, cogent, theoretically based ethical examination of the wolf reintroductions has yet been completed. Ecological feminist thought, particularly as articulated by Karen J. Warren, presents one way to create such an ethical assessment. Applying ecological feminist theories to wolf reintroduction also generates an intriguing instance of theoretical application in the "real world" and sheds insight on the pragmatic value of ecological feminist thought. While ecofeminism does not give a definitive and decisively defensible position concerning wolf reintroduction, it does offer a repeatable framework and set of conditions by

which one can assess environmental practice and policy, evidencing yet another example of the relevance of environmental ethics for the assessment of environmental policy. (EE)

Palamar, Colette R. "Restorashyn: Ecofeminist Restoration." Environmental Ethics 28(2006):285-301. Most restoration projects are designed to approximate the species composition and ecotypes ecologists and historians determine were present in an area at some point in the historical past. In most cases, although somewhat arbitrary, the specific time chosen (usually immediately before European settlement) is based on an understanding of historic species composition and anthropogenic disturbances. Although restoring an area to the estimated, historical vegetation types is widely accepted, the exclusory nature of the restoration process often actively eliminates not just invasive species, but also non-invasive, nonnative species as well as displaced native species. These exclusory activities echo patterns of domination and degradation that led to a need for restoration in the first place. Although the domination present in restoration stems from an earnest desire to repair harms inflicted by human carelessness, it at the same time enforces a human conception of the ideal landscape. Attending to ecofeminist concepts such as inclusivism and pluralism, and embracing their rejection of dualistic thinking and the logic of domination demands an expanded tolerance within the practice of ecological restoration. An expanded ecofeminist conceptualization of restoration, a restorashyn, attempts to reduce the presence of overt human domination of the land. Doing so may ultimately mean that the species composition of an ecofeminist restorashyn will not be purely native, but may instead include a diverse mix of both native and non-invasive, nonnative species. (EE)

Palang, H., et al., "The Forgotten Rural Landscapes of Central and Eastern Europe," Landscape Ecology 20(no. 6, September 2005): 645-655.

Palang, Hannes; et al., "The Forgotten Rural Landscapes of Central and Eastern Europe," Landscape Ecology 21 (no.3, April 2006): 347-357 (11).

Palmer, Clare, Environmental Ethics. Santa Barbara, California: ABC-CLIO, 1997 (P. O. Box 1911, Santa Barbara, CA 93116-1911). 192 pages. Hardback only, \$ 45.00, includes shipping. One of a series of reference books on Contemporary Ethical Issues (also including International Ethics, Journalism Ethics, and Business Ethics). This book provides an introduction to environmental ethics and is intended to assist those newly exploring the field--for instance upper high school or university students. The book contains sections:

--What is Environmental Ethics? (a one-chapter useful introduction to the field)

--Chronology (1650, Descartes, to 1996, founding of the most recent journal in the field, Ethics and the Environment)

--Biographical Sketches (historically important figures, such as John Muir; contemporary contributors, such as J. Baird Callicott)

--Major Issues in Environmental Ethics (such as, agriculture, deforestation, genetic engineering, population, tourism, wilderness). An A-Z section.

--Environmental Ethics and Environmental Law

--Codes of Practice in Environmental Ethics (such as Volkswagen's Environmental Policy, IBM Corporate Environmental Policy)

--Annotated Directory of Organizations with an interest in environmental ethics

--Selected Print Resources, extended bibliography

--Selected Media and Non-print Resources, including videos, CD-Roms and internet sites).

Excellent resource. Don't miss this one. Palmer is in the Department of Religious Studies, University of Stirling, Scotland. (v.9,#3)

Palmer, Clare, Environmental Ethics. Santa Barbara, California: ABC-CLIO, 1997 (P. O. Box 1911, Santa Barbara, CA 93116-1911; 800/368-6868; 805/968-1911. Fax: 805/685-9685. E-mail: sales@abc-

clio.com). 192 pages. Hardback only, \$ 55.00, includes shipping. This book is back in print, and, though the price went up \$ 10.00 from the previous \$ 45.00, is still an excellent resource for libraries that have students doing introductory research and writing papers on environmental ethics.

--What is Environmental Ethics? (a one-chapter introduction)

--Chronology (1650, Descartes, to 1996, founding of the most recent journal in the field, Ethics and the Environment)

--Biographical Sketches (historically important figures, such as John Muir; contemporary contributors, such as J. Baird Callicott)

--Major Issues in Environmental Ethics (such as, agriculture, deforestation, genetic engineering, population, tourism, wilderness). An A-Z section.

--Environmental Ethics and Environmental Law

--Codes of Practice in Environmental Ethics (such as Volkswagen's Environmental Policy, IBM Corporate Environmental Policy)

--Annotated Directory of Organizations with an interest in environmental ethics

--Selected Print Resources, extended bibliography

--Selected Media and Non-print Resources, including videos, CD-Roms and internet sites).

It is worth your while to bug your librarian to get this. Palmer is in the Department of Religious Studies, University of Stirling, Scotland. Earlier announced in v.9,#3, but it sold out, now reprinted.

Palmer, Clare, Review of Roger Gottlieb, The Ecological Community. Environmental Values 7:(1998):479.

Palmer, Clare, "A Bibliographic Essay on Environmental Ethics," Studies in Christian Ethics (Edinburgh) 7(1994):68-97. An excellent introduction to environmental ethics. In its combination of a historical sketch with the principal conceptual issues, and literature noted, this introduction is unsurpassed in an article of this length. A historical sketch of the developing field, central questions in the current debate (subjective-objective, naturalistic fallacy, monism/pluralism, intrinsic value, etc.), key positions presented by various environmental ethicists, grouped as individual consequentialist (Singer, VanDeVeer, Attfield), individual deontological (Goodpaster, Schweitzer, Taylor), collective environmental ethics (Leopold, Callicott, Lovelock), mixed monistic (Rolston, Johnson, Sylvan), deep ecology (Naess, Fox), ethical positions reviving earlier philosophical positions (such as Whitehead's process philosophy, Spinoza, Heidegger), and pluralist approaches (Stone, Brennan, Wenz). The significant books and articles in each position are noted. Palmer is the University of Greenwich School of Environmental Sciences. (v7,#4)

Palmer, Clare, Review of Attfield, Robin, Environmental Philosophy: Principles and Prospects. Environmental Values 6(1997):237-239. (EV)

Palmer, Clare, Environmental Ethics and Process Thinking. Oxford: Clarendon Press, Oxford University Press, 1998. 243 pages. Palmer challenges the view that process thinking offers an unambiguously positive contribution to the philosophical debate on environmental ethics. She explores the approaches to ethics which may be drawn out of the work of process thinkers such as A. N. Whitehead and Charles Hartshorne, raising questions about the implications of such approaches for justice and individual integrity. She compares the ethics of process thinking with a variety of other approaches to environmental ethics, concluding that these raise a number of difficulties relating to process thinking about the environment. Although she does offer some reformations of process thinking in an attempt to address such difficulties, she suggests that a question mark remains over what process thinking can contribute to environmental ethics. Palmer is in Religious Studies at the University of Stirling, Scotland. (v.9,#3)

Palmer, Clare, "The Idea of the Domesticated Animal Contract," Environmental Values 6(1997):411-425. ABSTRACT: Some recent works have suggested that the relationship between human beings and

domesticated animals might be described as contractual. This paper explores how the idea of such an animal contract might relate to key characteristics of social contract theory, in particular to issues of the change in state from nature to culture, issues of free consent and irrevocability; and the benefits and losses to animals which might follow from such a contract. The paper concludes that there are important dissimilarities between a domesticated animal contract and other theories of social contract; and that contract language may be used to legitimate relationships of domination over domesticated animals. Department of Philosophy, University of Western Australia, Nedlands, Perth, WA 6009 Australia. (EV)

Palmer, Clare, "Response to Cobb and Menta," Process Studies 33.1 (2004):46-70. Palmer responds to John Cobb and Tim Menta who critiqued her Environmental Ethics and Process Thinking and also her "Animality, Civilization, and Savagery in the work of A. N. Whitehead." (v. 15, # 3)

Palmer, Clare, "Religion in the Making? Animality, Savagery, and Civilization in the Work of A. N. Whitehead," Society and Animals 5/november 2000, pp. 287-304. What is "human" as opposed to what is "animal" are frequent ways of distinguishing humans and, often unfortunately, of disparaging animals, perhaps under the concept of "savagery." A critique of Whitehead, especially his Religion in the Making, suggesting that using Whitehead to underpin modern work in theology and environmental ethics requires considerable caution. Palmer is in philosophy, Washington University, St. Louis. (v. 15, # 3)

Palmer, Clare, "Christianity, Englishness and the southern English countryside: a study of the work of H. J. Massingham," Social and Cultural Geography 3(no. 1, 2002):25-38. The relationship between Christianity, Englishness, and ideas about the southern English landscape in the writings of the 1930's and 1940's rural commentator H. J. Massingham. An example of religious and national identities in the context of national landscapes. A kind of "divine Englishness," an interesting example of one way in which theological reasoning can reflect and reinforce concepts of a naturally ordered national identity. Palmer is herself English, now in philosophy at Washington University, St. Louis. (v. 15, # 3)

Palmer, Clare, "Placing Animals in Urban Environmental Ethics," Journal of Social Philosophy 34(no. 1, 2003):64-78. Thinking about animals in urban environmental ethics. The complex nature of urban areas (which includes parks and natural areas) and the diversity of human-animal relationships within these areas (from pets to pests to bird-watching) raises very different questions for animal ethics than those raised within wilderness areas. Palmer is in philosophy, Washington University, St. Louis. (v. 15, # 3)

Palmer, Clare, "Madness and Animality in Michel Foucault's Madness and Civilization," in Peter Atterton and Matt Calarco, eds., Animal Philosophy: Essential Writings in Theory and Culture. Continuum Press, 2004. Difficulties that underlie Foucault's treatment of animality. Palmer is in philosophy, Washington University, St. Louis. (v. 15, # 3)

Palmer, Clare, "Stewardship: A Case Study in Environmental Ethics." Pages 67-86 in Ian Ball, Margaret Goodall, Clare Palmer, and John Reader, eds., The Earth Beneath: A Critical Guide to Green Theology (London: SPCK, 1992).

Palmer, Clare, ed., Teaching Environmental Ethics. Leiden and Boston: Brill Academic Press, 2006. This collection explores a wide variety of questions, both of a theoretical and a practical nature, raised by teaching environmental ethics. The essays consider general issues such as the place of environmental advocacy in the environmental ethics classroom; using outdoor environments to prompt reflection on environmental ethics; and handling student responses, such as anger and pessimism, that may emerge from teaching environmental ethics. The essays also explore more practical issues, including successfully teaching environmental ethics to students without a background in philosophy; promoting the development of interdisciplinarity in the classroom; useful ways to structure environmental ethics syllabi,

and teaching and learning techniques in environmental ethics. Fifteen essays and an introduction written by the editor.

Palmer, Clare. Animal Liberation, Environmental Ethics and Domestication. OCEES Research Paper No. 1. Oxford: Oxford Centre for the Environment, Ethics and Society, Mansfield College, 1995. 25 pp. A new taxonomy of human-animal relationships. A number of animals with which we most commonly interact "fit only very uneasily into either the category of "wild" or "domestic." We need categories for captive wild animals, scavenging animals, and feral animals, for example. Categories in terms of varying degrees of dependence on human beings are more adequate than those in terms of an unwritten contract of the kind proposed by Stephen Budiansky and endorsed with some qualification by Baird Callicott. At the same time, the different relationships we enjoy with animals of different categories may justify more variation in the way we treat them than would be allowed by the universalizing ethical theories of Regan and Singer. (v8,#1)

Palmer, Clare. Review of Philosophical Dialogues: Arne Naess and the Progress of Ecophilosophy. Edited by Nina Witoszek and Andrew Brennan. Environmental Ethics 24(2002):103-104. (EE)

Palmer, Clare. Environmental Ethics and Process Thinking. Reviewed by Timothy Sprigge. Environmental Ethics 22(2000):191-194.

Palmer, Clare. "'Taming the Wild Profusion of Existing Things'? A Study of Foucault, Power, and Human/Animal Relationships." Environmental Ethics 23(2001):339-358. I explore how some aspects of Foucault's work on power can be applied to human/animal power relations. First, I argue that because animals behave as "beings that react" and can respond in different ways to human actions, in principle at least, Foucault's work can offer insights into human/animal power relations. However, many of these relations fall into the category of "domination," in which animals are unable to respond. Second, I examine different kinds of human power practices, in particular, ways in which humans construct animal constitutions and animal subjectivities. Finally, I use a case study of a pet cat to show how such power practices may come together in a single instance. (EE)

Palmer, Joy and David Cooper, eds. Just Environments: Intergenerational, International and Inter-Species Issues. New York: Routledge, 1995. 208 pages. \$16.95. Obligations to future generations, to the developing world, and to the non-human species. Social, political, and ethical aspects of ecology from the perspective of moral philosophy and from a scientific perspective. Palmer is in education, Cooper in philosophy at the University of Durham, U.K. The Elliot volume and this one make twenty anthologies issued in environmental ethics; see this Newsletter, 5, 4, Winter 94 for a list. (v6,#1)

Palmer, Joy A., ed., Fifty Key Thinkers on the Environment. London: Routledge, 2001. The fifty thinkers, and the authors who evaluate them, are:

- Buddha, fifth century BCE, by Purushottama Bilimoria.
- Chuang Tzu, fourth century BCE, by David E Cooper.
- Aristotle, 384-322 BCE, by David E Cooper.
- Virgil, 70-19 BCE, by Philip R. Hardie
- Saint Francis of Assisi, 1181/2-1226, by Andrew Linzey and Ara Barsam.
- Wang Yang-ming, 1472-1528, by T. Yamauchi.
- Michel de Montaigne, 1533-92, by Ann Moss.
- Francis Bacon, 1561-1626, by Paul S. MacDonald.
- Benedict Spinoza, 1632-77, by Paul S. MacDonald.
- Basho 1644-94, by David J Mossley.
- Jean-Jacques Rousseau, 1712-78, by Paul S. MacDonald.
- Johann Wolfgang von Goethe, 1749-1832, by Colin Riordan.

- Thomas Robert Malthus, 1766-1834, by John I. Clarke.
- William Wordsworth, 1770-1850, by W. John Coletta.
- John Clare, 1793-1864, by W. John Coletta.
- Ralph Waldo Emerson, 1803-82, by Holmes Rolston III.
- Charles Darwin, 1809-82, by Janet Browne.
- Henry David Thoreau, 1817-62, by Laura Dassow Walls.
- Karl Marx, 1818-83, by Richard Smith.
- John Ruskin, 1819-1900, by Richard Smith.
- Frederick Law Olmsted, 1822-1903, by R. Terry Schnadelbach.
- John Muir, 1838-1914, by Peter Blaze Corcoran.
- Anna Botsford Comstock, 1854-1930, by Peter Blaze Corcoran.
- Rabindranath Tagore, 1861-1941, by Kalyan Sen Gupta.
- Black Elk, 1862-1950, by J. Baird Callicott.
- Frank Lloyd Wright, 1867-1959, by Robert McCarter.
- Mahatma Gandhi, 1869-1948, by Purushottama Bilimoria.
- Albert Schweitzer, 1875-1965, by Ara Barsam and Andrew Linzey.
- Aldo Leopold, 1887-1948, by J. Baird Callicott.
- Robinson Jeffers, 1887-1962, by Michael McDowell.
- Martin Heidegger, 1889-1976, by Simon P James.
- Rachel Carson, 1907-64, by Peter Blaze Corcoran.
- Lynn White, Jr, 1907-87, by Michael P. Nelson.
- E. F. Schumacher, 1911-77, by Satish Kumar.
- Arne Naess, 1912-, by David E. Cooper.
- John Passmore, 1914-, by David E. Cooper.
- James Lovelock, 1919- , by Michael A Allaby.
- Ian McHarg, 1920- , by Terry Schnadelbach.
- Murray Bookchin, 1921- , by John Barry.
- Edward Osborne Wilson, 1929- , by Phillip J. Gates.
- Paul Ehrlich, 1932- , by G. Simmons.
- Holmes Rolston III, 1932- . by Jack Weir. Online at:
<http://lamar.colostate.edu/~rolston/weir.pdf>
- Rudolf Bahro, 1935-97, by John Barry.
- Gro Harlem Brundtland, 1939- , by Joy A. Palmer.
- Val Plumwood, 1939- , by Nicholas Griffin.
- J. Baird Callicott, 1941- , by Michael P Nelson.
- Susan Griffin, 1943- , by Cheryl Glotfelty.
- Chico Mendes, 1944-88, by Joy A. Palmer.
- Peter Singer, 1946- , by Paula Casal.
- Vandana Shiva, 1952- , by Lynette J Dumble.

Palmer is in education and a chancellor at the University of Durham, UK. She also directs the Centre for Research on Environmental Awareness at the University of Durham. (EE v.12,#1)

Palmer, Joy A., ed., Kankyo no shisoka tachi [Fifty Key Thinkers on the Environment]. Tokyo: Misuzu Shobo, 2004. Japanese translation. In two volumes in Japanese: ISBN 4-622-08161-X (vol. 1, Ancient) ISBN 4-622-08162-8 (vol. 2, Ancient and Modern).

Palmer, Karen, Sigman, Hilary, Walls, Margaret. "The Cost of Reducing Municipal Solid Waste," Journal of Environmental Economics and Management 33(no.2, 1997):128. (v8,#3)

Palmer, Martin, "Dancing to Armageddon: Doomsday and Utopia in Contemporary Science and Religion." CTNS Bulletin (Center for Theology and the Natural Sciences, Graduate Theological Union,

Berkeley) vol. 12, no. 2, Winter 1992. A new model to guide humankind's relation to the natural world. Palmer is a religious advisor to the World Wildlife Fund, an advisor to Prince Philip on environmental issues, and Director of the International Consultancy on Religion, Education and Culture, Manchester, UK. The lecture summarizes his forthcoming book of a similar title, Harper Collins, 1992. (v3,#3)

Palmer, Ronan. "From the Inside Out." Environmental Values 9(2000):411-418. Abstract: Environmental values are integral to the work of environmental regulators. However values are not simple concepts that can be 'applied' by the regulators. How they are taken on board will depend, inter alia, on the nature of the organisation, its staff and the issues it deals with. Because the environment is complex, the use of values, and in particular of monetary values, will also be complex. While certain ways of expressing values may not be without problems, they can still provide useful guidelines for action. An organisation uses both internal and external processes to develop and articulate values. The challenge is, over time, to integrate these processes and make them more meaningful.

Keywords: Appraisal, decision theory, organisation theory, valuation.

Ronan Palmer is with the The Environment Agency, Rio House, Waterside Drive, Aztec West, Bristol BS32 4UD, UK. (EV)

Palmer, Thomas, "The Case for Human Beings," Atlantic Monthly, January 1992. Apprehension about the disappearance of animal or plant species may be misplaced, a naturalist argues, and may arise out of a mistaken and shortsighted view of the evolutionary process. "To suppose that earthly diversity is past its prime, and that a strenuous program of self-effacement is the best contribution our species has left to offer, is neither good biology nor good history." Homo sapiens has begun to see itself as a vast, featureless mob of yahoos mindlessly trampling this planet's most ancient and delicate harmonies. Maybe, we're being too hard on ourselves. (v3,#1)

Palmer-Fernandez, Gabriel, ed., Moral Issues: Philosophical and Religious Perspectives. Upper Saddle River, NJ: Prentice-Hall, 1996. 525 pages. Section 10 is "Religion, Ethics, and the Environment: What is the Moral Status of Nature and How Ought We To Treat It?" Contains: Lynn White, Jr., "The Historic Roots of Our Ecological Crisis"; Rosemary Radford Ruether, "Ecofeminism: Symbolic and Social Connections of the Oppression of Women and the Domination of Nature"; Robert Gordis, "Ecology and the Judaic Tradition"; Kenneth Goodpaster, "On Being Morally Considerable"; Thomas E. Hill, Jr., "Ideals of Human Excellence and Preserving Natural Environments." Palmer-Fernandez is at Youngstown State University. (v6,#4)

Palmunen, Rainer, ed., Finland: Land of Natural Beauty. Helsinki: Oy Valitut Palat--Reader's Digest Ab, 1988. 304 pages. FM 331.-. ISBN 951-9079-88-2 (English edition), also in Finnish, ISBN 951-9079-36-X. 70 authors, a coffee-table type book, and also an excellent introduction to all aspects of nature and nature conservation in Finland. Includes regional introductions. (v5,#2) (Finland)

Paloheimo, Eero, Maan Tie (The Way of the Earth) Helsinki: Werner Söderström Osakeyhtiö, 1989. ISBN 951-0-16075-X. 250 pages. Paper. Paloheimo analyzes three dimensions of the world: the material, the psychical, and the conceptual, the latter found only in humans. Developing a spectrum of consciousness, he considers non-living beings, non-sentient living organisms, sentient life, and human consciousness. There is, further, a collective consciousness of the biosphere and humankind. In the second half of the book, Paloheimo asks about possibilities for a different kind of future world, as these depend on different kinds of collective consciousness. There are different psychical and material outcomes of the different kinds of collective consciousness. Analyzing the value of the diversity of life, he considers materialistic uses of the world, esthetic values in nature, and ethical duties to nature. What would an ideal observer think the world should be like? In result what should we do? We ought to dismiss the idea that the future is unknown and gain power, use it responsibly, make adequate choices, and follow with appropriate deeds. In addition to continental and Finnish philosophers, Paloheimo has

read extensively in English-speaking philosophers, including environmental philosophers. He is a member of the Finnish Parliament, with a doctorate in technology studies, the author of five other books. (v5,#2) (Finland)

Palovicová, Zuzana, "Problém Hodnôt v Environmentálnej Etike (The Value-Problem in Environmental Ethics)," Filozofia 51(no. 2, 1996):91-98. (In Slovak) An analysis of value in environmental ethics, with attention to the most important axiological theories, i.e. axiological individualism and axiological holism. A value theory adequate for the protection of the environment cannot be built on a merely subjective axiology. Value results from more objective human needs and from our human struggle to survive. "Systemic value" (Rolston) and "transformative value" (Norton) are analyzed, as is the relation between instrumental and intrinsic values. Also, Callicott, Regan, Singer. Palovicová is at the Institute of Philosophy, Slovak Academy of Sciences, Bratislava, Slovakia. (v.10,#1)

Palovicová, Zuzana, "K Vychodiskám Etiky Zivotného Prostredia (Foundations of Environmental Ethics)," Filozofia 50(no. 7, 1995):375-381. (In Slovak) Palovicová is at the Institute of Philosophy, Slovak Academy of Sciences, Bratislava, Slovakia. (v.10,#1)

Palsson, Gisli. Review of A.M. Shah, B.S. Baviskar and E.A. Ramaswamy, eds., Development and Ethnicity. Environmental Values 8(1999):409. (EV)

Panalver, Eduardo M., "Acts of God or Toxic Torts? Applying Tort Principles to the Problem of Climate Change." Natural Resources Journal 38(No. 4, Fall 1998):563- . (v10,#4)

Panayotakis, Costas. "Environmental Ethics and Capitalism's Dialectic of Scarcity." Environmental Ethics 27 (2005):227-244. A non-productivist Marxism departing from the analysis of capitalism's "dialectic of scarcity" can make a valuable contribution to the field of Environmental Ethics. On the one hand, the analysis of capitalism's dialectic of scarcity shows that the ethical yardstick by which capitalism should be measured is immanent in this social system's dynamic tendencies. On the other hand, this analysis exposes capitalism's inability to fulfill the potential for an ecologically sustainable society without unnecessary human suffering that capitalism's technological dynamism generates. This argument can be illustrated by a critical analysis of Bjorn Lomborg's *The Skeptical Environmentalist*. An exploration of capitalism's dialectic of scarcity can bring to light those weaknesses and internal contradictions of anti-ecological discourses that are likely to escape the attention of non-Marxist ecologists. This analysis shows that to the extent capitalism's dialectic of scarcity encourages the fragmentation of social justice and environmental movements, a critical analysis of this dialectic can contribute to the formation of the alliance of emancipatory movements that the attainment of a just and ecologically sustainable society presupposes. (EE)

Pancheco, Luis F., and Simonetti, Javier A., "Genetic Structure of a Mimosoid Tree Deprived of Its Seed Disperser, the Spider Monkey," Conservation Biology 14(2000):1766-1775. Large bodied animals, including some primates, are usually the preferred bushmeat. They also carry seeds, in fur or gut, and disperse them widely. Such dispersion is required for some plants, here for example the seeds of Inga ingoides, a common tree of the lowland forests in Bolivia are dispersed almost exclusively by the spider monkey. If the animal comes under threat, there are adverse consequences for these plants. Remove one link, and the system starts to unravel. See also: Moore, Peter D., "The Rising Cost of Bushmeat," Nature 409(2001):775-777. (v.12,#4)

Panksepp, Jaak, "Beyond a Joke: From Animal Laughter to Human Joy?" Science 308 (1 April 2005): 62-63. Rats "laugh," or at least chirp when they play, enjoy getting tickled, and come chirping back for more. Panksepp finds the neural circuits for laughter exist in ancient regions of the brain, also that children laugh when they hardly speak. Next he wants to find genes for joy. He concedes this may not be

a sense of humor. Also Panksepp, Jack, and Jeff Burgdorf, "'Laughing' Rats and the Evolutionary Antecedents of Human Joy?" Physiology and Behavior 79 (2003): 533-547.

Pannenberg, Wolfhart, Toward a Theology of Nature: Essays on Science and Faith. Edited by Ted Peters. Philadelphia: Westminster/John Knox Press, 1993. 208 pages. Paper. \$ 20.00. "Many scholars of religion sit timidly by waiting to hear what physicists and biologists say about the world of nature. Then, they adjust their religious vision accordingly. But not systematic theologian Wolfhart Pannenberg. Based on dialogue between theologians and scientists for more than three decades, Pannenberg poses theological questions to natural scientists ... He says the scientific view of nature is incomplete and challenges scientists to incorporate the idea of God into their picture of nature. He reviews the relationship between natural law and contingency, the importance of the spirit in the phenomenon of life, field theory language, and the theological account for the nature of God and of God's creative activity. Pannenberg believes the world we live in is a creature of a creating God, and unless we understand this, we cannot fully understand the world." Pannenberg is professor of systematic theology at the University of Munich. (v4,#4)

Panusz, Filip Henryk, Bodily Work and Value: Merleau-Ponty, Marx and Environmental Ethics. M.A. thesis, Colorado State University, spring 2002. A quasi-materialist approach to value theory. Bodily work is one of the means through which values arise, as with laboring on the land. Values are not created out of pure mind. They are not discovered through pure reason, independently of the material manifold that surrounds us. It is impossible to speak of value without phenomenological inquiry into the subject's immediate experience of the world.

Value is first approached here through Merleau-Ponty's phenomenology of the lived body and the Life-world. Continuing, values are not intellectual beliefs that one "has." A value exists when it is "lived." Value is next approached through Karl Marx's critique of idealism and his materialist emphasis upon praxis, as expressed in the labor theory of value.

Among the consequences for environmental ethics are that (a) environmental education must educate entire embodied beings, that (b) isolation from the sensuous environment may have deleterious ethical consequences, and (c) that some kinds of physical work on the land are particularly fruitful and salubrious in invoking a moral sense within the laborer. Panusz is originally from Poland, now resident in the United States. (v.13,#2)

Papadakis, E., and R. Grant, "The Politics Of 'Light-Handed Regulation': 'New' Environmental Policy Instruments In Australia," Environmental Politics 12(no. 1, 2003): 27-50. (v 14, #3)

Papadimitriou, Efthimios, *Toward a New Philosophy of Nature*. Athens: Politis, 1995 (in Greek).

Papuziński, A., (ed.), Wprowadzenie do filozoficznych problemów ekologii (An Introduction to Philosophical Problems of Ecology), WSP Bydgoszcz (Bydgoszcz College of Educational Sciences Press), 1999.

Papuziński, A., (ed.) Decentralizacja, Regionalizacja, Ekologia. Studium Filozoficznych, społeczno-politycznych i edukacyjnych aspektów ekologii z perspektywy "małych ojczyzn" (Decentralization, Regionalization, Ecology. The Study of Philosophical, Social-Political, and Educational Aspects of Ecology from the "little mother-lands" point of view), Wydawnictwo WSP w Bydgoszczy (Bydgoszcz College of Educational Sciences Press), 1998. (v.13,#1)

Papuziński, A., Życie - Nauka - Ekologia. Prolegomena do kulturalistycznej filozofii ekologii (Life - Science - Ecology. Prolegomena to Cultural Philosophy of Ecology), Wyd. WSP w Bydgoszczy (Bydgoszcz College of Educational Sciences Press), 1998. (v.13,#1)

Papuziński, A., (ed.) Decentralizacja, Regionalizacja, Ekologia. Studium Filozoficznych, społeczno-politycznych i edukacyjnych aspektów ekologii z perspektywy "małych ojczyzn" (Decentralization, Regionalization, Ecology. The Study of Philosophical, Social-Political, and Educational Aspects of Ecology from the "little mother-lands" point of view), Wydawnictwo WSP w Bydgoszczy (Bydgoszcz College of Educational Sciences Press), 1998.

Papuziński, A., Życie - Nauka - Ekologia. Prolegomena do kulturalistycznej filozofii ekologii (Life - Science - Ecology, Prolegomena to Cultural Philosophy of Ecology), Wyd. WSP w Bydgoszczy (Bydgoszcz College of Educational Sciences Press), 1998.

Papuziński, A., (ed.), Wprowadzenie do filozoficznych problemów ekologii (An Introduction to Philosophical Problems of Ecology), WSP Bydgoszcz (Bydgoszcz College of Educational Sciences Press), 1999. (v.13,#1)

Paraskevopoulos, S; Korfiatis, KJ; Pantis, JD, "Social Exclusion as Constraint for the Development of Environmentally Friendly Attitudes," Society and Natural Resources 16(no.9, 2003):759-774. (v.14, #4)

Parejko, K., "Pliny the Elder's Silphium: First Recorded Species Extinction," Conservation Biology 17(no. 3, 2003): 925-927. (v 14, #3)

Parini, Jay, "The Greening of the Humanities," New York Times Magazine, October 29, 1995, pages 52-53. (v7,#2)

Park, Jacob. "Financing Environmentally Sound Development," Environment 37(no.7, Sept. 1995):25- . (v6,#4)

Parke, Rebecca and Vandermast, David. "The American Chestnut: Its Continuing Story." Wild Earth 9(No. 2, Summer 1999):23- . (v10,#4)

Parker, I. M., Kareiva, P. "Assessing the Risks of Invasion for Genetically Engineered Plants: Acceptable Evidence and Reasonable Doubt", Biological Conservation 78(no.1/2, 1996):193. (v7,#4)

Parker, Kelly A. "A Reply to C. A. Bowers." Environmental Ethics 26(2004):333-334. (EE)

Parker, Kelly, "Economics, Sustainable Growth, and Community." Environmental Values Vol.2 No.3(1993):233-246. ABSTRACT: Sustainable growth is emerging as a normative concept in recent work in economics and environmental philosophy. This paper examines several kinds of growth, seeking to identify a sustainable form which could be adopted as normative for human society. The conceptions of growth expressed in standard economic theory, in the writings of John Dewey, and in population biology, each suggest particular accounts of how the lives of individuals and communities ought to be lived. I argue that, while absolute sustainability is not possible, the latter two conceptions together suggest a regulative ideal of sustainable growth which is acceptable at the social level, and which encourages the development of genuine community. KEYWORDS: Economics, ethics, sustainable, growth, development. Department of Philosophy, 214 Lake Superior Hall, Grand Valley State University, Allendale MI 49401, USA.

Parker, Kelly, "The Values of a Habitat," Environmental Ethics 12(1990):353-368. This is only the third article to use pragmatism as a basis for an environmental ethic to appear in Environmental Ethics. Pragmatism stresses the end of dualisms that pervade ethical thought and environmental philosophy and policy. Parker attempts to reduce the dichotomy between natural and artificial habitats, but he errs in relying on the human valuation of natural habitats. Parker suggests that the values of "adequacy" and

"significance" can be applied to both natural and artificial habitats---but the evaluations are all based on human affective relationships (see p. 368). (Katz, Bibl # 2)

Parker, Kelly. "The Values of a Habitat." Environmental Ethics 12(1990):353-68. Recent severe environmental crises have brought us to recognize the need for a broad reevaluation of the relation of humans to their environments. I suggest that we consider the human-nature relation from two overlapping perspectives, each informed by the pragmatic philosophy of experience. The first is an anthropology, according to which humans are viewed as being radically continuous with their environments. The second is a comprehensive ecology, according to which both "natural" and "nonnatural" environments are studied as artificial habitats of the human organism (i.e., as artifacts). The pragmatic approach has two features which make it promising as a way to ground environmental thinking. First, it allows us to avoid a human-nature dichotomy and the many problems which that dichotomy has traditionally engendered. Second, it ties environmental questions to a common cultural experience and a philosophical position from which environmentalists can effectively engage main-stream educational and political discussions. Parker is in the philosophy department, Vanderbilt University, Nashville, TN. (EE)

Parker, P, "Environmental Initiatives among Japanese Automakers: New Technology, EMS, Recycling and Lifecycle Approaches," Environments 29(no.3, 2001):91-114. (v.13, #3)

Parkes, Graham, "Human/Nature in Nietzsche and Taoism," In: Nature in Asian Traditions and Thought, J. Baird Callicott and Roger J. Ames (eds), New York: State University of New York Press, 1989, pp. 79-97.

Parkes, Graham. "Nietzsche's Environmental Philosophy: A Trans-European Perspective." Environmental Ethics 27 (2005):77-91. Against the background of a growing interest in Nietzsche's moral philosophy, several articles have appeared in these pages in recent years dealing with his relation to Environmental Ethics. While there is much here that is helpful, these essays still fail to do full justice to Nietzsche's understanding of optimal human relations to the natural world. The context of his life helps to highlight some ecological aspects to his thinking that tend to be overlooked. His ideas about the Overhuman in Thus Spoke Zarathustra undermine the traditional anthropocentric attitude toward nature. By understanding Nietzsche's idea of will to power primarily as interpretation, following his suggestion that we engage the world as a play of interpretive forces, and paying attention to the relevant parallels with Chinese Daoism and Mahāyāna Buddhism, it is clear that Nietzsche takes a salutary step beyond biocentrism to a Dionysian celebration of existence as a whole. (EE)

Parkhurst, GM; Shogren, JF, "Evaluating Incentive Mechanisms for Conserving Habitat," Natural Resources Journal 43(no.4, 2003):1093-1150. (v. 15, # 3)

Parkins, J. R., "Review of: Sandberg, L. Anders, and Peter Clancy, Against the Grain: Forests and Politics in Nova Scotia," Society and Natural Resources 14(no.10, 2001): 929-32. (v.13,#2)

Parkins, J; Mitchell, R, "Public Participation as Public Debate: A Deliberative Turn in Natural Resource Management," Society and Natural Resources 18 (no. 6, July 2005): 529-540.

Parkinson, John S. and David F. Blair, "Does E. coli Have a Nose?" Science, March 19, 1993. Studies now suggest that the common Eschericia coli bacterium has a remarkably sophisticated nose-spot, a precursor of smelling! The authors are in biology, University of Utah. (v4,#1)

Parks, Bradley; Roberts, J. Timmons, "Globalization, Vulnerability to Climate Change, and Perceived Injustice," Society and Natural Resources 19 (no.4, Number 4/April 2006): 337-355 (19).

Parks, SA; Harcourt, AH, "Reserve Size, Local Human Density, and Mammalian Extinctions in U.S. Protected Areas," Conservation Biology 16(no.3, 2002):800-808. (v.13, #3)

Parkyn, L., Stoneham, R.E., Ingram, H.A.P. Peatlands: Conservation and Management. New York: Oxford University Press, 1997. Why should peatlands be conserved? How should this conservation be achieved? The current situation regarding peatlands and bogs and an agenda for their future survival. (v8,#1)

Parlee, Brenda, and Fikret Berkes. "Indigenous Knowledge of Ecological Variability and Commons Management: A Case Study on Berry Harvesting from Northern Canada." *Human Ecology* Vol. 34, no. 4 (2006): 515-28.

Parney, Lisa Leigh. "'Whales' Immerses Viewers in Creatures' Majesty." The Christian Science Monitor, vol. 88, 20 Nov. 1996, p. 13.

Parris, TM, "Toward A Sustainability Transition: The International Consensus," Environment 45(no.1, 2003): 12-23.

Parrish, JD; Braun, DP; Unnasch, RS, "Are We Conserving What We Say We Are? Measuring Ecological Integrity within Protected Areas," Bioscience 53(no.9, 2003):851-860. (v.14, #4)

Parry, Ian W. H. "Should We Abandon Cap and Trade in Favor of a CO2 Tax?" *Resources* (Resources for the Future) No. 166 (Summer 2007): 6-12. Parry discusses the pros and cons of controlling carbon emissions by a carbon tax versus the prevailing idea that emissions trading is better.

Parson, Edward A., Protecting the Ozone Layer: Science and Strategy. New York: Oxford University Press, 2003. Parson is at Harvard University.

Parsons, Glenn. "The Aesthetic Value of Animals." *Environmental Ethics* 29(2007):151-169. Although recent work in philosophical aesthetics has brought welcome attention to the beauty of nature, the aesthetic appreciation of animals remains rarely discussed. The existence of this gap in aesthetic theory can be traced to certain ethical difficulties with aesthetically appreciating animals. These difficulties can be avoided by focusing on the aesthetic quality of "looking fit for function." This approach to animal beauty can be defended against the view that "looking fit" is a non-aesthetic quality and against Edmund Burke's famous critique of the connection between fitness and the beauty of animals. (EE)

Parsons, Glenn. "Natural Functions and the Aesthetic Appreciation of Inorganic Nature." *British Journal of Aesthetics* Vol. 44, no. 1 (2004): 44-56.

Parsons, Glenn. "Theory, Observation, and the Role of Scientific Understanding in the Aesthetic Experience of Nature." *Canadian Journal of Philosophy* Vol. 3, no. 2 (2006): 165-86.

Parsons, Glenn. "Nature Appreciation, Science and Positive Aesthetics." *British Journal of Aesthetics* Vol. 42, no. 3 (2002): 279-95.

Parsons, Howard. Marx and Engels on Ecology. Reviewed in Environmental Ethics 1(1979):283-85.

Parsons, KN; Jones, G; DavidsonWatts, I; Greenaway, F, "Swarming of bats at underground sites in Britain-implications for conservation," Biological Conservation 111(no.1, 2003): 63-70.

Parton, Glenn, "The Rise of Primitivism and the Fall of Civilization: A Reply to J.B. Callicott and Holmes Rolston, III, on Wilderness," The Environmental Professional 16(1994):366-373. Wilderness is a medium that enfolds everything, not something "out there" independently of humans. Wilderness ought to be the habitat for humans. Civilization terminates wilderness and the good of beings who dwell there, including humans. Primitivism, reemerging as an alternative form of life, is a matter of correcting and undoing that fatal fork in the road that exiled us from our homeland. The price of the goods and services of civilization is too high. We humans should not have come out of the wilderness and we can and should go back to living and working in the wild. That primitive freedom and happiness cannot be surpassed, but only marred and lost. Callicott and Rolston are caught in a people vs. no-people in the wilderness argument, when real people must be in the wilderness, not in civilization. Parton is with the South Fork Mountain Defense in Weaverville, CA. (v5,#4)

Parton, Glenn. "Humans-in-the-Wilderness." Trumpeter 12, no. 4 (Fall 1995): 185-90. Parton proposes that civilization is not a linear development but includes wrong turns. What needs to be carried forward are the achievements, not the wrong parts. Humans should return the wilderness but not forfeit all the achievements of civilization.

Parton, Glenn. "The Rise of Primitivism and the Fall of Civilization: A Reply to J. B. Callicott and Holmes Rolston, III, on Wilderness." The Environmental Professional 16 (1994): 366-71. Parton offers criticism on the debate on wilderness between Callicott and Rolston in The Environmental Professional 13, no. 3 and no. 4. Parton argues that wilderness is a medium that enfolds everything. It is not the far-removed place "out there" envisioned by Callicott and Rolston. Wilderness is common ground for humans and nonhumans. Parton expects slow convergence in environmental work toward this conception of wilderness. (v6,#1)

Partridge, Ernest, "How Much is Too Much?" in Environmental Challenges to Business, The Ruffin Series No. 2, Society for Business Ethics, 2000. Criticizes Mark Sagoff's contention that "technology can deliver greater and greater abundance [and that] the endless expansion of the global economy is physically possible." In response: (a) prices are false indicators of sustainability, (b) close inspection reveals limitations in all basic resource categories--food, forests, water and energy. (c) Sagoff and other technological optimists ignore the fundamental physical principle of entropy. (EE v.12,#1)

Partridge, Ernest, "Should We Seek a Better Future?" Ethics and the Environment 3(1998):81-95. The radical contingencies attending human reproduction indicate that attempts to improve the living conditions of future generations result in generations populated by different individuals than would otherwise have been born. This remarkable consequence challenges the widespread belief that the present generation has responsibilities to its remote successors. I contend, first, that while the radical genetic contingency and epistemological indeterminacy of future persons absolves us of obligations to act "in behalf of" them as individuals, this moral absolution does not entail a permission to disregard entirely the remote consequences of our policies. Since relevant moral principles bind us to persons in general, not to particular individuals, we remain obligated to improve the life prospects of whatever individuals eventually com into being. Second, I suggest that by applying an analogous argument within the lives of persons rather than to the long history of civilization, we arrive at the morally repugnant result of negating long-term obligations to contemporary persons. Conversely, the condition of continuity which afford moral legitimacy to personal obligations among contemporaries likewise entails moral responsibility for the life conditions of distant generations. Partridge is in philosophy, University of California, Riverside. (E&E)

Partridge, Ernest, ed. Responsibilities to Future Generations. Reviewed in Environmental Ethics 4(1982):75-83.

Partridge, Ernest, "Nature as a Moral Resource," Environmental Ethics 6(1984):101-130. An attempt to find a nonprudential and disinterested reason for humans to preserve nature. Nature fulfills the human need for a self-transcending concern that enriches human life. But if nature is a "moral resource" it is still a resource, instrumentally valuable. This may be a "higher level" interest than hunting or powerboating, but it is still basically prudential. (Katz, Bibl # 1)

Partridge, Ernest, "Three Wrong Leads in a Search for an Environmental Ethic: Tom Regan on Animal Rights, Inherent Values, and 'Deep Ecology.'" Ethics and Animals vol. 5, no. 3 (September 1984): 61-74. Partridge begins by criticizing Regan's views of environmental ethics because his notion of "inherent value" is non-relational and hence meaningless, and because his concern for individual animals is not in the least "ecological." Partridge then proposes a synthesis of individualism and holism in environmental ethics by devising a sliding scale of individual worth based on sentience. This is an important paper representing central issues in environmental ethics. (Katz, Bibl # 1)

Partridge, Ernest, "The Tonic of Wildness," in Sharpe, Virginia A., Norton, Bryan G, and Donnelley, Strachan, eds., Wolves and Human Communities. Washington, DC: Island Press, 2001. Experiences of natural and artistic beauty are contrasted: Natural beauty is uncomposed and unframed, and includes the subject in the natural context. Concludes that the experience of wildness teaches us "of our origins, our sustenance, our limitation, and our planetary home. From such lessons ... we ... gain the perspective, appreciation and motivation to preserve our natural estate, and with it our sustainable place within it." (EE v.12,#1)

Partridge, Ernest, "Gefährlicher Optimismus (Perilous optimism)". In German. Natur und Kultur 2(no. 1,2001):3-32. Abstract: Despite the warnings by the environmentalists of impending disasters due to the destruction of the natural environment and the exhaustion of natural resources, there is no shortage of reassurances. The optimists find support in the economic principle that all problems of scarcity and growth limitation can be solved through human ingenuity and economic incentives. This optimism is indefensible because 'market forces' are systematically 'myopic,' e.g., oriented toward short-term projections and returns on investment. Furthermore, the optimists disregard well-established facts of biological and natural sciences; in particular the complexity of ecosystems and the natural entropic progression of systems toward disorder and dispersion. (v.12,#2)

Partridge, Ernest, "Future Generations," in Jamieson, Dale, ed., A Companion to Environmental Philosophy, London: Blackwells, 2001. Survey of recent philosophical responses to the problem of the responsibility to future generations. Among them: Libertarianism, Utilitarianism, Communitarianism (de-Shalit), Contractarianism (Rawls). The problem of motivating the living generation to make provision to the remote future. Some policy guidelines are offered for just provision for remote posterity. (EE v.12,#1)

Partridge, Ernest, "Reconstructing Ecology," in Pimentel, David, Westra, Laura, and Noss, Reed F., eds. Ecological Integrity: Integrating Environment, Conservation, and Health (Washington, DC: Island Press, 2000). Answers recent attacks on such cherished ecological concepts as "stability," "equilibrium," "integrity" and "community," by such biologists as Michael Soulé and Daniel Botkin, and by the philosopher Mark Sagoff. Granted, many "classical ecologists" have overstated these concepts. However, the opposing account of nature as a chaotic "hodgepodge" of coexisting species is indefensible. Evolution presupposes order, stability, and symbiosis among species, albeit within a condition of constant change. Ecological theory is falsifiable and predictive, and employs valid classification schemes. Finally, normative terms such as "ecosystemic health" and "integrity" are meaningful. (EE v.12,#1)

Partridge, Ernest, "The Future - For Better or Worse," Environmental Values 11(2002):75-85. Alan Carter correctly argues that Thomas Schwartz's "future persons paradox" applies with equal force to

utilitarianism, rights theory and Aristotelian ethics. His criticism of Rawls "justice between generations" is less successful, because of his failure (and perhaps Rawls as well) to fully appreciate the hypothetical nature of the "original position". Carter's attempt to refute Schwartz's argument by focusing on the individuality of moral action fails, since it evades the essential point of Schwartz's argument. The best response to Schwartz is to concede the essential validity of his argument and then to turn that argument into an ad absurdum refutation of his central premise, "the person affecting principle". (EV)

Partridge, Ernest. "If Environmental Education Is the Answer, Then What Is the Question?" Annual Hulings Lecture, Northland College, February 15, 1995. How did Western civilization fall into the environmental trap in which we now find ourselves? We did so by allowing our cleverness to outpace our intelligence, our facility to outdistance our foresight, and our decision-making procedures to evolve without moral charts and compasses, secure in the belief that our lives and institutions were being moved by such benign "invisible hands" as consumer preferences, market forces, and cultural drift. If environmental education is the answer, then many questions follow: How do we get environmental education into the college and university curriculum? Copies from Ernest Partridge, Northland College, Ashland, WI 54806. (v6,#1)

Partridge, Ernest. Review of Obligations to Future Generations. Edited by R. I. Sikora and Brian Berry. Environmental Ethics 1(1979):371-74.

Partridge, Ernest. "Posterity and the Strains of Commitment." In Creating a New History for Future Generations, edited by Kim and Dator. Kyoto: Institute for the Integrated Study of Future Generations, 1995. (v.8,#4)

Partridge, Ernest. Review of Nuclear Power and Public Policy. By Kristin S. Shrader-Frechette. Environmental Ethics 4(1982):261-71.

Partridge, Ernest. Review of All That Dwell Therein. By Tom Regan. Environmental Ethics 7(1985):81-86.

Partridge, Ernest. "Values in Nature: Is Anybody There?" Philosophical Inquiry 8, nos. 1-2 (Winter-Spring 1986):96-110. A detailed criticism of the axiological position of Holmes Rolston that values exist in nature independently of any conscious evaluator. Partridge insists that valuation depends on an evaluator, but this view need not lead to anthropocentrism. (Katz, Bibl # 1)

Partridge, Ernest. "On the Possibility of a Future Global Environmental Ethic." In Viewpoints. The Wisconsin Institute, 1995. (v.8,#4)

Partridge, Ernest. "Are We Ready for an Ecological Morality?" Environmental Ethics 4(1982):175-90. This essay is an inquiry into the relevance of psychology to morality--particularly, the relevance of a capacity to treat nature with respect and restraint to a responsibility to do so. I begin with a presentation of Aldo Leopold's "land ethic" (which I also designate with the term ecological morality). I then examine two notions of moral psychology that have recently attracted the interest of moral philosophers: first, "the moral sense," a concept that has gained prominence, in part, through the recent work of the philosopher, John Rawls; and second, Lawrence Kohlberg's theory of the development of moral cognition. Finally, I consider how these perspectives on moral psychology might apply to ecological morality. Partridge is in Environmental Studies, University of California, Santa Barbara, CA. (EE)

Partridge, Ernest. "Nature as a Moral Resource." Environmental Ethics 6(1984):101-30. In this paper I attempt a moral justification of protecting wild species, ecosystems, and landscapes, a justification not directly grounded in appeals to human benefit. I begin with a description of anthropocentric and ecosystemic approaches to the valuing of nature and offer some empirical arguments in support of the

ecosystemic view. I suggest that human beings have a genetic need for natural environments, and that the direct experience of wild nature is an intrinsic good. Theoretical coherence and scope is another advantage of the ecological perspective over the anthropocentric view. Turning to moral psychology, I argue that human beings have a fundamental need to care for things outside themselves and that this need is suitably met, and human life enriched, by a transcending concern for the wellbeing of natural species, habitats, and ecosystems. These considerations are joined with the ecological point of view to yield the conclusion that a self-transcending concern for the welfare of wild species and their habitats enriches the quality of moral life. Persons with genuine reverence and respect for wild creatures and their habitats will enjoy greater fulfillment in their own lives and be better neighbors to each other. Partridge is at the Center for the Study of Value and Social Policy, University of Colorado, Boulder, CO. (EE)

Partridge, Ernest. "Environmental Justice and 'Shared Fate': A Contractarian Defense of Fair Compensation." Human Ecology Review 2, no. 2 (Spring 1996). (v.8,#4)

Partridge, Ernest. Book Review of Justice, Posterity, and the Environment. By Wilfred Beckerman and Joanna Pasek. Environmental Ethics 26(2004):429-432. (EE)

Partridge, Ernest, "Ecological Morality and Nonmoral Sentiments," Environmental Ethics 18(1996):149-163. A complete environmental ethic must include a theory of motivation to assure that the demands of that ethic are within the capacity of human beings. J. Baird Callicott has argued that these requisite sentiments may be found in the moral psychology of David Hume, enriched by the insights of Charles Darwin. I reply that, on the contrary, Humean moral sentiments are more likely to incline one to anthropocentrism than to Aldo Leopold's land ethic, which is defended by Callicott. This mismatch becomes more evident as Callicott attempts to enlist Humean moral sentiments in support of the Leopoldian 'land community.' The disanalogies between human and natural communities, I argue, are too great to permit this application. The motivation we need to meet our duties as 'citizens of the land community' must be of a nonmoral kind. I suggest that the necessary sentiments may be found in a genetically based 'affirmation of nature' that has evolved out of our natural history as a species, shaped by the very forces and contexts that are now put in peril by our technology. Partridge teaches at Northland College, Ashland, WI. (EE)

Pascalev, Mario, "Maps and Entitlement to Territory," Philosophy and Geography 2 (1998): 233-247. Pascalev is a Ph.D. candidate in the Department of Philosophy at Bowling Green State University. (P&G)

Pascual, Miguel A., Kareiva, Peter, Hilborn, Ray. "The Influence of Model Structure on Conclusions about the Viability and Harvesting of Serengeti Wildebeest," Conservation Biology 11(no.4, 1997):966. (v8,#3)

Pasculli, Leonard P., "The 'War' Against Industry as an Environmental Enemy Shows Signs of Ending," Journal of Environmental Law & Practice 7 (No. 3, 2000 Winter): 17-. (v.11,#4)

Paske, Gerald H., "Why Animals Have No Right To Life: A Response to Regan", Australasian Journal of Philosophy, 66 (1988): 498-511. It is argued that the right to life is based upon abstract rationality and that thus moral agents but not moral patients have a right to life. Regan's argument, that appeals to rationality are "'perfectionistic" and hence unacceptable, is examined and rejected. Abstract rationality makes possible (1) abstract sympathy and (2) the evaluation and alteration of one's own feelings and desires. This generates moral agency and makes moral agents subject to a unique type of harm: deontic harm. Death is a deontic harm and hence is uniquely harmful to moral agents. Consequences of this thesis are (1) there are two independent, fundamental moral principles, (2) there are degrees of inherent value, (3) some animals have greater moral standing than some humans, and (4) some genetic humans

have greater moral standing than other genetic humans. The dangers inherent in such views are briefly assessed.

Paske, Gerald H., "The Life Principle: A (Metaethical) Rejection." Journal of Applied Philosophy 6 (1989): 219-225. Critical discussion of Paul Taylor's "life-principle" or biocentric ethic. Paske argues that Taylor has made an arbitrary distinction between nonsentient living entities and inanimate objects; and the crucial mistake is a narrow interpretation of teleology as being "goal-directed." "But nonsentient life is not conscious and hence, literally, has no goals...The real difference between stalactites and protozoa is that stalactites come about by a physical-chemical process whereas protozoa come about via biophysical and bio-chemical processes" (p. 224). This difference is not a relevant moral distinction. Most discussions of Taylor focus on the policy implications of his view; this argument addresses the foundation. (Katz, Bibl # 2)

Paskins, Barrie, and Michael Doctrill. The Ethics of War. Reviewed in Environmental Ethics 2(1980):285-88.

Pasko, BS, "The Great Experiment that Failed? Evaluating the Role of a 'Committee of Scientists' as a Tool for Managing and Protecting Our Public Lands," Environmental Law 32(no.2, 2002):509-548. (v.13, #3)

Passmore, John, Man's Responsibility for Nature. New York: Scribner's, 1974.

Passmore, John, "The Preservationist Syndrome," Journal of Political Philosophy 3(#1, 1995):1-22. Passmore wishes more consistent use of "conservation" and "preservation." Conservation is future-oriented; preservation is past-oriented. In the rapidly changing modern world, the rise of preservationist interests is striking. Passmore considers urban preservation, ecological preservation, cultural preservation, versus development, the question of "rights" to development, indigenous "rights" to traditional lands, "rights" of animals to be preserved, "rights" of species, whether to say that preservation is "better" is culturally relative, whether preservationists are elitists. The paper, he notes, is a development and generalization of Chapters IV and V in his Man's Responsibility for Nature (London: Duckworth, 1980). Passmore is retired, Australian National University, Canberra. He will speak at the forthcoming World Congress of Philosophy, Boston, August 1997. (v8,#3)

Paterson, B, "Ethics for Wildlife Conservation: Overcoming the Human-Nature Dualism," BioScience 56 (no. 2, February 2006): 144-150. This article contrasts the instrumental value approach, extensionist approach, and biocentric approach to environmental ethics with the Buddhist approach of Daisaku Ikeda in terms of their meaning for wildlife conservation. I argue that both anthropocentric and biocentric approaches create a false dichotomy between humans and nature and are not helpful to modern wildlife conservation, which aims to balance the needs of people with the conservation of nature. The views of Daisaku Ikeda, in particular the principle of dependent origination and the theory of the oneness of life and its environment, constitute an alternative approach that places people within the web of all living things.

Paterson, D., and Palmer, M., eds., The status of animals: Ethics, education, and welfare. Wallingford, Oxon, UK: CAB International, 1989.

Paterson, John L. "Conceptualizing Stewardship in Agriculture within the Christian Tradition." Environmental Ethics 25(2003):43-58. The concept of stewardship as resource development and conservation, a shallow environmental ethic, arises out of a domination framework. Stewardship as earthkeeping arises out of a keeping framework and falls somewhere between an intermediate and deep environmental ethic. A notion of agricultural stewardship, based on earthkeeping principles, can be used

as a normative standard by which to judge a range of agricultural economies and practices. (EE)

Paterson, Matthew, "Understanding the Green Backlash," Environmental Politics 8(no. 2, Summer 1999):183- . (v.11,#1)

Paterson, Matthew. Review of Wolfgang Sachs, Wolfgang. Planet Dialectics: Explorations in Environment and Development. London and New York: Zed Books, 1999, Environmental Values 10(2001):521. (EV)

Paterson, Ogle, "Pesticides, Valuations and Politics", Journal of Agricultural and Environmental Ethics 5(1992):103-106. In this paper I will discuss some aspects of the Swedish policy to reduce pesticide use by 50%, a decision that has attracted great interest and may sometimes have been over-advertised. What are the cultural and political backgrounds? Why did the demand for this decision first occur in Sweden? Does the Swedish policy imply a new approach with completely different conditions for pesticide use or should it preferably be described as an adaptation to what modern pesticide and agricultural technology can achieve? Paterson is an extension specialist at the Swedish University of Agricultural Sciences, Uppsala.

Pattanaik, Prasanta K., and Cullenberg, Stephen, Globalization, Culture, and the Limits of the Market. New York: Oxford University Press, 2004. The limitations of markets as an instrument of decision-making in society, globalization and culture, and the fundamental principles for public policy, and the paradox of scarcity despite affluence in modern societies.

Patten, MA; Erickson, RA; Dunn, EH; Hussell, DJT; Welsh, DA, "Conservation Value and Rankings of Exotic Species," Conservation Biology 15(no. 4, 2001):817-818. (v.13,#1)

Patterson, Alan, "Debt for Nature Swaps and the Alternatives," Environment 32(no. 10, December 1990):4-13. Reasoned assessment of their potential and limits. Patterson is an environmental planner and policy analyst and writing a dissertation on debt-funded environmental activities at Tufts University, Medford, Massachusetts. (v2,#2)

Patterson, Charles, Eternal Treblinka: Our Treatment of Animals and the Holocaust. With a title from one of the stories of the Yiddish writer and Nobel Laureate Isaac Bashevis Singer (1904-91): "In relation to them, all people are Nazis; for the animals it is an eternal Treblinka." Human beings, throughout history, have perpetrated terrible wrongs on non-human animals. (v.12,#4)

Patterson, John, Exploring Maori Values (Palmerston North, New Zealand: The Dunmore Press, 1992). Paper, 191 pages. In the Maori environmental philosophy, humans (or at least the Maori) are related to all items in the world--to the trees, birds, and fish, also to the mountains, rivers, and the land herself--to Papatuanuki, mother of all. These kinship links entail that we must respect and enhance the world in which we live. Patterson spells out some traditional and contemporary statements of this environmental philosophy and works out some radical implications for contemporary western societies. Patterson is senior lecturer in philosophy at Massey University, Palmerston North, New Zealand. He invites correspondence from others doing related work in other parts of the world. (v3,#1)

Patterson, John, "Maori Environmental Virtues." Environmental Ethics 16(1994):397-409. The standard sources for Maori ethics are the traditional narratives. These depict all things in the environment as sharing a common ancestry, and as thereby required, ideally, to exhibit certain virtues of respect and responsibility for each other. These environmental virtues are expressed in terms of distinctively Maori concepts: respect for mauri and tapu, kaitiakitanga, whanaungatanga, manaakitanga, and environmental balance. I briefly explore these Maori environmental virtues, and draw from them some messages for the

world at large. Patterson is with the Dept. of Philosophy, Massey University, New Zealand. (EE)

Patterson, John. "Environmental Mana." Environmental Ethics 21(1999):267-276. In Maori tradition, all creatures are naturally sacred or tapu, and cannot be used without ritual removal of the tapu, a symbolic acknowledgment of the mana of the gods concerned. Although there is a religious dimension to tapu, it is also the natural state of all creatures, reflecting the idea that they have intrinsic worth. The theist aspect of tapu can be bypassed: tapu is the mana of the atua or gods, who can be seen as personifications of or indeed identical with areas of the natural world. In this way, the mana of the gods is seen as the mana of nature itself, and respect for the tapu of a creature turns out quite like the familiar idea of respect for its intrinsic value or its ecological value. We might conclude that the environmental mana of the human species is currently negative, and this conclusion in turn might persuade us to change our ways. (EE)

Patterson, M. Global Warming and Global Politics. Reviewed by Clive Spash. Environmental Values 8(1999):407. (EV)

Patterson, Michael E., Watson, Alan E., Williams, Daniel R., and Roggenbuck, Joseph R., "An Hermeneutic Approach to Studying the Nature of Wilderness Experiences," Journal of Leisure Research 30(no. 4,1998):423-452. Most studies attempt to understand and measure wilderness experience as some preference satisfied with more or less quality. But these authors study the quality of wilderness experience as acquiring stories that enrich one's life. The nature of human experience is best characterized by situated freedom in which the environment sets boundaries that constrain the nature of the experience but that within those boundaries recreationists are free to experience the world in unique and variable ways. Patterson is in the School of Forestry, University of Montana. Watson is at the Aldo Leopold Wilderness Research Institute, Missoula, MT. Williams is at the U.S. Forest Service, Rocky Mountain Research Station, Fort Collins, CO. Roggenbuck is in forestry, Virginia Polytechnic Institute and State University, Blacksburg, VA.

Patton-Mallory, Marcia, Franzreb, Kathleen, and Cline, Richard, "Ethical Conduct for Research: A Code of Scientific Ethics," Journal of Forestry 98 (No. 7, 2000 July 01): 32- Because it employs researchers from many disciplines, the Forest Service seeks to establish consistency in scientific (as opposed to professional) ethics through a formal code. (v.11,#4)

Pattullo, Poly. *The Ethical Travel Guide: Your Passport to Exciting Travel Holidays*. London: Earthscan, 2006.

Paul, E, "The Riches of Biological Research-An Elusive Number?," Bioscience 52(no.12, 2002): .

Paul, Ellen, "Science Could Play Starring Role in New Forest Management Plans," Bioscience 50 (No. 2, Feb 01 2000): 108- . (v.11,#2)

Paul, Ellen Frankel. Property Rights and Eminent Domain. Reviewed in Environmental Ethics 11(1989):179-89.

Paul, Ellen Frankel. "The Just Takings Issue." Environmental Ethics 3(1981):309-28. Courts and legal commentators have been notoriously unsuccessful in articulating a rule to differentiate between uncompensated police power regulations of land by government and situations in which the government can only interfere with property rights if it provides compensation to those owners who suffer losses. Noticeably absent from most discussions of this "takings" issue is any foundational underpinning in a theory of justice with respect to property holdings. Can two of the most influential contemporary theories of justice--that of John Rawls and Robert Nozick--provide such needed support for the analysis of the "takings" issue? By employing the vehicle of three hypothetical examples I investigate this question and

reach some conclusions concerning the applicability of such abstract theories of justice to the real world. Paul is at the Institute for Social Philosophy and Policy, Bowling Green State University, Bowling Green, OH. (EE)

Paula, Lino, and Frans Birrer, "Including Public Perspectives in Industrial Biotechnology and the Biobased Economy," Journal of Agricultural and Environmental Ethics 19(2006):253-267. Industrial ("white") biotechnology promises to contribute to a more sustainable future. Compared to current production processes, cases have been identified where industrial biotechnology can decrease the amount of energy and raw materials used to make products and also reduce the amount of emissions and waste produced during production. However, switching from products based on chemical production processes and fossil fuels towards "biobased" products is at present not necessarily economically viable. This is especially true for bulk products, for example ethanol production from biomass. Therefore, scientists are also turning to genetic modification as a means to develop organisms that can produce at lower costs. These include not only micro-organisms, but also organisms used in agriculture for food and feed. The use of genetic modification for "deliberate release" purposes, in particular, has met great opposition in Europe. Many industrial biotechnology applications may, due to their scale, entail deliberate releases of GM organisms. Thus, the biobased economy brings back a familiar question; is it ethically justifiable, and acceptable to citizens, to expose the environment and society to the risks associated with GM, in order to protect that same environment and to sustain our affluent way of life? For a successful innovation towards a biobased economy, its proponents, especially producers, need to take into account (take responsibility for) such issues when developing new products and processes. These issues, and how scientists can interact with citizens about them in a timely way, are further explored in projects at Delft University and Leiden University, also in collaboration with Utrecht University. Keywords: industrial biotechnology - white biotechnology - genetic modification - dialogue - innovation. We include the field of genomics in our use of the term biotechnology. The authors are in the Institute of Biology, Biology and Society, Leiden University, Leiden, The Netherlands.

Pauley, John A., "The Value of Hunting," Journal of Value Inquiry 27(2003):233-244. The contemporary debate over hunting has focused primarily on the moral status of killing animals for sport. Is it really true, as many opponents of the hunt claim, that the end of hunting is simply the death of the prey? What does hunting require of a hunter and how does a hunter relate to prey and the environment of prey? Without complete answers to those questions, we run the considerable risk of making uninformed normative judgments about the practice of hunting. Pauley is in philosophy, Simpson College, Indianola, IA.

--Philippon, Daniel, Conserving Words: How American Nature Writers Shaped the Environmental Movement. Athens, GA: University of Georgia Press, 2004. How did American nature writers shape the environmental movement? To answer this difficult question, Philippon looks at five authors of seminal works of nature writing who also founded or revitalized important environmental organizations: Theodore Roosevelt and the Boone and Crockett Club, Mabel Osgood Wright and the National Audubon Society, John Muir and the Sierra Club, Aldo Leopold and the Wilderness Society, and Edward Abbey and Earth First! These writers used powerfully evocative and galvanizing metaphors for nature, metaphors that Philippon calls "conserving" words. Integrating literature, history, biography, and philosophy, this study explores how "conserving" words enabled narratives to convey environmental values as they explained how human beings should interact with the nonhuman world.

--Poirier, MR, "The NAFTA Chapter 11 Expropriation Debate Through the Eyes of a Property Theorist", Environmental Law 33 (no.4, 2003): 851-928.

Paurizio, Maurizio G., Pimentel, David. "Genetic Engineering in Agriculture and the Environment", Bioscience 46(no.9, 1996):665. Assessing risks and benefits.

Pausas, J. G., and Austin, M. P. "Potential Impact of Harvesting for the Long-Term Conservation of

Arboreal Marsupials," Landscape Ecology 13(no. 2, Apr. 1998):103- . (v9,#2)

Pavlik, BM, "Plants that protect ecosystems: a survey from California", Biodiversity and Conservation 12(no.4, 2003):717-729.

Pawlowskiego, Lucjana and Stanislaw Zieby, eds., Humanizm Ecologiczny (Ecological Humanism), vol. 1. Lublin, Poland: Politechnika Lubelska, 1992. A new book on environmental ethics published in Poland, the proceedings of a conference at the Catholic University of Lublin. Some themes: Culture and self-discipline as actualizing humanity: humans, nature, and value; historical and philosophical factors in the ecological crisis; ecological problems in the social teachings of the Catholic Church; ecology and technology, antagonism and compromise; philosophical and cultural premises of ecological ethics; the scientific basis needed for pro-environmental activity and policy. (v4,#4)

Payette, S; Fortin, MJ; Gamache, I, "The Subarctic Forest-Tundra: The Structure of a Biome in a Changing Climate," Bioscience 51(no, 9, 2001):709-719. (v.13,#1)

Payton, M; Fulton, D; Anderson, D; "Influence of Place Attachment and Trust on Civic Action: A Study at Sherburne National Wildlife Refuge," Society and Natural Resources 18 (no. 6, July 2005): 511-528.

Peace Review: A Journal of Social Justice Vol. 19, no. 3 (2007). The topic of this special issue is "Environmentalism." Contents include: (1) "Introduction" by Peter Jacques and Kerry Donoghue (pp. 293-95), (2) "Globalization from the Subsistence Perspective" by Sharon Ridgeway (pp. 297-304), (3) "The Industria Hypothesis" by William Hipwell (pp. 305-13), (4) "Socio-Ecological Instability in China" by John Gulick (pp. 315-22), (5) "Resource Conflict in the Twenty-First Century" by Travis K. Sharp (pp. 323-30), (6) "The Ecological Costs of Militarization" by Kenneth A. Gould (pp. 331-34), (7) "'Shock and Awe' and the Environment" by Peter Carr (pp. 335-42), (8) "Protecting Indigenous Spiritual Values" by Kira Russo Bauer (pp. 343-49), (9) "Ecotourism and Indigenous Rights in Australia" by Robert A. Poirier (pp. 350-58), (10) "Ecological Degradation in Southern Ethiopia" by Daien Ogbaharya (pp. 359-63), (11) "Appalachian Stereotypes and Mountain Top Removal" by Jill. M. Fraley (pp. 365-70), (12) "Environmental Justice and Peacebuilding in the Middle East" by Ilan Alleson and Stuart Schoenfeld (pp. 371-79), (13) "Green Nonviolent Resistance in Australia" by Wendy Varney (pp. 381-87), (14) "Hedonism and Peace" by Mark Manolopoulos (pp. 389-95), (15) "Incorporating Africa's Conflicts into the War on Terror" by Greg Collins (pp. 397-406), (16) "Toward the American Garrison State" by Milton J. Esman (pp. 407-16), (17) "FENSUAGRO's Struggle for Social Justice" by James J. Brittain (pp. 417-26), (18) "Building a Culture of Peace in Ladakh" by Stanzin Dawa (pp. 427-34), (19) "Evidence of an American Dirty War in Iraq" by Nicolas J.S. Davies (pp. 435-43), (20) "Civil Society and Peace in Northern Ireland" by Timothy J. White (pp. 445-51), (21) "The Lessons of War" by Camillo C. Bica (pp. 453-57), and (22) "Peace Profile: Bud Day" by Carol Thompson (pp. 459-63).

Peace Review: A Journal of Social Justice Vol. 19, no. 3 (2007). The topic of this special issue is "Environmentalism." Contents include: (1) "Introduction" by Peter Jacques and Kerry Donoghue (pp. 293-95), (2) "Globalization from the Subsistence Perspective" by Sharon Ridgeway (pp. 297-304), (3) "The Industria Hypothesis" by William Hipwell (pp. 305-13), (4) "Socio-Ecological Instability in China" by John Gulick (pp. 315-22), (5) "Resource Conflict in the Twenty-First Century" by Travis K. Sharp (pp. 323-30), (6) "The Ecological Costs of Militarization" by Kenneth A. Gould (pp. 331-34), (7) "'Shock and Awe' and the Environment" by Peter Carr (pp. 335-42), (8) "Protecting Indigenous Spiritual Values" by Kira Russo Bauer (pp. 343-49), (9) "Ecotourism and Indigenous Rights in Australia" by Robert A. Poirier (pp. 350-58), (10) "Ecological Degradation in Southern Ethiopia" by Daien Ogbaharya (pp. 359-63), (11) "Appalachian Stereotypes and Mountain Top Removal" by Jill. M. Fraley (pp. 365-70), (12) "Environmental Justice and Peacebuilding in the Middle East" by Ilan Alleson and Stuart Schoenfeld (pp. 371-79), (13) "Green Nonviolent Resistance in Australia" by Wendy Varney (pp. 381-87), (14)

“Hedonism and Peace” by Mark Manolopoulos (pp. 389-95), (15) “Incorporating Africa’s Conflicts into the War on Terror” by Greg Collins (pp. 397-406), (16) “Toward the American Garrison State” by Milton J. Esman (pp. 407-16), (17) “FENSUAGRO’s Struggle for Social Justice” by James J. Brittain (pp. 417-26), (18) “Building a Culture of Peace in Ladakh” by Stanzin Dawa (pp. 427-34), (19) “Evidence of an American Dirty War in Iraq” by Nicolas J.S. Davies (pp. 435-43), (20) “Civil Society and Peace in Northern Ireland” by Timothy J. White (pp. 445-51), (21) “The Lessons of War” by Camillo C. Bica (pp. 453-57), and (22) “Peace Profile: Bud Day” by Carol Thompson (pp. 459-63).

Peacock, Kent, ed., Living with the Earth: An Introduction to Environmental Philosophy. Toronto: Harcourt Brace and Co., Canada, 1996. 461 pages. Features Canadian authors, and, often, authors who are not professional philosophers. An anthology that can be read by individuals on their own, as well as used in an introductory class in environmental ethics. Section and chapter titles: Is there really an environmental crisis? Crisis in the skies: The ozone hole and global warming. Extinction is so final: The crisis in biodiversity. The human crisis: war, disease, poverty, and overpopulation. Soils and forests. Seeking a perspective (humans in relation to nature). What is the environment? Some views of the ecosystem. Symbiosis, parasitism, and commensalism. The Gaia hypothesis. Environmental ethics at last. Where ecology meets philosophy. Is anything sacred. Deep and shallow ecology. Hunting, trapping, and animal rights. Ecofeminism. Should we let the market decide? What is wealth? Sustainable development: Hypocrisy or best hope? Toward symbiosis. Can species be saved. The artifactual ecology.

"In this book, I have tended to give prominence to the impact of environmental degradation upon humans, and I have more than once suggested, or presented other authors who suggest, that human stewardship of the environment is a meaningful and desirable end. In the eyes of many, such views will be called 'arrogant' and 'anthropocentric.' And in some circles these days, to be found out as anthropocentric is a very grave thing indeed. And yet ... I resist being classified as either anthropocentric or biocentric exclusively. It seems to me that this categorization is beside the point if not harmful. I seek a view that recognizes both the special abilities and the special responsibilities of humans, and at the same time recognizes the dependency of humans upon nonhuman life and the relative insignificance of humans in the grand biotic scheme. To pretend that nonhuman life does not have intrinsic value, however philosophers may struggle to define such values, is indeed fatuous arrogance; to deny that humans do not have special capacities and a special place (for a whole at least) in nature on this planet is a simple abdication of responsibility. We have had enough of both, the arrogance and the abdication; now let's get on with the task of figuring out how to live with the Earth, instead of just on it" (p. 435). Peacock teaches environmental philosophy at the University of Western Ontario. Reviewed by David G. A. Castle, Journal of Agricultural and Environmental Ethics 10(1997):87-89. (v9,#1)

Peacock, Kent A., Living with the Earth: An Introduction to Environmental Philosophy. Reviewed by David G.A. Castle. Journal of Agricultural and Environmental Ethics 10(1997):87-89. (JAEE)

Pearce, D. and Barbier, E. B. Blueprint for a Sustainable Economy. London: Earthscan, 2000. Review by Colin Green, Environmental Values 10(2001):563. (EV)

Pearce, D. W., et al, "The Social Costs of Climate Change: Greenhouse Damage and the Benefits of Control." Pages 179-224 in Intergovernmental Panel on Climate Change, Climate Change 1995: Volume III. Economic and Social Dimensions of Climate Change. Cambridge: Cambridge University Press, 1996.

Pearce, David, "Green Economics." Environmental Values Vol.1 No.1(1992):3-14. ABSTRACT: Economists assume that people are fundamentally greedy, though not exclusively so. If environmental improvement is to be achieved, it will require policies that use selfishness rather than opposing it. Such policies are to be found in the basics of green economics in which market signals are modified by

environmental taxes and tradeable pollution certificates to 'decouple' the economic growth process from its environmental impact. Green economic policies avoid the infringements of human liberties implied in ever stronger 'command and control' measures. KEYWORDS: Sustainability, market based instruments, command and control. Centre for Social and Economic Research on the Global Environment, University College London, Gower Street, London WC1E 6BT, UK.

Pearce, David, Neil Adger, David Maddison and Dominic Moran. "Debt and the Environment." Scientific American 272 (no. 6, June 1995):52-56. Loans to Third World Countries cause great human hardship, but their connection to ecological troubles is difficult to prove. Most debtor nations continue to rely on outside funds, even though additional loans only make their predicament sharper. Structural adjustment programs are hard on people, especially the poor, but whether the environment has also been harmed directly in result is less clear. There is scant empirical evidence to suggest that the connection between debt and environment is significant. According to a common theory production of goods for export, to earn foreign exchange with which to pay debts, diverts resources away from the domestic sector producing goods for consumption at home, and this may be so, but the evidence that the environment is harmed in result is anecdotal and speculative. Most environmental degradation in the developing world probably has other causes than the servicing of debt. Pearce, the senior author, is in economics, University College, London. (v6,#3)

Pearce, David, "The Political Economy of the Global Environment," Scottish Journal of Political Philosophy 44(no.4, 1997):462-483. Many of the global agreements today are couched in terms of a common good. "If the economists of the Scottish empirical tradition were resurrected today and asked to advise on global environmental problems, we can hazard the judgement that they would not approve of the presumptions underlying the environmental agreements in force or being negotiated. They would have advised in favour of less government and less reliance on motives that run counter to Hume's 'self-love'. They would surely have identified a large area where mutual self-interest would enable the various stakeholders each to be better off with an agreement than they were without it. The framework for such global bargains does, indeed, involve governments, but in a fairly minimal role as facilitators, something Smith would surely have approved of. The Scottish tradition of political economy remains of great relevance. ... Environmental problems require practical and politically realistic solutions, the search for which also defines the Scottish tradition. If the global commons are to be saved, it is more likely that success will come from the pragmatists than from the moralists, and more likely still that it will come from a combination of the two, as in Scottish political economy" (p. 282). Pearce is in economics, University College, London, and University of East Anglia.

Pearce, David, and Moran, Dominic, The Economic Value of Biodiversity. Reviewed by John MacArthur. Environmental Values 5(1996):89-90. (EV)

Pearce, David. "Dead in the Water." New Scientist, 4 February 1995. Attempts to save the grossly polluted Mediterranean Sea seem as doomed as the sea itself. The Mediterranean Action Plan, a convention organized by UNEP and agreed to 20 years ago by every nation bordering the sea (except Albania), has failed. More than 130 million people live along the coastline, with an additional 100 million tourists, and 80% of their sewage goes untreated into the sea. Add to that enormous amounts of industrial wastes and marine ecosystems are everywhere collapsing. (v6,#1)

Pearce, Edward, Green Warriors: The People and the Politics Behind the Environmental Revolution. London: Bodley Head, 1991.

Pearce, Fred, Explaining Climate Change. Gland, Switzerland: World Wildlife Fund, 1996. The United Nations' Intergovernmental Panel on Climate Change's Second Assessment Report (SAR), released in 1996, represents a milestone in the study of the greenhouse effect. For the first time scientific consensus

has been reached that there is a discernible human influence on the climate. The main conclusions of this report. (v7,#4)

Pearce, Fred. *When the Rivers Run Dry: Water the Defining Crisis of the Twenty-First Century*. Boston: Beacon Press, 2006. Many rivers around the globe are overtapped and barely make it to the sea, especially where there are long dry seasons. Irrigation accounts for 70% of water consumption globally, including 90% of water consumption in many Asian countries. There is already much abandoned land as a result of failed irrigation from lack of water, often where water no longer flows downstream. Water, as much as oil, may drive politics and crises in the Middle East. The bottom line is efficiency or else.

Pearce, J. M., 1997. *Animal Learning and Cognition: An Introduction*, second edition. East Sussex, UK: Psychology Press. (v9,#2)

Pearce, Neil E., and Douglas Crawford-Brown. "Sufficient Proof in the Scientific Justification of Environmental Actions." *Environmental Ethics* 11(1989):153-67. Environmental actions require a willingness to act, which, in turn, is stimulated partially by the belief that an action will yield the desired consequences. In determining whether an actor was justified in exerting the will to act, therefore, it is essential to examine the nature of evidence offered by the actor in support of any beliefs about the environment. In this paper we explore the points in environmental risk analyses at which evidence is brought to bear in support of inferences concerning environmental effects of regulatory actions. The intent is to provide a framework for discussing the manner in which evidence may provide a sufficient basis for ethically sound decisions for environmental actions. Pearce is at the Wellington Clinical School of Medicine, Wellington, New Zealand. Crawford-Brown is at the School of Public Health, University of North Carolina, Chapel Hill, NC. (EE)

Pearl, Mary C. and Newman, Scott, "Taking Responsibility for a New Disease," *San Francisco Chronicle*, May 7, 2003, p. A23. New human diseases often come from pathogens in animals, of which SARS may well be an example, seeming to have come from wild animals sold in Chinese markets. But these diseases have often been triggered in epidemic proportions because of human-caused disruptions on landscapes which stress the animals, and they spread because of human crowding on these landscapes and in cities. "By altering the normal balance between viruses, bacteria, and wildlife, we force infectious agents to evolve and adapt to new environmental conditions." Mary Pearl is a primatologist and president of World Life Trust. (v 14, #3)

Pearman, PB, "Conservation Value of Independently Evolving Units: Sacred Cow or Testable Hypothesis?," *Conservation Biology* 15(no.3, 2001):780-783. (v.12,#4)

Pearson, Clive, "Theological Postcards from the Ecological Edge," *Ecotheology* No 5/6 (Jul 98 / Jan 99):142-161.

Pearson, Clive, "Constructing a Local Ecotheology," *Ecotheology* No 3 (July 1997):23-38.

Pearson, Clive, "Report on the Christchurch Conference, July 2000," *Ecotheology* Vol 6 (Jul 01/Jan 02):205-208.

Pearson, Clive, "On Being Public about Ecotheology," *Ecotheology* Vol 6 (Jul 01/Jan 02):42-59. clivep@nsw.uca.org.au Theology has made some progress in 'adjusting to the newcomer' ecotheology. In so doing theology is taking seriously its 'ecology of responsibility' and engaging the public audience. An ecotheology, though, has a great deal of work to do in order to speak credibly into the public forum and marketplace of ideas.

Pearson, Gina, Conner, Charles W., "The Quitobaquito Desert Pupfish, An Endangered Species within

Organ Pipe Cactus National Monument: Historical Significance and Management Challenges," Natural Resources Journal 40(no. 2, Spring 2000):379- .

Pearson, Henry A., Susanna B. Hecht, and Theodore E. Downing, eds., Development or Destruction: The Conversion of Forest to Pasture in Latin America. An interdisciplinary Man and the Biosphere study. 416 pages, \$ 25.00. Boulder, CO: Westview Press, 1990. (v1,#2)

Pease, Craig M. and Matson, David J., "Demography of the Yellowstone Grizzly Bears," Ecology 80(3, 1999):957-975. Using a new model of population dynamics based on Yellowstone field studies, the authors claim that Yellowstone grizzly bears have increased only about 1% per year 1975-1995, a much lower estimate than the 5% annual rise over the last decade claimed by the Park Service. Scientists disagree over whether Yellowstone grizzlies remain imperiled. Another story: Kaiser, Jocelyn, "Study Sounds Alarm on Yellowstone Grizzlies," Science 284(1999):568. (v.12,#2)

Peccei, Aurelio and Daisaku Ikeda. Before It is Too Late. Reviewed in Environmental Ethics 9(1987):269-71.

Peck, F., "Beynon, H., Cox, A. and Hudson, R. Digging up Trouble. The Environment Protest and Opencast Coal Mining," Progress in Human Geography 26(no.4, 2002): 570. (v.13,#4)

Peck, Robert McCracken, "Home Again!" International Wildlife 29 (no. 5, September/October, 1999):36-41. Przewalski's horse is wild again. Przewalski's horse was common in Siberia at the end of the last Ice Age, but its numbers steadily declined, then declined even more rapidly with increased human population pressures in the 18th and 19th centuries, although the species was not known by Western scientists to be yet alive, until it was discovered by a Polish explorer Colonel Przewalski in 1878. It was extinct in the wild by the 1960's. From a handful in zoos, it has now been re-established in Mongolia, apparently a successful reintroduction. This is the world's oldest and only truly wild horse (other "wild" horses are feral), and it has never been domesticated. (v10,#4)

Peck, Sheila. Planning for Biodiversity: Issues and Examples. Washington, D.C.: Island Press, 1998. \$25. 256 pp. (v9,#2)

Peck, Steven. "Gathering Steam," Alternatives 23(no.2, 1997):6. Eco-industrial parks exchange waste for efficiency and profit. (v8,#2)

Pedersen, Kusumita P.. "Environmental Ethics in Interreligious Dialogue," in Sumner Twiss and Bruce Grelle, eds., Explorations in Global Ethics: Comparative Religious Ethics and Interreligious Dialogue. Boulder, CO: Westview Press, 2000.

Pedersen, Poul Ove. Small African Towns: Between Rural Networks and Urban Hierarchies. Brookfield, VT: Ashgate, 1997. 200pp. \$63,95 cloth. Investigates the development of small rural towns in Africa and their importance for rural economic development. Pedersen is at the Centre for Development Research, Denmark. (v8,#1)

Pedroli, B; deBlust, G; vanLooy, K; vanRooij, S, "Setting targets in strategies for river restoration," Landscape Ecology 17(no.1SUPP, 2002):5-18. (v.13, #3)

Pedroli, Bas; Pinto-Correia, Teresa, "Landscape Whats in it? European Landscape Research at a Turning Point," Landscape Ecology 21 (no.3, April 2006): 313-313 (1).

Pedroli, Bas; Pinto-Correia, Teresa; Cornish, Peter, "Landscape Whats in it? Trends in European

Landscape Science and Priority Themes for Concerted Research," Landscape Ecology 21 (no.3, April 2006): 421-430 (10).

Pedrós-Alió, Carlos. "Dipping into the Rare Biosphere." *Science* Vol. 315, no. 5809 (12 January 2007): 192-93. Recent advances in microbial DNA sequencing are revealing huge dimensions of microbial diversity hidden in nature. This is especially true in marine microbial biodiversity. In the sea, there may be millions to hundreds of millions of species. Such species, surprisingly, may be rare. They reproduce by cloning, not sexually (since sexed rare species have difficulty finding a mate), and individuals can be long-lived. Pedrós-Alió is in marine biology at the Institut de Ciències del Mar, Barcelona, Spain.

Pedynowski, D, "Toward a More "Reflexive Environmentalism": Ecological Knowledge and Advocacy in the Crown of the Continent Ecosystem," Society and Natural Resources 16(no.9, 2003):807-826. (v.14, #4)

Pedynowski, D, "Prospects for Ecosystem Management in the Crown of the Continent Ecosystem, Canada-United States: Survey and Recommendations," Conservation Biology 17(no.5, 2003):1261-1269. (v.14, #4)

Peepre, Juri and Jickling, Bob, eds. Northern Protected Areas and Wilderness. Whitehorse, Yukon, Canada: Canadian Parks and Wilderness Society, and Yukon Conservation Society, 1994. 379pp. \$20 softcover. The book is a lightly edited compilation of the presentations made at an international conference, November 1993 in the Yukon Territory, by a host of native people, resource professionals, educators, and activists--nearly all of them from the grassroots of the Arctic and sub-Arctic regions of North America. The examination of the North by northerners provided the unique nature of the conference and gives value to this publication. (v7,#2)

Peepre, Juri. "The Yukon Wildlands Project", Wild Earth 6(no.3, 1996):66. (v7,#4)

Peerenboom, R. P. "Beyond Naturalism: A Reconstruction of Daoist Environmental Ethics." Environmental Ethics 13(1991):3-22. In this paper I challenge the traditional reading of Daoism as naturalism and the interpretation of wu wei as "acting naturally." I argue that such an interpretation is problematic and unhelpful to the would-be Daoist environmental ethicist. I then lay the groundwork for a philosophically viable environmental ethic by elucidating the pragmatic aspects of Daoist thought. While Daoism so interpreted is no panacea for all of our environmental ills, it does provide a methodology that may prove effective in alleviating some of our discomfort. Peerenboom is in the philosophy department, University of Hawaii at Manoa, Honolulu, HI. (Taoism) (China) (EE)

Peerman, Dean. "Unsportsmanlike Conduct." *Christian Century* Vol. 124, no. 5 (2007): 10-11. Peerman laments "canned hunts." There are some 1,000 canned hunt operations in the U.S., where, for thousands of dollars (\$20,000 for an oryx, ibex, impala, rhino, jaguar) a "so-called" hunter can kill an animal, fenced in a (so-called) preserve. Many of the more exotic animals are aging or ailing castoffs from prestigious zoos. If one includes release and shoot bird operations, there are 3,000 such canned hunts.

Peery, C. A., Kavanagh, K. L. and Scott, J. M., "Pacific Salmon: Setting Ecologically Defensible Recovery Goals," Bioscience 53(no. 7, 2003): 622-623.

Peet, R., "Review of: Blunt, A. and Wills, J., Dissident Geographies: An Introduction to Radical Ideas and Practice," Progress in Human Geography 25(no.4, 2001): 668. (v.13,#2)

Peet, Richard, and Watts, Michael, eds. Liberation Ecologies: Environment, Development, Social Movements. London; Routledge, 1996. 273 pp. Contents include the following:

--Peet, Richard and Michael Watts, "Liberation Ecology." *Development, sustainability, and environment in an age of market triumphalism*. pp. 1-45.

--Escobar, Arturo, "Constructing Nature." *Elements for a post-structural political ecology*. pp.46-68.

--Yapa, Lakshman, "Improved Seeds and Constructed Scarcity." pp.69-85.

--Bebbington, Anthony, "Movements, Modernizations, and Markets." *Indigenous organizations and agrarian strategies in Ecuador*. pp.89-109.

--Zimmerer, Karl S., "Discourses on Soil Loss in Bolivia." *Sustainability and the search for socioenvironmental "middle ground"*. pp.110-124.

--Moore, Donald S., "Marxism, Culture, and Political Ecology." *Environmental struggles in Zimbabwe's Eastern Highlands*. pp.125-147.

--Jarosz, Lucy. "Defining Deforestation in Madagascar." pp.148-164.

--Carney, Judith A., "Converting the Wetlands, Engendering the Environment." *The intersection of gender with agrarian change in Gambia*. pp.165-187.

--Schroeder, Richard and Suryanata, Krisnawati, "Gender and Class Power in Agroforestry Systems." *Case studies from Indonesia and West Africa*. pp.188-204.

--Rangan, HariPriya, "From Chipko to Uttaranchal." *Development, environment, and social protest in the Garhwal Himalayas, India*. pp.205-226.

--Muldavin, Joshua S.S., "The Political Ecology of Agrarian Reform in China." *The case of Heilongjiang Province*. pp.227-259.

--Watts, Michael and Peet, Richard, "Conclusion." *Towards a theory of liberation ecology*. pp. 260-269. Peet is professor of geography, Clark University, Massachusetts. Watts is professor of geography and Director of the Institute of International Studies, University of California, Berkeley. (v.10,#2)

Peet, Richard, and Watts, Michael, eds. Liberation Ecologies: Environment, Development, Social Movements. London: Routledge, 1996. Focuses on the interrelations of development, social movements, and the environment in "the South," Latin America, Africa, Asia, and in an age of market triumphalism, where there is no "truth," only better and worse, more and less liberating "discourses." Peet is in geography, Clark University, Worcester, Massachusetts. Watts is in international studies, University of California, Berkeley. (v.13,#1)

Pelkki, MH; Kirillova, NV; Sedykh, VN, "The Forests of Western Siberia: New Century, New Role," Journal of Forestry 99(no. 7, 2001):21-27. (v.13,#1)

Pellicane, Patrick J., Gutkowski, Richard M., Czarnock, Jacek. "Poland: Threatened and Neglected Forests," Journal of Forestry 95(no.2, 1997):29. (v8,#1)

Pellizzoni, Luigi, "Uncertainty and Participatory Democracy," Environmental Values 12(2003): 195-224. The article deals with some implications of radical uncertainty for participatory democracy, and more precisely for Participatory Technology Assessment (PTA). Two main forms of PTA are discussed. One is aimed at involving lay citizens and highlighting public opinion. The other is addressed to stakeholder groups and organisations, not only in terms of interest mediation but also of inclusion of their insight into a problem. Radical uncertainty makes 'intractable' many environmental and technological issues and brings into question traditional and new approaches to policy-making. Its consequences are explored from the viewpoint of new science, deliberative democracy, and network governance. Radical uncertainty calls for a rethinking of the aims of public deliberation, and a reinterpretation of the divide between opinion- and position-oriented PTA. To look for a public opinion, understood as a shared principled view, can prove misleading, as can thinking of stakeholder participatory arrangements in the usual way. When facts and values overlap, and are deeply controversial, the only opportunity for mutual understanding may be to look for practical, 'local' answers, based on different positional insights. Moreover, radical uncertainty also affects interest determination and pursuit, and may enhance the opportunity of joint, inclusive, non-strategic issue definition and solution-devising. This vision of public deliberation is consistent with

the idea of network governance. However, fragmentation can affect the effectiveness and legitimacy of participatory policies. Trying to handle fragmentation from the top, as many suggest, is unlikely to be successful. A more promising endeavour is to foster deliberative settings which, although positioned at the level of 'local' and often contingent networks and commonalities, are open to include 'Otherness' - other contexts, other problem definitions, other concerns.

Pellow, David Naguib and Robert J. Brulle, Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement. Cambridge, MA: The MIT Press, 2005. Problems and potential in the environmental justice movement.

Pellow, David N. "Environmental Inequality Formation: Toward a Theory of Environmental Justice," American Behavioral Scientist 43(No.4, 2000). (v.11,#1)

Pellow, David Naguib. *Resisting Global Toxics: Transnational Movements for Environmental Justice*. Cambridge, MA: MIT Press, 2007. Pellow uses his own research, interviews, and participant observations to build on environmental justice studies, environmental sociology, social movement theory, and race theory. He investigates global environmental inequality and considers the work of activists, organizations, and networks resisting it. He discusses the transnational waste trade in depth from the 1980s to today by examining global garbage dumping, the toxic pesticides that are the legacy of the Green Revolution in agriculture, and the dumping and remanufacturing of high-tech and electronics (e-waste) products in an attempt to develop a pragmatic path towards environmental justice, human rights, and sustainability.

Pellow, David Naguib. *Resisting Global Toxics: Transnational Movements for Environmental Justice*. Cambridge, MA: MIT Press, 2007. Pellow uses his own research, interviews, and participant observations to build on environmental justice studies, environmental sociology, social movement theory, and race theory. He investigates global environmental inequality and considers the work of activists, organizations, and networks resisting it. He discusses the transnational waste trade in depth from the 1980s to today by examining global garbage dumping, the toxic pesticides that are the legacy of the Green Revolution in agriculture, and the dumping and remanufacturing of high-tech and electronics (e-waste) products in an attempt to develop a pragmatic path towards environmental justice, human rights, and sustainability.

Pellow, DN, "Review of: Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries by Jennifer Clapp," Journal of Environment and Development 12(no.3, 2003):349-351. (v.14, #4)

Peluso, Nancy Lee and Watts, Michael, eds., Violent Environments. Cornell University Press. Geographers, historians, anthropologists, and sociologists examine whether environmental problems generate violence. Africa ("forest wars," peasants and wildlife conservation in Tanzania), Indonesia, enclosures in the early American West, militarized landscapes, India, and much more. (v.12,#4)

Pena (Peña), Devon G. *Mexican Americans and the Environment: Tierra y vida*. Tucson: University of Arizona Press, 2005. After beginning with an introduction to scientific and political ecology, Peña presents an environmental history of Mexican-origin peoples in the US and Mexico and shows how Norteño land use practices were eroded by the conquest of El Norte by the US. Peña offers critiques of mainstream American environmentalism (natural resources conservation, wilderness preservation, and professional environmentalism) and radical American environmentalism (deep ecology, social ecology, ecofeminism, ecosocialism, and bioregionalism) to develop an ecological politics of Mexican-origin peoples.

Pence, Gregory E., Designer Food: Mutant Harvest or Breadbasket of the World? Lanham, MD: Roman

and Littlefield, 2001. Genetically modified food. Improved crops by genetic engineering can assure the world adequate sustainable food production without hurting the environment or wildlife habitats. Pence is in both the School of Medicine and the Department of Philosophy at the University of Alabama. (v.13,#1)

Pence, Gregory, E., ed., The Ethics of Food: A Reader for the Twenty-First Century. Blue Ridge Summit, PA: Rowman and Littlefield, 2002. The morally imperative questions surrounding food production, modification, and consumption, particularly their global impact on ecosystems. (v.13,#2)

Pence, Gregory E., ed., The Ethics of Food: A Reader for the 21st Century. Lanham, MD: Roman and Littlefield, 2002. The moral questions surrounding food production, modification, consumption, particularly their global impact upon ecosystems. The ongoing tension between food biotechnologies and biodiversity, and some reasonable resolutions. Pence is in both the School of Medicine and the Department of Philosophy at the University of Alabama. (v.13,#1)

Pendery, Bruce M. "Reforming Livestock Grazing on the Public Domain: Ecosystem Management-Based Standards and Guidelines Blaze a New Path for Range Management," Environmental Law 27(no.2, 1997):513. In 1995, the Bureau of Land Management (BLM) amended livestock grazing regulations on public lands based largely upon a final environmental impact statement entitled Rangeland Reform '94. These amendments broke from the previous method that had been traditionally used by the BLM for administering grazing permits by establishing new administrative standards and guidelines that embrace some of the ecosystem management-based standards published by the National Research Council. Pendery details the rulemaking effort used to develop the new regulations, including a review of the legal history behind public land grazing and summaries of the modern-day arguments between range scientists, ranchers, and environmentalists. (v8,#3)

Pendleton, Scott, "US Pressures Shrimpers to Save Endangered Turtles," The Christian Science Monitor 86 (2 August 1994): 3. (v5,#3)

Pendleton, Scott. "Balancing Politics and Plutonium." The Christian Science Monitor, 27 May 1994, p. 12. Some scientists predict that nuclear waste from the Integral Fast Reactor, when its technology is fully engineered, will be more manageable than waste from conventional Light Water Reactors. At issue is continued government funding to complete the new technology. (v5,#2)

Pendleton, Scott. "No Vampires, These Bats Are Friends." The Christian Science Monitor, 5 July 1994, pp. 10-11. (v5,#2)

Pendleton, Scott. "Looking for Oil." The Christian Science Monitor, 20 June 1994, pp. 9-11. New computer technology is finding overlooked oil and reviving drilling in Texas. (v5,#2)

Penney, James, "Land, Life and Death: The Bible and the Land in Brazil," Ecotheology No 1 (July 1996):53-60.

Penney, Jennifer, "Work in Progress," Alternatives 27(no. 1, Winter 2001):18- . Major unions in Canada are pushing for a win-win scenario: jobs and environment. (v.12,#2)

Pennington, Mark, Review of Richard Gilbert, et al, Making Cities Work. Environmental Values 7(1998):492.

Pennisi, Elizabeth, "New Threat Seen from Carbon Dioxide," Science 279(1998):989. Increasing atmospheric carbon dioxide is having an adverse effect on coral reefs. Even though these are highly

carbonate systems, they are more sensitive to minor shifts in the carbon in seawater, influenced by carbon in the air, than previously thought. (v9,#1)

Pennisi, Elizabeth, "Brazil Wants Cut of Its Biological Bounty," *Science* 279(1998):1445. The Brazilian Senate is trying to pass legislation to ensure that Brazil's citizens share in any profits from crops or medicines derived from the biological wealth of the Amazon. But the legislators are finding it difficult to be precise about who should benefit, who has rights to the biodiversity, differentiating between scientific collecting and bioprospecting, and wondering whether such legislation will stimulate or discourage bioprospecting. Linger in memory is still-smoldering anger from the early 1900's when rubber trees were transplanted to Southeast Asia, which the Brazilians widely regarded as being stolen. (v9,#1)

Pennisi, Elizabeth, "ShakeUp to Proceed, but Conservation Center Stays Open," *Science* 292(2001):1034-1035. Grossman, Lev, "Mr. Small at the Smithsonian: Cutbacks in Conservation," *Time*, May 8, 2001, p. 57. Lawrence Small, the new Secretary of the Smithsonian, tried hard to close the Conservation Research Center (budget 5.2 million annually) to save money, at the same time that he continued renting for the Zoo two pandas from the Chinese (rental \$ 10 million annually). He claimed the pandas are good publicity and help to raise money for Smithsonian. Small is a banker appointed to revise Smithsonian finances; previous secretaries have been scientists. His proposal provoked enormous protests from conservation biologists, and he has relented, for the time being. (v.12,#2)

Pennisi, Elizabeth, "New Insect Order Speaks to Life's Diversity," *Science* 296(19 April 2002):445-446. A new species of insect has been discovered that is placed in a new order, the first new insect order in almost a century. There are three known specimens from Tanzania and Namibia, and, marvelously, a specimen preserved for 45 million years in amber. The new order has been named Mantophasmatodea. The insects are carnivorous and stick-like. (v.13,#2)

Pennisi, Elizabeth, "A Shaggy Dog History," *Science* 298(22 November 2002):1540-1542. The dog is better than primates at communication with humans. The origin(s) of the domestication of dogs remains in dispute, probably in China, from a Chinese wolf. With several other articles in this issue on the genetics and behaviors of dogs, a remarkably flexible species. (v.13,#4)

Pennisi, Elizabeth, "Social Animals Prove their Smarts," *Science* 312(23 June 2006):1734-1738. A new generation of experiments reveals that group-living animals have a surprising degree of intelligence. There has been ongoing debate about whether primates have a theory of mind. New experiments suggest they know what other primates know and intend particularly when food is involved, at least picking up behavioral cues. Nevertheless they lack the ability to realize that another individual is thinking something wrong or that it has a false belief, which some regard as a critical test of a theory of mind. Others think symbolic language is required for the transmission of ideas from mind to mind. Meanwhile, scrub jays also notice who knows where the food is hidden, and few think this requires a theory of mind. See Emery, N. J., and N. S. Clayton, "Effects of Experience and Social Context on Prospective Caching by Scrub Jays," *Nature* 414(22 November 2001):443-446. So the debate about precursors of theory of mind in animals continues.

Pennisi, Elizabeth. "Sorcerers of the Sea." *Bioscience* 46, no.4 (1996): 236. Making microbes do our dirty work. (v7, #3)

Pennisi, Elizabeth. "DNA Study Forces Rethink of What It Means to Be a Gene." *Science* Vol. 316, no. 5831 (15 June 2007): 1556-57. Genes are more sprawling than once thought, with far-flung protein-coding and regulatory regions that overlap with other genes. Only about 2% of the human genome is protein-coding, but some 80% of the genes (once called "junk DNA") are expressed. The genome is super complex. One researcher (Thomas Gingeras) says this means that "the gene" is no longer a useful

concept. But Frances Collins, director of the Human Genome Project, says that the gene “is a concept that’s not going out of fashion” and that “we have to be more thoughtful about it.”

Pennisi, Elizabeth. “U.S. Weighs Protection for Polar Bears.” *Science* Vol. 315, no. 5808 (5 January 2007): 25. Polar bears are threatened by shrinking polar ice. Faced with a lawsuit by the Center for Biological Diversity, Greenpeace, and National Resources Defense Council, the U.S. Fish and Wildlife Service has announced that it will decide within the next year whether to list polar bears for protection under the U.S. Endangered Species Act.

Pennock, David S., Dimmick, Walter W. "Critique of the Evolutionarily Significant Unit as a Definition for 'Distinct Population Segments' under the U.S. Endangered Species Act, Conservation Biology 11(no.3, 1997):611. (v8,#2)

Pennock, Robert T. "Moral Darwinism: Ethical Evidence for the Descent of Man", Biology and Philosophy 10(1995):287-307. Darwin's causal story of how the moral sense could develop out of social instincts by evolutionary mechanisms of group selection. The form of utilitarianism Darwin proposes involves a radical reduction of the standard of value to the concept of biological fitness. This causal analysis, although a weakness from a normative standpoint, is a strength when judged for its intended purpose as part of an evidential argument to confirm the hypothesis of human descent. Pennock is in philosophy at the University of Texas.

Peña, Devon G. *Mexican Americans and the Environment: Tierra y vida*. Tucson: University of Arizona Press, 2005. After beginning with an introduction to scientific and political ecology, Peña presents an environmental history of Mexican-origin peoples in the US and Mexico and shows how Norteño land use practices were eroded by the conquest of El Norte by the US. Peña offers critiques of mainstream American environmentalism (natural resources conservation, wilderness preservation, and professional environmentalism) and radical American environmentalism (deep ecology, social ecology, ecofeminism, ecosocialism, and bioregionalism) to develop an ecological politics of Mexican-origin peoples.

People and the Planet is a quarterly devoted to people-centered issues of population, development and the environment. Worldwide Fund for Nature, forced to discontinue publication of The New Road (on religion and environment), now co-sponsors People and the Planet, along with IUCN, the World Conservation Union, the United Nations Population Fund, and the International Planned Parenthood Foundation. Contact: John Rowley, editor, 1 Woburn Walk, London WC1H 0JJ, UK. Fax 44 (country code) (0)71 (city code) 388 2398

Pepper, David, Eco-socialism: From Deep Ecology to Social Justice. London and New York: Routledge, 1993. Paper. 266 pages. Has concern for nature taken priority over our concern for people? Must capitalism inevitably degrade environments and produce social injustice? How can Marxist analysis improve the coherence of green politics? Pepper is in geography at Oxford Brookes University. (v4,#3)

Pepper, David, Modern Environmentalism: An Introduction. London: Routledge, 1996. 376 pages. Chapters: Defining Environmentalism. Some Fundamental Issues in Radical Environmentalism. Pre-modern and Modern Ideas about Nature and Science: The Roots of Technocentrism. Modern Roots of Ecocentrism. Postmodern Science and Ecocentrism: Subjectivity, Ideology and the Critique of Classical Science. Ways Ahead. "Above all, a historical and ideological perspective teaches us that there is no one, objective, monolithic truth about society-nature/environment relationships, as some might have us believe. There are different truths for different groups of people and with different ideologies. ... Each myth functions as a cultural filter, so that adherents are predisposed to learn different things about the environment and to construct different knowledges about it" (pp. 3-4). Pepper, having introduced modern environmentalism, recommends a postmodern environmentalism. Of course, postmodern

environmentalism, like modern environmentalism, is just one more myth about the way humans do and should relate to nature. Pepper is in geography at Oxford Brookes University, Oxford, UK. (v7,#1)

Pepper, David, "Ecological Modernisation or the 'Ideal Model' of Sustainable Development: Questions Prompted at Europe's Periphery," Environmental politics 8 (No. 4, 1999 Winter): 1- . (v.11,#4)

Pepper, David, "Tensions and Dilemmas of Ecotopianism," *Environmental Values* 16(2007): 289-312. This paper examines some of many tensions associated with the utopian propensity that underlies much thinking and action in radical environmentalism. They include the tensions inherent within ecotopianism's approach to social change, its desire to embrace ecological universals, its general propensity to face Janus-like in the direction of both modernity and post-modernity, and its tendency towards a polarised stance on scale, and local and global issues. These tensions create dilemmas that are not merely of academic interest: they have practical, tactical and strategic implications, affecting the environmental movement's 'transgressive' potential in the search for ecotopia. Pepper is in geography, Oxford Brookes University, Oxford, UK.

Pepper, David. Eco-socialism: From Deep Ecology to Social Justice: (London: Routledge, 1993). Reviewed by James Meadowcroft in Environmental Values 4(1995):85-86. (EV)

Pepper, David. *Eco-Socialism: From Deep Ecology to Social Justice*. Translator: Liu Ying. (Jinan: Shandong University Press, 2005). (in Chinese)

Pepperberg, Irene Maxine, The Alex Studies: Cognitive and Communicative Abilities of Grey Parrots. Cambridge, MA: Harvard University Press, 1999. Alex is an African grey parrot, bought in a pet shop. Taught some language, he can classify objects according to color and substance, count up to six, understand the concepts of identity and difference, absence, and relative size. He can recognize that objects continue to exist even when hidden. He has four verbs: "want" (with variations), "go," "come here," and "tickle me." He can say "want corn" or "want grape," and "wanna go chair." It is difficult to test whether Alex can do this only after and because he has been taught language by social interaction with trainers (25 years of training), although Pepperberg maintains that language training affects only the ease with which animals can learn and not whether learning occurs. She takes considerable care not to overinterpret data, and questions remain about how and how much learning takes place in the wild. Meanwhile, bird-brained Alex is quite a talented bird! (EE v.12,#1)

Percesepe, Gary, ed., Introduction to Ethics: Personal and Social Responsibility in a Diverse World. Englewood Cliffs, NJ: Prentice-Hall, 1995. Chapter 10 is "Ethics of Animals and the Nonhuman Environment," with reprints from Thoreau, Bratton, Feinberg, Regan, Commoner, Warren. (v9,#1)

Percival, Robert V., Alevizatos, Dorothy C., eds. Law and the Environment: A Multidisciplinary Reader. Philadelphia: Temple University Press, 1997. 464pp. \$69.95 cloth, \$29.95 paper. A comprehensive examination of society's multidisciplinary response to the difficult challenges posed by environmental problems. (v8,#1)

Percival, Robert V. and Dorothy Alevizatos. Law and the Environment: A Multidisciplinary Reader. Philadelphia, PA: Temple University Press 1997. Review by Simon Sneddon, *Environmental Values* 10(2001):127. (EV)

Percival, Robert V., and Alevizatos, Dorothy C., eds., Law and the Environment: A Multidisciplinary Reader. Reviewed by Simon Sneddon, Environmental Values 10(2001):127.

Taylor, Prue, An Ecological Approach to International Law: Responding to Challenges of Climate

Change. Reviewed by Simon Sneddon, Environmental Values 10(2001):127. (EV)

Percival, Val, Homer-Dixon, Thomas. "Environmental Scarcity and Violent Conflict: The Case of Rwanda," The Journal of Environment and Development 5(no.3, 1996):270. (v8,#2)

Perelman, Michael. "Myths of the Market: Economics and the Environment", Organization and Environment, 16, (No. 2, 2003): 168-226. Adam Smith's farmworker paradox reflects the fact that those who do the most essential work in society earn the least, just as his diamonds and water paradox revolves around the low valuation that markets place on essential resources. This article explores the perverse economic logic that leaves markets to run roughshod over both humanity and nature, and examines how economists have either attempted to get to grips with, or more commonly, tried to avoid or justify this phenomenon. Perelman is in economics at California State University, Chico.

Peres, CA; Zimmerman, B, "Perils in Parks or Parks in Peril? Reconciling Conservation in Amazonian Reserves with and without Use," Conservation Biology 15(no.3, 2001):793-797. (v.12,#4)

Peres, Carlos A. et al (some 20 others), "Demographic Threats to the Sustainability of Brazil Nut Exploitation," Science 302(19 December 2003):2112-2114. Overharvesting of Brazil nuts is preventing many natural stands from reproducing, which is leading to ever older populations of trees that could eventually cause the Brazil nut trade to crash. Brazil nut harvesting is a major part of the rainforest economy and has been thought to be a sustainable way to prevent more destructive activities such as ranching. Given the chance, Brazil nut trees can regenerate quite well in the forest, but not at the current rate of harvesting. Accompanying commentary, Stokstad, Erik, "Too Much Crunching on Rainforest Nuts?" Science 302(19 December 2003):2049.

Peretti, Jonah H., "Nativism and Nature: Rethinking Biological Invasion," Environmental Values 7 (1998): 183-192. The study of biological invasions raises troubling scientific, political and moral issues that merit discussion and debate on a broad scale. Nativist trends in Conservation Biology have made environmentalists biased against alien species. This bias is scientifically questionable, and may have roots in xenophobic and racist attitudes. Rethinking conservationists' conceptions of biological invasion is essential to the development of a progressive environmental science, politics, and philosophy. KEYWORDS: conservation, biological invasion, native, alien. Jonah H. Peretti is at University of California at Santa Cruz. (EV)

Perfecto, Ivette; Rice, Robert A.; and Van Der Voort, Martha E. "Shade Coffee: A Disappearing Refuge for Biodiversity." Bioscience 46, no.8 (1996): 598. Shade coffee plantations can contain as much biodiversity as forest habitats. (v7, #3)

Pergams, Oliver R. W., and Patricia A. Zaradic. "Evidence for a Fundamental and Pervasive Shift away from Nature-based Recreation." *Proceedings of the National Academy of Sciences (PNAS)*, PNAS Early Edition (2008). Available online at:

<www.pnas.org/cgi/doi/10.1073/pnas.0709893105>. After fifty years of steady increase in *per capita* visits to natural parks, such as US national parks, visits have declined since 1987, with a cumulative downturn of 18% to 25%. There are similar trends in Japan. The downturn is in camping, hunting, and fishing, although not in hiking and backpacking. Other studies show that interest in conserving nature and environmentally responsible behavior correlate highly with direct contact with the natural environment, so declining nature participation has crucial implications for current conservation efforts. The authors suggest that a major cause is "videophilia" (increased electronic media/internet use). Pergams is in biology at the University of Illinois; Zaradic is in the Environmental Leadership Program at Bryn Mawr College.

Pergams, Oliver R.W., and Patricia A. Zaradic. "Evidence for a Fundamental and Pervasive Shift away from Nature-Based Recreation." *Proceedings of the National Academies of Science* Vol. 105, no. 7 (2008): 2295-2300. There is a general downward trend in nature recreation. Per capita visits to US national parks increased for fifty years prior to 1987, and have declined since. The authors examine this and similar data. Such a downturn will, they predict, lower interest in respect for and valuing of nature, and lower interest in conservation. They do find that hiking and backpacking increased, but consider this a small percent of the overall total, including park visits, hunting, fishing, bird-watching and more. See "Nature-based Outdoor Recreation Trends and Wilderness" by H. Ken Cordell, Carter J. Betz, and Gary T. Green (*International Journal of Wilderness* Vol. 14, no. 2 (2008): 7-9, 13).

Perhac, Jr., Ralph M. "Environmental Justice: The Issue of Disproportionality." *Environmental Ethics* 21(1999):81-92. It is widely held that environmental risks which are distributed unequally along racial or socioeconomic lines are necessarily distributed unjustly. While disproportionality may result from the perpetration of procedural injustices: what might be termed environmental racism, the question I am concerned with is whether disproportionality, in and of itself, constitutes injustice. I examine this question from the perspective of three prominent theories of justice that largely capture the range of our intuitions about fairness and justice: utilitarianism, natural rights theory, and (Rawlsian) contractarianism. While each of these theories provides clear grounds for objecting to the imposition of risk on individuals without their consent, none provides grounds for thinking that eliminating disproportionalities along racial or socioeconomic lines, in and of itself, is called for as a matter of justice. As a result, I suggest that the concern of environmental justice should lie with identifying (and protecting) those at greatest risk, rather than identifying correlations between average risk levels and morally arbitrary characteristics possessed by individuals, such as race or socioeconomic status. (EE)

Perkins, Ellie. "Building Communities to Limit Trade: Following the Example of Women's Initiatives," *Alternatives* 22(no.1, Jan. 1996):10- . Building strong communities depends heavily on economic roles often filled by women and on approaches that women have been foremost in expounding and exemplifying. (v6,#4)

Perkins, John H. Review of Nature Wars: People vs. Pests. By Mark L. Winston. *Environmental Ethics* 21(1999):221-222.

Perkins, John H. Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War. New York: Oxford University Press, 1997. 400pp. \$60. Explores the political ecology of wheat breeding in developed countries such as the U.S., India, Britain, and Mexico. Through a detailed study of the history of the Green Revolution, this work stimulates questions about the sustainability of agriculture and the future of human population growth. (v8,#1)

Perkins, John H. Geopolitics and the Green Revolution: Wheat, Genes, and the Cold War. Reviewed by Christian Hunold. *Environmental Ethics* 22(2000):195-197.

Perkins, John, Confessions of an Economic Hit Man. San Francisco: Berrett-Koehler, 2004. The author worked for decades promoting the interests of corporations in developing countries, increasingly to recognize that he was really an "economic hit man," part of an imperialist capitalist corporate machine, ripping off those in the lesser developed countries.

Perkins, Matthew, "The Federal Indian Trust Doctrine and the Bald and Golden Eagle Protection Act: Could Application of the Doctrine Alter the Outcome in *U.S. v. Hugs*?" *Environmental law* 30(no. 3, 2000):701- . The Ninth Circuit's recent affirmation of the criminal convictions of Frank and William Hugs, members of the Crow Indian Tribe, for violating the Bald and Golden Eagle Protection Act even though the tribe members claimed their actions were protected by the First Amendment's free exercise of

religion. Outlines the history of Native American religious rights and suggests that the federal Indian Trust Doctrine is a viable basis upon which Native American religious freedom arguments may be asserted. (v.12,#2)

Perlin, John, A Forest Journey: The Role of Wood in the Development of Civilization. New York: W. W. Norton, 1989. 445 pages, \$ 26.95. Without forests, there would have been no civilization. Wood provided the principal fuel and building material for nearly every society from the Bronze Age to the 19th century. But civilization has always meant the death of forests, nearly always to the detriment of the civilization destroying its forests. (v1,#4)

Perlman, Dan L., Adelson, Glenn. Biodiversity: Exploring Values and Priorities in Conservation. Malden, MA: Blackwell Science, Inc., 1997. 208pp. \$36.95. The questions scientists and policy makers must address when assessing and making policy that influences the diversity of life forms. The aim is to cover the basic modular, statistical, and theoretical approaches to the subject while exploring the applications of these approaches through case studies. (v8,#1)

Perreault, Melanie. Review of African American Environmental Thought: Foundations. By Kimberly K. Smith. *Environmental Ethics* 30(2008):435-436. (EE)

Perrett, Roy W. "Indigenous Rights and Environmental Justice." Environmental Ethics 20(1998):377-91. The modern environmental movement has a tradition of respect for indigenous cultures and many environmentalists believe that there are important ecological lessons to be learned from studying the traditional life styles of indigenous peoples. More recently, however, some environmentalists have become more sceptical. This scepticism has been sharpened by current concerns with the cause of indigenous rights. Indigenous peoples have repeatedly insisted on their rights to pursue traditional practices or to develop their lands, even when the exercise of these rights has implications in conflict with environmentalist values. These conflicts highlight some important questions in environmental ethics, particularly about the degree to which global environmental justice should be constrained by the recognition of indigenous rights. I explore some of these issues and argue for the relevance of the "capability approach" to environmental justice. Perrett is in philosophy, Massey University, Palmerston North, New Zealand. (EE)

Perrings, C. Economics of Ecological Resources: Selected Essays. Cheltenham: Edward Elgar, 1997. Review by Clive Spash, Environmental Values 10(2001):125. (EV)

Perrings, Charles, Williamson, Mark, and Salmazzone, Silvana, eds., The Economics of Biological Invasions. Cheltenham, UK: Edward Elgar, 2000. Reviewed by Edwards-Jones, Gareth, Environmental Values 12(2003):138-140. (EV)

Perrings, Charles; Maler, Karl-Goran; Folke, Carl; Holling, C.S.; and Jansson, Bengt-Owe, eds. Biodiversity Loss: Economic and Ecological Issues. New York: Cambridge University Press, 1996. 348 pages. \$54.95 cloth. The findings of a research program that brought together economists and ecologists to consider the causes and consequences of biodiversity loss. The main cause is incentives that encourage resource users to ignore the effects of their actions. (v7, #3)

Perrow, Martin R., and Davy, Anthony J., eds., Handbook of Ecological Restoration. New York: Cambridge University Press, 2002. A survey, with some attention to policy and ethics. The authors are at University of East Anglia, Norwich, UK. (v.13,#4)

Perry, Brian, and Keith Sones. "Poverty Reduction Through Animal Health." *Science* Vol. 315, no. 5810 (19 January 2007): 333-34. The global community needs to give greater thought and investment to

building scientific capacity in animal health research within developing countries. Animal diseases severely constrain livestock enterprises in developing countries and are not being given the attention they deserve.

Perry, Clifton. "We Are What We Eat." Environmental Ethics 3(1981):341-50. If it is immoral to raise animals for the purpose of eating during a period of food scarcity because the process of changing grain protein to animal protein is wasteful then it is surely immoral to waste animal protein which was not raised for the purpose of eating, but which could nevertheless be eaten during periods of food scarcity. Therefore, it is immoral not to eat human carrion during periods of food scarcity. Perry is in the philosophy Department, San Jose State University, San Jose, CA. (EE)

Perry, David A. Forest Ecosystems. Baltimore: Johns Hopkins University Press, 1995. 500 pp. Cloth, \$80.00. Paper, \$50.00. Twenty-three chapters in comprehensive survey of the structure and functioning of forest ecosystems worldwide: temperate, tropical, and boreal. Climatic influences on the distribution of forests and how global warming might shift that. Forest dynamics, biological diversity, soils. Primary productivity, nutrient cycling, herbivory, ecosystem stability, and factors contributing to ecosystem collapse, such as acid rain and mismanagement. Principles of sustainable forest management. Perhaps the most outstanding work on forest ecosystems in print. Perry is in ecosystem studies at Oregon State University. (v6,#1)

Perry, Gregory M., and Pope, C. Arden, "Environmental Polarization and the Use of Old-Growth Forests in the Pacific Northwest," Journal of Environmental Management 44(1995):385-397. The allocation of old-growth forests in the Pacific Northwest comes not from orderly market processes, but from chaotic and polarized political and legal conflicts. Analysis of the economic factors of polarization, of differences in environmental ethics regarding old-growth forests, and differences in time preferences. Resolving the debate over old-growth forests will be extremely difficult. Perry is in Agricultural and Resource Economics, Oregon State University. Pope is at Brigham Young University, Provo, UT. (v.10,#1)

Perry, James. Water Quality: Management of a Natural Resource. Malden, MA: Blackwell Science, Inc., 1996. 656pp. \$64.95. A multi-disciplinary approach to the study of water by building on the foundations of water chemistry and hydrology and expanding to cover subjects such as preservation and biological diversity and ecosystem integrity, public health standards, international waterways and policy, and the preservation of water resources. (v8,#1)

Persson, Torsten, Miljökunskap (The Study of the Environment). Lund: Studentlitteratur, 1994. In Swedish. "A number of environmental issues can be defined in terms of natural sciences but ultimately it is a question of morality and ethics. What right have human beings to exploit nature in a way which leads to the extinction of other species?" (p. 10). Prepared as a student text, though subsequently with little discussion of environmental ethics. (v.12,#4)

Perz, Stephen, Robert Walker, Robert, and Marcellus Caldas. "Beyond Population and Environment: Household Demographic Life Cycles and Land Use Allocation Among Small Farms in the Amazon." *Human Ecology* Vol. 34, no. 6 (2006): 829-49.

Peter, Kenneth B. "Jefferson and the Independence of Generations." Thomas Jefferson's argument against long-term debt and his theory of usufruct are used to show why each generation is obligated to protect the independence of future generations. This argument forms the theory of "Jeffersonian generational independence." The theory has wide implications for the environmental movement because most environmental problems result in limitations on the liberty of future generations. I compare and defend Jeffersonian generational independence from two alternatives including the investment theory raised by

James Madison and the problem of generational interdependence raised by John Passmore or Edmund Burke. When the obligation to protect the independence of future generations is taken seriously, liberalism can no longer reasonably be used to defend environmental exploitation, since such exploitation amounts to an attack on the liberty and independence which form its core values. Environmental Ethics 24(2002):371-387. (EE)

Peterken, George F., Natural Woodland: Ecology and Conservation in Northern Temperate Regions. Cambridge: Cambridge University Press, 1996. A rationale and practice for woodland nature conservation and management. An account that is expectedly well informed scientifically, but is also surprisingly philosophically sophisticated about to what extent woods in Britain and in the United States can be considered "natural" in the light of various degrees of human influence, management, restoration. The book starts with an analysis of "the concept of naturalness," distinguishing (1) original-naturalness, (2) present-naturalness, (3) past-naturalness, (4) potential naturalness, and (5) future naturalness. Many woods are in a limbo between various qualities of naturalness. North America has forests with all these elements; such a forest would be rare in Europe. "It is more useful to regard naturalness as a continuous variable, ranging from completely natural (100% natural) to completely artificial (0% natural). In some cases such measures have to be differently applied in different parts of the same forest. An eight-point scale for past-natural woodlands with three differing systems of management. The importance of time lapse since the last management at various levels.

Selected studies in particular temperate and boreal forests, for example, the Joyce Kilmer Memorial Forest in North Carolina and the Bialowieza Forest, Poland. Indian influences on North American forests. (The records are equivocal; some U.S. forests were less "natural" than ecologists initially supposed. At the same time, though "the Indians certainly burned woodland close to home, elsewhere they merely augmented the naturally low frequency of lightning strike fires. Considerable areas of essentially natural forests thus awaited the European settlers" (p. 52). And much more. Peterken has served with various conservancy groups in the UK, such as the Nature Conservancy Council and the Joint Nature Conservation Committee. (v.14, #4)

Peters, Debra; et al., "Integrating Patch and Boundary Dynamics to Understand and Predict Biotic Transitions at Multiple Scales," Landscape Ecology 21 (no.1, January 2006): 19-33 (15).

Peters, Joe, "Transforming the Integrated Conservation and Development Project (ICDP) Approach: Observations From the Ranomafana National Park Project, Madagascar," Journal of Agricultural and Environmental Ethics 11(1998):17-47. ABSTRACT. Preservation of the biological diversity and ecosystems in protected areas can be achieved through projects linking conservation of the protected areas. with improved standards of living for resident peoples within surrounding buffer zones. This is the hypothetical claim of the integrated conservation and development project (ICDP) approach to protected area management. This paper, based on several years of experience with the Ranomafana National Park Project in Madagascar, questions the major assumptions of this approach from ethical and practical perspectives. The four basic strategies available to ICDPs: protected areas, buffer zones, compensation, and economic development, are analyzed and shown to be deficient or untested in the case of Ranomafana. Recommendations are made to explore conservation models other than the western conception of the national park, to modify the notion of a buffer zone outside the protected area, to redistribute money or other resources directly to the poor people living in and around the protected areas, and to eliminate the middle men in the development business. An appeal is made to focus on local education, organization and discipline in order to promote self-determination and self-reliance among resident peoples of protected areas. The paper argues that a public works program, similar to the Roosevelt administration's Civilian Conservation Corps of the 1930s, funded through a hard-currency endowment or other innovative financing mechanism, should be tried as a replacement for the currently questionable ICDP approach at Ranomafana. KEY WORDS: biodiversity, buffer zone, conservation, development, ethics, international aid, Madagascar, national parks, protected areas, slash-and-burn.

(JAEE)

Peters, Joe. "Transforming the Integrated Conservation and Development Project (ICDP) Approach: Observations from the Ranornafana National Park Project, Madagascar. Journal of Agricultural and Environmental Ethics 11(1999):17-47. (JAEE)

Peters, Karl E., "Humanity in Nature: Conserving Yet Creating." Zygon 24 (1989): 469-485. An argument based on the philosophy of cosmic evolution against the dominant human-nature dualism of Western thought. (Katz, Bibl # 2)

Peters, Karl E., Dancing with the Sacred: Evolution, Ecology, and God. Harrisburg, PA: Trinity Press International, 2002. A naturalistic, nonpersonal model of God, based on evolution and ecology. God is a process: one aspect is the emergence of new possibilities in nature, human history, and personal living; the other is the selection of some of these possibilities to continue. The creative process is like a sacred dance. A contemporary creative struggle is to find ways of living harmoniously with the rest of life on our ever-changing planet, otherwise we may degrade and destroy the creative sacred process. Peters taught religion and philosophy, including environmental ethics, at Rollins College, Winter Park, FL; he is now emeritus. (v.13,#4)

Peters, Rebecca Todd, In Search of the Good Life: The Ethics of Globalization. Continuum, 2005.

Peters, Robert H., A Critique for Ecology. New York: Cambridge University Press, 1991. 366 pages. \$ 30.00 paper. Argues that much of ecology cannot be science because ecology often provides no information or information of such poor quality that it can only be soft science. If ecology and environmental science are to meet the needs of the present decade and next millennium, researchers will need far more acute critical abilities than they have yet demonstrated. Ecologists have minimized the importance of predictive power in assessing scientific quality. Instead, they offer logical rationalization, historical explanation and mechanistic understanding, and fall prey to numerous failings that confound any assessment of the science. Predictions are often vague, inaccurate, qualitative, subjective, and inconsequential. But ecology can be effective and informative, and predictive ecology is already a reality in autecology, community ecology, limnology and ecotoxicology. A controversial book, about which the Cambridge editors themselves were much divided. Peters is in biology at McGill University, Montreal. (v5,#3)

Peters, Ted, ed. Genetics: Issues of Social Justice. Cleveland, OH: Pilgrim Press, 1998. 262 pages. Moral and social aspects of genetics, including the human genome project and genetic engineering. (v9,#1)

Petersen, David, ed. A Hunter's Heart, Honest Essays on Blood Sport. New York: Henry Holt, 1997. 331 pages. \$ 25.00. Conflicting sides on the issues. Contains, among several dozen contributions and extracts:

--Beck, Tom, "A Failure of the Spirit" (pp. 200-209), on the use of bait and dogs to hunt bears, a practice that is illegal in many states.

--Carter, Jimmy, "A Childhood Outdoors" (pp. 35-46)

--Causey, Ann S., "Is Hunting Ethical?" (pp. 80-89)

--Wallace, George N., "If Elk Would Scream" (pp. 96-101)

--Posewitz, Jim, "The Hunter's Spirit" (pp. 136-142)

--Abbey, Edward, "Blood Sport" (pp. 11-16)

and many more. (v8,#1)

Petersen, David, ed., A Hunter's Heart: Honest Essays on Blood Sport. New York: Henry Holt and Co.,

1996. Among the contributors: Richard K. Nelson, Edward Abbey, Jimmy Carter, Terry Tempest Williams, Ann S. Causey, George N. Wallace, Mary Zeiss Stange, Stephen Bodio, Ted Kerasote, Jim Posewitz, and others. (v.11,#3)

Petersen, Shannon. "Congress and Charismatic Megafauna: A Legislative History of the Endangered Species Act." Environmental Law 29(No. 2, 1999):463- . When Congress overwhelmingly passed the Endangered Species Act in 1973, it failed to anticipate that the Act would become one of the strongest and most comprehensive of environmental laws. Instead, most in Congress believed the Act would apply modest restrictions primarily to protect charismatic megafauna representative of our national heritage, like bald eagles, bison, and grizzly bears. (v10,#4)

Peterson, Anna L. Being Human: Ethics, Environment, and Our Place in Nature. Reviewed in Environmental Ethics 25(2003):199-202. (EE)

Peterson, Anna L. Review of Christianity and Ecology: Seeking the Well-Being of Earth and Humans. Edited by Dieter T. Hessel and Rosemary Radford Ruether. Environmental Ethics 24(2002):105-108. (EE)

Peterson, Anna L., Being Human: Ethics, Environment, and Our Place in the World. Berkeley, CA: University of California Press, 2001. Some chapters: Not of this world: Human exceptionalism in Western traditions. The social construction of nature and human nature. The relational self: Asian views of nature and human nature. Persons and nature in Native American worldviews. Relationships, stories, and feminist ethics. Evolution, ecology and ethics. In and of the world: Toward a chastened constructivist anthropology. Different natures. Peterson is in religion at the University of Florida, Gainesville. (v.12,#2)

Peterson, Anna L., Being Human: Ethics, Environment, and Our Place in the World. Reviewed by Lijmbach, Susanne. Journal of Agricultural and Environmental Ethics 16(2003):409-415. (JAEE)

Peterson, Anna L. Review of David Landis Barnhill and Roger S. Gottlieb, eds. Deep Ecology and World Religions: New Essays on Sacred Ground. Environmental Ethics 25(2003):215-219. (EE)

Peterson, Anna L. Review of Living with Nature: Environmental Politics as Cultural Discourse. Edited by Frank Fischer and Maarten A. Hajer. Environmental Ethics 23(2001):103-106. (EE)

Peterson, Anna L. Book Review of Nature, God and Humanity: Envisioning an Ethics of Nature. By Richard L. Fern. Environmental Ethics 26(2004):221-222. (EE)

Peterson, Anna L. Review of Environmental Ethics, Ecological Theology and Natural Selection. By Lisa H. Sideris. Environmental Ethics 27 (2005):217-220.

Peterson, Anna L. "Toward a Materialist Environmental Ethic." Environmental Ethics 28(2006):375-393. Environmental ethics has been dominated by an idealist logic that limits its positive impact on the natural world about which environmental philosophers care deeply. Environmental ethicists need to alter the ways we think and talk about what we value and the relations among ideas, values, and actions. Drawing on the sociology of religion and Marxian philosophy among other sources, a new approach may increase our understanding of how ideas are lived out and how we might increase the impact of our ideas about the value of nature. (EE)

Peterson, Anna L. Review of Religion and the New Ecology: Environmental Responsibility in a World in Flux. Environmental Ethics 29(2007):439-440. (EE)

Peterson, Anna, Review of Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008). *Journal of Agricultural and Environmental Ethics* 21(2008):609-611.

Peterson, Anna, Reviews of Roger Gottlieb, ed., *The Oxford Handbook of Religion and Ecology* (New York: Oxford University Press, 2006) and Roger Gottlieb, *A Greener Faith: Religious Environmentalism and Our Planet's Future* (New York: Oxford University Press, 2006). *Journal of Agricultural and Environmental Ethics* 21(2008):607-608.

Peterson, Anna. "Environmental Ethics and the Social Construction of Nature." *Environmental Ethics* 21(1999):339-357. Nature can be understood as socially constructed in two senses: in different cultures' interpretations of the nonhuman world and in the physical ways that humans have shaped even areas that they think of as "natural." Both understandings are important for environmental ethics insofar as they highlight the diversity of ways of viewing and living in nature. However, strong versions of the social constructionist argument contend that there is no "nature" apart from human discourse and practices. This claim is problematic both logically, insofar as it fails to deconstruct the notion of culture, and ethically, insofar as it categorically privileges human activities and traits. (EE)

Peterson, Anna. Review of Frans de Waal, *Good Natured: The Origins of Right and Wrong in Humans and Other Animals*. *Environmental Ethics* 20(1998):437-40.

Peterson, C. H. and Bishop, M. J., "Assessing the Environmental Impacts of Beach Nourishment," *Bioscience* 55(no. 10, October 2005): 887-896. With sea levels rising under global warming, dredge and fill programs are increasingly employed to protect coastal development from shoreline erosion. Such beach "nourishment" can bury shallow reefs and degrade other beach habitats, depressing nesting in sea turtles and reducing the densities of invertebrate prey for shorebirds, surf fishes, and crabs. Despite decades of agency mandated monitoring at great expense, much uncertainty about the biological impacts of beach nourishment nonetheless exists. Monitoring results are rarely used to scale mitigation to compensate for injured resources. Reform of agency practices is urgently needed as the risk of cumulative impacts grows.

Peterson, Courtney, *A Comparison of the Environmental Rhetoric of Dave Foreman, Earth First!, and Lois Marie Gibbs, Love Canal*. M.A. thesis in the Department of Speech Communication, Colorado State University, Spring 1998. A study in what makes rhetorical strategies work for environmental activists. Both figures are effective activists; their differences are found in philosophy and gender. The advisor was Professor Cindy L. Griffin. (v9,#2)

Peterson, D., and Goodall, J., *Visions of Caliban: On Chimpanzees and People*. Boston: Houghton Mifflin Company, 1993.

Peterson, D. J., *Troubled Lands: The Legacy of Soviet Environmental Destruction*. Boulder, CO: Westview Press, 1993. 276 pages. Paper. "Objectively describes the terrible environmental degradation on one-sixth of the earth's surface. This is the most reliable and weighty report available about the environment in the former Soviet Union. It should be read by all who are interested in global environmental problems" -- Aleksei Yablokov, Russian State Counsellor for Ecology and Public Health. Peterson is a fellow at the RAND/UCLA Center for Soviet Studies in Santa Monica, CA. (v4,#4)

Peterson, Dale. *Jane Goodall: The Woman who Redefined Man*. Boston: Houghton Mifflin, 2006. This book is reviewed by Meredith F. Small in "From Gombe to the World," *Science* Vol. 315, no. 5818 (16 March 2007): 1498-99). Peterson is in English at Tufts University.

Peterson, David L. and Darryl R. Johnson, Eds. Human Ecology and Climate Change: People and Resources in the Far North. Bristol, PA: Taylor and Francis, 1995. How global climate change might alter the face of the northern regions of North America during the next century. With a multidisciplinary team of contributors, the chapters cover meteorology, climate modeling, wildlife biology, human ecology, and resource management, and take an objective look into the future of natural resources and human populations in this region. (v7,#1)

Peterson, David L. and V. Thomas Parker, eds. Ecological Scale: Theory and Applications. New York: Columbia University Press 1998. Reviewed by Jon Loverr. Environmental Values 9(2000):261.

Peterson, David. Heartsblood: Hunting, Spirituality, and Wildness in America. Review by Gene Wunderlich, Journal of Agricultural and Environmental Ethics 10(2001):354-358. (JAEE)

Peterson del Mar, David. *Environmentalism*. Harlow, UK: Pearson Education Ltd, 2006. Peterson del Mar examines the history of environmentalism as conservation and preservation movements and other forms of nature-loving. He argues that environmentalism has distracted us from creating a sensible and sustainable relationship with the environment.

Peterson del Mar, David. *Environmentalism*. Harlow, UK: Pearson Education Ltd, 2006. Peterson del Mar examines the history of environmentalism as conservation and preservation movements and other forms of nature-loving. He argues that environmentalism has distracted us from creating a sensible and sustainable relationship with the environment.

Peterson, E. Wesley, "Time Preference, the Environment and the Interests of Future Generations", Journal of Agricultural and Environmental Ethics 6(1993):107-126. The behavior of individuals currently living will generally have long-term consequences that affect the well-being of those who will come to live in the future. Intergenerational interdependencies of this nature raise difficult moral issues because only the current generation is in a position to decide on actions that will determine the nature of the world in which future generations will live. The writings of both economists and philosophers concerned with the weight to attach to the interest of future generations are reviewed and evaluated in this paper and the implications for environmental policy are discussed. Peterson is in agricultural economics at the University of Nebraska, Lincoln.

Peterson, Jonathan W., and Bouma-Prediger, Steven, "Ethical Analysis of Risk-based Environmental Cleanup," Proteus: A Journal of Ideas 15(no. 2, 1998):19-24. An analysis of RBCA, Risk Based Corrective Action, whereby only those sites that pose a significant risk to human health and the environment undergo active remediation, since there are "too many sites, too few dollars." RBCA has a number of important ethical assumptions involving distributive justice. Application to a leaking gasoline tank in a western Michigan town. "We conclude that RBCA is the most effective approach only if the ethical decision-making is based on the needs of the moral patients and if those needs are equally weighted. RBCA is ineffective and inappropriate if agency decisions regarding environmental cleanup are based solely on the merits of the moral players" (p. 23). Peterson is in Geological and Environmental Sciences, Bouma-Prediger in Religion, Hope College, Holland MI.

Peterson, Kaja. Nature Conservation in Estonia. Tallin, Huma Press, 1994. 48 pp. National parks, nature reserves, landscape reserves, mire reserves, ornithological reserves, botanical reserves, botanical-zoological reserves, geological reserves, nature parks and program areas. (v7,#4)

Peterson, Markus J., and Peterson, Tarla Rai, "Ecology: Scientific, Deep and Feminist," Environmental Values 5(1996):123-146. The application of hierarchy theory to ecological systems presents those who

seek a radical change in human perspectives toward nature with a unique window of opportunity. Because hierarchy theory has enabled scientific ecologists to discover that the window through which one chooses to observe a system influences its reality, they may now be more amenable to including the perspectives of deep and feminist ecologists into their self-definition. A synergy between deep, feminist, and scientific ecology could improve environmental policy by encouraging more ecofeminists to encompass the marginalisation of nonhuman life-forms within the ethic of care, more deep ecologists to encompass the issues of overconsumption and militarisation within the anthropocentric-biocentric polarity, and more scientific ecologists to scrutinise the politics behind their investigations. KEYWORDS: Communication, deep ecology, ecofeminism, environmental policy, scientific ecology. (EV)

Peterson, Markus J. and Tarla Rai Peterson, "A Rhetorical Critique of `Nonmarket' Economic Valuations for Natural Resources." Environmental Values Vol.2 No.1(1993):47-66. ABSTRACT: Various `nonmarket' economic valuation methods have been used to compute `total' value of nonmarketed natural resources and related recreation. We first outline the history of these valuation techniques and use the Exxon Valdez disaster response and the valuation of whooping cranes, an endangered species, as examples of how these tools can constrain policy. We then explain how, by excluding non-economic social spheres, economic valuation techniques produce a terministic screen that deforms policy makers' vision of the ecological problems faced by society. Using Luhmann's functionalist social theory, we demonstrate that when natural resource managers privilege economic motives, they trivialize other social functions such as education, politics, religion and law. This process presents a significant ethical dilemma for democracies by first naturalizing, then ethicizing, existing patterns of domination. KEYWORDS: Environmental ethics, functionalism, natural resources, nonmarket economic valuation, rhetorical criticism, wildlife. Markus: Department of Wildlife and Fisheries Sciences, Texas A & M University, College Station, Texas 77843-2258, USA. Tarla: Department of Speech Communication and Theatre Arts, Texas A & M University, College Station, Texas 77843-4234, USA.

Peterson, Richard B. Conversations in the Rainforest: Culture, Values, and the Environment in Central Africa. Boulder, CO: Westview Press, Perseus Books Group 2000. (v.12,#2)

Peterson, Rolf O., The Wolves of Isle Royale: A Broken Balance. Minocqua, WI: Willow Creek Press, 1995. 190 pages. Isle Royale, in Lake Superior, is the site of the longest running study (35 years) of any mammal on the planet, and here is the story by a wildlife biologist who has been there 25 of those years. The wolf population is now at the lowest recorded level. (v7,#1)

Peterson, Russell W., Patriots. Stand Up!: This Land Is Our Land; Fight to Take it Back. Wilmington, DL: Cedar Tree Publishing, 2003. A devastating indictment of the Bush administration by a former Republican governor of Delaware, former head of the Office of Technology Assessment, former high official of both the Nixon and Ford administration, and a former President of the Audubon Society. (v. 15, # 3)

Peterson, Tarla Rai and Horton, Cristi Choat, "Rooted in the Soil: How Understanding the Perspectives of Landowners Can Enhance the Management of Environmental Disputes," The Quarterly Journal of Speech 81(1995):139-166. The need to include the perspective of ranchers in environmental disputes, specifically the dispute over the endangered golden-cheeked warbler and its habitat. "Public discourse must enable divergent versions of collective identity to emerge," and, in the case of the warbler, these versions of collective identity provided by the ranchers and the environmentalists must be acknowledged and integrated if the warbler is to survive. (v.8,#4)

Peterson, Tarla Rai, "The Meek Shall Inherit the Mountains: Dramatistic Criticism of Grand Teton Nation Park's Interpretive Program," Central States Speech Journal 39(no. 2, 1988):121-133. The author finds

that Christian myths were used, effectively, in Grand Teton National Park interpretation. (v.8,#4)

Peterson, Tarla Rai, Review of C.G. Herndl and S.C. Brown, Green Culture. Environmental Values 7(1998):362.

Peterson, Tarla-Rai, Sharing the Earth: The Rhetoric of Sustainable Development. Columbia, SC: University of South Carolina Press, 1997. 240 pages. \$ 30.00. (v9,#2)

Petrinovich, Lewis, Darwinian Dominion: Animal Welfare and Human Interests. Cambridge, MA: MIT Press, 1998. 448 pages. Humans have a set of cognitive abilities, developing from a suite of emotional attachments, that make them unique among species. Although other animals can think, suffer, and have needs, the interests of members of the human species should triumph over comparable interests of members of other species. Animal liberation, morality and animal research, the eating of animals, keeping animals in zoos and as pets, the importance of biodiversity. The main issues and principles governing the resolution of animal/human interactions and tradeoffs. (v.10,#1)

Petrucci, Mario. "Population: Time-Bomb or Smoke-Screen?" Environmental Values 9(2000):325-352. Abstract: 'Overpopulation' is often implicated as a major causative factor of poverty and environmental degradation in the developing world. This review of the population-resource debate focusses on Red, Green and neo-Malthusian ideologies to demonstrate how they have ramified into current economic and development theory. A central hypothesis is that key elements of Marxist analysis, tempered by the best of Green thought, still have much to offer the subject. The contributions of capitalism to 'underdevelopment', and its associated environmental crises, are clarified and reasserted in a contemporary context. The concept of valuation vector is also introduced, and a novel closure of Blaikie's 'Chain of Explanation' is proposed. The Circuit of Capital model thus created is applied to specific case-studies of resource-population conflict so as to overturn the simplistic conventional connection held between population growth and ecological devastation. The model highlights sequential causes of poverty arising from important capital-based factors which might otherwise be overlooked. It can accommodate a variety of Red-Green perspectives and its structural form is suited to the unravelling of complex population-resource pressures in the multi-dimensional space of the modern global political economy. KEYWORDS: Population, environment, Marxism, Green, Circuit of Capital, valuation vector. Petrucci is at ?? (University College London), 79 Lincoln Crescent, Bush Hill Park, Enfield, Middlesex EN1 1JZ. (EV)

Petsonk, Annie, Silverthorne, Katherine. "The Relevance of the UN Climate Treaty for U.S. Environmental Lawyers," Journal of Environmental Law & Practice 3(no.3, Nov. 1995):4- . Results of the Climate Conference sponsored by the UN and its relevance for environmental law practitioners. (v6,#4)

Petts, Geoffrey, Calow, Peter, eds. River Restoration. Malden, MA: Blackwell Science, Inc., 1995. 232pp. \$49.95. Fifteen UK and overseas experts contribute, covering the nature of rivers, river pollution, biological water quality assessment, water quality control, flow-allocation management and environmentally sensitive engineering. (v8,#1)

Pettus, Ashley, "A Taste for Extinction," Harvard Magazine 107(no. 6, July/August 2004):13-14. Madagascar's 69 primates are all endemic, and all endangered, along with many other animals. Christopher Golden, a Harvard undergraduate, has done research to find that eating bushmeat is a major contribution to their decline, in addition to deforestation. They even eat the indri, a primate considered sacred because it is believed to be their ancestor, and they may eat it not only because they are hungry but to increase their prestige. They also kill and eat the fosa, the island's largest predator, and the aye-aye, a

lemur, which are superstitiously considered to bring evil on children and the elderly.

Petulla, Joseph M. American Environmentalism: Values, Tactics, Priorities. Reviewed in Environmental Ethics 3(1981):375-76.

Petulla, Joseph M., "Objectivist and Relativist Science and Environmentalism," Philosophical Inquiry 11 (nos. 1-2, Winter-Spring 1989):17-27. Objectivist and relativist assumption of scientific and popular writings need to be clarified by their interpreters. Scientific knowledge is commonly used by conflicting interest groups for a confusing array of political reasons in advocacy causes. It would be better to state one's commitment and evidence than to appeal to universal laws or principles of ecology or economics. Petulla is with the Environmental Management Graduate Program, University of San Francisco.

Peverelli, Roberto, "Un'etica della terra. La riflessione filosofica di Holmes Rolston, III [The Land Ethic: Philosophical Reflections of Holmes Rolston, III], Aut Aut: rivista di filosofia e di cultura, Issue 316-317, July-October, 2003, pages 116-138. In Italian. This issue also contains "Il fiume di vita: passato, presente e futuro," pages 139-144. a translation of Rolston's "The River of Life: Past, Present, and Future," [originally in Ernest Partridge, ed., Responsibilities to Future Generations (Buffalo, NY: Prometheus Books, 1981), pp. 123-132].

Pew Commission on Industrial Farm Animal Production, Final Report, 2008. *Putting Meat on the Table: Industrial Farm Animal Production in America*. Available online at: <<http://www.ncifap.org>>. This is a major report following a two and a half year study that concludes that industrial farm animal production as currently practiced poses unacceptable risks to public health, environmental safety and quality, and the welfare of the animals. The negative evidence is too great, and the scientific evidence is too strong to ignore. One of the major consultants on ethical issues was Bernard Rollin in the Department of Philosophy at Colorado State University.

Pezzey, John, "Sustainability: An Interdisciplinary Guide." Environmental Values Vol.1 No.4(1992):321-362. ABSTRACT: A definition of sustainability as maintaining 'utility' (average human wellbeing) over the very long term future is used to build ideas from physics, ecology, evolutionary biology, anthropology, history, philosophy, economics and psychology, into a coherent, interdisciplinary analysis of the potential for sustaining industrial civilization. This potential is highly uncertain, because it is hard to know how long the 'technology treadmill' of substituting accumulated tools and knowledge for declining natural resource inputs to production, can continue. Policies to make the treadmill work more efficiently, by controlling its pervasive environmental, social and psychological external costs, and policies to control population, will help to realize this potential. Unprecedented levels of global cooperation, among very unequal nations, will be essential for many of these policies to work effectively. Even then, tougher action may be required, motivated by an explicit moral concern for sustainability. An evolutionary analysis of history suggests that technology and morality can and will respond to a clearly perceived future threat to civilization; but we cannot easily predict the threat, or whether our response will be fast enough. KEYWORDS: Economics, environment, evolution, history, natural resources, policy, population, psychology, sustainability, technology. UK CEED Research Fellow, Department of Economics, University of Bristol, 8 Woodland Road, Bristol BS8 1TN, UK.

Pezzoli, K., "Science and Technology for Sustainability: North American Challenges and Lessons," Journal of Environment and Development 11(no.3, 2002): 304-06. (v.13,#4)

Pezzoli, Keith, Human Settlements and Planning for Ecological Sustainability: The Case of Mexico City. Cambridge: MIT Press, 1998. (v.9,#3)

Pezzoli, Keith. Human Settlements and Planning for Ecological Sustainability: The Case of Mexico City.

Cambridge, MA: MIT Press, 1998. 400 pp. \$40. The heart of the book is the story of what happened when residents of Los Belvederes, a group of Ajusco settlements, fought relocation by proposing that Los Belvederes be transformed into "Colonias Ecolthe bo Productivas", or productive ecology settlements. Through innovative organized resistance, their grassroots movement generated environmental and social action that eventually won crucial state support. (v.9,#4)

Pfaff, Donald W. *The Neuroscience of Fair Play: Why We (Usually) Follow the Golden Rule*. New York: Dana Press, 2007. Because the Golden Rule is universal—stated variously but widely transcultural—it is likely to have neurological bases. Pfaff's altruism is, however, mostly "reciprocal altruism" (benefiting others with expectation of reciprocation).

Pfeffer, M., "A Review of: Thompson, Charles D., and Melinda F. Wiggins, eds. The Human Cost of Food: Farmworkers' Lives, Labor, and Advocacy," Society and Natural Resources 18(no. 9, October 2005): 849-851.

Pfeffer, M. J., "Review of: Magdoff, Fred, John Bellamy Foster, and Frederick H. Buttel, eds., Hungry for Profit: The Agribusiness Threat to Farmers, Food and the Environment," Society and Natural Resources 15(no.3, 2002): 290-91. (v.13,#2)

Phan-Huy, Sibyl Anwander, and Fawaz, Ruth Badertscher, "Swiss market for meat from animal-friendly production - Responses of public and private actors in Switzerland," Journal of Agricultural and Environmental Ethics 16(2003):119-136. Animal welfare is an important societal issue in Switzerland. Policy makers have responded with a strict legislation on animal protection and with two programs to promote animal friendly husbandry. Also private actors in the meat industry initiated programs for animal friendly meat production to meet consumers' expectations. Labeled meat has a market share of over 20%. Depending on the stakeholders responsible for the labels, their objectives vary. While retailers want to attract consumers with meat produced in an animal friendly and environmentally compatible manner and with products of consistently good sensory quality, producers want to keep market shares and increase their revenues. KEY WORDS: animal protection, agricultural policy, consumer behavior, meat consumption, Switzerland. (JAEE)

Pharoah, Tim. "Reducing the Need to Travel: A New Planning Objective in the UK?" Land Use Policy 13(no.1, Jan. 1996):23- . (v6,#4)

Phelan, Shane, "Intimate Distance: The Dislocation of Nature in Modernity." Pages 44-62 in Bennett, Jane, and Chaloupka, William, eds., In the Nature of Things. Minneapolis, MN: University of Minnesota Press, 1993. "Nature" once meant "outside of culture," but, deconstructed, such meaning is no longer available. Nature should now be thought of as "intimate distance." "Recognition of nature as intimate distance reminds us simultaneously that nature is us and our lives, but that those lives are the greatest, most mundane mystery we will ever have" (p. 59). With attention to Rousseau and Nietzsche. Phelan teaches political science at the University of New Mexico. (v9,#2)

Phelps, Norm, "When Hunting is Homework.," The Animals' Agenda 20 (No. 3, 2000 May 01): 30- . How hunting groups "infiltrate" schools to recruit young people to their dying pastime. (v.11,#4)

Philander, S. George. Is the Temperature Rising? The Uncertain Science of Global Warming. Princeton: Princeton University Press, 1998. 240 pp. \$29.95. The basics of the Earth's climate and weather. The relationship between scientific knowledge and public affairs. Philander teaches geosciences at Princeton. (v.10,#1)

Philip Cafaro, Thoreau's Living Ethics: Walden and the Pursuit of Virtue, Reviewed by Ronald Sandler, Environmental Values 15(2006):135-138.

Philipp, Steven F., "Race, Gender, and Leisure Benefits," Leisure Sciences 19(1997):191-207. Phillip is in Health, Leisure, Sports, University of West Florida, Pensacola. Compares African-Americans and European-Americans, men and women, on the values they find in recreation, including outdoor recreation.

Philippon, Daniel J., Conserving Words: How American Nature Writers Shaped the Environmental Movement. Athens, GA: University of Georgia Press. The subtle effects of language and culture on how we know and might be led to save that part of the world we call nature. Leopold's writings "illustrate the ways in which wilderness is as much a rhetorical construction as a physical place." With much attention to metaphor. Philippon is in rhetoric at the University of Minnesota, Twin Cities. (v. 15, # 3)

Phillips, C. J. C. and Sorensen, J. Tind, "Sustainability in Cattle Production Systems", Journal of Agricultural and Environmental Ethics 6(1993):61-74. Cattle production has the potential of being an important component of sustainable agriculture globally. The ability to transform feed not suitable for humans into high-quality food will be of great importance in the long-term for feeding a growing population. To exploit the sustainable potential of cattle production systems, problems of pollution and of health and welfare, which are associated with cattle production are critically reviewed. The possibilities of integrating cattle production with other types of production are evaluated. The possibilities of using organic cattle production systems as prototypes of sustainable cattle production systems are explored. Phillips is in dairy research at the School of Agricultural and Forest Sciences, University College of North Wales, Bangor, Gwynedd. Sorensen is at the National Institute of Animal Science, Tjele, Denmark.

Phillips, Dana, "Thoreau's Aesthetics and 'The Domain of the Superlative,'" Environmental Values 15(2006): 293-305. Recently, 'ecocritics' have tried to show how literature might help us weather the global environmental crisis both emotionally and intellectually. Their arguments have been based, in part, on the assumption that despite its obvious strengths natural science has well-defined intellectual and ethical 'limits', and that environmental values are (therefore) best articulated by concerned humanists more in touch with the imagination. This essay addresses some of the problems faced by green humanists in their uneasy, mistrustful relationship with natural science, using passages from Thoreau as touchstone texts and juxtaposing those passages with remarks made by Bachelard, Coleridge, Stevens, Nietzsche, and Kant. (EV)

Phillips, Dana, The Truth of Ecology: Nature, Culture, Literature in America. Oxford: Oxford University Press, 2003. The contradictions of contemporary American nature writing, the need for greater theoretical sophistication, and the possibilities for a less devotional, "wilder" approach to ecocritical and environmental thinking.

Phillips, M. T., and Sechzer, J. A., Animal research and ethical conduct: An analysis of the scientific literature: 1966-1986. New York: Springer-Verlag, 1989.

Phillips, Melissa Lee, "Interdomain Interactions: Dissecting Animal Bacterial Symbioses," BioScience 56 (no.5, May 2006): 376-381 (6).

Phillips, Robert A. and Reichart, Joel, "The Environment as Stakeholder? A Fairness-Based Approach," Journal of Business Ethics 23(2000):185- . (v.13, #3)

Phillips, Robert A., and Reichart, Joel, "The Environment as a Stakeholder: A Fairness-Based Approach," Journal of Business Ethics 23(2000):185-197. Stakeholder theory is often unable to distinguish those individuals and groups that are stakeholders from those that are not. This problem of stakeholder identity has recently been addressed by linking stakeholder theory to a Rawlsian principle of fairness. To

illustrate, the question of stakeholder status for the non-human environment is discussed. This essay criticizes a past attempt to ascribe stakeholder status to the non-human environment, which utilized a broad definition of the term "stakeholder." This paper then demonstrates how, despite the denial of stakeholder status, the environment is nonetheless accounted for on a fairness-based approach, through legitimate organizational stakeholders. In addition, since stakeholder theory has never claimed to be a comprehensive ethical scheme, it is argued that sound reason might exist for managers to consider their organization's impact on the environment that are not stakeholder related. Phillips teaches business, Georgetown University. Reichart teaches business, Fordham University.

Phillips, Sarah T. "Lessons From the Dust Bowl: Dryland Agriculture and Soil Erosion in the United States and South Africa, 1900-1950." Environmental History 4(No. 2, April 1999):245- . (v10,#4)

Philosophica, Volume 39:1 (1987). Ghent University, Belgium. This is a special issue, "probably the first philosophical journal on the European continent to devote an entire issue to environmental ethics" (p. 3). The issue contains seven articles, but three of these focus on problems with animal-rights (Tom Regan, "Pigs in Space," Evelyn Pluhar, "The Personhood View and the Argument from Marginal Cases," and Raymond G. Frey, "The Significance of Agency and Marginal Cases"). Articles by Robin Attfield, Dieter Birnbacher, Frank De Roose, and J. Baird Callicott focus on broader problems in environmental philosophy. (Katz, Bibl # 2)

Philosophy and The Ecological Problem, a special issue of Filozoficky Casopis (Czechoslovakian Philosophy Journal). Reviewed in Environmental Ethics 13(1991):87-93.

Philosophy and Geography is sponsored by the Society for Philosophy and Geography and published by Rowman and Littlefield Press. Editors: Andrew Light, Department of Philosophy, University of Alberta, Edmonton, Alberta T6G 2E5, Canada, and Jonathan M. Smith, Department of Geography, Texas A and M University, College Station, TX 77843-3147. (v6,#4)

Phipps, Alison, "'The Mice Have Eaten the Lipstick': Performing amidst Creation in South-west Germany," Ecotheology No 7 (July 1999):98-107.

Phuong, Tran Thi Thanh. "AFTA and Its Environmental Implications for Vietnam," The Journal of Environment and Development 6(no.3, 1997):341. (v8,#3)

Phyne, John G. "Balancing Social Equity and Environmental Integrity in Ireland's Salmon Farming Industry." Society and Natural Resources 9, no.3 (1996): 281. (v7, #3)

Piasecki, Bruce and Peter Asmus, In Search of Environmental Excellence: Moving Beyond Blame. New York: Simon and Schuster, 1990. \$ 9.95 paper. Traces the historical and recent abuses of land, air, and water, but also describes many examples of public and private entities successfully searching for and finding solutions. Government has a key role as facilitator and coordinator. "The true test for American environmentalism is to achieve a better balance between fear of ecological catastrophe and trust in our political system." (v1,#4)

Piasecki, Bruce, and Peter Asmus, In Search of Environmental Excellence: Moving Beyond Blame. New York: Simon & Schuster, 1990. Pp. 203. This is a highly readable book on environmental policy, examining the historical causes of environmental problems and proposing workable solutions. The central idea is to move beyond name-calling and blame, so that we can unify industry, government, and private citizen action in the development of alternative appropriate technologies. (Katz, Bibl # 2)

Piatek (Piątek), Z., Etyka Drodowiskowa. Nowe spojrzenie na miejsce człowieka w przyrodzie

(Environmental Ethics. The new outlook on the Human status in Nature), Jagiellonian University Press, Cracow, 1998. The standpoints of P. Taylor, J.B. Callicott, A. Leopold, T. Regan and P. Singer are discussed. (v.13,#4)

Piatek (Piątek), Z., "Przyroda i wartości (Mother Nature and Values)", in: Wartości bycia. Wądy Stróewskiemu w darze (The Value of Being. A gift-book for Prof. W. Stróewski), collective editing, Polish Philosophical Society, Warsaw-Cracow, 1993 (v.13,#4)

Piatek (Piątek), Z., "Czy zmiany w kulturze mogą zahamować destrukcję Natury? (Can changes in Culture check the destruction of Nature?)", in: Człowiek, Kultura, Przemiany (Human, Culture, Transitions), J. Pązowski & M. Suwara (eds.), Jagiellonian University Press, 1998. (v.13,#4)

Piatek, (Piątek), Z., "Wartości i ewolucja (Values and Evolution)", in: Nauka, Filozofia, Wartości (Science, Philosophy, Values), Kosmos-Logos Series, T. Grabińska & M. Śabierowski (eds.), Wrocław University of Technical Sciences Press, Wrocław, 1994. (v.13,#4)

Piatek, (Piątek), Z., "Przetwarzanie informacji w świetle teorii ewolucji, czyli o poszukiwaniu semantyki biosfery (Information Processing in the Light of the Theory of Evolution, or in search of Semantics of the Biosphere)", in: Filozofia i logika. W stronę Jana Woleńskiego (Philosophy and Logic. Towards Jan Woleński - a gift-book), J. Hartman (ed.), AUREUS Publishers, Cracow, 2000. (v.13,#4)

Pichon, Francisco J. "Settler Agriculture and the Dynamics of Resource Allocation in Frontier Environments." Human Ecology 24, no.3 (1996): 341. (v7, #3)

Pickerill, J, "Review of: Derrick Purdue, Anti-GenetiX: The Emergence of the Anti-GM Movement," Environmental Politics 11(no.4, 2002): 147-148.

Pickering, Andrew, "Asian Eels and Global Warming: A Posthumanist Perspective on Society and the Environment," Ethics and the Environment 10(no. 2, 2005):29-43. My idea in this essay is to talk about how some recent developments in my field--science and technology studies--might pass over into environmental studies. In particular, I want to talk about a certain posthumanist perspective on the relation between people and things, because it transfers nicely from thinking about people and machines to thinking about people and the environment. The basic point is that the academic disciplines carve up the visible world in a systematic way. On the one hand, the natural sciences, engineering, and so on, talk about a world of things from which people are notably absent. Human beings might disturb ecosystems, but the job of the ecologist is to understand the systems themselves, not the disturbances. We find a beautiful disciplinary dualism: to the harder sciences goes the world of things: to the softer sciences goes the world of people. But what about the interface of people and things, the zone of intersection? Pickering is in sociology at the University of Illinois at Urbana-Champaign. (Eth&Env)

Pickering, David, and Bruce, David, "Ecology and Ecumenism in Europe: A Way Forward," Ecotheology No 5/6 (Jul 98 / Jan 99):9-21.

Pickering, K.T., Owens, L.A. An Introduction to Global Environmental Issues. Review by Olive Spash, Environmental Values 7(1998):493.

Pickering, Kevin T., and Lewis A. Owen, An Introduction to Global Environmental Issues. New York: Routledge, 1994. 336 pages. Paper, £ 14.99. Chapters: Introducing Earth; Climate Change and Past Climates; Greenhouse Effect; Acid Rain; Water Resources and Pollution; Nuclear Issues; Energy; Natural Hazards; Human Impact on the Earth's Surface; Managing Our Earth. Pickering is at the University of Leicester and Owen at the University of London. (v5,#1)

Pickett, S.T.A., Ostfeld, R.S., Shachak, M., and Likens, G.E., eds., The Ecological Basis of Conservation. New York: Chapman and Hall, 1997. Includes, for example:

--Fiedler, Peggy L., White, Peter S., and Leidy, Robert A., "The Paradigm Shift in Ecology and Its Implications for Ecology," pages 83-91. (1) New ecology does not find some species better adapted than others; it is more egalitarian about species. (2) Habitat fragmentation is more complex than ecologists had envisioned. (3) Ecology as a science is not methodologically equivalent to the sciences of chemistry, physics, mathematics; but this does not mean ecology is a soft science. (4) The profound complexity of the natural world and the possibility of studying one small piece of the puzzle does not guarantee that the results will be generalizable to a similar piece next door. (5) Just as the individual is the fundamental unit in evolution, the population is the fundamental unit in conservation.

--Leopold, A. Carl, "The Land Ethic of Aldo Leopold," pages 193-200.

--Zedler, Joy B., "Conservation Activism: A Proper Role for Academics?", pages 345-350.

--Wiens, John A., "The Emerging Role of Patchiness in Conservation Biology," pages 93-107. "The 'patchiness paradigm' in ecology, if it exists at all, is a very nebulous one without a cohesive body of theory to guide research or management. Nevertheless, we know that the patchiness of environments cannot be ignored" (p. 106). (v.10,#3)

Pickett, Steward, Ostfeld, Richard S., Shachak, Moshe, Likens, Gene E., eds. The Ecological Basis of Conservation: Heterogeneity, Ecosystems, and Biodiversity. New York: Chapman and Hall, 1997. 432 pp. \$59.95. Conservation policy is moving toward conservation and management of the interactive networks and large-scale ecosystems on which species depend. This book offers a scientific framework for this new approach, providing a solid basis for stronger links between ecology and public policy. (v8,#3)

Pickett, Steward T.A., Jurek Kolasa, and Clive G. Jones. *Ecological Understanding: The Nature of Theory and the Theory of Nature*, 2nd edition. San Diego: Academic Press, 2007. The authors discuss ecology in terms of theory development, ecological integration, and scientific understanding from a philosophical point of view. This is an important contribution to the philosophy of ecology.

Piel, Gerard, Only One World: Our Own to Make and to Keep. San Francisco: W. H. Freeman, 1992. 367 pages. \$ 21.95. An excellent overview of the impact of humankind on the biosphere, tracing the agricultural and industrial revolutions and the ways in which these have disturbed ecosystems. By the founder and publisher of Scientific American, who writes with urgency and compassion. (v3,#2)

Pielou, E. C., After the Ice Age: The Return of Life to Glaciated North America. Chicago: University of Chicago Press, 1991. 366 pages. Vegetation responds slowly to climatic change, and "if climate changes continuously, as it appears to, then vegetation may never succeed in catching up with it. ... Plant (and animal) communities are in disequilibrium, continually adjusting to climate and continually lagging behind and failing to achieve equilibrium before the onset of a new climatic trend. (v3,#1)

Pienaar, U. De V., "An Overview of Conservation in South Africa and Future Perspectives," Koedoe: Research Journal for National Parks in the Republic of South Africa 34 (no. 1, 1991):73-80. With particular concern for a national environmental plan and policy that will arrest and reverse current resource and environmental deterioration while at the same time promoting approaches to attaining a better quality of life for all South African (v2,#4)

Pierce, Christine, and Donald VanDeVeer, eds., People, Penguins, and Plastic Trees, 2nd ed. \$ 35.00. Belmont, CA: Wadsworth Publishing Co., 1995. 485 pages, paper. Here is the second edition of the best-selling text first published in 1986, widely regarded as the easiest text to use with freshmen and sophomores. Additions include: ecofeminism, deep ecology, Native American land ethics, critiques of

industrialized nations by those in less-industrialized nations, environmental racism, sustainability, as well as the continuing issues: moral relations with nonhumans, biocentric views, intrinsic value, biodiversity, animal liberation, land ethics. New authors include: James Rachels, Mark Sagoff, Gary Varner, Val Plumwood, Donald Worster, Harley Cahen, Karen Warren, Holmes Rolston, Bryan Norton, Vandana Shiva, Sara Stein, Anthony Weston. Another, higher level and more theoretical (and more expensive) anthology by the same editors is The Environmental Ethics and Policy Book. (Wadsworth alone has four texts in environmental ethics.) Both editors are in philosophy at North Carolina State University. (v5,#3)

Pierce, Jessica, Morality Play: Case Studies in Ethics. Boston: McGraw Hill, 2005. Chapter III is "Habitat and Humanity," with case studies on famine in Ethiopia, hunting, ecoterrorism, dolphin parks, sea turtles, the precautionary principle, cosmetic surgery for pets, seal hunting in Canada, and more. Pierce is at the University of Colorado, Boulder. (v.14, #4)

Pierce, Jessica, and Jameton, Andrew, The Ethics of Environmentally Responsible Health Care. Oxford University Press, 2004. The book is summarized in Jameton, Andrew, and Pierce, Jessica, "Environment and health: Sustainable health care and emerging ethical responsibilities," Canadian Medical Association Journal 164(2001):365-369. Health care professionals and organizations need to consider the long-term environmental costs of providing health care and to reduce the material and energy consumption of the health care industry. This may seem a surprising conclusion, given that average human health has, for the most part, improved in recent decades despite environmental decline. Yet, these achievements are fragile. In the long term, human health requires a healthy global ecosystem. There is no realistic way or current technology available to replace declining natural ecosystem services (e.g., climate stabilization, water purification, waste decomposition, pest control, seed dispersal, soil renewal, pollination, biodiversity and protection against solar radiation) that are essential to health. Jameton is with the Department of Preventive and Societal Medicine, University of Nebraska Medical Center, Omaha, NB. Pierce is with the Department of Philosophy, University of Colorado at Boulder, Boulder, CO. (v.14, #4)

Pierce, Jessica. Theologies for Our Time: Our Moral Relationship to the Earth, Ph.D. thesis at the University of Virginia, in the Department of Religious Studies, May 1993. Theological ethics is moving away from anthropocentrism and toward theocentrism. While the value of nonhuman life is necessarily understood from the human perspective, it does not follow that humans beings are the center or measure of all value. Ethics should be conceived primarily in the language of response and responsibility, correcting a traditional formulation in terms of principles and rules in terms of justice. This highlights community and the common good, relates parts to whole, individuals to communities, and re-describes the community and common good to include the nonhuman world. The work builds on James Gustafson's theocentric ethics, and John B. Cobb's and Jay McDaniel's process theology. James F. Childress was the principal advisor. Pierce is now Assistant Professor, Department of Preventive and Societal Medicine, University of Nebraska Medical Center, Box 984350, Omaha, NE 68196-4350. (v5,#1)

Pierre, Andrew J. "The Missing Link in Global Stability." The Christian Science Monitor, June 30, 1995, p. 19. (v6,#2)

Pietarinen, Juhari, "Ihminen ja luonnon arvo (Humans and the Value of Nature), in Teoreettisen biologian seminaari (Proceedings of the Seminar in Theoretical Biology), December, 1977, published by the Academy of Finland, 1978. ISBN 951-715-073-3. (v5,#2) (Finland)

Pietarinen, Juhari, "Principal Attitudes towards Nature," in Pekka Oja and Risto Telama, eds., Sport for All (Amsterdam: Elsevier Science Publishers, 1991), the Proceedings of the World Congress of Sport for All, Tampere, Finland, June 1990. There are four attitudes: (1) Utilism aims to use nature to achieve a high level of welfare for people, nature is a huge and valuable source of energy and raw materials, people have an unlimited right to use nature for their welfare, and technology makes this possible. (2)

Humanism aims at the intellectual and moral development of humans, nature contains the possibilities for cultural development, and people have a right to use nature for promoting Socratic virtues, technology should be developed in accordance with these goals of humanism. (3) Mysticism aims at the experience of unity with nature, nature is essentially a spiritual and divine totality, a sanctity, the achievement of which is the highest end for human life, science and technology are rejected if they undermine this. (4) Naturism aims at the conservation of nature in as original and primordial condition as possible, nature is a uniform system acting in accord with the laws of ecology, and humans are part of the system, all parts of nature are of equal inherent value, which people should respect, all technology that endangers the life of other species and causes ecological disturbances should be rejected. Each of the four affects not only human work but the sports in which it is appropriate for humans to participate. Perhaps it is necessary to have proponents of all four attitudes; possibly no proper balance between people's interests and the tolerance of nature can be found. Pietarinen teaches philosophy at the University of Turku, Finland. He has developed this position in a series of papers in Finnish over twenty years and is the first philosopher systematically to develop environmental philosophy in Finland. (Finland)

Pietarinen, Juhari, "Ihminen ja luonto: neljä perusasennetta (Humans and Nature: Four Basic Attitudes" in Matti Kamppinen, ed., Elämäkatsomustieto (Studies in Worldviews on Life), Helsinki: Gaudemus, 1987. (v5,#2) (Finland)

Pieterse, HJC 1991. God heers oor die natuur (Ps 29). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 126-134. (Africa)

PietraŃ, M., Bezpiecze½stwo ekologiczne w Europie. Studium politologiczne (Ecological Security in Europe. The Study from Political Science Perspective), UMCS (UMCS Press), Lublin, 2000. (v.13,#1)

PietraŃ, M., Bezpiecze½stwo ekologiczne w Europie. Studium politologiczne (Ecological Security in Europe. The Study from Political Science Perspective), UMCS (UMCS Press), Lublin, 2000.

Pilkey, Orrin H., Dixon, Katharine L. The Corps and the Shore. Washington, D.C.: Island Press, 1998. \$24.95 cloth, \$16.95 paper. 256 pp. (v9,#2)

Pilkey, Orrin, Dixon, Katharine. The Corps and the Shore. Covelo, CA: Island Press, 1996. 256 pp. \$22.95 cloth. Pilkey is one of the most outspoken coastal geologists in the U.S., and Dixon is an educator and activist for national coastal policy reform. They provide a comprehensive examination of the impact of coastal processes on developed areas and the ways in which the U.S. Corps of Engineers has attempted to manage erosion along America's coastline. (v7,#4)

Pilkey, Orrin H., and Linda Pilkey-Jarvis. *Useless Arithmetic: Why Environmental Scientists Can't Predict the Future*. New York: Columbia University Press, 2007. The authors complain about too much unquestioning faith in models and forecasts by environmental professionals.

Pilot 2006 Environmental Performance Index. Yale Center of Environmental Law and Policy. Center for International Earth Science Information Network, Columbia University. World Economic Forum, Geneva, Switzerland. Joint Research Centre of the European Commission, Ispra, Italy. Identifies specific targets for environmental performance and measures how close each country comes to these goals. Such indicators as urban particulates, water consumption, timber harvest rate, overfishing, energy efficiency, renewable energy, wilderness protection, carbon dioxide per GDP, child mortality. New Zealand, Sweden, Finland, Czech Republic. the UK come out at the top; Ethiopia, Mali, Mauritania, Chad, Niger at the bottom (of some 130 nations). The U.S. is 28, China is 94. More at: www.yale.edu/epi.

Pilson, Diana, and Holly R. Prendeville, "Ecological Effects of Transgenic Crops and the Escape of Transgenes into Wild Populations," Annual Review of Ecology, Evolution, and Systematics 2004, 35:149-174. Transgenes will have more specific target effects, intended results, and may have fewer nontarget effects, unintended results. But the escape of transgenes into wild populations by hybridization and introgression could lead to increased weediness or to the invasion of new habitats by the wild population. Native species with which the wild plant interacts could be negatively affected by transgenic wild plants. The authors are in biology, University of Nebraska, Lincoln. (v.14, #4)

Pimentel, D, Brown, N., Vecchio, F., LaCapra, V., Hausman, S., Lee, O., Diaz, A., Williams, J., Cooper, S., and Newburger, E., "Ethical Issues Concerning Potential Global Climate Change on Food Production", Journal of Agricultural and Environmental Ethics 5(1992):113-146. The projected changes in climate associated with global CO₂ increases are expected to alter world food production. Burning fossil fuel in the North American continent contributes more to the CO₂ global warming problem than in any other continent. The resulting climate changes are expected to alter food production. The overall changes in temperature, moisture, carbon dioxide, insect pest, plant pathogens, and weeds associated with global warming are projected to reduce food production in all regions. The authors are in entomology at the College of Agriculture and Life Sciences at Cornell University, Ithaca, NY.

Pimentel, D., Berger, B., Filiberto, D., Newton, M., Wolfe, B., Karabinakis, E., Clark, S., Poon, E., Abbott, E. and Nandagopal, S., "Water Resources: Agricultural and Environmental Issues," BioScience 54(no. 10, 2004): 909-918(10). The increasing demands placed on the global water supply threaten biodiversity and the supply of water for food production and other vital human needs. Water shortages already exist in many regions, with more than one billion people without adequate drinking water. In addition, 90 of the infectious diseases in developing countries are transmitted from polluted water. Agriculture consumes about 70 of fresh water worldwide; for example, approximately 1000 liters (L) of water are required to produce 1 kilogram (kg) of cereal grain, and 43,000 L to produce 1 kg of beef. New water supplies are likely to result from conservation, recycling, and improved water use efficiency rather than from large development projects. (v.14, #4)

Pimentel, D; Herz, M; Glickstein, M; Zimmerman, M; Allen, R; Becker, K; Evans, J; Hussain, B; Sarsfeld, R; Grosfeld, A, "Renewable Energy: Current and Potential Issues," Bioscience 52(no.12, 2002): 1111-1120.

Pimentel, David, "Ethanol Fuels: Energy Security, Economics, and the Environment", Journal of Agricultural and Environmental Ethics 4(1991):1-13. Problems of fuel ethanol production have been the subject of numerous reports, including this analysis. The conclusions are that ethanol: does not improve U.S. energy security; is uneconomical; is not a renewable energy source; and increases environmental degradation. Ethanol production is wasteful of energy resources and does not increase energy security. Considerably more energy, much of it high-grade fossil fuels, is required to produce ethanol than is available in the energy output. About 72% more energy is used to produce a gallon of ethanol than the energy in a gallon of ethanol. Ethanol production from corn is not renewable energy. Its production uses more non-renewable fossil energy resources in growing the corn and in the fermentation/distillation process than is produced as ethanol energy. Ethanol produced from corn and other food crops is also an unreliable and therefore a non-secure source of energy, because of the likelihood of uncontrollable climatic fluctuations, particularly droughts which reduce crop yields. The expected priority for corn and other food crops would be for food and feed. Increasing ethanol production would increase degradation of agricultural land and water and pollute the environment. In U.S. corn production, soil erodes some eighteen times faster than soil is reformed, and, where irrigated, corn production mines water faster than recharge of aquifers. Increasing the cost of food and diverting human food resources to the costly and inefficient production of ethanol fuel raise major ethical questions. These occur at a time when more food is needed to meet the basic needs of a rapidly growing world population.

Pimentel, David, Westra, Laura, and Noss, Reed F., eds. Ecological Integrity. Covelo, CA: Island Press, 2000. 384 pp. Cloth \$70. Paper \$35. Since 1992 the Global Integrity Project has brought together leading scientists and thinkers to examine the combined problems of threatened and unequal human well-being, degradation of the ecosphere, and unsustainable economies. Based on the proposition that healthy ecosystems are a necessary prerequisite for both economic security and social justice, the project is built around the concept of ecological integrity and its practical implications for policy and management. Ecological Integrity presents a synthesis and findings of the project. (v.11,#4)

Pimentel, David, Pimentel, Marcia, eds. Food, Energy, & Society. Niwot, CO: University Press of Colorado, 1997. 2nd ed. Individuals and nations as they face the inevitable dilemma of how everyone can be fed, given the limits of land, water, energy, and biological resources. (v8,#2)

Pimentel, David, Shanks, Roland E., Rylander, Jason C. "Bioethics of Fish Production: Energy and the Environment," Journal of Agricultural and Environmental Ethics 9(1996):144-164. Aquatic ecosystems are vital to the structure and function of all environments on earth. Worldwide, approximately 95 million metric tons of fishery products are harvested from marine and freshwater habitats. A major problem in fisheries around the world is the bioethics of overfishing. A wide range of management techniques exists for fishery, managers and policy-makers to improve fishery production in the future. The best approach to limit overfishing is to have an effective, federally regulated fishery, based on environmental standards and fishery carrying capacity. Soon, overfishing is more likely to cause fish scarcity than fossil fuel shortages and high energy prices for fish harvesting. However, oil and other fuel shortages are projected to influence future fishery policies and the productive capacity of the fishery industry. Overall, small-scale fishing systems are more energy efficient than large-scale systems. Aquaculture is not the solution to wild fishery production. The energy input/output ratio of aquacultural fish is much higher than that of the harvest of wild populations. In addition, the energy ratios for aquaculture systems are higher than those for most livestock systems. Keywords: bioethics, fish, energy, environment, food. Pimentel, Shanks, and Rylander teach in the College of Agriculture and Life Sciences, Cornell University. (JAEE)

Pimentel, David, ed., The Pesticide Question: Environment, Economics, and Ethics. New York: Chapman and Hall, 1993. 448 pages. \$ 45, cloth. Environmental impacts of pesticide use and value tradeoffs and ethical issues. Sometimes the pesticide use is as much for cosmetic purposes as for real nutritional or health significance. (v4,#1)

Pimentel, David et al (and eight others), "Economic and Environmental Benefits of Biodiversity," BioScience 47(1997):747-757. The annual economic and environmental benefits of biodiversity in the United States total approximately \$ 319 billion. Some aspects of conserving biodiversity are expensive, although they may return major dividends. The economic value to humans around the world is \$ 2.9 trillion annually. By comparison, the gross domestic product in the U.S. topped \$ 7.6 trillion in 1996. For another study, see Costanza, Robert, and twelve others, "The Value of the World's Ecosystem Services and Natural Capital," Nature 387(15 May 1997):253-260, and note in ISEE Newsletter, v.8,#2. Costanza's group figured the world total in the range of \$ 16-54 trillion, with an average of \$ 33 trillion per year. So the numbers seem slippery, but everybody agrees they are huge. (v.8,#4)

Pimentel, David, Houser, James, White, Omar. "Water Resources: Agriculture, the Environment, and Society," Bioscience 47(no.2, 1997):97. An assessment of the status of water resources. (v8,#1)

Pimentel, David and Marcia Pimentel, eds., Food, Energy, and Society, rev. ed. Niwot, CO: University Press of Colorado, 1996. \$ 39.95. 392 pages. In the fifteen years since the first edition of this book was published, world energy supplies, especially fossil fuels, have dwindled as their use has escalated. Availability of the other major resources required for human life also has come under growing pressure.

These include fertile land, water, and biological diversity. The very integrity of these resources is threatened. David Pimentel is professor of insect ecology, Marcia Pimentel teaches nutritional science in the College of Human Ecology, Cornell University. (v7,#2)

Pimentel, David, "Environmental and Social Implications of Waste in U.S. Agriculture and Food Sectors", Journal of Agricultural Ethics 3(1990):5-20. Because the agriculture/food sectors appear to be driven by short-term economic and political forces, cheap energy, and agricultural-chemical technologies, waste and environmental/social problems in the agricultural/food sectors are estimated to cost the nation at least \$150 billion per year. Most of the waste and environmental/social problems can be eliminated through better resource management policies and the adoption of sustainable agricultural practices. Pimentel is in entomology at New York State College of Agriculture and Life Sciences, Cornell University, Ithaca.

Pimentel, David, Westra, Laura, and Noss, Reed F., eds. Ecological Integrity: Integrating Environment, Conservation, and Health. \$ 35.00 paper, \$ 70.00 hardbound. Washington, DC: Island Press, 2000. A result of the Global Integrity Project. The integrity concept. Historical and philosophical perspectives. Sustainability and the integrity of natural resource systems. Human and societal health. The economics and ethics of achieving global integrity. 21 contributions. In addition to the editors, contributors include James Karr, Robert Goodland, Orié Loucks, Mark Sagoff, Peter Miller, Ernest Partridge, Robert Ulanowicz, Donald A. Brown, Alan Holland, and others. Partridge's "Reconstructing Ecology" is a sustained critique of Mark Sagoff's deconstructing of ecology; see separate entry. Also of particular interest: Ted Schrecker, "The Cost of the Wild: International Equity and the Losses from Environmental Conservation." (v.12,#1)

Pimentel, David, "Economics and Energetics of Organic and Conventional Farming", Journal of Agricultural and Environmental Ethics 6(1993):53-60. The use of organic farming technologies has certain advantages in some situations and for certain crops such as maize; however, with other crops such as vegetables and fruits, yields under organic production may be substantially reduced compared with conventional production. In most cases, the use of organic technologies requires higher labor inputs than conventional technologies. Some major advantages of organic production are the conservation of soil and water resources and the effective recycling of livestock wastes when they are available. Pimentel is in agriculture and life sciences at Cornell University, Ithaca, NY.

Pimentel, David et al., "Water Resources: Agricultural and Environmental Issues", BioScience 54(no.10, 1 October 2004):909-918(10). The increasing demands placed on the global water supply threaten biodiversity and the supply of water for food production and other vital human needs. Water shortages already exist in many regions, with more than one billion people without adequate drinking water. In addition, 90 of the infectious diseases in developing countries are transmitted from polluted water. Agriculture consumes about 70 of fresh water worldwide; for example, approximately 1000 liters (L) of water are required to produce 1 kilogram (kg) of cereal grain, and 43,000 L to produce 1 kg of beef. New water supplies are likely to result from conservation, recycling, and improved water-use efficiency rather than from large development projects.

Pimentel, David S., and Peter H. Raven, "Bt Corn Pollen Impacts on Nontarget Lepidoptera: Assessment of Effects in Nature," Proceedings of the National Academy of Sciences 97(no. 15, July 18, 2000):8198-8199. The effect of Bt corn on butterfly populations appears to be relatively insignificant, compared with other considerations. Bt corn permits reduced use of pesticides and the use of pesticides required with non Bt corn (especially to kill the corn rootworm) has worse environmental effects. Some 35% of food sold in U.S. supermarkets has detectable pesticide residues, an undesirable effect. Pesticides cause the death of 70 million birds a year and kill billions of insects, beneficial as well as harmful, each year. The beneficial insects are vital to fruit and vegetable pollination, useful biological control agents, and many

others. Such environmental losses, due to pesticide killing of beneficial insects, are estimated at \$1 billion a year. Pimentel is in entomology, Cornell University. Raven is at the Missouri Botanical Garden, St. Louis.

Pimentel, David. "Amounts of Pesticides Reaching Target Pests: Environmental Impacts and Ethics." Journal of Agricultural and Environmental Ethics 8(1995):17-29. Less than 0.1% of pesticides applied for pest control reach their target pests. Thus, more than 99.9% of pesticides used move into the environment where they adversely affect public health and beneficial biota, and contaminate soil, water, and the atmosphere of the ecosystem. Improved pesticide application technologies can improve pesticide use efficiency and protect public health and the environment. (JAEE)

Pimentel, David; Hepperly, Paul; Hanson, James; Douds, David; Seidel, Rita, "Environmental, Energetic, and Economic Comparisons of Organic and Conventional Farming Systems," BioScience 55 (no. 7, July 2005): 573-582. Various organic technologies have been utilized for about 6000 years to make agriculture sustainable while conserving soil, water, energy, and biological resources. Among the benefits of organic technologies are higher soil organic matter and nitrogen, lower fossil energy inputs, yields similar to those of conventional systems, and conservation of soil moisture and water resources (especially advantageous under drought conditions). Conventional agriculture can be made more sustainable and ecologically sound by adopting some traditional organic farming technologies. Response by Alex Avery, "Organic and Conventional Agriculture Reconsidered," BioScience 55(2005):820-821, and see that entry.

Pimentel, D., Westra, L., and Noss, R., eds. Ecological Integrity: Integrating Environment, Conservation and Health. Washington, DC: Island Press, 2000. (v.11,#3)

Pimm, Stuart L. Gareth J. Russell, John L. Gittleman, Thomas M. Brooks. "The Future of Biodiversity." Science 269(1995):347-350. Recent extinction rates are 100 to 1000 times their pre-human levels in taxonomically diverse groups in widely different environments. If all species currently deemed threatened become extinct in the next century, the future rate will be 10 times the present rate. Many species not now threatened will also succumb. Estimates of future extinctions are hampered by our limited knowledge of which areas are rich in endemics. (v6,#3)

Pimm, Stuart L., The Balance of Nature? Ecological Issues in the Conservation of Species and Communities. Chicago: University of Chicago Press, 1991. (v7,#2)

Pimm, Stuart L, et al. (two dozen others), "Can We Defy Nature's End?" Science 298(2002):2207-2208. Is saving remaining biodiversity still possible? Is protecting biodiversity economically possible? Will protecting areas work? Should conservation research and management be centralized or distributed? Should efforts concentrate on protection or on slowing harm? Do we know enough to protect biodiversity?

Pinches, Charles. "Eco-minded: Faith and Action," Christian Century 115 (no. 22, August 12-19, 1998):755-757. A review of Rasmussen, Larry L., Earth Community, Earth Ethics (Orbis, 1996), as well as a reflection over ecotheology. Pinches thinks ecotheologians, including Rasmussen, are too trendy and not well grounded in systematic theology. Pinches teaches theology at the University of Scranton, Pennsylvania. (v.9,#3)

Pinchot, Gifford, "What It All Means," Wild Earth 10(no. 2, Summer 2000):14- . (v.12,#2)

Pinchot, Gifford. Breaking New Ground. Washington, D.C.: Island Press, 1998. \$25. 546 pp. The autobiography of the first chief of the U.S. Forest Service, here reprinted. (v9,#2)

Ping, Ye, "On the Structure of Ecological Ethics," Seeking Truth, no. 2 (1992): 39-42. Article in Chinese. The foundation, starting point, and ultimate end of ecological ethics is the coordination of the ongoing relations between humans and nature. To develop an ecological ethics, there must be development of the study of ecological moral philosophy as well as of the study of ecological science. This involves both fundamental principles and application, theory and practice; it couples attitudes and behaviors, personal norms and personal actions. Both this and the preceding article criticize an exclusively anthropocentric ethics and begin to explore a nonanthropocentric environmental ethics. Ye Ping is professor of philosophy, Northeast Forestry University, Harbin, China. (v3,#1)

Pinkson, Tom, "Soul of the Wilderness: Wilderness Wisdom to Save our Souls--and the Planet," International Journal of Wilderness 3(no. 1, 1997):4-5, 48 On the summits, in the desert, the forest, the ocean, we most easily can see that we humans are but a small part of the whole, compared to the vast cyclic rhythms of creation. Pinkson is a psychologist, Sausalito, CA. (v8,#2)

Pinnock, Clark, ed., The Openness of God: A Biblical Challenge to the Traditional Understanding of God. Reviewed by J. Harley Chapman. American Journal of Theology and Philosophy 18(no.1, 1997):100-105.

Pinstrup-Andersen, Per, and Peter Sandøe, eds. *Ethics, Hunger, and Globalization: In Search of Appropriate Policies*. New York: Springer 2007. Contents include: (1) "Introduction and Summary" by Per Pinstrup-Andersen and Peter Sandøe, (2) "Eliminating Poverty and Hunger in Developing Countries: A Moral Imperative or Enlightened Self-Interest?" by Per Pinstrup-Andersen, (3) "Ethics, Globalization, and Hunger: An Ethicist's Perspective" by Lou Marinoff, (4) "The Ethics of Hunger: Development Institutions and the World of Religion" by Katherine Marshall, (5) "What Hunger-Related Ethics Lessons Can We Learn From Religion? Globalization and the World's Religions" by Richard S. Gilbert, (6) "Freedom from Hunger as a Basic Human Right: Principles and Implementation" by Asbjørn Eide, (7) "Millennium Development Goals and Other Good Intentions: How to Translate Rhetoric Into Action" by Urban Jonsson, (8) "What We Know About Poverty and What We Must Do: Ethical and Political Aspects of Empowerment" by Sartaj Aziz, (9) "Ethics and Hunger: A Non-Governmental Organization (NGO) Perspective" by Tom Arnold, (10) "Economic Development, Equality, Income Distribution, and Ethics" by Erik Thorbecke, (11) "On the Ethics and Economics of Changing Behavior in Food and Agricultural Production, Consumption, and Trade: Some Reflections on What to Do" by Joachim von Braun and Tewodaj Mengistu, (12) "Agricultural and Food Ethics in the Western World: A Case of Ethical Imperialism?" by Peter Sandøe and Kathrine Hauge Madsen, (13) "Ethics, Hunger, and the Case for Genetically Modified (GM) Crops" by Paul B. Thompson, (14) "Reforming Agricultural Trade: Not Just for the Wealthy Countries" by M. Ann Tutwiler and Matthew Straub, (15) "Agricultural Subsidy and Trade Policies" by Devinder Sharma, (16) "Food Safety Standards in Rich and Poor Countries" by Julie A. Caswell and Christian Friis Bach, and (17) "Concluding Reflections on the Role of Ethics in the Fight Against Poverty" by Peter Sandøe, Karsten Klint Jensen, and Per Pinstrup-Andersen.

PinstrupAndersen, P, "Feeding the World in the New Millennium: Issues for the New U.S. Administration," Environment 43(no. 6, 2001):22-31. (v.13,#1)

Pinto, Vivek. Gandhi's Vision and Values: The Moral Quest for Change in Indian Agriculture. Review by John McMurtry, Journal of Agricultural and Environmental Ethics 11(1999):243-246. (JAEE)

Pinto-Correia, Teresa; Gustavsson, Roland; Pirnat, Janez, "Bridging the Gap between Centrally Defined Policies and Local Decisions: Towards more Sensitive and Creative Rural Landscape Management," Landscape Ecology 21 (no.3, April 2006): 333-346 (14).

Pirages, Dennis C., ed. Building Sustainable Societies: A Blueprint for a Post-Industrial World. Armonk, NY: M.E. Sharpe, 1996. 372pp. \$54.95 cloth, \$24.95 paper. This collection of articles addresses the question whether the industrial model of human progress can be sustained in the long run. It analyzes the social political, economic, and environmental implications as well as potential solutions to the problem of resource-intensive growth. (v8,#1)

Pister, Edwin P. "Endangered Species: Costs and Benefits." Environmental Ethics 1(1979):341-52. Biologists are often placed in the difficult position of defending a threatened habitat or animal with vague reasoning and faulty logic simply because they have no better rationale at their immediate disposal. This places them at a distinct disadvantage and literally at the mercy of resource exploiters and their easily assignable dollar values. Although the initial dollar cost of delaying or precluding "development" may be significant, the long-term benefits of saving the biological entities which might otherwise be destroyed are likewise great and are measurable in concrete terms which society is only now beginning to appreciate. Case histories are presented, a more profound rationale is explained, and the environmentalist is challenged to make his case sufficiently effective to reverse the current exploitive trends which threaten so many of Earth's life forms. Pister is at the California department of Fish and Game, Bishop, CA. (EE)

Pister, Edwin P. (Phil), "Desert Fishes: An Interdisciplinary Approach to Endangered Species Conservation in North America," Journal of Fish Biology (UK) 37(1990): Supplement A: 183-187. In the 1960' and 1970's, protective legislation and basic research needed for conservation efforts did not exist, and Pister recounts developing these. Desert aquatic communities were among the first to need attention, and an interdisciplinary effort was mounted in an early application of conservation biology. Pister was, until retirement, with the California Department of Fish and Game and remains secretary of the Desert Fishes Council. This whole supplement is the papers from a symposium, "The Biology and Conservation of Rare Fish," held by the Fisheries Society of the British Isles, Lancaster, U.K., July 16-20, 1990. (v5,#4)

Pister, Edwin Philip, "Species in a Bucket, Natural History, January 1993. Phil Pister's celebrated story of an emergency transfer of the Owens pupfish (Cyprinodon radiosus), an endangered species in California, from one spring to another, when he held the entire population of the species in two buckets. "For a few frightening moments, there was only myself standing between life and extinction." Pister is a retired fisheries biologist with the Desert Fishes Council, Bishop, California. (v4,#2)

Pister, Edwin P., "Ethics of Native Species Restoration: The Great Lakes," Journal of Great Lakes Research 21, Supplement 1 (1995):10-16. Value issues are of increasing importance in environmental decisions, although narrow academic backgrounds and traditional scientific rigidity among decision makers have impeded proper consideration of ethics. Aldo Leopold's land ethic and the developing discipline of environmental ethics provide a solid foundation for restoration of habitats and native fauna in the Great Lakes. Such principles provides the best chance for constructing biologically and ethically sound restoration programs. Pister is with the Desert Fishes Council, Bishop, CA. (v.10,#1)

Pitcher, Alvin, Listening to the Crying of the Earth: Cultivating Creation Communities. Cleveland: The Pilgrim Press, 1993. Paper. 157 pages. Chapter titles: What is happening to the Earth? Why our social institutions are not responding well to the ecological crisis. Theological foundations for responding. Being a part of a creation community. With appendices as case studies and summary position statements. Quite usable in local churches, for general readers. Does not deal with the major issues raised in philosophical environmental ethics. Pitcher is professor emeritus of ethics and society at the Divinity School, University of Chicago. (v5,#2)

Pitcher, Alvin. Listen to the Crying of the Earth: Cultivating Creation Communities. Cleveland, OH: Pilgrim Press, 1993.

Pitt, Jennifer Luecke, Daniel F. Valdes-Casilla, Carlos, "Two Nations, One River: Managing Exosystem Conservation in the Colorado River Delta," Natural Resources Journal 40(no.4, Fall 2000):819-. (v.12,#4)

Pittman, Nigel C. A., and Jorgensen, Peter M., "Estimating the Size of the World's Threatened Flora," Science 298 (1 November 1998):989. The most commonly cited figure is 13%, known to be a serious underestimate, because it is inadequate for the tropics where most of the world's plants grow. These authors re-evaluate the data and the results fall in the range of 22% to 47%. A research project finding out more specifically just what plants are endangered would cost less than \$ 100 per species per year, or about \$ 12 million a year studying all the biodiversity hot spots. Pittman is with the Center for Tropical Conservation, Duke University. Jorgensen is with the Missouri Botanical Garden, St. Louis. (v.13,#4)

Pittock, A. Barrie. "Climate Change and World Food Supply and Special Issues of Global Environmental Change and Food Policy," Environment 37(no. 9, Nov. 1995):25- . (v6,#4)

Pizzuto, J., "Effects of Dam Removal on River Form and Process," Bioscience 52(no.8, 2002) (v.13,#4)
Place, Frank, and Keijiro Otsuka, "Population, Tenure, and Natural Resource Management: The Case of Customary Land Area in Malawi," Journal of Environmental Economics And Management 41(no.1, Jan., 2001): 13-. (v.12,#3)

Placter, Harald. "Functional Criteria for the Assessment of Cultural Landscapes," Chapter 34 in Droste, Bernd von; Plachter, Harald, and Rössler, Mechtild, eds., Cultural Landscapes of Universal Value (Jena, Germany: G. Fischer-Verlag, 1995), pages 393-404. In English. Cultural landscapes result from the interaction of humans and nature. Landscapes are often characterized by their structural or material features, but they can as well be characterized by their functional features and the way these are interrelated, such as nutrients or energy supplied, which is a more ecosystemic approach. This also reveals the degree to which the natural qualities of self-regulation and self-development may still be present on a culturally modified landscape. Placter is professor for natural conservation at the University of Marburg, Germany. (v8,#2)

Plant, Christopher and Judith Plant, eds., Turtle Talk: Voices for a Sustainable Future. Santa Cruz: New Society Publishers, 1990. 132 pp. \$ 11.70 paper. Fourteen interviews with leaders of the activist North American bioregional movement. The turtle has become the symbol of the bioregional movement, from a native American name for the Earth: Turtle Island. (v1,#4)

Plater, ZJB, "Law and the Fourth Estate: Endangered Nature, the Press, and the Dickey Game of Democratic Governance," Environmental Law 32(no.1, 2002):1-36. (v.13, #3)

Plater, Zygmunt J.B. "Environmental Law as a Mirror of the Future: Civic Values Confronting Market Force Dynamics in a Time of Counter-Revolution", Boston College Environmental Affairs Law Review 23(no.4,1996):733. (v7,#4)

Plater, Zygmunt J. B., Robert H. Abrams, and William Goldfarb. Environmental Law and Policy: Nature, Law, and Society. St. Paul, MN: West Publishing Co., 1992. 1033 pages, plus indexes. About \$50. With a periodic supplement, keeping it current, in a rather rapidly changing field. Supplement for Environmental Law and Policy: Nature, Law, and Society. St. Paul, MN, West Publishing Co., 1994. Softcover, 355 pages. One of the better, and halfway reasonably priced, introductions to environmental law, suitable also for use with undergraduates. Based on cases by subject area, with interpretive text. The supplement, for example, contains a new chapter "Environmental Justice--Race, Poverty, and the Environment" (with analysis of the East Bibb Twiggs Neighborhood Association vs. Macon-Bibb

County, Georgia case) and a current bibliography on environmental justice (pp. 40-45 in appendix) that lists many yet forthcoming articles. Also recent relevant documents, such as the President's Executive Order 12898 (February 11, 1994) on environmental justice, and the EPA Title VI Rules. Plater is at Boston College Law School, Abrams at Wayne State University Law School, and Goldfarb at Cook College, Rutgers. (v6,#1)

Platt, Rutherford H., Barten, PI K., and Pfeffer, Max J., "A Full, Clean Glass? Managing New York City's Watersheds," Environment 42 (No. 5, 2000 Jun 01): 8- . New York may offer a model for how a city can protect its water sources and ensure community involvement. (v.11,#4)

Platt, Rutherford, et al., Disasters and Democracy: The Politics of Extreme Natural Events. Washington, DC: Island Press, 1999. To what extent does the likelihood of general federal assistance (in the U.S.) serve to diminish the natural caution that individuals, communities, and businesses might otherwise exercise in adjusting to natural hazards. Platt and colleagues find "a legal edifice of byzantine complexity" that is deeply flawed and amounts to "driving with the brakes on." The answers lie in reducing the federal aid and increasing local and individual responsibility and control. Platt is in geography and planning law at the University of Massachusetts. (v.12,#2)

Platt, Rutherford H., Rowan A. Rowntree and Pamela Muick, eds. The Ecological City--Preserving and Restoring Urban Biodiversity. Amherst, MA: University of Massachusetts Press, 1994. Paper, \$ 17.95. Cloth, \$ 45.00. Sixteen papers showing convincingly that the term "ecological city" is not an oxymoron. There are urban ecosystems--wetlands, forested areas, meadows, wildlife, and genuine landscapes in the urban environment--albeit too few and all too often threatened with deterioration or loss. Existing resources can be protected, enlarged, and improved if only their worth can be recognized and the necessary measures taken in time. (v6,#3)

Player, Ian, Zulu Wilderness: Soul and Shadow. Golden, CO: Fulcrum Publishing, 1998. Player's involvement with the conservation movement in South Africa, including a lifelong friendship with a Zulu chief and game scout, Magqubu Ntombela. Their successful effort to save the white rhino in Africa and their never ending effort to protect wilderness, a story placed in the broader framework of South African history, Zulu history, apartheid, and the growing environmental ethic in South Africa. (v.9,#3)

Pletscher, Daniel H., and Michael K. Schwartz, "The Tyranny of Population Growth," Conservation Biology 14(no.6, 2000): 1918- . (v.12,#3)

Pleune, Ruud, "Strategies of Environmental Organizations in the Netherlands regarding the Ozone Depletion Problem," Environmental Values 5(1996):235-255. Strategies of environmental organizations in the Netherlands regarding the ozone depletion problem have been analyzed both at the cognitive level and at the operational level. The first objective of this analysis was to describe their strategies over a period of time. Secondly, it aimed to increase understanding of the linkage between cognitive and operational aspects of the strategies. The third objective was to find out to what extent strategies are constant features of an organization and how far they are defined by particular problems. The results indicate that each of the organizations concerned with the ozone depletion problem adopted several different strategies, that the strategies of the organizations did not change much over time, and that there was no one-to-one linking of different aspects of the strategy of the organizations. Strategies seem largely to be defined by the problem encountered. KEYWORDS: Strategy, ecocentrism, anthropocentrism, environmental organization, environmental movement, ozone depletion (EV)

Plotnik, Joshua M., Frans B. M. de Waal, and Diana Reiss, "Self-Recognition in an Asian Elephant," Proceedings of the National Academy of Sciences (PNAS) 103(November 7, 2006):17053-17057. Now elephants have joined a small group of animals that can recognize themselves in a mirror (apes, dolphins--

known only once). Researchers at the Bronx Zoo found that an elephant could repeatedly use her trunk to examine a white X the researchers had painted on her face in a location she could only see in the mirror. See also: Miller, Greg, "Jumbo Reflections," ScienceNOW Daily News, 30 October 2006.

Pluhar, Evelyn B., Beyond Prejudice: The Moral Significance of Human and Non-human Animals. Reviewed by Hugh Lehman. Journal of Agricultural and Environmental Ethics 9(1996):187. (JAEE)
Pluhar, Evelyn B., "When Is It Morally Acceptable to Kill Animals?", Journal of Agricultural Ethics 1(1988):211-224. In response to Professor Lehman's arguments on "the rights view", I distinguish two versions of the rights view: the "equal" and the "unequal" rights view. I conclude with a discussion of the merits of phasing out the meat production industry. Pluhar is in philosophy at Penn State University-Fayette, Uniontown.

Pluhar, Evelyn B. Review of Regulation, Values and the Public Interest. Edited by K. M. Sayre et al. Environmental Ethics 6(1984):271-74.

Pluhar, Evelyn, "Who Can be Morally Obligated to be a Vegetarian?" Journal of Agricultural and Environmental Ethics 5(1992):189-216. I argue that Tom Regan's "liberty principle" either contradicts his "equal rights view" or does not permit the slaughter of another for food. I show that a different view recognizing the moral rights of nonhumans but according them less value than normal adult humans, "the unequal rights view", would permit such action if human survival or health depended upon it. Finally, I argue that current nutritional research does not support George's contention that most humans would suffer if they ceased eating other animals and their products. Pluhar is in philosophy at Pennsylvania State University Fayette Campus, Uniontown.

Pluhar, Evelyn B., Beyond Prejudice: The Moral Significance of Human and Nonhuman Animals. Durham, NC: Duke University Press, 1995. \$ 19.95 paper. 392 pages. (v6,#4)

Pluhar, Evelyn B. Review of Joan Dunayer, "Animal Equality", Organization and Environment, 15, (No. 4, 2002): 490-493. Pluhar is a professor of philosophy at the Pennsylvania State University, Fayette campus.

Pluhar, Evelyn, "Vegetarianism, Morality, and Science Revisited", Journal of Agricultural and Environmental Ethics 7(1994):77-82. Professor Kathryn George's "Use and Abuse Revisited" does not contain an accurate assessment of my "On Vegetarianism, Morality and Science: A Counter Reply." I show that she has misrepresented my moral and empirical argumentation. Pluhar is in philosophy at Pennsylvania State University, Fayette Campus, Uniontown.

Pluhar, Evelyn, Review of Lehman, Hugh, Rationality and Ethics in Agriculture. Journal of Agricultural and Environmental Ethics 9(1996):181-186. (JAEE)

Pluhar, Evelyn B., "On Vegetarianism, Morality, and Science: A Counter Reply", Journal of Agricultural and Environmental Ethics 6(1993):185-213. I recently took issue with Kathryn George's contention that vegetarianism cannot be a moral obligation for most human beings. In her 1992 response to my critique, George did not address my moral argumentation. In my counter-reply, I argue that her rejection of my discussion of nutrition is based upon numerous distortions, omissions, and false charges of fallacy. As I did in my earlier paper, I cite current research, including George's own preferred source on the topic of vegetarianism, to support my view. Pluhar is in philosophy at Pennsylvania State University, Fayette Campus.

Pluhar, Evelyn B. "The Justification of an Environmental Ethic." Environmental Ethics 5(1983):47-61. Tom Regan has made a very important contribution to the debate on environmental ethics in his "On the

Nature and Possibility of an Environmental Ethic." The debate can be brought out yet more clearly by contrasting Regan's views with those of an eminent critic of environmental ethics in Regan's sense, William K. Frankena. I argue that Regan's position has much to recommend it, but has a fatal flaw which would render environmental ethics unjustifiable. I suggest this flaw can be remedied by divorcing an environmental ethic from a dubious ontological commitment. Reflection on metaethics, ontological commitments, and the nature of ethical justification leads to a conclusion favorable to an environmental ethic. Pluhar is in the philosophy department, Pennsylvania State University, Fayette Campus, Uniontown, PA. (EE)

Pluhar, Evelyn, Beyond Prejudice: The Moral Significance of Human and Nonhuman Animals. Reviewed by Tom Regan. Journal of Agricultural and Environmental Ethics 10(1997):79-82. (JAEE)

Pluhar, Evelyn B., Beyond Prejudice: The Moral Significance of Human and Nonhuman Animals. Durham, NC: Duke University Press, 1995. 370 pages. Paper, \$ 19.95. Any sentient cognitive being--one caring about what happens to him or herself--is morally significant, supporting the moral status and rights of many nonhuman animals. Implications of this for children and abnormal humans, and its relevance for population policies, animal testing, euthanasia, hunting and the treatment of companion animals. Pluhar is in philosophy at Pennsylvania State University, Fayette Campus, Uniontown. (v7,#1)

Pluhar, Evelyn B., "The Justification of an Environmental Ethic," Environmental Ethics 5(1983):47-61. An important discussion of the metaethical foundations of an environmental ethic, particularly the nonnaturalistic individualism of Tom Regan. Pluhar reminds us that substantive environmental ethics can take place only against a background of deep metaethical problems. The search for "intrinsic value" in natural ethics may well be a fruitless task. (Katz, Bibl # 1)

Pluhar, Evelyn, "Is There a Moral Relevant Difference Between Human and Animal Nonpersons?", Journal of Agricultural Ethics 1(1981):59-68. It is commonly believed that we humans are justified in exploiting animals because we are "higher" beings: persons who have highly complex, autonomous lives as moral agents. I conclude that, although there is a morally relevant difference between human nonpersons and most animal nonpersons, this difference is not an indication of superior moral status. We would do better to abandon speciesism and the assumption that personhood is morally paramount for a view which implies that both human and nonhuman nonpersons are morally considerable and have a right to life. Pluhar is in philosophy at Pennsylvania State University, Fayette Campus.

Pluhar, Evelyn B., "Two Conceptions of An Environmental Ethic and Their Implications." Ethics and Animals Vol. 4, no. 4 (December 1983): 110-127. An analysis of the problems and strengths of both holism and individualism. Pluhar attempts to blend the two positions, emphasizing the importance of individual rights and interests, but also considering the aesthetic features of nonsentient individuals and systems to be morally valuable. But this leaves unclear why we should preserve ugly species and ecosystems. (Katz, Bibl # 1)

Pluhar, Evelyn, "Utilitarian Killing, Replacement, and Rights", Journal of Agricultural Ethics 3(1990):147-171. The ethical theory underlying much of our treatment of animals in agriculture and research is the moral agency view. It is assumed that only moral agents, or persons, are worthy of maximal moral significance, and that farm and laboratory animals are not moral agents. I consider a number of ingenious recent attempts by utilitarians to defeat the killing and replaceability arguments, including the attempt to make a place for genuine moral rights within a utilitarian framework. Those who reject the restrictive moral agency view and find they cannot accept utilitarianism's unsavory implications must look to a different ethical theory to guide their treatment of humans and non-humans. Pluhar is in philosophy at Penn State University, Fayette Campus, Uniontown.

Plumb, Jessica. "Patagonia's Rugged Beauty Has Its Share of Chills and Thrills." *Christian Science Monitor* 89 (17 July 1997): 10, 12. Includes details of how to get there via plane, bus, or boat. (v8,#3)

Plumwood, Val, "Intentional Recognition and Reductive Rationality," *Environmental Values* 7(1998): 397-421. Recognition of intentionality and the possibility of agency in nonhuman others is a prerequisite for a process of mutual adjustment and dialogue that could replace current reductive and dualistic human-centered theories. John Andrews' article in this issue of *Environmental Values* is criticised for misattributing to me the view that intentionality could be a sole criterion for moral worth - a view which I reject as unacceptably hierarchical and human-centered. To clarify my position, the values and limitations of different kinds of ranking are discussed; and the concept of intentionality is explored, with particular reference to apparently purposeful machines and to Dennett's theory of consciousness. KEYWORDS: consciousness, dualism, moral extensionism, intentionality, panpsychism, ranking, reductionism. Val Plumwood resides at Braidwood, NSW, Australia. (EV)

Plumwood, Val, "Babe: The Tale of the Speaking Meat," *Animal Issues* 1(1997):1-20. "The problems in representing other species' communicative powers or subjectivities in terms of human speech are real, but they do not rule out such representation in any general way, and they pale before the difficulties of failing to represent them at all, or before the enormity of representing communicative and intentional beings as lacking all communicative and mental capacity ... (which is) a much greater inaccuracy and injustice than any anthropomorphism could be" (p. 1). (v.11,#1)

Plumwood, Val, *Imperial Culture: The Ecological Crisis of Reason*. London: Routledge, 2002. Reviewed by Twine, Richard, *Environmental Values* 12(2003):535-537. (EV)

Plumwood, Val, "Feminism and Ecofeminism: Beyond the Dualistic Assumptions of Women, Men and Nature," *The Ecologist* 22(no. 1, January/February 1992):8-13. The identification of men with culture and women with nature has been fiercely criticized by feminists who have shown how it is used to justify the domination of both women and nature. While liberal feminists have challenged the feminine ideal, and radical feminists have promoted the replacement of patriarchal values with feminine ones, a thoroughgoing ecofeminism should question the construction of both masculine and feminine identities. The article contains a box summary: "Current Trends in Ecofeminism. Among these current trends (a position not shared by Plumwood), "Cultural ecofeminism emphasizes the quest for a new spiritual relationship to nature, and stresses personal transformation and the (re)empowerment of women and women's values. Women are seen as having a superior relationship with nature which is sometimes taken to be biologically determined, so that only a society in which women can limit or control the number and influence of men will be free of aggressiveness and the destruction of nature." A good short article for sorting out the different kinds of ecofeminism. Plumwood lectures at the Department of General Philosophy, University of Sydney, Australia. (v5,#2)

Plumwood, Val, "Women, Humanity and Nature." *Radical Philosophy* 48 (Spring 1988): 16-24. Excellent argument for the importance of the ecofeminist investigation into the connections between the domination of women and the domination of nature. Plumwood seeks to address the "naive" feminist view that consideration of a female-nature connection is a regressive move re-emphasizing the traditional categories of female subjugation to male instrumental rationality. She argues for the necessity of re-structuring a new degendered model of human nature that transcends the old categories of masculine and feminine; we do not want to be left with a model of human nature based on a naive female "closeness to nature" which denies "reason, intelligence and control of life conditions" (p. 23). Instead we ought to see the connection between what is human and what is natural. (Katz, Bibl # 2)

Plumwood, Val, "Babe: The Tale of the Speaking Meat," *Animal Issues* 1(1997):1-20. "The problems in representing other species' communicative powers or subjectivities in terms of human speech are real, but

they do not rule out such representation in any general way, and they pale before the difficulties of failing to represent them at all, or before the enormity of representing communicative and intentional beings as lacking all communicative and mental capacity ... (which is) a much greater inaccuracy and injustice than any anthropomorphism could be" (p. 1). (v10,#4)

Plumwood, Val, "Ecofeminism an Overview and Discussion of Positions and Arguments", Australasian Journal of Philosophy, Supplement to 64 (1986)", 120-38. There are a number of striking initial parallels between the treatment of women and that of nature, so that the investigation of conceptual links between these kinds of domination seems a logical outcome of the growth of both the environmental and feminist movements. The author claims, however, that an exploration of the conceptual links between the domination of women and that of nature reveals many serious difficulties. The author provides a critical outline of the positions in the literature and suggests ways to salvage from ecofeminism a position which sheds valuable light on the conceptual structure of domination, and makes important critical points about the western philosophical tradition.

Plumwood, Val, Feminism and the Mastery of Nature. New York: Routledge, 1994. 248 pages. Paper. \$ 17.95. The master form of rationality in Western culture has been systematically unable to acknowledge dependency on nature. Feminist thought can contribute to radical green thought and to the development of a better environmental philosophy. Some chapter titles: Feminism and Ecofeminism; Dualism: the Logic of Colonisation; Mechanism and Mind/Nature Dualism; Ethics and the Instrumentalising Self; Deep Ecology and the Denial of Difference, Changing the Master Story. Says Nancy Fraser (Northwestern University), "Puncturing the myth of 'the angel in the ecosystem,' Plumwood aims to develop a genuinely critical ecological feminism." Plumwood teaches in the Department of Philosophy at the University of Tasmania, Australia. (v5,#1)

Plumwood, Val, Review of Morgan, Marlo, Mutant Message Down Under and Jackson, Michael, At Home in the World. Environmental Ethics 18(1996):431-435. (EE)

Plumwood, Val, "Inequality, Ecojustice and Ecological Rationality," Ecotheology No 5/6 (Jul 98 / Jan 99):185-218.

Plumwood, Val, "Prospecting for Ecological Gold Amongst the Platonic Forms: a Response to Timothy Mahoney," Ethics and the Environment 2(1997):149-168. Timothy Mahoney discovers and champions an ecologically benign account of Plato in opposition to my own critical analysis of the reason-centeredness, reason-nature dualism, and nature and body devaluation in the Platonic dialogues, in which multiple linked dualism of reason and nature associated with systems of oppression provide major organizing principles for Platonic philosophy. I show first that Mahoney's criticisms of my interpretation involve some careless and mistaken readings of my own text. Second, I argue that Mahoney's account of nature is significantly different from Plato's, and that his interpretation of Plato is an overly generous and idealized one which plays on the multiplicity and elasticity of the concept of nature and the notorious vagueness of the concept of participation to conflate, among other things, Plato's attitude to celestial nature with his attitude to biological nature. Mahoney's interpretation involves setting aside the issue of Plato's most offensive and revealing passages of earth disparagement, ignoring the network of social meanings from which Plato's philosophy emerges. Finally, I give some reasons why Mahoney's accounts of participation and nature, even considered as a reworking of Plato, would be highly problematic as the foundation for an ecological philosophy. Plumwood is currently a visiting professor at the University of Montana. (E&E)

Plumwood, Val, Feminism and the Mastery of Nature. (London: Routledge, 1993). Reviewed by Julie Cook. Environmental Values 6(1997):245-246.

Plumwood, Val, "Plato and the Bush", Meanjin, 49 (1990): 524-36. How does philosophy in Australia treat the issue of how humans can or should relate to the natural world? The question is particularly interesting in the light of current interest in the environment, and because of the presence in this country of two cultures, Aboriginal and white, which contrast markedly on the issue of relations to the land. The author discusses the two Australian philosophical traditions and the conflict between them, by focusing on two figures, one historical and one contemporary. Plato's philosophy of nature, the basic elements of which are followed by a succession of rationalist philosophers, is contrasted to first-hand statements of Aboriginal relationship to the land. These first-hand accounts, it is claimed, must replace accounts of Aboriginal views obtained through the filter of white anthropologists. What emerges is a worldview in which, first, there is a constant interchange of forms between human and non-human spheres. Second, obligations concerning the land are central to social, moral and religious life. Third, human social identity and individual identity are intimately connected to the land. A critical scrutiny of our own past philosophical traditions together with a dialogue with Aboriginal worldviews promises to open some new perspectives, and to enable better recognition of some of the wisdom of those who inhabited the land for so long before us, whose record of care contrasts so remarkably with our own.

Plumwood, Val, "Androcentrism and Anthrocentrism: Parallels and Politics," Ethics and the Environment 1(no. 2, 1996):119-152. The critique of anthrocentrism has been one of the major tasks of ecophilosophy, whose characteristic general thesis has been that our frameworks of morality and rationality must be challenged to include consideration of nonhumans. But the core of anthrocentrism is embattled and its relationship to practical environmental activism is problematic. I shall argue here that although the criticisms that have been made of the core concept have some justice, the primary problem is not the framework challenge or the core concept itself, but rather certain problematic understandings of it which have developed in environmental philosophy. In the case of the intrinsic/instrumental distinction, much of the criticism turns on unrealistic expectations about what the distinction means and what it can do; in the case of anthropocentrism, a perverse reading which I will call cosmic anthrocentrism has invited many of the criticisms which have been widely seen as fatal to the concept. Using concepts and models originating in feminist theory and other liberation critiques, I outline an alternative, feminist rereading of anthrocentrism. I argue that this model is theoretically illuminating and capable of meeting major objections that the perverse readings have invited. Critics of the core distinctions have almost universally identified the two core concepts and issues of anthrocentrism and instrumental/intrinsic value. The analysis I present will show how these concepts and issues are connected, but also why there is more to anthrocentrism than the failure to recognise the intrinsic value of nature, and why anthrocentrism rather than intrinsic value should be the major conceptual focus of environmental critique. It will also show why the framework challenge is of practical importance to the green movement and why anthrocentrism is a serious problem in contemporary life. Plumwood lives in Australia where (according to the contributor's notice) she is a forest dweller, bushwalker, and crocodile survivor. (E&E)

Plumwood, Val, Environmental Culture. New York: Routledge, 2002. Rather than looking at the symptoms of environmental degradation to find out what has gone wrong in our thinking, Plumwood looks at the roots of our thinking. She argues that we need to move away from the isolated, individualistic and liberal conception we have of our place in nature and see humanity as part of our ecological world-view, not standing outside it.

A detailed and passionate argument for forms of culture that are logically and pragmatically superior to those cultures built on rationalism, idealism, empiricism, and other philosophical systems that encourage moral distance. Plumwood's focus is on the ways common Western philosophical and practical conceptions of knowledge, goodness, and existence have ignored the grand and absolute significance of the natural world and have therefore brought us to the brink of global ecological disaster.

The ecological crises we currently face are the result of arrogant cultures, based in arrogant philosophical views, that deny the fact that humans are dependent on nature, men dependent on women, and those with economic and decision-making power are dependent on the disempowerment of others.

Instead of thinking of the project of ethics as a matter of extending the boundaries of human-centered thought and recognizing the value of others in relation to human worth, Plumwood suggests that we begin with basic respect for all life and approach others with an ethos of intentional recognition and openness. (v.12,#4)

Reviewed by Chris Cuomo, Notre Dame Philosophical Reviews 2002.11.03. Online at: <http://ndpr.icaap.org/content/archives/2002/11/cuomo=plumwood.html>

Plumwood, Val, "The Concept of a Cultural Landscape: Nature, Culture and Agency in the Land," Ethics and the Environment 11(2006):115-150. The Millennium Ecosystem Assessment Report issued in April 2005 shows how severely our civilisation is degrading and overstressing the natural systems that support human life and all other lives on earth. An important critical challenge, especially for the eco-humanities, is to help us understand the conceptual frameworks and systems that disappear the crucial support provided by natural systems and prevent us from seeing nature as a field of agency. This paper considers the currently popular concept of a cultural landscape as an example of a concept that downplays natural agency, and discusses the epistemology of nature scepticism and nature cynicism that often accompanies its vogue in the humanities. Can some philosophical disentangling of senses of nature (often considered the most complex term in the language) allow sceptics their main points without placing them on such a strong collision course with the requirements of commonsense and survival? Plumwood is at the Centre for Resource and Environmental Studies, Australian National University, Canberra. (Eth&Env)

Plumwood, Val, "Animals and Ecology: Toward a Better Integration," *Food for Thought: The Debate over Eating Meat*, edited by Steve F. Sapontzis (Amherst, NY: Prometheus Books, 2004).

Plumwood, Val, *Environmental Culture: The Ecological Crisis of Reason* (London: Routledge, 2002). Plumwood argues that distortions of reason and culture created dangerous forms of ecological denial that—through economics, ethics, politics, science, and spirituality—gave us an illusory sense of our independence from nature that made us insensitive to dependencies, ecological limits, and interconnections; she drew from democracy, feminism, globalization, and postcolonialism to develop an alternative dialogical interspecies ethics and materialist spirituality of place.

Plumwood, Val, "Ethics and Instrumentalism: A Reply to Janna Thompson," *Environmental Ethics* Vol. 13, no. 2 (1991): 139-49.

Plumwood, Val, "Paths Beyond Human-Centeredness: Lessons from Liberation Struggles," *An Invitation to Environmental Philosophy*, edited by Anthony Weston (Oxford: Oxford University Press, 1999).

Plumwood, Val, "Androcentrism and Anthropocentrism: Parallels and Politics," *Ethics and the Environment* Vol. 1, no. 2 (1996): 119-52.

Plumwood, Val, "The Politics of Reason: Towards a Feminist Logic," *Australasian Journal of Philosophy* Vol. 71, no. 4 (1993): 436-62.

Plumwood, Val, "Plato and the Bush: Philosophy and the Environment in Australia," *Thinking* Vol. 9 (1991): 39-46.

Plumwood, Val, "Tasteless: Towards a Food-Based Approach to Death," *Environmental Values* 17(2008):323-330. In this posthumously published paper Val Plumwood reflects on two personal encounters with death, being seized as prey by a crocodile and burying her son in a country cemetery with a flourishing botanic community. She challenges the exceptionalism which sets the human self apart from nature and which is reflected in the choice between two conceptions of death, one of continuity in the

realm of spirit, the other a reductive materialist conception in which death marks the end of the story of the self. Both perspectives structure out the basis of animal existence - that we are all food, and through death nourish others. She commends an animistic materialist approach, where life is seen as in circulation and where mortuary practices might affirm death as an opportunity of life for others in the ecological community.

Plumwood, Val, "The Concept of a Cultural Landscape: Nature, Culture and Agency in the Land" *Ethics and the Environment* Vol. 11, no. 2 (2006): 115-50.

Plumwood, Val, "The Environment," *A Companion to Feminist Philosophy*, edited by Alison M. Jaggar and Iris Marion Young (Malden, MA: Blackwell, 1998).

Plumwood, Val, "Ecofeminism: An Overview and Discussion of Positions and Arguments," *Australasian Journal of Philosophy* Supplement to Vol. 64 (1986): 120-38.

Plumwood, Val, "The Ecopolitics Debate and the Politics of Nature," *Ecological Feminisms*, edited by Karen J. Warren (London: Routledge, 1994).

Plumwood, Val, "Wilderness Skepticism and Wilderness Dualism," *The Great New Wilderness Debate*, edited by J. Baird Callicott and Michael P. Nelson (Athens: University of Georgia Press, 1998).

Plumwood, Val, "Integrating Ethical Frameworks for Animals, Humans, and Nature: A Critical Feminist Eco-Socialist Analysis," *Ethics and the Environment* Vol. 5, no. 2 (2000): 285-322.

Plumwood, Val, *Feminism and the Mastery of Nature* (London: Routledge, 1993). Plumwood develops a feminist critique to argue that the master form of western culture's rationality was unable to acknowledge its dependence on nature, women, and other dominated groups of people that were constructed as inferior; this rational distortion shaped the basic categories of western thought and threatened the survival of people and nonhuman nature.

Plumwood, Val, "Do We Need a Sex/Gender Distinction?," *Radical Philosophy* Vol. 51, no. 1 (1989): 2-11.

Plumwood, Val, "Women, Humanity and Nature," *Radical Philosophy* Vol. 48, no. 1 (1988): 16-24.

Plumwood, Val, "Intentional Recognition and Reductive Rationality: A Response to John Andrews," *Environmental Values* Vol. 7, no. 4 (1998): 397-421.

Plumwood, Val, "Toward a Progressive Naturalism," *Recognizing the Autonomy of Nature: Theory and Practice*, edited by Thomas Heyd (New York: Columbia University Press, 2005).

Plumwood, Val, "Journey to the Heart of Stone," *Culture, Creativity and Environment: New Environmentalist Criticism*, edited by Fiona Becket and Terry Gifford (Amsterdam: Rodopi, 2007).

Plumwood, Val, "Nature, Self, and Gender: Feminism, Environmental Philosophy, and the Critique of Rationalism," *Hypatia* Vol. 6, no. 1 (1991): 3-27.

Plumwood, Val. "Human Vulnerability and the Experience of Being Prey." *Quadrant*, March 1995, pp. 29-34. *Quadrant* is an Australian literary and academic magazine (46 George St., Fitzroy, Victoria 3065, a Melbourne suburb, ISSN 033-5002. Also published as "Being Prey," *Terra Nova* 1 (no. 3, Summer 1996):32-44. Reflections on her attack by a crocodile in Kakadu National Park, Australia, on February 5,

1985. Plumwood was attacked while canoeing, and rolled three times as the crocodile attempted to drown her. She reached a steep, muddy bank with a paperbark tree with low branches, and made several efforts to escape. "As I leapt again into the same branch, the crocodile again propelled itself from the water, seizing me once more, this time round the upper left thigh." Escaping at great ordeal, she later reflects, "The human species has evolved not only as predator, but also as prey, and this has very likely given us capacities to scent danger which we cannot now recognise or account for." She contrasts aboriginal and colonial attitudes toward nature, masculine bias in extensive media coverage of her attack, and reflects over the conquest of nature and human vulnerability. "The illusion of invulnerability is typical of the mind of the colonizer; and as the experience of being prey is eliminated from the face of the earth, along with it goes something it has to teach about the power and resistance of nature and the delusions of human arrogance. In my work as a philosopher, I now tend to stress our failure to perceive human vulnerability, the delusions of our view of ourselves as rational masters of a malleable nature."

Plumwood, Val. "Integrating Ethical Frameworks for Animals, Humans, and Nature: A Critical Feminist Eco-Socialist Analysis." Ethics and the Environment 5(2000):285-322. ABSTRACT: I discuss in this article ways a critical feminist-socialist ecology envisage the projects of animal ethics and defense in a form both might begin to be both more integrated and more effective as a liberatory theory and political movement than the present offerings of animalist theories. Mainstream (mainly male and abstract) animal ethics theory has many substantial achievements to its credit. It has effectively contested the dominant human-centered assumption that ethics, mind, and communicative capacity are confined to the human sphere, and begun to drive mainstream philosophy towards a revision of Cartesian human/nature dualism. Some ecofeminist and eco-socialist theorists especially have developed a powerful critique of human/animal dualisms and their role in rendering food practices as well as science practices sites for both human and gender domination. (E&E)

Plumwood, Val. See also Routley, Val.

Plumwood, Val. "Has Democracy Failed Ecology? An Ecofeminist Perspective." Environmental Politics 4(Winter 1995):134. (v7,#2)

Plumwood, Val. "Ethics and Instrumentalism: A Response to Janna Thompson." Environmental Ethics 13(1991):139-149. I argue that Janna Thompson's critique of environmental ethics misrepresents the work of certain proponents of non-instrumental value theory and overlooks the ways in which intrinsic values have been related to valuers and their preferences. Some of the difficulties raised for environmental ethics (e.g., individuation) are real but would only be fatal if environmental ethics could not be supplemented by a wider environmental philosophy and practice. The proper context and motivation for the development of non-instrumental theories is not that of an objectivist value theory but rejection of the human domination and chauvinism involved in even the broadest instrumental accounts of nature as spiritual resource. Plumwood is in the philosophy department, University of Sydney, Sydney, Australia. (EE)

Plumwood, Val. *Feminism and the Mastery of Nature*. Translators: Ma Tianjie and Li Lili. (Chongqing: Chongqing Publishing House, 2007). (in Chinese)

Plumwood, Val. "In Memoriam: Val Plumwood," *International Society for Environmental Ethics Newsletter* 19, no. 2, Spring/Summer, 2008, pp. 3-9. Memories and tributes to Val Plumwood, died February 29, 2008. Online at: <http://www.cep.unt.edu/ISEE/index.htm>

Pobee, JS 1985. "Creation faith and responsibility for the world." Journal of Theology for Southern Africa 50, 16-26. (Africa)

Pocalyko, Steve, "Ethyl Corp. v. Environmental Protection Agency: Circuit Court Limits EPA Administrator's Discretion under Waiver Provisions of the Clean Air Act", Tulane Environmental Law Journal, 9(No.1, 1995):183- . (v7,#1)

Podoba, Juraj. "Rejecting Green Velvet: Transition, Environment and Nationalism in Slovakia." Environmental Politics 7(no.1, Spring 1998):129- . (v10,#4)

Poe, Gregory L. "Maximizing the Environmental Benefits per Dollar Expended : An Economic Interpretation and Review of Agricultural Environmental Benefits and Costs." Society & Natural Resources 12(No. 6, Sept. 1999):571- . (v10,#4)

Poff, N. L., and Hart, D. D., "How Dams Vary and Why It Matters for the Emerging Science of Dam Removal," Bioscience 52(no.8, 2002): 659-68. (v.13,#4)

Pogge, Thomas W., ed. Global Justice. Cambridge, MA: Blackwell Publishers, 2002. The dramatic political, economic, and technological changes of the last decade raise new moral challenges. Contributors from several countries analyze the central moral issues arising in the emerging global order, bringing this to bear on the complex and evolving international politics of the new millenium. Pogge is in philosophy at Columbia University. (v.13,#2)

Poguntke, T., "Green Parties in National Governments: From Protest to Acquiescence?," Environmental Politics 11(no.1, 2002): 133-45. (v.13,#2)

Pohl, Otto, "European Environmental Rules Propel Change in U.S.," New York Times, July 6, 2004, p. D4. The EU often has higher environmental standards than the US, and when Europe moves ahead the U.S. sometimes must follow, reluctantly or not in exports to Europe. The EU is now the pacemaker in showing what is possible, especially in phasing out toxics, which American industry may complain they can't afford to eliminate. U.S. industry may lobby in Brussels against the tighter standards. (v.14, #4)

Pohl, Sarah. "Technology and the Wilderness Experience." Environmental Ethics 28(2006):147-163. Environmental Ethics 28(2006):147-183. As mechanical devices become lighter, sleeker, and cheaper, the issue of technology in wilderness becomes an increasingly more important ethical concern because many high-tech luxuries or devices stand to separate the backcountry traveler from the very goals he or she hopes to actualize by recreating in wilderness. As recreationists, we need to determine which items are essential and which are distracting, separating important "equipment" from needless "devices," and exercising the self-control to carry only what we need. This process can be called "responsible simplicity." It is in the backcountry traveler's best interest to exercise responsible simplicity, to choose only the devices necessary to actualize the telos, or goal, of one's wilderness experience. A critique of the appropriateness of technology in the backcountry should entail examining devices in their context and also by their relationship to other technologies brought into the backcountry. From a virtue ethics standpoint, responsible simplicity can promote the integrity of wilderness recreation by providing oversight with regard to what goods are internal to the practice. It can also allow room for "wilderness" in our everyday lives in association with David Strong's notion of "counterbalancing" and Albert Borgmann's notions of "eloquent reality" and "focal practices." (EE)

Poiani, Karen A., Richter, Brian D., and Richter, Holly E., "Biodiversity Conservation at Multiple Scales: Functional Sites, Landscapes, and Networks," Bioscience 50 (No. 2, Feb 01 2000): 133- . (v.11,#2)

Pointing, Clive, A Green History of the World, Chinese translation, translator: Wang Yi and Zhang Xueguang. Publisher: Shanghai People's Publishing House, 2002.

Pointing, Clive, A Green History of the World. New York: St. Martin's Press, \$ 24.95. The Earth's degradation began with Adam and Eve's expulsion into the garden (rather than out of it), that is into agriculture, which was, in turn, followed by industry. A sweeping history of spiral and decay that leaves the land exhausted and civilization destroying itself. If Pointing is right, Murray Feshbach and Alfred Friendly, Jr. Ecocide in the USSR (q.v) only show that the Communists reached this end first. (v3,#2)

Poirier, R., and Ostergren, D., "Evicting People from Nature: Indigenous Land Rights and National Parks in Australia, Russia, and the United States," Natural Resources Journal 42(no.2, 2002): 331-52. (v.13,#4)

Pois, Robert, National Socialism and the Religion of Nature. London: Croon Helm Publishers, 1986. (v8,#3)

Poisner, Jonathan. "A Civic Republican Perspective on the National Environmental Policy Act's Process for Citizen Participation." Environmental Law 26, no.1 (1996): 53. Civic republicans advocate a model of democratic participation that requires broad public participation in a deliberative decision-making process to arrive at a "common good." Poisner advances this model by reviewing the citizen participation provisions of the National Environmental Policy Act and developing criteria that would enable citizens to take a more active role in fulfilling the Act's requirements. (v7, #3)

Pojman, Louis, ed. Environmental Ethics: Readings in Theory and Application. Foreword by Holmes Rolston, III. Boston: Jones and Bartlett Publishers, 1994. 503 pages. Paper. Part One (Theory) and Part Two (Applications) have 36 articles each; 20 topical subsections; the Rio Declaration is an Epilogue. Pojman strives to include articles on both sides of issues, not merely articles advocating environmentalist viewpoints. Included are Leopold, Rachel Carson, Callicott, Naess, Lovelock, Gould, Hardin, Ehrlich, Commoner, Singer, Regan. Also Albert Schweitzer and Al Gore. An analytic philosopher with several important articles, books and anthologies, Pojman is especially adept at selecting and editing readings for undergraduates. In addition to the usual topics, there are sections on non-Western perspectives (Hindu, Buddhist, Islamic, and African), future generations, and human population issues (three sections).

Pojman, Louis P., Global Environmental Ethics. Mountain View, CA: Mayfield Publishing Co., 2000. 393 pages.

1. The Environment: A Global Perspective
2. What is Ethics?
3. Ethical Relativism: Who's to Judge What's Right and Wrong?
4. Egoism, Self-Interest, Altruism
5. Classical Ethical Theories and the Problem of Future Generations
6. The Historical Roots of Our Ecological Crisis (Anthropocentrism)
7. Animal Rights: Sentience as Significant
8. Does Nature Have Objective Value?
9. Ecocentric Holism: The Land Ethic
10. Contemporary Environmental Philosophy: Biocentric Egalitarianism
11. Population: General Considerations
12. Population and World Hunger
13. Air Pollution, the Greenhouse Effect, and Ozone Depletion
14. Water Pollution, Pesticides, and Hazardous Wastes
15. Energy: The Ethics of Power
16. Preservation of Wilderness and Species
17. Economics, Ethics, and the Environment
18. The Challenge of the Future: From Dysfunctional to Sustainable Society

There is also a test bank to accompany this text, prepared by E. R. Klein, Flagler College. Pojman teaches philosophy at the United States Military Academy, West Point. (v.10,#1)

Pojman, Louis P., ed., Environmental Ethics: Readings in Theory and Application, second edition. 568 pages. Belmont, CA: Wadsworth Publishing Co., 1998. Another second edition of another popular text. This one was first issued by Jones and Bartlett, 1994. One of the new features is an exchange between Holmes Rolston and Ernest Partridge on intrinsic values in nature, with some of the material written for this volume. Beyond the usual topics, there is material on the Gaia hypothesis, world hunger, immigration (with a commissioned article, Lindsey Grant, "The Central Immigration Issue: How Many Americans?") and risk assessment (with a commissioned article by Kristin Shrader-Frechette, "A Defense of Risk-Cost-Benefit Analysis." Pojman teaches philosophy at the U. S. Military Academy, West Point, N.Y. (v9,#1)

Pojman, Louis P., ed., Life and Death: A Reader in Moral Problem, 2nd ed. Belmont, CA: Wadsworth Publishing Co., 2000. Section X is on "Animal Rights." Kant, Peter Singer, R. G. Frey, Tom Regan, Robert White, Carl Cohen, James Rachels. Pojman is at the West Point Military Academy. (v.10,#3)

Pojman, Louis P., ed., Environmental Ethics: Readings in Theory and Application. Boston: Jones and Bartlett, 1994. \$ 35 paper. A big reader, by a well-known biology publisher now moving into philosophy of biology, expected to compete with the VanDeVeer and Pierce, ed., The Environmental Ethics and Policy Book. Arranged in a pro and con dialogue, 72 readings on 20 topics, in 18 sections, emphasizing a mix of theory and practice. Study questions follow each reading. The historical roots of our ecological crisis, animal rights, biocentrism, a land ethic, deep ecology, intrinsic natural value, ecofeminism, the Gaia hypothesis, the preservation of biodiversity, obligations to future generations, Asian concepts of nature and the human relation to it, world population, world hunger, pollution, wastes, energy policy, nuclear power, climate change, sustainable development, economics, ethics, and environmental policy. Five commissioned articles, and Vice-President Gore. Foreword by Holmes Rolston. Pojman is professor of philosophy at the University of Mississippi. (v4,#3) (v4,#4)

Pojman, Louis P., Life and Death: Grappling with the Moral Dilemmas of Our time. Boston: Jones and Bartlett Publishers, Inc, 1992. 175 pages. Includes sections on "Morality and the Tragedy of the Commons" and on "Animal Rights." A reader, Life and Death: A Reader in Moral Problems, with sixty readings, will be released in August to accompany this text. (v3,#1)

Pojman, Louis, ed. Philosophy: The Quest for Truth, 3rd ed. Belmont, CA: Wadsworth Publishing Co., 1995. Contains Peter Singer, "The Case for Animal Liberation," and Carl Cohen, "The Case Against Animal Rights." Pojman teaches philosophy at the United States Military Academy, West Point, and is also the editor of an environmental anthology. (v6,#3)

Pojman, Louis P., ed., Environmental Ethics: Readings in Theory and Application, 3rd ed. Belmont CA: Wadsworth/Thompson Publishing Co., 2001. The third edition of a quite successful anthology, its success proved by its repeated re-issuing. New in this edition: Rolston, Holmes, III, "Naturalizing Values: Organisms and Species" and Ned Hettinger's response (see that entry); Jamieson, Dale, "Against Zoos"; Mies, Maria, "Deceiving the Third World: The Myth of Catching-up Development"; and Sapontzis, S. F., "What Animal Liberation Is and Isn't About." Pojman teaches philosophy at the U.S. Military Academy, West Point. (v.11,#1)

Polasky, S., Camm, J.D., and Ding, R., "Choosing reserve networks with incomplete species information," Biological Conservation 94 (No. 1, 2000): 1- . (v.11,#4)

Polasky, S; Solow, AR, "The value of information in reserve site selection," Biodiversity and Conservation 10(no. 7, 2001):1051-1058. (v.13,#1)

Polesetsky, Matthew. "Will a Market in Air Pollution Clean the Nation's Dirtiest Air? A Study of the South Coast Air Quality Management District's Regional Clean Air Incentives Market," Ecology Law Quarterly 22(no.2, 1995):359- . (v6,#4)

Poli, Corrado and Peter Timmerman, eds., L'Etica in Politiche Ambientali (Ethics in Environmental Policy). Rome: Gregoriana Liberia Editrice. 1991. This volume results from the First International Conference on Ethics and Environmental Policies, held in Borca di Cadore, Italy, in 1990. The second such conference was just held at the University of Georgia in April, see above. The main sponsoring foundation is Fondazione Lanza, via Dante 55, 35139 Padova, Italy. Phone 049/8756788. Contents (translations from the Italian), Gabrielle Scimemi, "Ethics in Environmental Policy: An International Perspective"; Franz Böckle, "Environmental Ethics: Philosophical and Theological Foundations"; Antonia Autiero, "A Hope for Our Planet"; Frederick Ferre, "The Environment and the Problem of Evil"; Warwick Fox, "Anthropocentric and Nonanthropocentric Foundations of Environmental Decision-Making"; Sebastiano Maffettone, "Ethics in Environmental Policy"; Kristin Shrader-Frechette, "Ethics in Environmental Policy: Public Action and Populist Reforms"; Corrado Poli, "Environmental Impact Assessment and Value Judgments: Foundations for New Techniques"; Barbara Rhode, "Environmental Damage and the Application of Criminal Law"; Kenneth E. Boulding, "Environmental Ethics and Earth's Economic Systems"; Charles Howe, Ethics, Environment, and Economic Practice"; Peter Brown, "Fiduciary Responsibility and the Greenhouse Effect"; Ratna Murdia, "Environmental Impact and Deforestation in India"; Carlos B. Gutierrez, "Ethics, Politics, and Economics applied to a Safari in Amazonia"; Thomas Heyd, "Sustainable Development: Panacea or Impossibility? Some Implications for Implementing Ethics." An English translation of this work is in progress. (v3,#1)

Policy Implications of Greenhouse Warming (Washington: National Academy Press, 1991). A report by the Committee on Science, Engineering, and Public Policy of the National Academies of Science and Engineering and the Institute of Medicine. The United States could cut emissions of greenhouse gases by 10% to 40% for little or no cost. Meanwhile ozone destruction worsens. New satellite data show that the ozone shield over the United States is eroding twice as fast as had been assumed. See Science, April 12, 1991. (v2,#1)

Polishchuk, Leonard V., "Conservation Priorities for Russian Mammals," Science 297(16 August 2002):1123. Conservation of slow-reproducing, long-lived, large-bodied species is especially challenging and especially in Russia, for example with the Siberian tiger and the polar bear. But Russian resources for conservation, though directed at the tiger and bear, are overlooking over species such as the desman (a cat-sized mole-like animal, much trapped for its fur), on the endangered species list. Polishchuk is in ecology, M. V. Lomonosov Moscow State University, Moscow. (v.13,#4)

Polk, Danne, "Good Infinity/Bad Infinity: Il y a, Apeiron, and Environmental Ethics in the Philosophy of Levinas," Philosophy in the Contemporary World 7(no. 1, Spring):35-40. Although Levinas does not specifically articulate an environmental ethic, he certainly has a concept of nature, from which can be drawn the human, primordial relationship to the elemental. This involves two types of infinity, environmental imperatives toward both the body's exclusive relationship to nature and to the interpersonal relationships between the self and other human beings. Apeiron is undifferentiated material nature. Polk is in philosophy, Villanova University. (v.11,#3)

Polk, Danne W., "Gabriel Marcel's Kinship to Ecophilosophy" Environmental Ethics 16(1994):173-186. Gabriel Marcel spent most of his life developing a phenomenology of human intersubjectivity. While doing so he discovered the extent to which an authentic human community depends upon the relationship it has to nonhuman nature. By exploring Marcel's critique of technology, as well as his religious phenomenology, I show the proximity to which Marcel's philosophy approaches the current egalitarian response of the radical ecology movement. Even though the bulk of Marcel's work is concerned with

human intersubjectivity, his writings advocate a transcendence of anthropocentrism to what Marcel calls "cosmocentrism," an existential attitude toward the world which submits to the sacredness of all beings, as well as to the bioregions within which all earthly creatures share the sacraments of life. Polk is in philosophy, Villanova University, Villanova, PA. (EE)

Pollack, Andrew, "Genes from Engineered Grass Spread for Miles, Study Finds," New York Times, September 21, 2004, P. A1, C4. Genes from genetically engineered grass can spread much farther than previously known, up to 13 miles in windblown pollen. Monsanto and Scotts have developed a strain of creeping bentgrass for use on golf courses that is resistant to the widely used herbicide Roundup. The altered grasses would allow groundkeepers to spray the herbicide in their greens and fairways, while leaving the grass unscathed. But environmental groups and the U.S. Forest Service and Bureau of Land Management worry that the grass would spread to areas where it is not wanted or transfer its herbicide resistance to weedy relatives, creating superweeds immune to the weedkiller. The Forest Service has said that the grass "has the potential to adversely impact all 175 national forests and grasslands." (v.14, #4)

Pollack, Andrew, "U.S. and Allies Block Treaty On Genetically Altered Goods," New York Times (2/25/99): A1. U.S. blocks international treaty on trade in genetically altered goods. The U.S., Canada, Australia, Chile, Argentina and Uruguay blocked a Biosafety Protocol supported by 130 nations that would have required exporters of genetically-altered organisms and seeds to get explicit permission from importing nations. The treaty was aimed at preventing possible environmental harm from such trade. The six major agricultural exporters objected to the inclusion of commodities like wheat and corn, arguing that they are meant for eating and processing and do not enter the environment. They were afraid that the protocol would be used as an excuse to block billions of dollars in farm exports. From 25 to 45 percent of corn, cotton and soybeans grown in the U.S. has been genetically modified. The Biosafety Protocol was an outgrowth of the Convention on Biological Diversity agreed to at the 1992 Rio de Janeiro Earth Summit. The U.S. Senate has still not ratified this convention because of fear it would harm the biotechnology industries. (v.10,#1)

Pollack, Andrew, "Biotech's Sparse Harvest," New York Times, February 14, 2006. Genetically engineered crops have mostly benefited farmers by making it easier for them to control weeds and insects, but the promise of healthier and tastier foods is still unfulfilled. Big companies are not interested in it, for fear of customer resistance. Smaller companies do not have the resources to do it. Where some results have been achieved, there are often problems; it's more nutritious, but it doesn't taste good, or there are side effects. Corn with more lysine, an amino acid, is being fed to farm animals. Considerable work has been done with soybeans to change the fat composition to more desirable fats, with mixed success. Often traditional breeding works about as well, without customer resistance.

Pollack, Andrew, "Can Biotech Crops Be Good Neighbors?" New York Times, September 26, 2004. The answer is quite uncertain. (v.14, #4)

Pollan, Michael, Second Nature: A Gardener's Education. New York: Atlantic Monthly Press, 1991. There are two problems with a purist ethic toward nature. (1) Seemingly pristine parts of nature are more changed by humans already than we like to realize. (2) There is no guidance for what to do with areas that are not pristine. "'All or nothing,' says the wilderness ethic, and in fact we've ended up with a landscape in America that conforms to that injunction remarkably well. Thanks to exactly this kind of either/or thinking, Americans have done an admirable job of drawing lines around certain sacred areas (we did invent the wilderness area) and a terrible job of managing the rest of our land. The reason is not hard to find: the only environmental ethic we have has nothing useful to say about those areas outside this line. Once a landscape is no longer 'virgin' it is typically written off as fallen, lost to nature, irredeemable. We hand it over to the jurisdiction of that other sacrosanct American ethic: laissez-faire economics. ... Essentially, we have divided our country in two, between the kingdom of wilderness,

which rules about eight percent of America's land, and the kingdom of the market, which rules the rest" (p. 188-189). (v7,#1)

Pollan, Michael, "Only Man's Presence Can Save Nature," Journal of Forestry 88(no.7, July, 1990):24-33. A panel with Daniel B. Botkin, Dave Foreman, James Lovelock, Frederick Turner, and Robert D. Yaro. The theme is the shifting definitions of nature and of humans. Some opinions: "We are foolish to believe that all our problems are solvable, especially by technology or sociology." "The quintessential element of nature [is] us. Humankind is more what nature is than anything else." "The Indians changed the ecology of North America totally." "We shouldn't treat nature as if it's a machine--take it apart, rebuild it, and substitute new parts. The rule should be: change nature at nature's rates and in nature's ways." Michael Pollan is executive editor of Harper's Magazine, in which this earlier appeared. And he ought to have better sense than to use a sexist title like this. Maybe his environmentalist opinions are suspect on this account alone. (v3,#3)

Pollan, Michael , *The Omnivore's Dilemma: The Search for a Perfect Meal in a Fast-Food World* (London: Bloomsbury, 2006). Reviewed by Michael Allen Fox, *Environmental Values* 17(2008):113-116.

Pollan, Michael. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin Press, 2006. The "American paradox" is that we are a "notably unhealthy people obsessed by the idea of eating healthily." Pollan eats four meals, following the origins and results of the food eaten. One is from an Iowa farm with confined animal feeding operation. One is a meal from an organic supermarket. One is on a small farm in Virginia run by a farmer who creatively exploits natural symbioses of plants and animals. The last is in the hunter-gatherer food chain. In closing he reflects on "the perfect meal," with a true accounting of its benefits and costs.

Pollock, Rebecca, "Crystal Waters," Alternatives 26 (No. 3, 2000 Summer): 36- . Australian ecovillage is a world-recognized pioneer in low-impact living. (v.11,#4)

Pollock-Ellwand, Nancy, "Cultural Landscapes and Environmental Ethics: The Case of Puslinch Township's Historic Roadside Trees", Journal of Agricultural and Environmental Ethics 7(1994):189-204.

Pollock-Ellwand, Nancy. "The Need for Holism: A Landscape and Pluralist Perspective", Environments 24(no. 1, 1996):94. (v7,#4)

Pollution in the Arctic and Antarctic. Polar Record, vol. 37, no. 202, July 2001 is a theme issue devoted to pollution and its remediation in frozen ground, Arctic and Antarctic, permafrost, fuel spills, waste disposal, landfills. (v.12,#3)

Polson, Sheila. "A Troubled Environment Seen Through the Art of Children." The Christian Science Monitor 89.87 (1 April 1997): 13.

Polunin, N., "Humility And The Environment," Environmental Conservation 26 (No. 4, Dec 01 1999): 243- . (v.11,#2)

Polunin, Nicholas. "Editorial: Humans' Real Place on Earth." Environmental Conservation 22, no.4 (1995): 289. (v7, #3)

Pompe, Jeffrey J. and Rinehart, James R., Environmental Conflict: In Search of Common Ground. Albany, NY: State University of New York Press, 2002. (v.13, #3)

Pompetzki, Monika, "Papers," Environments 28(no.2, 2000): 11-. Domination, Alienation, Integration: Three Models of Human-Environment Relations Applied to Land Use in Niagara. (v.12,#3)

Poortinga, W., Steg, L., and Vlek, C., "Environmental Risk Concern and Preferences for Energy-Saving Measures," Environment and Behavior 34(no.4, 2002): 455-78. (v.13,#4)

Pope, Carl, "Television Misses the Picture," Sierra 81 (no. 2, March/April 1996):12-14. Environmental coverage on the three networks has declined by 60 percent since 1989; the decline is not due to lack of environmental news or interest, but possibly to the pressures of owners and advertisers. Ted Turner and Tom Brokaw are notable exceptions. Pope is executive director of the Sierra Club. (v7,#1)

Pope, Carl and Paul Rauber, Strategic Ignorance: Why the Bush Administration is Recklessly Destroying a Century of Environmental Progress. San Francisco: Sierra Club Books, 2004. Searing criticism of the Bush administration for compromising environmental gains of the last century. Risk analysis, pollution standards, federal lands, Alaska, global warming, American decline in environmental leadership, and more.

Popke, E., "Poststructuralist Ethics: Subjectivity, Responsibility and the Space of Community," Progress in Human Geography 27(no. 3, 2003): 298-316. (v 14, #3)

Popp, Trey, "Nature Hits the Roof," Science and Spirit 16 (no. 6, Nov./Dec. 2005):15-18. Plant a prairie on your roof. An emerging trend for environmental, religious, and aesthetic reasons is green roofs that create an urban canopy where nature is restored on the rooftop. Ford Motor Company makes some of its biggest trucks under the world's biggest green roof, 10 acres that provides habitat for local wildlife, saves the plant 7% of energy costs, minimizes storm water runoff, absorbs harmful emissions.

Popper, Deborah and Popper, Frank, "The Buffalo Commons: Using Regional Metaphor to Envision the Future," Wild Earth 9 (No. 4, Wint 1999): 30- . (v.11,#2)

Population and Environment is an interdisciplinary journal. A special issue on "Roots of Environmental Neglect" is forthcoming. Articles feature the comparative importance of population, affluence, depletion of natural resources, new technologies, ideology, ethics, social domination, anthropocentrism, biocentrism. The journal especially publishes articles that seek to integrate and reconcile these viewpoints, or to enrich this debate by grounding it in such disciplines as history, philosophy, political science, psychology, anthropology, economics, biology, literature, and archeology. (v8,#1)

Population and Environment, an interdisciplinary journal, is soliciting contributions for a forthcoming special issue on "Roots of Environmental Neglect." Reviews of prevailing viewpoints (e.g., the comparative importance of population, affluence, depletion of natural resources, new technologies, ideology, ethics, social domination, anthropocentrism, biocentrism) are welcome. Equally welcome are contributions which seek to integrate and reconcile these viewpoints, or which seek to enrich this debate by grounding it in such disciplines as history, philosophy, political science, psychology, anthropology, economics, biology, literature, and archeology. Please send papers, in duplicate, to Dr. Moti Nissani, Guest Co-Editor, Interdisciplinary, Studies Program, 5700 Cass Ave., Wayne State University, Detroit, MI 48202, USA; Email: mnissani@juno.com; Fax: (313) 577-8585; Tel.: (810) 543-0536 (home & message). (v8,#2)

Population and Environment: A Journal of Interdisciplinary Studies is now in volume 13, an important journal that may be overlooked by those interested in environmental ethics. The editor is Virginia Abernethy, Department of Psychiatry, AA-2206 Medical Center North, Nashville, TN 37232. Phone: 615/322-6608. The publisher is Human Sciences Press, Inc., 233 Spring Street, New York, NY 10013-

1578. Phone 212/620-8000. A free sample copy is available. A sample paper, by Virginia Abernethy is: "The True Face of Compassion: Immigration Policy and Other Ways to Help." "The steadily intensifying national debate on immigration is incorrectly cast with pro-immigration 'humanitarians' on the one hand and hard-nosed, tight-border, 'America-firsters' on the other. This scenario distorts an underlying question, which is how to encourage and support third world countries in confronting their own, very serious problems. From this perspective, positions both for and against high immigration share the common ground of having a compassionate intent." "Immigration policy is one of the very few means by which the U. S. may be able to influence the trend of world population growth. ... Barriers to immigration which lead to zero population growth in the U.S. make us a credible international example. ... Only then will the most innovative, even dissident, people beyond our border be persuaded to remain at home, where they are needed to confront and lead the way out of the misery which inevitable results from failure to recognize limits." (Thanks to Ron Engel.) (v4,#1)

Porritt, J, "Sustainability without Spirituality: a Contradiction in Terms?," Conservation Biology 16(no.6, 2002): 1465.

Porritt, Jonathon, "The Common Heritage: What Heritage? Common to Whom?" Environmental Values Vol.1 No.3(1992):257-268. ABSTRACT: Global commons are natural goods which transcend national boundaries. A brief glance at management of oceans and terrestrial commons is succeeded by fuller discussion of rainforests, over which nations claim property rights, yet which perform global services. Leasing out could effect a desirable transfer of funds from North to South. Sustainable development requires these or other large incentives towards environmental protection in developing countries, but land and institutional reform are crucial to success. In conclusion, the anthropocentric ethic implicit in all such solutions is contrasted with the ecocentric one which may be necessary to preserve the biosphere in the future. KEYWORDS: Biosphere, global commons, rainforests, property rights, stewardship, sustainability. 30 Swinton Street, London WC1X 9NX, UK.

Porritt, Jonathon, Capitalism as if the World Matters. London: Earthscan, 2005. Our unsustainable world. 1. Conflicting Imperatives. 2. Sustainable Development for Real. 3. Re-engaging with Economic Growth. 4. Unsustainable Capitalism? 5. Through the Global Looking Glass. 6. The Five Capitals Framework. 7. Natural Capital. 8. Human Capital. 9. Social Capital. 10. Manufactured Capital. 11. Financial Capital. 12. Confronting Denial. 13. Changing the Metrics. 14. Business Excellence. 15. Civil Society. 16. Visions and Values. 17. Converging Imperatives.

Porteous John Douglas. Environmental Aesthetics: Ideas, Politics, and Planning. New York: Routledge, 1996. (v.8,#4)

Porter, Douglas R. Managing Growth in America's Communities. Covelo, CA: Island Press, 1997. 215 pp. \$29.95 paper. The author describes the regulatory and programmatic techniques that have been most useful, obstacles to be overcome, and specific strategies that have been instrumental in achieving successful growth management programs. Also included are informational sidebars written by leading experts in growth management. (v8,#2)

Porter, Gareth. "Natural Resource Subsidies and International Policy: A Role for APEC," The Journal of Environment and Development 6(no.3, 1997):276. (v8,#3)

Porter, Richard C., The Economics of Water and Waste in Three African Capitals. Brookfield, VT: Ashgate, 1997. 154 pp. \$55.95. The successes and failures of the policies and outcomes of three differing approaches to the problems of providing adequate urban service in the cities of Accra, Harare, and Gaborone.

Porter, Richard C., The Economics of Water and Waste in Three African Capitals. Brookfield, VT: Ashgate, 1997. 154 pp. \$55.95. The successes and failures of the policies and outcomes of three differing approaches to the problems of providing adequate urban service in the cities of Accra, Harare, and Gaborone.

Portney, Kent E., Controversial Issues in Environmental Policy: Science vs. Economics vs. Politics. Thousand Oaks, CA: Sage Publications, 1992. 181 pages. \$ 15.50 paper. \$ 31.95 cloth. How value disputes have found their way into the policymaking process, pitting the values of science, technology, economics, and environmental conservation against the practice of politics. Portney is at Tufts University. (v4,#3)

Portney, Paul R., and Weyant, John P., eds., Discounting and Intergenerational Equity. Washington, DC: Resources for the Future, 1999. 224 pages. \$ 33 hardback. The contributor economists generally embrace discounting for evaluating projects with timeframes of forty years or less, with the discount rate to reflect the opportunity costs of capital. But beyond the forty year mark, much discomfort sets in. Very large costs to the future are worth nothing today. In fact, using the 7 percent discount rate that the Office of Management and Budget recommends for such purposes, the present inhabitants of Earth should not spend more than \$ 2 each today to prevent the loss of the entire gross domestic product (GDP) of the whole world two hundred years from now. Several contributors doubt that standard cost-benefit analysis is useful at all for problems with significant intergenerational consequences. A major problem is climate change; the usual discounting warrants spending rather little today to prevent great losses to future persons. Portney is president of Resources for the Future; Weyant is in engineering-economic systems at Stanford University. (v.10,#3)

Portney, Paul and John Weyant, eds. Discounting and Intergenerational Equity. Washington: Resources for the Future, 1999. Review by Colin Price
Environmental Values 10(2001):553. (EV)

Posewitz, Jim, Beyond Fair Chase: The Ethic and Tradition of Hunting. Helena, MT: Falcon Press, 1994. Paper. \$ 5.95. Cloth, \$ 17.95. "As hunters we enjoy the rare privilege of participating in the natural process rather than only observing it from a distance. We become, for a time a predator like the human hunters of our distant origins. We are however, a minority; and if we are to continue, we must do it in a way that is acceptable to the majority." "You need to be familiar with the field, the woods, the marsh, the forest, or the mountains where you hunt. If you work hard and long at this aspect of hunting, you can become a part of the place you hunt. You will sense when you start to belong to the country. Go afield often enough and stay out long enough and it will happen. Little by little you will become less of an intruder. More animals will seem to show themselves to you. You are no longer a stranger in their world; you have become part of it. Many people hunt for a lifetime without learning this, and they miss the most rewarding part of being a hunter." Already over 100,000 copies of this book have been used in hunter education programs in thirty states. Posewitz is a longtime Montana conservationist, and founder of Orion, The Hunters Institute. (v5,#4)

Posey, D., Balee, W., eds. Resource Management in Amazonia. Bronx, NY: The New York Botanical Garden, 1989. 304pp. \$59 paper. Examines the resource-use practices of eight tribal groups as well as the caboclos, non-tribal rural farmers, fisherman, and foragers in Amazonia, the world's largest expanse of tropical rain forest. In a variety of habitats--flood-plain and upland forests, savannas, highlands, black and clear water rivers--these peoples have developed management practices that can provide new insights for the conservation and wise use of these threatened ecosystems.

Posey, D. A., Dutfield, G., Plenderleith, K. "Collaborative Research and Intellectual Property Rights," Biodiversity and Conservation 4(no.8, Nov. 1995):892- . (v6,#4)

Posey, Darrell Addison, ed. Cultural and Spiritual Values of Biodiversity. Review by Richard Folitz, Journal of Agricultural and Environmental Ethics 14(2001):93-96.

Folitz, Richard. Review of Darrell Addison Posey, ed., Cultural and Spiritual Values of Biodiversity, Journal of Agricultural and Environmental Ethics 14(2001):93-96. (JAEE)

Posey, Darrell A., ed., Cultural and Spiritual Values of Biodiversity: A Complementary Contribution to the Global Biodiversity Assessment. London: Intermediate Technologies, and Nairobi, UNEP (United Nations Environment Programme), 1999. A hefty volume of 731 large-format, double-column pages. Some thirty contributors include David Suzuki, Baird Callicott, James Nash, Mark Sagoff, Oren Lyons, Vandana Shiva, and Rosemary Radford Ruether, as well as first-hand testimonies from representatives of indigenous groups around the world. Posey is at the Department de Ciências Biológicas, Universidad Federal do Maranhao, Sao Luis, Maranhao, Brazil. (v.11,#3)

Posner, Richard, Catastrophe. New York: Oxford University Press, 2004. The odds of the occurrence of one or more catastrophes are growing quickly because of "the breakneck pace of scientific and technological advance." These possible catastrophes include rapid climate change, which "is to a significant degree a byproduct of the success of capitalism in enormously increasing the amount of world economic activity ... and is a great and growing threat to anyone's idea of human welfare." About this, conservatives are "in a state of denial." Posner is often known for his economic approach to making decisions but, unfortunately, catastrophe "turns out to be an unruly subject for economic analysis." Posner is a judge of the U.S. Court of Appeals for the Seventh Circuit.

Post, James A., "Managing As If the Earth Mattered," Business Horizons 34, no. 4 (1991): 32-38. Managers can no longer ignore environmental problems; they must manage as if the earth mattered, because in fact it does. (v4,#2)

Post, Stephen G., editor in chief, Encyclopedia of Bioethics, 3rd edition. 5 vols. New York: Macmillan Reference, 2003. Some articles relevant to environmental philosophy and animal issues: (These are mostly carried over from the 2nd edition, Warren T. Reich, editor-in-chief, Macmillan Library Reference, Simon and Schuster, 1995, with Holmes Rolston, III as area editor for environmental ethics and animal welfare issues.

-Sagoff, Mark, "Agriculture and Biotechnology"

-Singer, Peter, "Animal Research: Philosophical Issues"

-Regan, Thomas, "Animal Welfare and Rights: I. Ethical Perspectives on the Treatment and Status of Animals"

-Linzey, Andrew, "Animal Welfare and Rights. II. Vegetarianism"

-Rolston, Holmes: "Animal Welfare and Rights. III. Wildlife Conservation and Management"

-Linzey, Andrew, "Animal Welfare and Rights: IV. Pet and Companion Animals"

-Dunlap, Julie, "Animal Welfare and Rights: V. Zoos and Zoological Parks"

-Bernard E. Rollin, "Animal Welfare and Rights: VI. Animals in Agriculture and Farming"

-Jamieson, Dale, "Climate Change"

-Lauritzen, Paul, "Cloning III: Religious Perspectives"

-Rolston, Holmes, "Endangered Species and Biodiversity"

-Callicott, J. Baird, "Environmental Ethics: Overview"

-Naess, Arne, "Deep Ecology"

-Callicott, J. Baird, "Environmental Ethics: III. Law and Ethics"

-Warren, Karen J., "Environmental Ethics: IV. Ecofeminism"

-Sagoff, Mark, "Environmental Policy and Law"

-Peters, Philip J., "Future Generations, Obligations to"

- Shrader-Frechette, Kristin, "Hazardous Wastes and Toxic Substances"
- Newton, Lisa H., "Life"
- Lennox, James A., "Nature" (v.14, #4)

Postma, Dirk Willem. *Why Care for Nature? In Search of an Ethical Framework for Environmental Responsibility and Education*. New York: Springer, 2006. Postma critiques the Education for Sustainable Development framework used by environmental educators and in its place develops an ethical framework for responsibility and care of nature that is inspired by our commitment to collective practices and by our sensual-aesthetic acquaintanceship with natural surroundings in our everyday activities.

Potgieter, JH 1991. Natuur, Skriftuur en die mens is getuies van God (Ps 19). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 105-113. (Africa)

Pottast, Thomas, "Inventing Biodiversity: Genetics, Evolution, and Environmental Ethics," Biologisches Zentralblatt (now Theory in Biosciences/Theorie in den Biowissenschaften) 115(nos. 2/3, 1996):177-188. In English. A historical survey of the concept of biodiversity. There are two components: genetic diversity, arising from the study of cultivated plants, and species diversity, arising from the study of evolutionary history. The first person to combine these was Otto Herzfeld Frankel, Australian plant geneticist and breeding scientist, in 1970 and again in 1974, using the term "evolutionary responsibility," his precursor to the later term "environmental ethics." Biodiversity conservation includes both economic dimensions and natural history dimensions, both with implications for nature conservation. (Presumably Frankel features genetic biodiversity conservation, else there was already Leopold, Carson, Muir, active in environmental ethics.) Pottast is at the Center for Ethics in the Sciences and the Humanities, University of Tübingen, Germany. (v.10,#1)

Potter, B., "A Review of: Smouts, Marie Claude. Tropical Forests, International Jungle: The Underside of Global Ecopolitics," Society and Natural Resources 18(no. 10, November/December 2005): 939-941.

Potter, B., "Predatory Politics: Group Interests and Management of the Commons," Environmental Politics 11(no.2, 2002): 73-94. (v.13,#4)

Potter, Christopher S. "Terrestrial Biomass and the Effects of Deforestation on the Global Carbon Cycle." Bioscience 49(No.10, Oct. 1999):769- . Results from a model of primary production using satellite observations. (v10,#4)

Potter, Clive. "Beyond Soil Conservation." Environment 38, no.7 (1996): 25. Current U.S. soil conservation programs are better at meeting political goals than environmental ones, according to this review of a report by the Office of Technology Assessment. (v7, #3)

Potter, H. R., "Review of: Gottlieb, Robert, Environmentalism Unbound: Exploring New Pathways for Change," Society and Natural Resources 15(no.2, 2002): 189-91. (v.13,#2)

Potter, RB, "Environmental problems in an urbanizing world," Land Use Policy 19(no.2, 2002):188- . (v.13, #3)

Potter, Stephen, An Environmental Ethic for Business (with special reference to the Electricity Supply Industry), Master's Thesis, Department of Philosophy, Lancaster University, September 1990.

Potter, Stephen, An Environmental Ethic for Business (with special reference to the Electricity Supply Industry), Master's Thesis, Department of Philosophy, Lancaster University, September 1990. (v7,#1)

Potter, Van Rensselaer, "Fragmented Ethics and 'Bridge Bioethics'," Hastings Center Report 29(no. 1, 1999):38-40. Environmental ethics can be a bridge between the two cultures: the sciences and the humanities. An environmental ethic seeks the preservation and restoration of the natural landscape, plants, and animals; clean air; plentiful, nonpolluted water; and large areas in the wild state. It can serve as a bridge between pluralist interests in society, and bridge humans to nature, also serve as a bridge to the future. Potter is professor emeritus in oncology at the University of Wisconsin. (v.10,#1)

Potter, Van Rensselaer, "Evolving Ethical Concepts," BioScience 27(1977):251-253. Analyses the origins of environmental ethics in the 1970's, and earlier precedents, finding Rolston a key figure, in contrast to Hardin.

Potter, Van Rensselaer, Global Bioethics: Building on the Leopold Legacy. Michigan State University Press, 1989. Reviewed in Environmental Ethics 11(1989):281-85.

Potter, Van Rensselaer, Discussion section: "Real Bioethics: Biocentric or Anthropocentric?," Ethics and the Environment 1(no.2, 1996):177-183. Environmental ethics is done by philosophers operating within the strict canons of the discipline. Environmental ethics has been pursued as the traditional ethics of pure reason. Real bioethics is not pure, traditional, reasoning ethics. Real bioethics is done by realistic scientists and concerned biologists and physicians who have an intuition to help build a "Bridge to the Future" whether or not their effort is labeled "bioethics." Among this cohort is Physicians for Social Responsibility and the editors of their new journal, Medicine and Global Survival. These people are not professional ethicists. As realists they see the survival and well-being of the human species as a matter of organizational morality--a civic society directed to the "common good" world-wide, as soon as possible, and with a long-range perspective. Real bioethics is not merely biocentric or merely anthropocentric. Instead, real bioethics calls for an idealistic mix of biocentrism and the kind of humanism that is concerned with the needs, interests, and welfare of human beings, or, in other words, and enlightened or realistic anthropocentrism that acknowledges the central role of the biosphere in the continued existence and "common good" of the human species, as previously discussed in connection with global bioethics, a subject foreign to environmental ethicists. From any point of view, real bioethics falls in the context of the ideals of two Wisconsin professors who lived in the early part of the twentieth century, Aldo Leopold and Max Otto. Potter was, until retirement, professor of oncology at the McArdle Laboratory for Cancer Research at the University of Wisconsin. He claims to have coined the word "bioethics" in 1970. (E&E)

Pottinger, Lori, "Dammed If You Do," The Ecologist 31(no.1, 2001 Feb 01): 50-. The new report from the World Commission on Dams is a strong condemnation of much of the world's dam-building. (v.12,#3)

Poudevigne, I. and Baudry, J., "The Implication of Past and Present Landscape Patterns for Biodiversity Research: Introduction and Overview," Landscape Ecology 18(no. 2, 2003): 223-225.

Pounds, J. Alan, Fogden, Michael P., and Campbell, John H., "Biological Response to Climate Change on a Tropical Mountain," Nature 398(15 April 1999):611-615. Recent warming has caused changes in species distribution and abundance on a tropical mountain in Costa Rica; the extent of these effects is unclear. Twenty of fifty species of frogs and toads have disappeared. Some data suggests this is from lifting cloud levels due to climate warming. One species is the locally endemic golden toad (Bufo periglones), which could be the first extinction due to global warming. See related article, Still, Christopher J., et al., "Simulating the Effects of Climate Change on Tropical Montane Cloud Forests," Nature 398(15 April 1999):608-610. (v.10,#2)

Pouta, Eija, and Mika Rekola, "The Theory of Planned Behavior in Predicting Willingness to Pay for Abatement of Forest Regeneration," Society & Natural Resources 14(no.2, 2001): 93-. (v.12,#3)

Pouta, Eija; Sievanen, Tuija; Neuvonen, Marjo, "Recreational Wild Berry Picking in Finland: Reflection of a Rural Lifestyle," Society and Natural Resources 19 (no.4, Number 4/April 2006): 285-304 (20).

Pouteau, Sylvie, "The Food Debate: Ethical Versus Substantial Equivalence," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):291-303. Substantial equivalence (SE) has been introduced to assess novel foods, including genetically modified (GM) food, by means of comparison with traditional food. Besides a number of objections concerning its scientific validity for risk assessment, the main difficulty with SE is that it implies that food can be qualified on a purely substantial basis. SE embodies the assumption that only reductive scientific arguments are legitimate for decision-making in public policy due to the emphasis on legal issues. However, the surge of the food debate clearly shows that this technocratic model is not accepted anymore. Food is more than physico-chemical substance and encompasses values such as quality and ethics. These values are legitimate in their own right and require that new democratic processes are set up for transverse, transdisciplinary assessment in partnership with society. The notion of equivalence can provide a reference scale in which to examine the various legitimate factors involved: substance (SE), quality (Qualitative Equivalence: QE), and ethics (Ethical Equivalence: EE). QE requires that new qualitative methods of evaluation that are not based on reductive principles are developed. EE can provide a basis for the development of an Ethical Assurance as a counterpart of Quality Assurance in the food sector. In France, a second circle of expertise is being set up to address the social issues in food public policy beside classical risk assessment by the first circle of expertise. Since ethics is likely to become an organizing principle of the second circle, the equivalence ethical framework can prove instrumental in this context. KEY WORDS: equivalence ethical framework, "Ethical Assurance," second circle of expertise, food integrity, genetically modified (GM) food, legitimate factors, quality, substantial equivalence.

Pouteau is with the Laboratoire de Biologie Cellulaire, INRA, Versailles cedex, France. (JAEE)

Pouyat, R. V., "Science and Environmental Policy--Making Them Compatible," BioScience 49(1999):281-286.

Povilitis, Anthony J. "On Assigning Rights to Animals and Nature." Environmental Ethics 2(1980):67-71. Watson argues that living entities do not have intrinsic or primary rights, such as the right to existence, unless they are capable of fulfilling reciprocal duties in a self-conscious manner. I suggest that (1) Watson's "reciprocity framework" for rights and duties is excessively anthropocentric, (2) that it is founded on the incorrect-assumption that the Golden Rule refers to mutual rather than individual duties, and (3) that Watson arbitrarily equates moral rights with primary rights. Since "intrinsic" rights are, in effect, assigned rights, the assignment of rights to a given entity is viewed as a function of its perceived value. Thus, in emphasizing differences between man and other living entities, Watson chooses Cartesian values in assigning rights. Conversely, the ecological and evolutionary relatedness of living things forms the basis for considering rights within the naturalist tradition. Povilitis is a senior wildlife ecologist for VTN Wyoming, Sheridan, WY. (EE)

Povilitis, Tony, "Toward a Robust Natural Imperative for Conservation," Conservation Biology 15(no.2, 2001): 533-. (v.12,#3)

Povinelli, Daniel J., Folk Physics for Apes: The Chimpanzee's Theory of How the World Works. New York: Oxford University Press, 2000. Chimpanzees think about the physical world in a way radically different from our own. Whereas humans can reason about imperceptible physical forces such as gravity, mass, and inertia, chimpanzees can only reason about perceptible things such as the learned association between dropping a rock onto a palm nut and then eating the fleshy meat inside. Research to support these conclusions. Our human cognitive departure from nonhuman primates is more dramatic than previously believed. Povinelli is at the Laboratory of Comparative Behavioral Biology, University of

Southwestern Louisiana. For a generally negative review, see Hauser, Marc D., "Elementary, My Dear Chimpanzee," Science 291(19 January 2001):440-441. Povinelli, he claims, worked with young and inexperienced chimpanzees (under 10 years old), and his experimental methodology was not careful enough. (EE v.12,#1)

Powell, Chris, "A Chance at History," Wildlife in North Carolina 65 (no. 3, March 2001):6-10. Restoration of elk to the Great Smoky Mountains in North Carolina, hunted to extinction in the 1700's. Twenty-five elk are being released each year. (v.12,#2)

Powell, Frona M., "The Public Trust Doctrine: Implications for Property Owners and the Environment," Journal of Environmental Law and Practice 5 (July 1997):30-. The application of public trust doctrine in the current debate over the extent to which government may regulate private property to protect the public environment. (v.8,#4)

Powell, Paul D. "Can Principles of Evolution and Ecology Be Applied to the Problem of HIV Infection/AIDS", Biodiversity Letters 3(no.1, 1996):14. (v7,#4)

Power, Mary E.; Tilman, David; and Menge, Bruce A. "Challenges in the Quest for Keystones." Bioscience 46, no.8 (1996): 609. Identifying keystone species is difficult--but essential to understanding how loss of species will affect ecosystems. (v7, #3)

Power, Thomas Michael. Lost Landscapes and Failed Economies. Covelo, CA: Island Press, 1996. 350 pp. \$29.95 cloth. An economist argues that the quality of the natural landscape is an essential part of a community's permanent economic base and should not be sacrificed in short-term efforts to maintain employment levels in industries that are ultimately not sustainable. Power analyzes areas where environmental protection measures have been enacted to examine the impact of protected landscapes on local economies. (v7,#4)

Power, Thomas Michael. Review of For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future. By Herman E. Daly and John B. Cobb, Jr. Environmental Ethics 15(1993):85-90.

Power, Thomas Michael. Environmental Protection and Economic Well-Being: The Economic Pursuit of Quality. Armonk, NY: M. E. Sharpe, 1996. 268pp. \$24.95 paper. A critique of the "folk economics" that dominates economic development discussions. Power applies the theoretical and empirical results of economic research to local development issues, and analyzes economic development policy in the context of the "total economy," not merely in terms of commercial business activity. (v8,#1)

Power, Thomas Michael, Extraction and the Environment: The Economic Battle to Control our Natural Landscapes. Washington; Island Press, 1995. 350 pages. The quality of the natural landscape is an essential part of a community's permanent economic base and should not be sacrificed to short-term goals. Case studies from ranching, mining, and timber industries. (v8,#2)

Power, Thomas Michael. Lost Landscapes and Failed Economies: The Search for a Value of Place. Washington, D.C.: Island Press, 1998. \$32.50 cloth, \$17.95 paper. 350 pp. (v9,#2)

Powers, Alan, Bird Talk: Conversations with Birds. Berkeley, CA: Frog, Ltd. 2003. Distributed by North Atlantic Books, P. O. Box 12327, Berkeley, CA 94712. An experimental walk through the city and countryside of several continents while listening, watching, and replying to birds. Powers brings a musician's ear and delight in language and the oral communication of the poet, Renaissance scholar, and college teacher to the question, "What are birds saying when they talk to each other?"

Powers, C. John. Review of Buddhism and Ecology: The Interconnection of Dharma and Deeds. Edited by Mary Evelyn Tucker and Duncan Williams. Environmental Ethics 22(2000):207-210.

Powers, C. John. Review of Confucianism and Ecology: The Interrelation of Heaven, Earth, and Humans. Edited by Mary Evelyn Tucker and John Berthrong. Environmental Ethics 22(2000):207-210.

Powers, Melissa, "The Spirit of the Salmon: How the Tribal Restoration Plan Could Restore Columbia Basin Salmon," Environmental Law 30(no.4, 2000): 867-. Columbia River salmon have undergone significant losses in populations due to habitat degradation and destruction. In the face of continued salmon population declines and the real threat of extinction, several fish management entities have developed various salmon recovery plans over the years. Ms. Powers argues for state and federal agencies to adopt the Columbia River Inter-Tribal Fish Commission's "Spirit of the Salmon" tribal restoration plan. She contends that the tribal restoration plan is the best hope for salmon recovery in the Columbia River Basin. Ms. Powers details the plan's main elements, how the plan could lead to salmon recovery, and the significance of the plan as a unique exercise of tribal sovereignty. (v.12,#3)

Powledge, F, "Chesapeake Bay Restoration: A Model of What?," BioScience 55 (no. 12, December 2005): 1032-1038.

Poyck, Elizabeth A. "Environmental Indemnities: Drafting Out the Defects." Journal of Environmental Law and Practice 4, no.1 (1996): 5. Recent case law interpreting environmental indemnities and the lessons to learn from these cases. (v7, #3)

Prades, Jose A., and Dunlap, Riley E., "Sociological Perspectives on Global Environmental Change," International Sociology. Part One, vol. 13, no. 4 (December 1998): articles:

--Eugene A. Rosa and Thomas Dietz, "Climate Change and Society: Speculation, Construction and Scientific Investigation."

--Allan Mazur, "Global Environmental Change in the News: 1987-90 vs. 1992-96."

--Riley E. Dunlap, "Lay Perceptions of Global Risk: Public Views of Global Warming in Cross-National Context."

--Michael Redclift and Colin Sage, "Global Environmental Change and Global Inequality: North/South Perspectives."

Part Two, consisting of articles by Prades, Markku Wilenius and by Herbert Giner and David Tabara, voll 14, no. 1 (March, 1999). (v.9, # 4)

Prades, José, Robert Tessier, and Jean-Guy Vaillancourt, eds., Environnement et développement: Questions éthiques et problèmes socio-politiques. Montreal: Éditions Fides, 1992. 376 pages. Canadian \$ 27.95. Fifteen chapters on sustainable development, acid rain, environmental ethics, religion and ecology, economy and ecology. (v5,#1)

Prades, José, Robert Tessier, and Jean-Guy Vaillancourt, eds., Instituer le développement durable: Éthique de l'écodécision et sociologie de l'environnement (Instituting Sustainable Development: Ethics of Ecodecision and Environmental Sociology). Montreal: Éditions Fides, 1994. 306 pages. Canadian \$ 29.95. Thirteen chapters: G. Baum on the social basis of environmental ethics, M-C. Gervais and B. Dumas on environmental knowledge, R. Tessier on ethics and acid rain, J. Hofbeck and E. Hofbeck on the Great Whale hydroelectric project, R. Babin on sustainable development in New Brunswick, O. Boiral on Quebec's sustainable development strategy, and others. (v5,#1)

Prades, José, Robert Tessier, and Jean-Guy Vaillancourt, eds., Gestion de l'environnement éthique et

société (Managing the Environment, Ethics, and Society). Montreal: Éditions Fides, 1991. 376 pages. Canadian \$ 27.95. Fourteen chapters, including J. Prades on environmental ethics, J. P. Waaub on growth versus sustainable development, R. Tessier on the foundations of environmental ethics, L. Gagnon on international dimensions of ecologism, U. Thomas on UNEP, J. Hofbeck on deep ecology, G. Baum on Polanyi and the ecological crisis, G. Lane on environmental and social ethics, M. Boutin on religion and ecology, E. Gaboury on women and environmental ethics. With a closing essay by Pierre Dansereau, Canada's leading ecologist. Prades and Tessier are at the University of Quebec in Montreal and Villancourt is at the University of Montreal. (v5,#1)

Pralle, Sarah B. *Branching Out, Digging In: Environmental Advocacy and Agenda Setting*. Washington, DC: Georgetown University Press, 2007. Strategic competition, conflict expansion, venue-shopping among policy advocates over who makes public decisions and on what basis. Lessons about how to restructure debates. Examples from British Columbian Forest politics, and from Clayquot Sound in British Columbia. Examples from U.S. Forest Service policy in Northern California. The Quincy Library Group.

Pralle, Sarah B., *Branching Out: Digging in: Environmental Advocacy and Agenda Setting* (Washington, DC: Georgetown University Press). Reviewed by Vanessa Timmer, *Environmental Values* 17(2008):547-549.

Prance, Ghilian, "Appropriate Technology and Christian Belief," Green Cross, summer, 1996, p. 18. (v7,#4)

Prato, Tony, and Dan Faigre, eds. *Sustaining Rocky Mountain Landscapes: Science, Policy, and Management for the Crown of the Continent Ecosystem*. Washington, DC: Resources for the Future Press, 2007. Contents include: (1) "Searching for Ecosystem Sustainability" by Tony Prato and Dan Fagre, (2) "Crown of the Continent Ecosystem: Profile of a Treasured Landscape" by Ben Long, (3) "Native Peoples and Archaeology of Waterton-Glacier International Peace Park" by Brian O.K. Reeves, (4) "Economic Growth and Landscape Change" by Tony Prato, Dan Fagre, and Ramanathan Sugumaran, (5) "Sustaining Wildland Recreation: Issues, Challenges, and Opportunities" by Stephen F. McCool and John C. Adams, (6) "Alpine Ecosystem Dynamics and Change: A View from the Heights" by George P. Malanson, David R. Butler, and Dan Fagre, (7) "Conserving Biodiversity" by Michael Quinn and Len Broberg, (8) "Aquatic Ecosystem Health" by F. Richard Hauer, Jack A. Stanford, Mark S. Lorang, Bonnie K. Ellis, and James A. Craft, (9) "Conserving Water Resources" by James M. Byrne and Stefan Kienzle, (10) "Paleo-Perspectives on Climate and Ecosystem Change" by Greg Pederson, Cathy Whitlock, Emma Watson, Brian Luckman, and Lisa Graumlich, (11) "Modeling and Monitoring Biophysical Dynamics and Change" by Dan Fangre, (12) "Ecosystem Responses to Global Climate Change" by Dan Fagre, (13) "Fire Regimes and Their Management" by Robert E. Keane and Carl Key, (14) "Cumulative Effects Analysis and the Crown Managers Partnership" by Michael Quinn, Danah Duke, and Guy Greenaway, (15) "Transboundary Conservation and the Yellowstone to Yukon Conservation Initiative" by Marguerite H. Mahr, (16) "Adaptive Ecosystem Management" by Tony Prato, (17) "Challenges of Managing Glacier National Park in a Regional Context" by Tara Carolin, Steve Gniadek, Sallie Hejl, Joyce Lapp, Dawn LaFleur, Leo Marnell, Richard Menicke, and Jack Potter, (18) "Resolving Transboundary Conflicts: The Role of Community-based Advocacy" by Steve Thompson and David Thomas, and (19) "Achieving Ecosystem Sustainability" by Tony Prato and Dan Fagre.

Pratt, Dallas. Alternatives to Pain in Experiments on Animals. Reviewed in Environmental Ethics 4(1982):273-79.

Pratt, Scott L., "The given land: Black Hawk's conception of place," Philosophy and Geography 4 (No. 1, 2001): 109-125. In the wake of a war against the United States and the displacement of his people from

their lands at the confluence of the Rock and Mississippi Rivers, the Sauk leader, Black Hawk, prepared an autobiography published in 1833. At the center of his work was an attempt to offer his readers a strategy that would make it possible for the Sauk and other Native peoples to coexist with the Americans of European descent who had come to the Mississippi valley. The autobiography, from this perspective, represents more than another statement of a Native American "worldview." Instead, it offers an assessment and a response to a crisis of survival. At issue for Black Hawk are neither property rights nor the troubles of communication between cultures, but rather ways of seeing and understanding the place that sustained the life of his people. Here, the land is not merely something valued, but rather the ground that organizes the meaning of things and events. It is the breakdown of this logic of place, both within the Native community and outside it that precipitated the disastrous war and it is the recovery of this logic through the narrative of Black Hawk's autobiography that he raises the possibility of cultural survival. This paper reexamines Black Hawk's project and provides resources for reading it both as philosophy and as an instance of a conception of place that can contribute to ongoing efforts to promote the coexistence of cultural differences in the land of Black Hawk's people. Pratt is Assistant Professor of Philosophy at the University of Oregon. (P&G)

Pratt, Vernon, with Howarth, Jane, and Brady, Emily, Environment and Philosophy. London and New York: Routledge, 2000. 275 pages. £ 14.00 An introduction to environmental ethics, concentrating on the philosophical presuppositions, and making these accessible those outside philosophy, especially to those in environmental science. Two great structures of modern Western civilization are particularly questioned: individualism and science. Chapters: 1. Introduction. 2. Objective nature. Science. 3. We are all one life. Romanticism, reaction to science, ending in deep ecology. 4. The exploitation of nature and women. Ecofeminism. 5. Phenomenology and the environment (by Jane Howarth). 6. Coping with individualism. 7. Lines into the future. The biological conception of life, biocentrism. Evolutionary origins and kinship of life. 8. Ecology and communities. Leopold's land ethic. 9. The importance of being an individual. Identity issues. 10. The aesthetics of the natural environment (by Emily Brady). The authors are all in philosophy at Lancaster University, U.K. (v10,#4)

Pray, Leslie. "Habitat Lost: Inbreeding Depression and Extinction." Wild Earth 9(No. 2, Summer 1999):12- . (v10,#4)

Preece, Rod, ed., Awe for the Tiger, Love for the Lamb: A Chronicle of Sensibility to Animals. London: Routledge, 2003. The most significant statements of sensibility to animals in the history of thought, West and East. Preece is at Wilfrid Laurier University, Canada. (v. 15, # 3)

Preece, Rod and Lorna Chamberlain, Animal Welfare and Human Values. Waterloo, Ontario: Wilfrid Laurier University Press, 1993. Canadian \$ 45.00. Cloth. (v4,#4)

Preece, Rod, Animals and Nature: Cultural Myths, Cultural Realities. Vancouver, BC: University of British Columbia Press, 1999. 305 pages. (EE v.12,#1)

Preece, Rod. Animals and Nature: Cultural Myths, Cultural Realities.

Vancouver: UBC Press, 1999, 336pp. Reviewed by Marhe Kiley-Worthington. Environmental Values 9(2000):399.

Preiser, Wolfgang F. E., and Baker H. Morrow. Review of A World with a View: An Inquiry into the Nature of Scenic Values. By Christopher Tunnard. Environmental Ethics 1(1979):375-78.

Prendergast, John R., Rachel M. Quinn, and Lawton, John H., "The Gaps Between Theory and Practice in Selecting Nature Reserves." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 3, June 1999):484- . (v10,#4)

Prendergast, Kate, "The Green Infiltration of Agriculture," Science and Spirit 11(no. 4, November/December 2000):16-17. Many environmental groups believe industrialized agriculture deserves a sizeable blame for the world's ecological ills, and they are putting increasing pressures on these companies to be more ecologically responsible. (v.11,#4)

Prendville, Brendan, Environmental Politics in France. Boulder, CO: Westview Press, 1994. 190 pages. \$ 49.95. Prendville is in sociology at the University of Rennes 2, Brittany. (v5,#3)

Prescott, Helen, Nature and Self, Master's Thesis, Department of Philosophy, Lancaster University, September 1994.

Prescott, Helen, Nature and Self, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Prescott-Allen, R., and Prescott-Allen, C., eds. Assessing the Sustainability of Uses of Wild Species. Gland, Switzerland: IUCN Species Survival Commission, 1996. (v.10,#1)

Press, D, "Who Votes for Natural Resources in California?," Society and Natural Resources 16(no.9, 2003):835-846. (v.14, #4)

Press, Daniel, Doak, Daniel F., Steinberg, Paul. "The Role of Local Government in the Conservation of Rare Species," Conservation Biology 10(no.6, 1996):1538. (v8,#1)

Press, Robert M. "Borlaug: Sowing 'Green Revolution' Among African Leaders." The Christian Science Monitor, 29 June 1994, p. 9. (v5,#2)

Pressey, R.L., and R.M. Cowling, "Reserve Selection Algorithms and the Real World," Conservation Biology 15(no.1, Feb. 2001): 275-. (v.12,#3)

Prestemon, Jeffrey P. "The Effects of NAFTA Expansion on US Forest Products Exports," Journal of Forestry 95(no.7, 1997):26. (v8,#3)

Preston, Christopher J. "Epistemology and Intrinsic Values: Norton and Callicott's Critiques of Rolston." Environmental Ethics 20(1998):409-28. Debates over the existence of intrinsic value have long been central to professional environmental ethics. Holmes Rolston, III's version of intrinsic value is, perhaps, the most well known. Recently, powerful critiques leveled by Bryan G. Norton and J. Baird Callicott have suggested that there is an epistemological problem with Rolston's account. In this paper, I argue first that the debates over intrinsic value are as pertinent now as they have ever been. I then explain the objections that Norton and Callicott have raised against Rolston's position. In the main body of the paper, I attempt to show that Rolston's position can accommodate these objections. In this defense of Rolston's position, I have two goals: first, to show that the notion of non-subjective intrinsic value in nature is coherent, and second, to illuminate the places where further philosophical work on intrinsic value remains to be done. Preston is in philosophy at the University of Montana, Missoula. (EE)

Preston, Christopher, Grounding Knowledge: Environmental Philosophy, Epistemology, and Place. Athens: University of Georgia, 2003. An exploration of what Paul Shepard once called "the strange and necessary relationship between place and mind." The author gathers evidence from science studies, cognitive science, evolutionary biology, ecological psychology, anthropology, religious studies, and narrative experience for the claim that physical environments play a structuring role in the knowledge claims that we make. The result is a broad and philosophically informed account of what is often referred

to as "a sense of place." Once the connection between place and mind has been made, Preston makes a straightforward case for the epistemic significance of place, arguing that places (and natural environments in particular) should be valued as important epistemic and cognitive sources. Preston is in philosophy, University of South Carolina.

Preston, Christopher J. "Conversing with Nature in a Postmodern Epistemological Framework." Environmental Ethics 22(2000):227-240. In a recent contribution to this journal, Jim Cheney argues for a postmodern epistemological framework that supports a conception of inquiry as a kind of "conversation" with nature. I examine how Cheney arrives at this metaphor and consider why it might be an appealing one for environmental philosophers. I note how, in the absence of an animistic account of nature, this metaphor turns out to be problematic. A closer examination of the postmodern insights that Cheney employs reveals that it is possible to stress the agency of nature in epistemology without having to draw on the metaphor of conversation. I conclude that this alternative account is not only more plausible, but can probably do the same ethical work as the problematic metaphor of inquiry as conversation. (EE)

Preston, Christopher J., Reintegration with Nature: Against Dualist Metaphysics. Colorado State University Master's thesis. Completed fall 1992. Cartesian metaphysics separates humans from nature; both environmental philosophy and environmental science (especially Barbara McClintock) offer possibilities for metaphysical reintegration with nature. (v3,#4)

Preston, Christopher J. Review of Philosophy and Geography I: Space, Place, and Environmental Ethics. Edited by Andrew Light and Jonathan Smith. Environmental Ethics 22(2000):215-218.

Preston, Christopher J. Review of Environmental Ethics and Philosophy and Geography II: The Production of Public Space. Edited by Andrew Light and Jonathan Smith. Environmental Ethics 22(2000):215-218.

Preston, Christopher J. and Steven H. Corey. "Public Health and Environmentalism: Adding Garbage to the History of Environmental Ethics." Environmental Ethics 27 (2005):3-21. There exists in the United States a popular account of the historical roots of environmental philosophy which is worth noting not simply as a matter of historical interest, but also as a source book for some of the key ideas that lend shape to contemporary North American environmental philosophy. However, this folk wisdom about the historical beginnings of North American environmental thinking is incomplete. The wilderness-based history commonly used by environmental philosophers should be supplemented with the neglected story of garbage and sanitation in North American urban areas during the nineteenth century. This supplemented history changes the conceptual territory over which North American environmental philosophy roams. This new territory is better suited to a number of important local and international environmental challenges. (EE)

Preston, Christopher J., "Epistemology and Environmental Philosophy: Introduction," Ethics and the Environment 10(no. 2, 2005):1-4. Introduction to a theme issue on environmental epistemology. Preston is in philosophy, University of Montana. (Eth&Env)

Preston, Christopher J., "The Promise and Threat of Nanotechnology: Can Environmental Ethics Guide Us?", HYLE 11(no. 1. Spring 2005): 19 44. Preston is in philosophy, University of Montana. Jointly published with TECHNE.
<http://scholar.lib.vt.edu/ejournals/SPT/>

Preston, Christopher J., and Wayne Ouderkirk, eds., Nature, Value, Duty: Life on Earth with Holmes Rolston, III. Dordrecht, The Netherlands: Springer, 2006. Publisher's Description: "Gifford Lecturer and Templeton Prize winner Holmes Rolston, III is widely known as the father of environmental ethics.

From his authorship of one of the first articles in professional environmental philosophy ("Is There an Ecological Ethic?" 1975) to his most recent article on the place of humanity in the cosmos ("Generating Life on Earth: Five Looming Questions" 2007) no author has taken a more prominent role in mapping out the terrain in environmental philosophy. His writings range between natural philosophy and theology and include detailed presentations of an interlocking position that includes aesthetics, value theory, natural resource policy, wilderness advocacy, and sustainable development." Nature Value and Duty: Life on Earth with Holmes Rolston, III is a collection of contemporary writings on the work of Holmes Rolston, III. The authors contributing to this volume are a mixture of senior scholars in environmental ethics and new voices in philosophy and in literature. Together they provide an in depth evaluation of many of the topics discussed by Rolston. They probe the strengths and weaknesses of his work and suggest valuable correctives. Rolston himself, in a detailed reply to each of his critics at the end of the volume, reveals where some of these criticisms sting him the most and in the process provides one of the most detailed and articulate defenses of his position ever offered."

Contents:

- Katie McShane, "Rolston's Theory of Value"
 - Keekok Lee, "Biotic and Abiotic Nature: How Radical is Rolston's Theory?"
 - Christopher J. Preston, "Refining Rolston: A Natural Ontological Attitude towards Natural Values"
 - Mark Wynn, "In Rolston's Footsteps: Human Emotions and Values in Nature"
 - Ned Hettinger, "Religion in Rolston's Environmental Ethics"
 - Lisa Sideris, "Writing Straight with Crooked Lines: Holmes Rolston's Ecological Theology and Theodicy"
 - Allen Carlson, "'We see beauty now where we could not see it before': Rolston's Aesthetics of Nature"
 - Eugene Hargrove, "Rolston on Objective and Subjective Beauty in Nature"
 - Brenda Hausauer, "Words Gone Wild: Language in Rolston's Philosophy of Nature"
 - Victoria Davion, "Caring for Nature: An Ecofeminist's View of Rolston on Eating, Hunting, and Genetics"
 - Clare Palmer, "Rethinking Animal Ethics in Appropriate Context: How Rolston's Work Can Help"
 - John Lemons, "Nature Diminished or Nature Managed: Applying Rolston's Environmental Ethics to National Parks"
 - James W. Sheppard and Andrew Light, "Rolston on Urban Environments"
 - Holmes Rolston, III, "Living on Earth: Dialogue and Dialectic with my Critics"
- Preston is in philosophy, University of Montana; in philosophy, Empire State College, Saratoga Springs, NY.

Reviews:

- Robinson, Christopher C., *Journal of Agricultural and Environmental Ethics* 21(2008):477-484.
Eric Katz, *Environmental Ethics* 30(2008):89-92.

Preston, Christopher J., "Animality and Morality: Human Reason as an Animal Activity," Environmental Values 11(2002):427-442. Those in animal and environmental ethics wishing to extend moral considerability beyond the human community have at some point all had to counter the claim that it is reason that makes human distinct. Detailed arguments against the significance of reason have been rare due to the lack of any good empirical accounts of what reason actually is. Contemporary studies of the embodied mind are now able to fill this gap and show why reason is a poor choice for a criterion to distinguish us from non-human animals. I use studies of the embodied mind to show that rationality is integrally connected to our animal and animate nature and hence not a significant point of departure between human and non-human animals. (EV)

Preston, Christopher J., *Saving Creation: Nature and Faith in the Life of Holmes Rolston, III*. San Antonio, TX: Trinity University Press, 2009. Preston documents the evolution of Rolston's theology of nature and concern for saving creation from his childhood in the Shenandoah Valley of Virginia through his four decades at Colorado State University, where Rolston gained an international reputation as the

"father of environmental ethics." The biography starts with Rolston's being dismissed as pastor of a Southwest Virginia church for being "too wild," and ends with Rolston's giving the Gifford Lectures at Edinburgh and receiving the Templeton Prize in Religion from Prince Philip in Buckingham Palace. Preston is in the Philosophy Department, University of Montana. More detail at : <http://lamar.colostate.edu/~rolston/Preston.htm>

Preston, Christopher J., "Synthetic Biology: Drawing a Line in Darwin's Sand," *Environmental Values* 17(2008):23-39. Maintaining the coherence of the distinction between nature and artefact has long been central to environmental thinking. By building genomes from scratch out of 'bio-bricks', synthetic biology promises to create biotic artefacts markedly different from anything created thus far in biotechnology. These new biotic artefacts depart from a core principle of Darwinian natural selection - descent through modification - leaving them with no causal connection to historical evolutionary processes. This departure from the core principle of Darwinism presents a challenge to the normative foundation of a number of leading positions in environmental ethics. As a result, environmental ethicists with a commitment to the normative significance of the historical evolutionary process may see synthetic biology as a moral 'line in the sand'.

Preston, Christopher J., Wayne Ouderkirk (eds): *Nature, Value, Duty: Life on Earth with Holmes Rolston, III* (Berlin: Springer, 2007). Reviewed by Christopher C. Robinson in *Journal of Agricultural and Environmental Ethics* 21(2008):477-484.

Preston, Christopher. "Intrinsic Value and Care: Making Connections through Ecological Narratives," *Environmental Values* 10(2001):243-264. Vitriolic debates between supporters of the intrinsic value and the care approaches to environmental ethics make it sound as though these two sides share no common ground. Yet ecofeminist Jim Cheney holds up Holmes Rolston's work as a paragon of feminist sensibility. I explore where Cheney gets this idea from and try to root out some potential connections between intrinsic value and care approaches. The common ground is explored through Alasdair MacIntyre's articulation of a narrative ethics and the development of the notion of an ecological and evolutionary tradition. Keywords: care, intrinsic value, narrativity, tradition, ecology and evolution. Christopher J. Preston is in the Department of Philosophy, University of South Carolina, Columbia, S.C. (EV)

Preston, Guy, "Integrated Environmental Management: Will It Be Worth Having," *Africa - Environment and Wildlife* 1 (no. 1, May-June 1993):31-35. Environmental management in South Africa is coming to have much of the force of law, and this is desirable. It aims to insure that negative impacts of development proposals are minimized and positive aspects enhanced, in such a way that the social costs of development proposals, those borne by society, rather than the developer, be outweighed by the social benefits. In fact, integrated environmental management is often ineffectual because it is watered-down by interest groups; in result developers make a lot of money at considerable costs of environmental degradation that have to be borne by the community. There is far too great an emphasis on development rights and scant regard for development responsibilities. In one case (Hout Bay), poor policy planning resulted in 95% of the planning bill being footed by taxpayers. Preston is head of research in the Environmental Evaluation Unit at the University of Cape Town. (v6,#3)

Preston, Guy and Helen Rees, "Now is the Time: Confronting South Africa's Population Growth," *Africa - Environment and Wildlife* 2(no.6, November/December 1994):27-32. In South Africa, population policy has been an almost taboo subject: highly politicized, manipulated, and, many would say, functionally ignored by previous governments. The urgent need for a sound policy has to be squarely faced--with South Africa's current population set to double within the next 30 years. There is no time for dithering if the country is to shake off its past and emerge with hope and optimism for a new era. In Africa, the whole continent, it is projected that the 1990 population of about 642 million people will increase by 2050 to 3,090 million, an increase of 500%. Preston is an environmental scientist at the

University of Cape Town; Rees is a medical practitioner and chair of the South African Planned Parenthood Association. (v6,#3)

Preston, Richard, The Hot Zone. New York: Random House, 1994. 300 pp. \$ 23.00. Claims that there is great danger to human life from viruses and other diseases that are native to tropical forests, and which serve a typical ecological role in those ecosystems, but which, when spreading to humans in cities, can play havoc and bring death. The HIV virus, originally in green monkeys in Central Africa, is an example. Another is the Marburg strain of the Ebola virus, detected in Marburg, Germany in 1967 in a shipment of monkeys, and which is highly lethal in humans. This book was first serialized in The New Yorker. (v5,#4)

Preston, Ronald H. "The Question of a Just, Participatory, and Sustainable Society." Bulletin of the John Rylands University Library of Manchester 63 (Autumn 1980): 95-117.

Preston-Whyte, Rob and Graham House, eds. Rotating the Cube: Environmental Strategies for the 1990's (South Africa). Durban: Department of Geographical and Environmental Sciences, and Indicator Project South Africa, University of Natal, April 1990. With chapters on water, air, fire, the rape of the land, industry and environment, and humans and their environment. A revealing study. Some 28 authors are involved. The editors are in geography and environmental science at the University of Natal. Reviewed in Environmental Ethics 14(1992):87-91. (v6,#3)

Preston-Whyte, Rob and Graham House. Rotating the Cube: Environmental Strategies for the 1990's (South Africa). Reviewed in Environmental Ethics 14(1992):87-91.

Pretty, J; Smith, D, "Social Capital in Biodiversity Conservation and Management," Conservation Biology 18(no.3, 2004):631-638. (v. 15, # 3)

Pretty, Jules, "Social Capital and the Collective Management of Resources," Science 302(12 December 2003):1912-1924. "The term social capital captures the idea that social bonds and norms are important for people and communities. ... Four features are important: relations of trust; reciprocity and exchange, common rules, norms, and sanctions, and connectedness in networks and groups." Local communities have often shown in the past that with high social capital people can co-operate for collective management of resources. Since the early 1990's some 400,000 to 500,000 local groups have been established, typically with 20-30 active members. Sometimes local groups are divisive and degrade their environments, but with high social capital they do not. Pretty also dislikes "the wilderness myth," the idea that some ecosystems are relatively pristine and ought to be preserved as such, without locals managing them for their use. (The author does not address the pressures of global capitalism on such local groups; also one wonders why the need for re-naming community trust and cooperation with the economist's term "capital.") Pretty is in biology, University of Essex, UK.

Pretty, Jules, Andy Ball, Ted Benton, Julia Guivant, David R. Lee, David Orr, Max Pfeffer, and Hugh Ward, eds. The SAGE Handbook of Environment and Society. London: SAGE Publications, 2007. This anthology is written from multi-disciplinary perspectives and is organized into seven sections: (1) environmental thought: past and present, (2) valuing the environment, (3) knowledges and knowing, (4) political economy of environmental change, (5) environmental technologies, (6) redesigning natures, and (7) institutions and policies for influencing the environment. Contributors include Ulrich Beck, Ted Benton, Warwick Fox, Amory Lovins, Mary Mellor, David W. Orr, Val Plumwood, David J. Rapport, Tom O'Riordan, and many others.

Pretty, Jules, Andy Ball, Ted Benton, Julia Guivant, David R. Lee, David Orr, Max Pfeffer, and Hugh Ward, eds. The SAGE Handbook of Environment and Society. London: SAGE Publications, 2007. This anthology is written from multi-disciplinary perspectives and is organized into seven sections: (1)

environmental thought: past and present, (2) valuing the environment, (3) knowledges and knowing, (4) political economy of environmental change, (5) environmental technologies, (6) redesigning natures, and (7) institutions and policies for influencing the environment. Contributors include Ulrich Beck, Ted Benton, Warwick Fox, Amory Lovins, Mary Mellor, David W. Orr, Val Plumwood, David J. Rapport, Tom O'Riordan, and many others.

Pretty, Jules. The Living Land: Agriculture, Food and Community Regeneration in Rural Europe. Review by Stewart Lockie, Journal of Agricultural and Environmental Ethics 14(2001):106-108. (JAEE)

Pretty, Jules. Review of J. Hodges J. and I. K. Han, eds., Livestock, Ethics and Quality of Life, Journal of Agricultural and Environmental Ethics 14(2001):85-87. (JAEE)

Price, Colin, Review of Fankhauser, Samuel, Valuing Climate Change. (London: Earthscan, 1995). Environmental Values 6(1997):368-369. (EV)

Price, Colin, Time, Discounting and Value. Reviewed by Terry Barker, Environmental Values 7(1998):116.

Price, Colin, Time, Discounting and Value. Oxford: Blackwell Publishers, 1993. 393 pages. Addresses the issue of valuing the future, discounting it, as economists commonly do. The claim here is that in many such applications this is a misleading procedure; moreover it is one which may be acting as a "scientific" cover to promoting the interests of the present generation at the expense of the future. (v9,#2)

Price, Colin. Review of Paul Portney and John Weyant, eds., Discounting and Intergenerational Equity, Washington: Resources for the Future, 1999, Environmental Values 10(2001):553. (EV)

Price, Jane, "Barriers to the Development of Sustainable Waste Management in New York City," Environments 27 (No. 2, 1999): 15- . (v.11,#2)

Price, Jennifer, Flight Maps: Adventures with Nature in Modern America. New York: Basic Books, 1999. Our changing attitudes toward what we think of as "nature," especially as our culture becomes increasingly complex and mechanical. Critiques of "nature" as presented in shopping malls, TV nature programs, and popular culture. Price has studied ornithology at the graduate level, but thinks pink flamingos tell us more about nature in America today. (v.11,#3)

Price, M. F., "Review of: Gunderson, Lance H., and Holling, C. S., Panarchy: Understanding Transformations in Human and Natural Systems (Washington, DC: Island Press, 2002)," Biological Conservation 114(no. 2, 2003): 308-309.

Price, Martin F. "People in Biosphere Reserves: An Evolving Concept", Society & Natural Resources 9(no.6, 1996):645. (v7,#4)

Price, S. J., Marks, D. R., Howe, R. W., Hanowski, J. M. and Niemi, G. J., "The Importance of Spatial Scale for Conservation and Assessment of Anuran Populations in Coastal Wetlands of the Western Great Lakes, USA," Landscape Ecology 441-454(no. 4, May 2005):

Price, V. B., "Saved by Scarcity?," Natural Resources Journal 42(no.1, 2002): 1-20. (v.13,#4)

Priddel, D., N. Carlile, M. Humphrey, S. Fellenberg and D. Hiscox, "Rediscovery of the 'extinct' Lord Howe Island stick-insect (*Dryococelus australis* (Montrouzier)) (Phasmatodea) and recommendations for its conservation," Biodiversity and Conservation 12(no. 7, 2003): 1391-1403. (v 14, #3)

Pridham, Geoffrey, "Towards Sustainable Tourism in the Mediterranean? Policy and Practice in Italy, Spain and Greece," Environmental Politics 8(no. 2, Summer 1999):97- . (v.11,#1)

Pridham, Geoffrey, Verney, Susannah, and Konstadakopulos, Dimitrios. "Environmental Policy in Greece: Evolution, Structures and Process," Environmental Politics 4(no.2, Summer 1995):244- . (v6,#4)

Prieditis, N, "Evaluation Frameworks and Conservation System of Latvian Forests," Biodiversity and Conservation 11(no.8, 2002): 1361-75. (v.13,#4)

Prieditis, Normunds, "Status Of Wetland Forests And Their Structural Richness In Latvia," Environmental Conservation 26 (No. 4, Dec 01 1999): 332- . (v.11,#2)

Primack, RB, "Evaluating Conservation Biology Textbooks," Conservation Biology 17(no.5, 2003):1202-1203. (v.14, #4)

Primack, Richard C., Essentials of Conservation Biology. Sunderland, MA: Sinauer Associates, 1993. 475 pages. \$ 28.95 hardbound. The first unified introduction to the science of conservation biology. Part III is on "The Value of Biological Diversity" and includes a chapter, "The Ethical Value of Biological Diversity." The opening chapter, "What Is Conservation Biology?" contains a "Statement of Ethical Principles." Primack is in the biology department, Boston University. (v4,#2)

Primack, Richard B., Lovejoy, Thomas E., eds. Ecology, Conservation, and Management of Southeast Asian Rainforests. New Haven: Yale University Press, 1996. 300 pp. \$35 cloth, \$28 paper. Essays on tropical forest by policy officials and scientists from the countries in the region, an overview of the timber industry in southeast Asia, a comparison of tropical rainforests with those in other parts of the world, and descriptions of plant and animal communities of the region and efforts to preserve them. (v7,#4)

Primack, Richard B., Essentials of Conservation Biology. Sunderland, MA: Sinauer Associates, 1993. 564 pages. \$ 28.95 cloth. The first unified, systematic introduction to conservation biology. (Earlier works are largely anthologies.) Six parts, 22 chapters, 1,000 references. Lots of diagrams and illustrations. Part III is on "The Value of Biological Diversity, and Chapter 10 is on "The Ethical Value of Biological Diversity." Primack is professor of biology at Boston University, an authority on rare plants in Massachusetts and on the ecology of tree communities in Malaysia. He is the book review editor for Conservation Biology. (v4,#3)

Primack, Richard, and Cafaro, Philip, "Environmental Ethics," Encyclopedia of Biodiversity 2: 545-555. Ethics is the branch of philosophy that seeks knowledge of human flourishing and right conduct toward others, so that we may act upon it. Modern philosophers have tended to limit their ethical concern to human beings, but throughout history people have also attempted to cultivate proper relationships to nature. Recently philosophers have turned to this topic, largely in response to environmental degradation and the loss of biodiversity, and have created a new discipline: environmental ethics. Environmental ethicists attempt to specify appropriate human relationships to the nonhuman, natural world. In the course of their work they have developed strong ethical arguments for preserving biodiversity. They have also challenged conventional views of happiness and human welfare and the materialistic values at the base of much modern life. While environmental ethics treats the full range of environmental issues, from air pollution to nuclear risk assessment, this article focuses on ethical issues directly related to the preservation of biodiversity. (v.11,#4)

Primack, Richard B., Essentials of Conservation Biology, 2nd ed. Sunderland, MA: Sinauer Associates, Publishers, 1998. Second edition of a popular text. Contains: "A Statement of Ethical Principles," pp.

19-21, with one of the principles: "Biological diversity has intrinsic value." "Species possess value regardless of their economic, scientific, or aesthetic value to human society. This value is conferred not only by their evolutionary history and unique ecological role, but also by their very existence." "Ethical Values: A Duty to Protect Biological Diversity," pp. 125-130. "Each species has a right to exist." "Each species has value for its own sake--an intrinsic value unrelated to human needs or desires." Primack is in biology at Boston University. (v.9,#3)

Primack, Richard, Essentials of Conservation Biology. Sunderland, Ma: Sinauer Associates, 1993. In six months time, this work has been adopted for use in conservation biology classes in over ninety colleges and universities. See Newsletter, 4, 2. (v5,#1)

Primack, Richard B. A Primer of Conservation Biology. Sunderland, MA: Sinauer Associates, 1995. 230 pages. \$18.95. A short course for those who are not up to Primack's longer Essentials of Conservation Biology, now widely used in colleges, but over twice as long and twice as expensive. Primack is in biology at Boston University. (v6,#1)

Primack, Richard, "Conservation Biology in Action: Case Studies." In J. Bottrill, ed., The Encyclopedia of Life Sciences. London: MacMillan Press, 2002. Volume 5, pp. 88-95, (v.13,#4)

Primack, Richard, and Cafaro, Philip, "Environmental Ethics." In Levin, Simon Asher, Encyclopedia of Biodiversity (San Diego: Academic Press [Harcourt], 2001), vol. 2:545-555. (v.13,#1)

Primack, Richard, Rozzi, Ricardo, Feinsinger, Peter, Dirzo, Rodolfo, and Massardo, Francisca, and others, Fundamentos de conservación biológica: Perspectivas latinoamericanas. Fondo de Cultura Económica, Carretera Picacho-Ajusco 227, 14200 México, D. F., 2001. ISBN 968-16-6428-0. Richard Primack's well known text in conservation biology here in an edition adapted for Latin America. (v.12,#4)

Primavesi, Anne, Sacred Gaia: Holistic Theology and Earth System Science. London: Routledge, 2000. James Lovelock's Gaia theory considers the Earth as a whole, with its evolution and the evolution of life upon it merging into a single process. Primavesi develops the religious implications of this theory and presents a theology rooted in "awe at the sacredness of the whole earth system." Lovelock says: "A splendid book. I now see why thoughts of Gaia are as much in the realms of theology as of science." Theology is an earth science. Primavesi is at Bristol University. (v.11,#4)

Primm, Steven A. "A Pragmatic Approach to Grizzly Bear Conservation." Conservation Biology 10, no.4 (1996): 1026. (v7, #3)

Primm, Steven A., and Clark, Tim W. "Making Sense of the Policy Process for Carnivore Conservation." Conservation Biology 10, no.4 (1996): 1036. (v7, #3)

Prince, Hugh C., Wetlands of the American Midwest: A Historical Geography of Changing Attitudes. Chicago: University of Chicago Press, 1997. 395 pages. (v9,#2)

Princen, Thomas, The Logic of Sufficiency. Cambridge, MA: The MIT Press, 2005. We need to learn how to change people's behavior and formulate a changed-consumption world. This leads to a principle of "consumption sufficiency" that can reach beyond the goal of resource efficiency. Includes an analysis of "efficiency" as well as "sufficiency." The Pacific Lumber Company in California could have logged redwoods in perpetuity with a model of sufficiency, but adverse discount rates and other institutional deficiencies won out over sustainable profits tomorrow. By contrast a lobster fishery in Maine, with co-management shared by local lobstermen and state authority has surmounted the problems of common-property rights and has produced a sustainable lobster industry. Princen is in sociology, University of

Michigan.

Princen, Thomas, Maniates, Michael, and Conca, Ken, eds., Confronting Consumerism. Cambridge, MA: MIT Press, 2002. 14 chapters, ten authors. Spending efficiency, responsible shopping, consumer sovereignty ("the consumer knows best"), consumption externalities both environmental and social, ecotechnologies, quality of life/quantity of livelihood, the economics of happiness. Many authors are deliberately provocative, though none propose a no-growth economy. Consumption is an issue not only in rich countries, but in developing and transition countries. In developing nations there are over a billion people with enough income to enjoy an affluent lifestyle. Their aggregate purchasing power (as measured in local terms) already matches that of the United States. China alone will soon exert an environmental impact to rival that of the United States. Reviewed by Norman Myers in Nature 418 (22 August 2002):819-820.

Princen, Thomas, The Logic of Sufficiency. Cambridge, MA: The MIT Press, 2005. Sufficiency on global environmental scales.

Pringle, Hugh, Ian Watson, Ian, and Ken Tinley. "Landscape improvement, or ongoing degradation reconciling apparent contradictions from the arid rangelands of Western Australia." *Landscape Ecology* Vol. 21, no. 8 (2006): 1267-79.

Pringle, P, "Hunger and the Biotech Wars," World Policy Journal 20(no.2, 2003):43-50. (v.14, #4)

Pringle, R. M., "The Origins of the Nile Perch in Lake Victoria," Bioscience 55(no.9, September 2005): 780-788. The ways in which economic, social, and political forces lead to species introductions are an important, if overlooked, aspect of ecology and conservation. The nonnative Nile perch (*Lates niloticus*) in Lake Victoria, and the ecological changes associated with the species' establishment and expansion there, has elicited tremendous attention from biologists. Yet it has never been clear why, when, or by whom the fish was introduced. Here I outline the history of fishery research and management in East Africa and explore the circumstances that led to the introduction of the Nile perch. The evidence suggests that repeated secretive introductions were made in the mid 1950s by members of the Uganda Game and Fisheries Department as part of a bifurcated effort to improve sport fishing on the one hand and to bolster fisheries on the other. Fisheries scientists affiliated with the East African Fisheries Research Organization opposed the introduction, but were ineffective; I suggest that this failure stemmed partially from their inability to engage effectively with political processes.

Prins, Gwyn, ed., Threats Without Enemies: Facing Environmental Insecurity. London: Earthscan, 1993. £ 12.95. 197 pages. We seem unable to comprehend and take relevant action to protect environmental security; the threats, though massive and ominous, are too incremental, insidious, and associated with the good things of life. There is no enemy, against which we can organize. Contributions from Prince Charles, Crispin Tickell, Jessica Tuchman Mathews, Jeremy Leggett, Kevin Gray, and others. Prins is part of the Global Security Programme at Cambridge. (v4,#4)

Prinsloo, WS 1991. Sing 'n lied tot lof van ons Here omdat Hy groot is (Ps 147). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 158-163. (Africa)

Prior, Michael, "Economic Valuation and Environmental Values," Environmental Values 7(1998): 423-441. The origins of both economic and philosophical value theory are examined and shown to be closely related. The status of neo-classical value theory is that it is internally flawed in any attempt to describe the real world. Cost-benefit analysis as it applies to the valuation of environmental agents relies upon the claim that this neo-classical theory has a particular status in optimal welfare maximisation and, therefore, suffers the same problems of internal consistency. Economic valuation of the environment is

not a scientific process derived from external law but a social process relying upon social agreement. Alternatives to economic valuation are considered and may possess a more plausible social base. However, all environmental valuation is at odds with beliefs based upon the existence of objective and intrinsic values. KEYWORDS: Economics, axiology, values, cost-benefit analysis, environmental assessment. Michael Prior resides at Hebden Bridge, West Yorkshire, UK. (EV)

Pritchard, Greg R., Econstruction: The Nature/Culture Opposition in Texts about Whales and Whaling, 2004, Ph.D. thesis, Faculty of Arts, Deakin University, Geelong, Victoria, Australia. 422 pages. This thesis investigates the perceived opposition between "culture" and "nature", presented as a dominant, biased and antagonistic relationship, engrained in the language of Western culture. By focusing on whale texts (including older narratives, whaling books, novels and other whale-related texts), it explores the portrayal of whales and the natural world. And, lastly, it suggests that Schopenhauerian thought, which has affinities in Moby-Dick, offers a cogent approach to ecocritically reading literature. The advisor was Brian Edwards. (v.14, #4)

Pritchard, J, "Review of: Mark Daniel Barringer, Selling Yellowstone: Capitalism and the Construction of Nature", Environmental History (no.2, 2003):331-332.

Pritchard, James, Preserving Natural Conditions: Science and the Perception of Nature in Yellowstone National Park. Ph.D. thesis, University of Kansas, 1996. 510 pages. (v10,#4)

Pritchard, Michael S., and Wade L. Robinson. "Justice and the Treatment of Animals: A Critique of Rawls." Environmental Ethics 3(1981):55-61. Although the participants in the initial situation of justice in John Rawls' Theory of Justice choose principles of justice only, their choices have implications for other moral concerns. The only check on the self-interest of the participants is that there be unanimous acceptance of the principles. But, since animals are not participants it is possible that principles will be adopted which conflict with what Rawls calls "duties of compassion and humanity" toward animals. This is a consequence of the initial situation's assumption that principles of justice can be determined independently of other moral considerations. We question this assumption, and show that satisfactory modifications of Rawls' initial situation undermine its contractarian basis and require the rejection of exclusively self-interested participants. Pritchard and Robinson are at the department of Philosophy, Western Michigan University, Kalamazoo, MI. (EE)

Pritchard, Roger, Review of International Environmental Negotiation. Environmental Values 3(1994):183. (EV)

Probst, Katherine N., Don Fullerton, Robert E. Litan, and Paul R. Portney. Footing the Bill for Superfund Cleanups: Who Pays and How? Washington, DC: Resources for the Future, 1995. 176 pages. \$ 12.95 paper. Liability for cleanup costs, taxes to raise revenues, and hotly debated alternatives in the 1994 reauthorization debate with the U.S. Congress. (v6,#3)

Proctor, James D., "Geography, Paradox and Environmental Ethics," Progress in Human Geography 22 (no. 2, 1998):234-255. As a diverse and divided discipline, geography embodies tensions central to the paradoxical nature of human dwelling on earth, from which questions of environmental ethics arise. This article reviews major ontological and epistemological tensions within geography--that between nature and culture, and objectivism and subjectivism--emphasizing the ways in which common resolutions to these tensions often represent flawed strategies of avoiding paradox. It then connects these tensions to important philosophical dimensions of environmental ethics. I argue that normative environmental ethics must be built on an adequate sensitivity to the nature/culture tension, and that environmental meta-ethics--specifically, the problem of relativism as applied to environmental discourse--must be similarly informed by the object/subject tension. The most fundamental contribution geography can make, therefore, lies in

establishing a philosophical space for environmental ethics that takes paradox seriously and avoids its simplistic resolutions. Proctor is in geography, University of California, Santa Barbara. (v.13,#2)

Proctor, James D. "Will the Real Land Ethic Please Stand Up?" Journal of Forestry 94(no.2, Feb.1996):39. (v7,#1)

Proctor, James D., "Resolving Multiple Visions of Nature, Science, and Religion," Zygon: Journal of Religion and Science 39(2004):637-657. Five metaphors, or "visions" of nature. (1) evolutionary nature, (2) emergent nature, (3) malleable nature, (4) nature as sacred, (5) nature as culture. This is somewhat like the blind men and the elephant. But given inescapable metaphor, the ultimate truth about nature may be unavailable, and the best we can hope for is limited metaphor. Proctor is in geography, University of California, Santa Barbara. (v. 15, # 3)

Proctor, James D. and Smith, David M., "Geography and Ethics: Journeys in a Moral Terrain," Philosophy and Geography 5 (No. 1, 2002): 119-122. Book reviewed by Thompson, Allen. (P&G)

Proctor, JD and Larson, BMH, "Ecology, Complexity, and Metaphor," BioScience 55 (no. 12, December 2005): 1065-1068. Complexity has recently risen to prominence in ecology as part of a broader interest that suggests its status is something more than just a scientific theory or property of reality. It may be helpful to consider complexity, and related terms such as "self organization," as recent metaphors deployed to advance knowledge on fundamental questions in ecology, including the relationship between parts and wholes, and between order and disorder. Though not commonly viewed as such, metaphors are an indispensable component of science, and should not be appraised as true or false, but rather in terms of how they help or hinder knowledge. By understanding metaphor as a necessary ally and not a threat to ecological knowledge, we may enrich our contextual understanding of complexity while continuing to invoke it in useful ways. The special section introduced by this article features essays by two prominent experts in ecology, complexity, and metaphor: science studies -- scholar Evelyn Fox Keller and theoretical ecologist Simon Levin.

Proescholdt, Kevin, Rapson, Rip, Heinselman, Miron L. Troubled Waters: The Fight for the Boundary Waters Canoe Area Wilderness. St. Cloud, MN: North Star Press, 1995. (v8,#2)

Proffitt, Fiona and Pallava Bagla, "Circling in on a Vulture Killer," Science 306(8 October 2004):223. Oriental white-backed vultures (Gyps bengalensis) were once probably the world's commonest large birds of prey, circulating India's skies in the millions, devouring dead livestock and removing rotting carcasses that could spread disease to humans. In two decades these vultures have declined by 99% in India. Scientists believe that the cause is a veterinary drug used on hooved livestock (diclofenac), although this has not been entirely proved. One (but only one) Indian state is phasing out the drug. But it may be too late to save the vultures. (v.14, #4)

Proffitt, Fiona, "Reproductive Failure Threatens Bird Colonies on North Sea Coast," Science 305(20 August, 2004):1090. The sea-bird breeding colonies on Britain's north sea coast, especially in the Orkneys and Shetlands, had the poorest reproductive success on record. Affected are kittiwakes, arctic terns, guillemots, razorbills, arctic skuas, and great skuas. The problem seems to be a shortage of sand eels, a small bottom-dwelling fish, that is a major food source. One cause may be global warming, another may be overfishing by the Danish fishing fleet. (v. 15, # 3)

Project and Policy Appraisal: Integrating Economics and the Environment. Organisation for Economic Cooperation and Development, 1994. 346 pages, \$40. Also available in French. This manual provides a detailed description of such techniques as the monetary valuation of environmental damage, the pricing of environmental resources, and the role of discounting. Practical examinations of the use of these

techniques in both industrial and developing countries are given. (v6,#1)

Proops, John, Review of Free Market Environmentalism. Environmental Values 3(1994):185. (EV)

Proops, John, Review of Anderson, Victor, Alternative Economic Indicators. Environmental Values Vol.1 No.1(1992):87.

Proops, John, Review of Adams, John, Risk. Environmental Values 5(1996):181-182. (EV)

Proops, John, Review of Costanza, Robert, ed., Ecological Economics. Environmental Values Vol.1 No.2(1992):176.

Prothero, Andrea. Review of L.D. DeSimone, and F. Popoff, Eco-Efficiency: The Business Link to Sustainable Development. Environmental Values 8(1999):119. (EV)

Protopapadakis, Evaggelos , *Ecological Ethics*. Athens: Sakkoula, 2005 (in Greek).

Pruetz, Jill D., and Paco Bertolani. "Savanna Chimpanzees (*Pan troglodytes verus*) hunt with tools." *Current Biology* Vol. 17, no. 5 (2007): 412-17. (With commentary from "Animal Cognition: Bring Me My Spear" by Richard W. Byrne, *Current Biology* Vol. 17, no. 5 (2007): R164-65.) Researchers in Senegal recently spotted wild chimpanzees biting the tips of sticks, which the chimps then used like spears to jab small primates called bushbabies. There are 22 such observations, though only once was a bushbaby actually killed, and critics wonder if perhaps the chimps were not more probing around than hunting with spears. But the researchers are convinced they used spears to hunt. Bushbabies are nocturnal and hide in holes in trees in the day. Chimps do regularly hunt mammals with their hands and teeth. See also the brief story: "Spear-Wielding Chimps Seen Hunting Bush Babies" by Ann Giddons," *Science* Vol. 315, no. 5815 (23 February 2007): 1063.

Prugh, Thomas, with Robert Costanza, John H. Cumberland, Herman Daly, Robert Goodland, and Richard B. Norgaard, Natural Capital and Human Economic Survival. Sunderland, MA: Sinauer Associates, 1995. Sustainability is threatened by nothing so much as a shortage of natural capital. The global ecosystem, which provides a vast array of indispensable resources and services to human beings, can be seen as a form of capital that can never be replaced by any combination of human labor, wealth, and technology. Yet Earth's natural capital endowment is under severe strains from rapidly increasing human economic activity and population. One step toward sustainability would be to "get the prices right" by properly valuing natural capital (which might add, for instance, \$ 51,000 to the price of an automobile!). (v6,#4)

Pryde, Philip R., ed., Environmental Resources and Constraints in the Former Soviet Republics. Boulder, CO: Westview Press, 1995. 364 pages. \$ 59.85. Environmental legacies of the Soviet period and current trends, a geographical approach. Pryde is in geography at San Diego State University. (v5,#3)

Pugh, Cedric, ed. Sustainability, the Environment and Urbanisation. London: Earthscan Publications Ltd., 1996. 224pp. £16.95. This provides an overview of the major environmental issues in Third World cities such as poor sanitation and water quality, air pollution and housing problems. It looks at the broad economic context behind the problems and examines the conceptual issues of sustainability infrastructure and health programs, as well as assessing environmental appraisal methods. (v8,#1)

Pugh, Cedric. "Methodology, Political Economy and Economics in Land Studies for Developing Countries." Land Use Policy 13, no.3 (1996): 165. (v7, #3)

Pugh, George Edgin. The Biological Origin of Human Values. Reviewed in Environmental Ethics 1(1979):181-85.

Pugh, J., "New Climate-Change Data Place Policymakers in the Hot Seat," Bioscience 53(no. 6, 2003): 542-543. (v 14, #3)

Pulido, Laura, Environmentalism and Economic Justice: Two Chicano Struggles in the Southwest. Tucson, AZ: University of Arizona Press, 1996. 320 pages. \$ 17.95 paper. The United Farm Workers 1965-71 pesticide campaign and a grazing conflict between a Hispano cooperative and mainstream environmentalist in New Mexico. Pulido argues for developing an inclusive environmental ethic that is at once economically empowering and respectful of ethnic and cultural diversity. (v7,#2)

Pullen, Andrew S., Conservation Biology. New York: Columbia University Press, 2002. A new text. Pullen is at the University of Birmingham, UK. (v.13,#4)

Pullin, A, "Protecting Biological Diversity: Roles and Responsibilities", Biological Conservation 111(no.2, 2003):278-279.

Pullin, AS, "The Farm as a Natural Habitat: Reconnecting Food Systems with Ecosystems", Biological Conservation 112(no.3, 2003):461.

Purdy, Kathleen D., "Environmental Ethics." Pages 267-270 in John K. Roth, ed., International Encyclopedia of Ethics. London, Chicago: Fitzroy Dearborn Publishers, 1995. Quite business oriented.

Purser, Ronald E., Park, Changkil, and Montuori, "Limits to Anthropocentrism: Toward an Ecocentric Organization Paradigm?" Academy of Management Review 20(1995):1053-1089. Historical anthropocentrism requires a linear perspective, a camera theory of knowledge, and human-nature dualism. These ideas are reproduced in organizational science and management practice. We now need an ecocentric approach, and here an environmental management paradigm is contrasted with an ecocentric responsibility paradigm. Corporate environmentalism and so-called "greening-business" are based in the environmental management paradigm, and incommensurable with the ecocentric responsibility paradigm. Out of the latter could grow an ecocentric organizational paradigm. Purser is in Organization Development, Loyola University, Chicago. Park is in Organization Behavior, Case Western Reserve University. Montuori is in Systems Science, Saybrook Institute and College of Notre Dame, San Francisco. (v.10,#1)

Puth, Linda M., and Karen A. Wilson, "Boundaries and Corridors as a Continuum of Ecological Flow Control: Lessons from Rivers and Streams," Conservation Biology 15(no.1, Feb. 2001): 21-. (v.12,#3)

Putman, Daniel. "Tragedy and Nonhumans." Environmental Ethics 11(1989):345-53. The concept of tragedy has been central to much of human history; yet, twentieth century philosophers have done little to analyze what tragedy means outside of the theater. Utilizing a framework from MacIntyre's After Virtue, I first discuss what tragedy is for human beings and some of its ethical implications. Then I analyze how we use the concept with regard to nonhumans. Although the typical application of the concept to animals is thoroughly anthropocentric, I argue first that the concept of tragedy can be applied directly to nonhumans (a) because the loss of potential for some nonhumans may be as great or greater than loss of potential for some humans to whom the concept applies and (b) because tragedy depends on what is valued and, for those creatures that do not conceptualize death, the destruction of the present moment through pain and suffering is the ultimate loss, and second that self-awareness in the human sense is not necessary for tragedy. Putman is in the philosophy department, University of Wisconsin Center-Fox Valley, Menasha, WI. (EE)

Putman, R. J. "Ethical Considerations and Animal Welfare in Ecological Field Studies," Biodiversity and Conservation 4(no.8., Nov. 1995):903- . (v6,#4)

Putnam, Hilary, The Collapse of the Fact/Value Dichotomy and Other Essays. Cambridge, MA: Harvard University Press, 2002. The fact/value dichotomy has found an all-too-prominent place in popular culture and philosophical thought, the idea that while factual claims can be rationally established or refuted, claims about value are wholly subjective, not capable of being rationally argued for or against. Although it is on occasion important and useful to distinguish between factual claims and value judgments, the distinction becomes positively harmful when identified with a dichotomy between the objective and the purely "subjective." Putnam is in philosophy, Harvard University.

Putz, Francis E., Geoffrey M. Blate, and John Robinson, "Tropical Forest Management and Conservation of Biodiversity: An Overview," Conservation Biology 15(no.1, Feb. 2001): 7-. (v.12,#3)

Pyare,S; Berger, J, "Beyond demography and delisting: Ecological recovery for Yellowstone's grizzly bears and wolves", Biological Conservation 113(no.1, 2003):63-73.

Pye-Smith, Charlie and Grazia Borrini Feyerabend, with Richard Sandbrook. The Wealth of Communities. Earthscan Publications (UK) and Kumarian Press (USA), 1994. 224 pages, £10.95. \$18.95. Ten case studies of community-based, environmentally sound development in support of a strategy called Primary Environment Care (PEC), in which a people organize and act to meet needs (income, health, housing), while taking care of their environment. (v6,#1)

Pykala, J., "Effects of Restoration with Cattle Grazing on Plant Species Composition and Richness of Semi-Natural Grasslands," Biodiversity and Conservation 12(no. 11, 2003): 2211-2226.

Pyle, Robert Michael, The Thunder Tree: Lessons from an Urban Wildland. Boston: Houghton Mifflin, 1993. When people connect with nature, they do so in a specific place; roots in the earth can be as important as roots in a family. For Bob Pyle, that place was the High Line Canal in Colorado. As a boy in the 1950's he discovered it, largely a wasteland, an accidental wilderness on the edge of a growing city. As he grew up, the canal became his sanctuary, his teacher, the place where he developed a passion for the natural world. The title comes from a cottonwood tree that saved his life in a freak hailstorm. By showing how the course of a life can be changed by a piece of land, Pyle argues that if we fail to preserve our opportunities to explore nature, we will diminish human lives and human culture immeasurably. Pyle's Wintergreen won the John Burrough's Medal for the best natural history book of 1987. He is an ecologist in Gray's River, Washington, and an expert on butterflies. (v6,#4)

Pyne, SJ, "Review of: J. Donald Hughes, An Environmental History of the World: Humankind's Changing Role in the Community of Life", Environmental History 8(no.2, 2003):316.--Rappole, JH; King, DI; Rivera, JHV, "Coffee and Conservation" Conservation Biology 17(no.1, 2003):334-336.

Pyne, Stephen J., Andrews, Patricia, and Laven, Richard D., Introduction to Wildland Fire. New York: John Wiley, 1996. With sections on aboriginal fires. (v10,#4)

Pyne, Stephen J., Fire in America: A Cultural History of Wildland and Rural Fire. Princeton, NJ: Princeton University Press, 1982. Pyne argues that most of America was so highly managed by Indians with fires that they set that we cannot now meaningfully recover what the forest was like without humans.

Pyne, Stephen J., "The Fires This Time, and Next," Science 294(2 November 2001):1005-1006. Fire belongs on landscapes, especially in the American West. A new problem is the enormous impact of industrial combustion. One could say there are two kinds of fires: burning fossil biomass and burning

living biomass. Fire suppression in American history has been not only by putting out fires but by driving out native Americans, who set many fires. A new problem is fires on quasi-wild lands, urban/wild interface fires, with many persons now inhabiting fire-prone forests. Humans need to be active fire managers on their landscapes.

"It is strange that we have so little sense of how to incorporate ourselves in this scene as active agents. We have, after all, enjoyed a species monopoly over fire over the entire course of human existence, and our myths almost universally attribute to fire our Faustian rise to ecological ascendancy. Yet we are peculiarly self-effacing when confronted with the challenge to reclaim our role as keepers of the flame. We should get over it." Pyne is a fire historian at Arizona State University. (v.12,#4)

Pyne, Stephen J, How the Canyon Became Grand: A Short History. New York: Viking, 1998. The social construction of the Grand Canyon. Pyne depicts "another Canyon, the one that most visitors actually see, a cultural Canyon, the Grand Canyon as a place with meaning. This landscape has been shaped by ideas, words, images, and experiences. Instead of faults, rivers, and mass wasting, the processes at work involved geopolitical upheavals and the swell of empires, the flow of art, literature, science, and philosophy, the chisel of mind against matter. These determined the shape of Canyon meaning. ... Here a great civilization encountered a great natural phenomenon. Neither was the same afterward. ... [The Canyon] has meaning, and that meaning depends less on the scene's physical geography than on the ideas through which it can be viewed and imagined. Those ideas ... have actively shaped the Canyon's meaning, without which it could hardly exist as a cultural spectacle. The Grand Canyon was not so much revealed as created" (pp. xii-xiii). Pyne is an environmental historian at Arizona State University, best known for his works on the history of fire.

Fortunately, there are other accounts of the natural history of the canyon, revealing its geological creation over millennia before its social creation in the last century, though environmental historians will no doubt soon be at work on the social construction of that natural history too, including the Vishnu schist and the river that runs through it.

Pyne, Stephen J, "The Perils of Prescribed Fire: A Reconsideration," Natural Resources Journal 41(no.1, Wint 2001):1-. (v.12,#4)

Pyra, Leszek, "Suffering and the Rights of Animals," paper (available in English) at the Jagiellonian University Symposium on Ethics, Suffering as Human Experience, Cracow, Poland, June 6-8, 1994. See Wawrzyniak, Jan, "Suffering as a Transcendental Value."

Qi Y.; Henderson M.; Xu M.; Chen J.; Shi P.; He C.; Skinner G.W., "Evolving core-periphery interactions in a rapidly expanding urban landscape: The case of Beijing," Landscape Ecology 19(no.4, 2004):375-388(14). (v. 15, # 3)

Qian Jianxing, "Environment Ethics: Foundation, Mechanism and Efficacy", Lingxia Shehuikexue (Lingxia Social Sciences) 3(2000)45-50. In Chinese. (EE v.12,#1)

Qin Shu-Sheng. "The Ecological Ethics Survey of Technology." *Science, Economy, and Society* No. 4 (2007): 45-48.

Qing Shitai, "The eco-ethical thoughts of Daoism and its modern implication", Journal of Sichuan Uni., 2002(1)

Quammen, David, "Dirge for a Butterfly," Outside 19 (no. 11, November 1994):39-42 & ff. But maybe the Uncompahgre fritillary isn't as dead as it seems. The butterfly, endemic to two Colorado mountains, is thought by some scientists to be going extinct naturally, and they argue that we should then do nothing to save it (see Newsletter v.5, #1). The butterfly, which prefers wet, north-facing slopes at 13,000 feet, is

a larvae for two years, an adult only for a week, when it is disinclined to colonize new areas. Its habitat is drying out, and there is habitat further north to which it presumably might be moved. Meanwhile, the most recent work on the butterfly, by Amy Seidl of Colorado State University, finds that numbers have somewhat rebounded, possibly because pressures from sheep and collectors have been removed. (v5,#4)

Quammen, David, "Planet of Weeds," Harper's 297(no. 1781, October 1998):57-69. Tallying the losses of Earth's animals and plants, inmixed with an interview with David Jablonski, paleontologist at the University of Chicago. Five major extinctions in evolutionary history. Efforts today to estimate probable extinctions. "The consensus among conscientious biologists is that we're headed into another mass extinction, a vale of biological impoverishment commensurate with the big five" (pp. 58-59). Mathematical models will prove partially wrong, but importantly onto huge losses of biodiversity. Escalating populations, escalating consumption, human relocation of species deliberately and accidentally, will leave us with a planet of weeds. (v.10,#3)

Quammen, David, *Monster of God: The Man-Eating Predator in the Jungles of History and the Mind*. New York: W. W. Norton, 2003. History, legends, psychological and philosophical reflections on the big predators that are, or can become, man-eating: lions, tigers, the brown bear, sharks, the Nile crocodile, leopards, possibly cougars, and others. In the 1900s tigers (usually females) were regularly killing and eating some 800 persons a year; over a number of years one tiger alone killed possibly 400 persons before Jim Corbett shot her. The conservation of such predators; or, Quammen thinks more likely, their eventual extinction in the wild. Alas, a dark and scary forest may have been a good thing.

Quarterly Review of Principles for Sustainability. The Citizens Network for Sustainable Development, Working Group on Ethics, is publishing a new NGO and quarterly. The mission of the working group is to revive efforts to produce an Earth Charter. The April Quarterly included brief articles by or excerpts from: Donald Brown, Frances Spivy-Weber, John Lemons, Roger Paden, Herman Daly as summarized by Laurie Timmermann, Donald B. Conroy, Pope John Paul II's letter on ecology, and Safei El-Denn Hamed. Chair and Editor is: Angela Oliveira-Harkavy, 9422 Goshen Lane, Burke, VA 22015 USA, FAX 703-425-0741. (v5,#2)

Querling, Jonathan, "Resistance takes root," The Ecologist 30(no. 9, Dec. 1, 2000):57- . The anti-GM movement in the US is catching up with its counterpart in Europe, as evidenced by the growth of crop-pulling actions. (v.12,#2)

Quiatt, Duane and Junichiro Itani, eds., Hominid Culture in Primate Perspective. Niwot, CO: University Press of Colorado, 1993. 320 pages. \$ 32.50. Human culture and animal behavior are commonly thought to differ importantly through the use of tools, inventing symbols, making words, and so on. But these primatologists think that their research indicates that the differences between human culture and primate behavior are increasingly difficult to identify. Quiatt is professor of anthropology at the University of Colorado at Denver; Itani is with the Laboratory of Human Evolution at Kyoto University. (v4,#2)

Quiet in the Canyon!" The Christian Science Monitor, vol. 89, 13 January 1997, p. 20.

Quigley, Peter. "Rethinking Resistance: Environmentalism, Literature, and Poststructural Theory." Environmental Ethics 14(1992):291-306. I argue that with the advent of poststructuralism, traditional theories of representation, truth, and resistance have been seriously brought into question. References to the "natural" and the "wild" cannot escape the poststructural attack against foundational concepts and the constituting character of human-centered language. I explore the ways in which environmental movements and literary expression have tended to posit pre-ideological essences, thereby replicating patterns of power and authority. I also point to how environmentalism might be reshaped in light of

poststructuralism to challenge power without reference to authority. Quigley is at the Humanities and Social Science department, Embry-Riddle Aeronautical University, Prescott, AZ. (EE)

Quinby, Peter, Trombulak, Steve, and Henry, Michael, "Opportunities for Wildlife Habitat Connectivity between Algonquin Provincial Park and the Adirondack Park," Wild Earth 10(no. 2, Summer 2000):75- . (v.12,#2)

Quinn, Daniel. Ishmael: An Adventure of the Mind and Spirit. New York: Bantam Books, 1992, 1995. A novel where the narrator is taught that we are killing the earth along with ourselves and it is nearly too late to check our fate, all by a remarkable teacher, Ishmael, who turns out to be a gorilla. (v6,#3)

Quinn, Frank. "Water Resources: From a Supply and Development to a Demand Management and Restoration Approach", Environments 24(no. 1, 1996):105.

Quinn, Frederick, To Heal the Earth: A Theology of Ecology. Nashville, TN: Upper Room, 1994. 159 pages. paper. Environmental reflection and ecological concern set in the context of biblical scholarship, drawing from both the Old and New Testaments and the works of the early church fathers. (v7,#2)

Quivik, F. L., "Review of: Ellen E. Wohl, Virtual Rivers: Lessons from the Mountain Rivers of the Colorado Front Range," Environmental History 7(no.3, 2002): 517-18. (v.13,#4)

Raab, Thomas and Frodeman, Robert, "What is it like to be a geologist? A phenomenology of geology and its epistemological implications," Philosophy and Geography 5 (No. 1, 2002): 69-81. In previous work we have described the nature of geologic reasoning and the relation between the geological observer and the outcrop which is the object of their study. We now turn to further consideration of the epistemological aspects of geology that have been largely neglected by 20th century epistemology. Our basic claim is that the experiential facts of geological fieldwork do not fit with a philosophy of science that has evolved out of considerations on the laboratory sciences. Shifting our focus from the lab to the field offers a more embodied, historical, and fallibilistic understanding of geology. Raab is a Post-Doctoral researcher at the Academy of Arts Düsseldorf, Germany. Frodeman is Hennebach Professor in the Humanities at the Colorado School of Mines. (P&G)

Rabb, G. B., and Sullivan, T. A., "Coordinating Conservation: Global Networking for Species Survival," Biodiversity and Conservation 1995(4):536-543. (v.10,#1)

Rabb, J. Douglas. "From Triangles to Tripods: Polycentrism in Environmental Ethics." Environmental Ethics 14(1992):177-83. Callicott's basic mistake in his much-regretted paper "Animal Liberation: A Triangular Affair" is to think of the anthropocentric, zoocentric, and biocentric perspectives as mutually exclusive alternatives. An environmental ethics requires, instead, a polycentric perspective that accommodates and does justice to all three positions in question. I explain the polycentric perspective in terms of an analogy derived from the pioneering work of Canadian philosopher Rupert C. Lodge and distinguish it from both pragmatism and moral pluralism. Rabb is in the philosophy department, Lakehead University, Ontario, Canada. (EE)

Rabb, J. Douglas "The Vegetarian Fox and Indigenous Philosophy: Speciesism, Racism, and Sexism." I critique the oppressive society in which Michael A. Fox's Deep Vegetarianism was written and which Fox too attempts to criticize and change. Fox proves himself to be among a handful of Western philosophers open-minded enough to acknowledge and attempt to learn from North American indigenous values and world views. For this reason, he should be commended. In defending his thesis that a vegetarian life style

is morally preferable, he draws upon indigenous thought, feminist philosophy, and antidomination theories, arguing that speciesism, racism, and sexism can all be traced back to the same mind-set of oppression, domination and exploitation. Unfortunately, identifying the oppressive mind-set is not ipso facto escaping it. I show that Fox in his explication and use of indigenous thought actually perpetuates the very oppression and exploitation he argues against. Environmental Ethics 24(2002):275-294. (EE)

Rabie, A 1989. Bejeën God se aarde met ontsag. Woord en Daad 321, 2-3. (Africa)

Rabinor, ZD, "Sustainable Development and Management of Ecotourism in the Americas: Preparatory Conference for the International Year of Ecotourism, 2002," Journal of Environment and Development 11(no.1, 2002):103-106. (v.13, #3)

Rachels, James, Created from Animals: The Moral Implications of Darwinism. New York: Oxford University Press, 1990. \$ 19.95. Rachels enlists Darwin in the animal rights movement. Darwin opposed the use of steel traps against vermin and could become enraged at someone abusing a horse. He disliked vivisection. More importantly, Darwin narrowed the discontinuity between humans and animals, showed our kinship with animal life both in origins and biological character. This perhaps devalues human life from the classical concepts of human dignity, but it also elevates the worth of animal life. Rachels is professor of philosophy, University of Alabama at Birmingham. (v1,#3)

Rachels, James, The Moral Implications of Darwinism. Oxford University Press, 1990. How Darwinism and evolutionary history brings humans and animals closer together both descriptively in science and prescriptively in morals. See note in Fall 1990 Newsletter. Comparable in many ways to Rodd's book, but one thing that is not comparable is the price. Rachels' is only \$ 19.95 for 256 pages; Rodd's is \$ 55.00 for 280 pages. Fortunately, the logic in Oxford's books is better than the logic of their pricing. (v1,#4)

Rachlow, Janet L., Berger, Joel. "Conservation Implications of Patterns of Horn Regeneration in Dehorned White Rhinos," Conservation Biology 11(no.1, 1997):84. (v8,#2)

Radcliffe, S. A., "Geography of Development: Development, Civil Society and Inequality: Social Capital Is (Almost) Dead?," Progress in Human Geography 28(no. 4, 2004): 517-527(11). (v.14, #4)

Radcliffe, SA, "Development and geography: towards a postcolonial development geography?" Progress in Human Geography 29 (no. 3, June 2005): 291-298.

Radcliffe, Samuel J., "Core Values, Ethics, and Forestry." Pages 151-158 in Forestry Forum: The Land Ethic. Bethesda, MD: The Society of American Foresters, 1998. Radcliffe is president, George Banzhaf & Company, Milwaukee. (v.12,#3)

Radcliffe, Samuel J., "A Professional Code of Ethics for the 21st Century: The Ethics Committee's Proposal," Journal of Forestry 98 (no. 7, July 2000):16-21. Report by the chair of the Society of American Forester's Ethics Committee, proposing a new Code of Ethics for the SAF. Radcliffe is president, George Banzhaf & Company, Milwaukee. (v.12,#3)

Radcliffe, Samuel J., "A Professional Code of Ethics for the 21st Century: The Ethics Committee's Proposal," Journal of Forestry 98 (No. 7, 2000 July 01): 16-. This fall, SAF will vote on whether to adopt a completely revised Code of Ethics. The chair of the Ethics Committee discusses the committee's rationale for the proposed revision. (v.11,#4)

Radcliffe, Sarah A, "Geography of development: development, civil society and inequality - social capital is (almost) dead?," Progress in Human Geography 28(no.4, 1 August 2004):517-527(11).

Radder, Hans, "Exploiting Abstract Possibilities: A Critique of the Concept and Practice of Product Patenting," Journal of Agricultural and Environmental Ethics 17(2004):275-291. Developments in biotechnology and genomics have moved the issue of patenting scientific and technological inventions toward the center of interest. In particular, the patentability of genes of plants, animals, or humans and of genetically modified (parts of) living organisms has been discussed, and questioned, from various normative perspectives. This paper aims to contribute to this debate. For this purpose, it first explains a number of relevant aspects of the theory and practice of patenting. The focus is on a special and increasingly significant type of patents, namely product patents. The paper provides three general arguments against the concept and practice of product patenting. The first argument briefly considers the claim that patents are legitimate because they promote socially useful innovation. Against this claim, it is argued that product patents may hamper rather than promote such innovation. The second and main argument concludes that product patents are not adequately based on actual technological inventions, as they should be according to the usual criteria of patentability. The principal moral issue is that product patents tend to reward patentees for inventions they have not really made available. The final argument proposes a method for patenting the heat of the sun. Assuming that granting this patent will be generally considered absurd, the argument exposes a further, fundamental problem of the concept and practice of product patenting. Keywords: (product) patents, biotechnology and genomics, experimental science and technology, reproducibility of inventions. The author is on the Faculty of Philosophy, Vrije Universiteit, Amsterdam, The Netherlands. (JAEE)

Radermacher, Walter. Review of I. Musu and D. Siniscalco, eds., National Accounts and the Environment. Environmental Values 8(1999):524. (EV)

Radkau, Joachim. Natur und Macht: Eine Weltgeschichte der Umwelt [Nature and Power: A World History of the Environment]. Munich: C.H. Beck Verlag, 2000. Review by Udo Simonis, Environmental Values 10(2001):274. (EV)

Radkau, Joachim. *Nature and Power: A Global History of the Environment*, translated by Thomas Dunlap. Cambridge: Cambridge University Press, 2008. This was originally published as *Natur und Macht: Weltgeschichte der Umwelt* in 2002. Radkau provides an overview of world environmental history that revolves around a number of key topics focused on primeval symbioses of humans and nature, energy and resource use, colonialism, limits of nature, and globalization.

Radmer, Richard J. "Algal Diversity and Commercial Algal Products." Bioscience 46, no.4 (1996): 263. New and valuable products from diverse algae may soon increase the already large market for algal products. (v7, #3)

Radner, Daisie and Michael Radner. Animal Consciousness (Amherst, NY: Prometheus Books. Reviewed in Environmental Ethics 13(1991):187-91.

Radosevich, Steven, "Weed Ecology and Ethics," Weed Science 46(1998):642-646. Environmental ethical issues have dominated discussions among weed scientists for years, for example the decade long debate over 2,4,4-T use in forestry. Because weeds are a consequence of how we grow food, the study of both ecological and human components of agroecosystems should allow weed scientists to construct management strategies that more fully address the production, environmental, and social implications of weeds and weeding. Radosevich is in forestry, Oregon State University. (v.10,#3)

Rae, Eleanor. Women, The Earth, The Divine. Maryknoll, NY: Orbis Books, 1997. 150pp. \$15 paper. Rae surveys the present situation of women and the basics of ecofeminism and explores the link between the oppression of women and the exploitation of nature. (v8,#1)

Raeburn, Paul, "Clamor Over Genetically Modified Foods Comes to the United States," New York University Environmental Law Journal 8(no.3, 2000):610- . (EE v.12,#1)

Raffensberger, Carolyn, and Joel A. Tickner, eds., Protecting Public Health and the Environment: Implementing the Precautionary Principle. Washington, DC: Island Press, 1999. (v. 15, # 3)

Raffensperger, Carolyn and Joel Tickner, Eds. Protecting Public Health and the Environment: Implementing the Precautionary Principle. Review by Paul Thompson, Journal of Agricultural and Environmental Ethics 10(2001):351-354. (JAEE)

Raghu, S., et al., "Adding Biofuels to the Invasive Species Fire?" Science 313(22 September 2006):1742. Some of the species proposed as biofuels appear to turn invasive in some ecosystems.

Raglon, Rebecca, Scholtmeijer, Marian, "Shifting Ground: Metanarratives, Epistemology, and the Stories of Nature," Environmental Ethics 18(1996):19-38. Recent discussions concerned with the problematical human relationship with nature have justifiably focused on the important role that language plays in both defining and limiting knowledge of the natural world. Much concern about language among environmental thinkers has been focused at the semantic level—proposing and analyzing definitions of certain key terms, such as anthropocentric, biocentric, wilderness, ecology, or holistic. Work at the semantic level, however, has had very little effect in challenging the scientific metanarrative of nature which is based on the primacy of objective knowledge. Using examples from three postmodern stories, we suggest that the only real challenge to the way humans presently construct and understand their relationship to nature can be found at the narrative level. In our discussion of these stories, we show that nature ceases to be a passive, designified object of the human eye. The result of these narrative shifts is a conception of nature composed of other subjects and other realities rather than a nature rendered meaningless by objectivity. Raglon is in women's studies, University of British Columbia. Scholtmeijer is at the University of Northern British Columbia. (EE)

Räikkä, Juha, "Coercive population policies, procreative freedom, and morality," Philosophy and Geography 4 (No. 1, 2001): 67-77. I shall briefly evaluate the common claim that ethically acceptable population policies must let individuals to decide freely on the number of their children. I shall ask, first, what exactly is the relation between population policies that we find intuitively appealing, on the one hand, and population policies that maximize procreative freedom, on the other, and second, what is the relation between population policies that we tend to reject on moral grounds, on the one hand, and population policies that use coercive methods such as laws or economic incentives and deterrents, on the other. I shall argue that when changing a population policy, it may be morally desirable to affect people's procreative decisions more rather than less, and that sometimes it may be morally desirable to prefer a population policy that does not maximize procreative freedom to a population policy that does maximize it. I shall also point out that indirect population policies that use incentives and deterrents are not necessarily incompatible with liberal principles. Finally, I try to show what is assumed by those who defend the view that coercive population policies are morally wrong in all circumstances. Räikkä is Professor of Theoretical Philosophy at the University of Turku. (P&G)

Rainbow, Stephen. "Greens Within an Alliance: The New Zealand Experience," Environmental Politics 4(no.3, Fall 1995):475- . (v6,#4)

Raines, Ben, "Rare Fish Found in Grand Bay (Alabama\Mississippi)," Mobile (Alabama) Register, November 22, 2004, p. 1A, 4A. The rare opossum pipefish has been found in Grand Bay, a few feet from the Alabama/Mississippi state line. Mississippi has protected its part of the bay, but Alabama has not and has been considering permitting prospecting for natural gas there. The fish is a candidate species for the endangered species list; the only other known population is on the Atlantic coast of Florida. The fish is

unusual in that the males are "pregnant," or, more accurately, the males have a belly pouch in which they brood the eggs. The pipefish is long and slim, about the size of and looks like a greenish pencil. There are other species of pipefish but this one is unusual for the mid-belly brooding pouch, hence the name "opossum" pipefish. (v.14, #4)

Raines, Ben, "Experts: Fish Rally When Gill Nets Gone," (Mobile Alabama) Press Register, October 6, p. 1A, 16A. Alabama permits gill netting off its coasts. Other states, Florida, Mississippi, Texas, Louisiana have essentially stopped permitting gill netting, with a rebound of fish populations. Scientists now say that Alabama's liberal commercial regulations are depleting stocks of desirable fish in Alabama waters, also having a quite adverse effect from "by catch," fish and other marine animals that are not desired but are nevertheless caught and killed in the half-mile long nets that sweep from bottom to surface. With 120 licensed gill netters Alabama can have more than 54 miles of nets stretched out in its waters on any given night. Alabama requires gill netters to operate at night, so as not to disturb sports fishing during the day, but sportsmen complain that by dawn there are no fish left.

Raines, Ben, "ConocoPhillips Withdraws LNG Proposal," Mobile (Alabama) Press-Register, June 9, 2006, pp. 1A, 4A. ConocoPhillips has now withdrawn its controversial proposal to build an off-shore liquid natural gas terminal eleven miles off the Alabama coast. Liquid natural gas arrives in tankers at minus 260 degrees and must be warmed to convert it into a usable product. Here it was to be warmed using 150 million gallons of seawater a day, sucked in with eggs and larvae of marine species, including some of the Gulf's most popular recreational and commercial fish species, as well as shrimp and crabs. The environmental damage was judged unacceptable. The Alabama governor had said that he would veto the terminal.

Raines, Ben. "State's Sad Salamander." *Mobile Alabama Press-Register* (June 17, 2008): 1A, 4A. The Red Hills salamander lives in wet burrows in the deep hollows of Alabama's Red Hills and is endemic there. It has tiny legs and hardly walks, but it burrows with a thick skull. The salamander is listed as a threatened species. Only about 150 acres, less than one percent of its range, is protected, and there is illegal dumping even there. The Alabama Department of Transportation did abandon plans to widen a highway for a truck passing lane with some concerns about salamander populations.

Rainey, Thomas B., "Siberian Writers and the Struggle to Save Lake Baikal," Environmental History Review, vol. 15, no. 1, spring 1991. Rainey is professor of history and environmental studies at the Evergreen State College, Olympia Washington. (v2,#2)

Raizis, Anthony, "The Plight of Animals in Romania," The Animals' Agenda 15 no. 2 (March 1995): 28-. Romania's totalitarian regime took its toll on animals. A research scientist describes the efforts being made to establish humane standards of animal care and control in Romania, where the average salary is \$100 a month in U.S. dollars, and the average family spends three quarters of that amount on food. (v6,#2)

Rajan, S. Ravi, "Disaster, Development and Governance: Reflections on the "Lessons" of Bhopal," Environmental Values 11(2002):369-394. The paper firstly uses the case study of the Bhopal gas disaster to understand why many scholars and activists seek alternatives to "big" development. Secondly, it critically examines the claims that have been made in this regard in the literature in political ecology, science and technology studies and environmental governance, and in doing so, articulates a framework of questions for the next generation of research and advocacy. (EV)

Rajan, Sudhir Chella. "Automobility, Liberalism, and the Ethics of Driving." *Environmental Ethics* 29(2007):77-90. Automobility, or the myriad institutions that foster car culture, has rarely if ever been put under the lens of liberal political theory, even though driving is one of the most common and widely

accepted features of daily life in modern societies. When its implied promise of guaranteeing both freedom and equality is examined more closely, however, it appears that the ethical implications of driving may be darker than initially supposed. Automobility may indeed be in violation of both the Kantian categorical imperative and Gewirth's principle of generic consistency, even though there has thus far been remarkably little ethical analysis to reveal these possibilities. It is conceivable that liberal political theory has turned a blind eye to automobility precisely because the latter has naturalized us into accepting what Roberto Unger has called a routine of "false necessity," so that driving is now virtually imperceptible as a social fact worthy of critical analysis. (EE)

Ralls, Katherine, Demaster, Douglas P., Estes, James A. "Developing a Criterion for Delisting the Southern Sea Otter under the U.S. Endangered Species Act," Conservation Biology 10(no.6, 1996):1528. (v8,#1)

Ramakrishna, Kilaparti and George M. Woodwell, eds., World Forests for the Future. New Haven: Yale University Press, 1993. \$ 18.50. 208 pages. Both authors are at Woods Hole Research Center. (v4,#1)

Ramelkamp, Betsy. "Birds of a Feather Quacked Together." The Christian Science Monitor, vol. 88, 14 Nov. 1996, p. 16.

Ramjoué, Celina, "The transatlantic rift in genetically modified food policy," *Journal of Agricultural and Environmental Ethics* 20(2007):419-436. The regulatory structures underlying United States and European Union policies regarding genetically modified (GM) food and crops are fundamentally different. The US regulates GM foods and crops as end products, applying roughly the same regulatory framework that it does to non GM foods or crops. The EU, on the other hand, regulates products of agricultural biotechnology as the result of a specific production process. Accordingly, it has developed a network of rules that regulate GM foods and crops specifically. As a result, US regulation of GM foods and crops is relatively permissive, whereas EU regulation is relatively restrictive. Why are genetically modified food policies in the United States and the European Union so strikingly different? In the light of the recent World Trade Organization dispute on agricultural biotechnology, it may seem that economic interests are the driving force behind policies. While they are certainly part of the picture, the issue is far more complex. This paper argues that three different elements help explain differences between US and EU GM food policies. First, an investigation of US and European policies of the 1970s and 1980s on recombinant DNA research and of events leading up to early GM food and crop regulation allows a deeper understanding of current policy. Second, scrutinizing underlying values and norms can uncover the beliefs that condition current GM food and crop policy. Third, an analysis of involved actors' views and levels of success in influencing policy is essential to understanding US and EU policies. Keywords: agricultural biotechnology - comparative public policy - genetically modified crops - genetically modified food - public policy - regulation. Ramjoué is at the European Commission, Brussels, Belgium.

Ramlogan, Rajendra. "Environmental Refugees: A Review." Environmental Conservation 23, no.1 (1996): 81. (v7, #3)

Ramphal, Shridath, Our Country, the Planet. Washington, DC: Island Press, 1992. 291 pages, paper. Chapters on: a fragile world, air and water, earth and fire, the profligate rich, the powerless poor, population, a feudal world, ethics of survival, muddling through or worse, enlightened change. Sir Shridath Ramphal is a former foreign minister of Guyana and a member of the Brundtland Commission. He is President of the World Conservation Union (IUCN). (v4,#1)

Ramphela, Mamphela, ed., Restoring the Land: Environment and Change in Post-Apartheid South Africa. London: Panos Publications, 1991. ISBN 1-870670-27-2. 216 pages, paper. By a study group of nearly two dozen persons, from all races, from law, media, philosophy, universities, unions. Sample chapter

titles: A Land out of Balance; The Legacy of 'Homeland' Policy; A Desert for the Deserted; Blighted Environment; Life in the Townships; Smoke over Soweto; People, Parks and Politics; Rural Democracy Revisited; A Fragile Land (Namibia). (v5,#2)

Ramphele, Mamphela. "Wilderness as a Resource for Healing in South Africa." International Journal of Wilderness 2, no. 2 (August 1996): 33-38. Wilderness offers a social leveling space that permits a healing process to occur even in the fractured South African society. Ramphele is an anthropologist and vice chancellor of the University of Cape Town. (v7, #3)

Ramsay, Maureen. Human Needs and the Market. Brookfield, Vt. Ashgate, 1992. 240pp. \$63.95 hardcover.

Ramsay, Paul, Revival of the Land--Creag Meagaidh National Nature Reserve. Battleby, Perth PH1 3EW (Scotland): Scottish National Heritage, 1997. £ 7.50 paper. Ecological restoration on a 9700 acre reserve in the Inverness-shire, in the highlands of Scotland. In 1985 the then Nature Conservancy Council (now the Scottish National Heritage) purchased an estate, Creag Meagaidh, and undertook ecological restoration on a scale never before attempted, a project that has generated wide interest in land management, forestry, and conservation circles in the United Kingdom. Of particular interest because of the long human occupancy of the area and the long history of use and abuse, and the question what sort of restoration ought to be done and was possible. (v8,#3)

Ramutsindela, M, "Land reform in South Africa's national parks: a catalyst for the human-nature nexus," Land Use Policy 20(no.1, 2003): 41-49.

Ranchor Prime, Hinduism and Ecology, 118 pages. In a series; the others are: Batchelor, Martine, and Kerry Brown, ed., Buddhism and Ecology, 114 pages. Breuilly, Elizabeth and Martin Palmer, ed., Christianity and Ecology, 118 pages. Khalid, Fazlun with Joanne O'Brien, ed., 111 pages. Rose, Aubrey, ed., Judaism and Ecology, 142 pages. The editors in each case include a variety of perspectives from that tradition (Prime is a single author, but interviews various persons). All in paper. London: Cassell Publishers Limited, for the World Wide Fund for Nature, 1992. \$ 5.99 each. A review of the series is in CTNS (Center for Theology and Natural Sciences) Bulletin 16 (no. 3, Summer, 1996):18-19.

Ranco, Darren J. Review of Mexican Americans and the Environment: Tierra y vida. By Devon G. Pena. Environmental Ethics 29(2007):111-112. (EE)

Randolph, Richard O., Race, Margaret S., and McKay, Christopher P., "Reconsidering the Theological and Ethical Implications of Extraterrestrial Life," CTNS (Center for Theology and the Natural Sciences) Bulletin 17 (no. 3, Summer 1997):1-8. With some inquiries into environmental ethics on Mars. Ought it to be resuscitated and made habitable? Or is it more appropriate to let it remain lifeless. Can it have intrinsic worth if lifeless? (v.9,#4)

Randolph, Richard O., "The Importance of a Health Public Discourse on the Environment," CTNS (Center for Theology and the Natural Sciences, Berkeley) Bulletin 16 (no. 1, Winter 1996):1-6. With reflections on how Albert Gore's Earth in the Balance has done and can do this. Randolph is a Ph.D. candidate at the Graduate Theological Union, Berkeley. (v7,#2)

Randolph, Richard O., "Environmental Ethics and Its Implications for a Hierarchy of Sciences," CTNS (Center for Theology and the Natural Sciences) Bulletin 18 (no. 4, Fall 1998):2-9. The next step in the development of environmental ethics, especially from a Christian perspective, is a richer, more complete integration of the natural and social sciences. Aldo Leopold is already prophetic here, arguing that in a genuine environmental ethic humans must see themselves as members and participants within the

biological community, discovered by the natural sciences, as well as within the social community, in which the governing forces are politics, technology, engineering, economics. Randolph is a Ph.D. candidate at the Graduate Theological Union, Berkeley. (v.10,#3)

Randolph, Sal, "Free words to free manifesta: Some experiments in art as gift," Ethics and the Environment 8(no. 1, 2003):61-73. Randolph secretly puts copies of her book into bookstores: "The book was called Free Words, and was an art project of mine. Its content was a list of 13,000 words I had collected over ten years. I had uncopyrighted the text, placing it in the public domain (no rights reserved), and labeled the book as free. No price tag, no barcode, no ISBN. The back cover said only "this book belongs to whoever finds it." I had printed 1,000 copies of it, and the idea was to create a kind of situation. Someone who came across the book would have to decide what it was and who really owned it. If they wanted it, they would have to decide whether to walk out with it like a shoplifter, or whether to negotiate something with the sales clerk. Randolph is an independent artist in New York. (E&E)

Randorf, Gary. "An Arctic Dream--Torngat National Park." Wild Earth 6, no.1 (1996): 27. (v7, #3)

Rang Shijie Geng Mei Hao--For a Better World (in both Chinese and English). Commemorative book, by China Environment News and the China Environmental Culture Promotion Association, about 40 pages, based on special issue Chinese stamps that promote environmental conservation. The stamps are quite artistically done, and the accompanying essays are on such topics as water, desertification, the Three Gorges, the narcissus, Dujiang Dam, forests, the Dunhuang Cave Frescoes, sturgeon, the Luanhe River Diversion Project, the red ibis, Dinghu Mountain, the giant panda, Wulingyuan scenic area, Pere David's deer, Wuyi Mountain, Suzhou, the garden city. "The love for nature and the country has always existed in the virtues of the Chinese history." (Thanks to Xu Guangming, Suzhou Institute of Urban Construction and Environmental Protection.)

Rangan, Haripriya, and Marcus B. Lane, "Indigenous Peoples and Forest Management: Comparative Analysis of Institutional Approaches in Australia and India," Society & Natural Resources 14(no.2, Feb. 2001): 145-. (v.12,#3)

Rangarajan, Mahesh, ed., The Oxford Anthology of Indian Wildlife. Vol. II: Watching and Conserving. Oxford: Oxford University Press, 2000. Remarkable changes in attitudes toward wildlife in India in the last century, from conquest and slaughter to conservation. Many of the accounts are from former hunters who point out a different relationship between humans and animals as they record observations of wildlife for the joy of it. Contemporary accounts include a new class of naturalists who give equal attention to smaller animals and trees. (v.12,#2)

Rankin, A, "On how both capitalism and communism diminish the status of the individual," The Ecologist 31(no.5, 2001):42-43. (v.12,#4)

Rankin, Richard, ed., North Carolina Nature Writing: Four Centuries of Personal Narratives and Descriptions. Winston-Salem, NC: John F. Blair, Publisher, 1996. 26 selections. From the preface: "It was impossible for the earliest colonial explorers and settlers to imagine progress apart from the subjugation of nature. As we approach the twenty-first century, many North Carolinians recognize the need to balance the productive potential of the earth and environmental health and wholeness. Nature writing represents a literature of inspiration and hope for those who would conserve our natural heritage" (p. xv). Rankin, a historian, is in administration, Queens College, Charlotte, NC. (v.12,#2)

Ransel, Katherine P., "The Sleeping Giant Awakens: PUD No.1 of Jefferson County v. Washington Department of Ecology," Environmental Law 25 no. 2 (1995): 255-. Ransel is the public interest lawyer who represented the plaintiffs in Jefferson County. She analyzes the U.S. Supreme Court's 1994 decision

that confirms the right of states to impose minimum instream flow requirements on federal hydroelectric projects and discusses its implications. (v6,#2)

Rao, Brinda. "Dominant Constructions of Women and Nature in Social Science Literature." Capitalism, Nature, Socialism Pamphlet 2. New York: Guilford Publications, 1991. (v7, #3)

Rao, M; McGowan, PJK, "Wild-Meat Use, Food Security, Livelihoods, and Conservation," Conservation Biology 16(no.3, 2002):580-583.

Rao, P. K., Environment and Development: A Policy Framework. Lawrenceville, NJ: Pinninti Publishers, 2002. Is eradication of poverty and intergenerational welfare part of the Sustainable Development (SD) approach? Is there a distinction between sustainability and SD? Are green taxes useful? Why do we need a World Environment Organization (WEO) and what are its organizational prerequisites? What reforms are relevant at international and national levels? P. K. Rao is an economist who has worked at Harvard and Rutgers Universities. (v.13, #3)

Raoult-Walk, Anne-Lucie, and Bricas, Nicolas, "Ethical Issues Related to Food Sector Evolution in Developing Countries: About Sustainability and Equity," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):325-334. After a century of major technical advance, essentially achieved by and for the industrialized countries, the evolution of the food sector in southern countries should no longer be thought of in terms of a "headlong pursuit." In the present context of demographic growth, urbanization, poverty and disparities, environmental degradation, and globalization of trade, new priorities have emerged, and new ethical questions have been raised, mainly related to sustainability and equity. This paper analyses these ethical concerns in the following terms: can the model of food sector development initiated by the industrialized countries be applied to the entire world on a sustainable and equitable basis, given the effects of this development with regard to the energy consumed, the changes in dietary behavior and related nutritional problems, the new demands in terms of food safety, the questions of biodiversity, ownership of knowledge, cultural identities, gender issues, and Man's relationship to food and Nature? KEY WORDS: biodiversity, cultural identity, developing countries, dietary behavior, energy, equity, food safety, gender issue, knowledge property, sustainability. The authors are in Montpellier, France. (JAEE)

Raphael, Ray, More Tree Talk: The People, Politics, and Economics of Timber. Washington, DC: Island Press, 1994. 352 pages. Paper, \$ 17.00. A sequel to Tree Talk in 1981. A running narrative that focuses on people's lives and livelihood in the midst of a declining resource base and increasing regulatory policies. Without an understanding of the economic and political factors that interfere with good forest management, all the scientific knowledge and the best intentions of on-site workers will come to no avail. Raphael is a writer in northern California, who grows timber and teaches school. (v5,#1)

Rapp, Friedrich. Analytical Philosophy of Technology. Reviewed in Environmental Ethics 5(1983):361-65.

Rappaport, Ann, and Sarah Hammond Creighton. *Degrees That Matter: Climate Change and the University*. Cambridge, MA: The MIT Press, 2007. This book is directed toward practical guidance for academic students, faculty, and staff. The authors, both involved in Tufts' University Climate Initiative, argue that colleges and universities can serve as communities for strategizing and organizing effective action, laboratories for learning and centers of research, and models for how to reduce greenhouse gas emissions, all directed toward mitigating global climate change.

Rappaport, David J., "What Constitutes Ecosystem Health?" Perspectives in Biology and Medicine 33(1) (1989):120-132. There are analogies and disanalogies between human health and ecosystem health. Three measures of ecosystem health are: the identification of critical characteristics or vital signs,

measures of the counteractive capacity to handle stress loadings, risk factors from certain anthropogenic stresses. Naturally healthy ecosystems can be more periodic or fluctuate more widely than sometimes thought. What counts as a healthy managed ecosystem, including an agro-ecosystem? A useful article, reasonably short, and readable by students. (v1,#3)

Rapport, David, Robert Costanza, Paul R. Epstein, Connie Gaudet and Richard Levins, eds. Ecosystem Health. Oxford: Blackwell Scientific Publications, 1998. Reviewed by Ian Spellerberg. Environmental Values 9(2000):389.

Rapport, David J. Review of Laura Westra and John Lemons, eds., Perspectives on Ecological Integrity. Environmental Values 8(1999):116. (EV)

Rapport, David J. "Ecosystem Health: More than a Metaphor?" Environmental Values 4(1995):287-309. There is considerable discussion about the nature of the health metaphor as applied to ecosystems. One does not need to accept the analogy of ecosystem as 'organism' to reap insight into the diagnosis of ecosystem ills by applications of approaches pioneered in the health sciences. Ecosystem health can be assessed by the presence or absence of signs ecosystem distress, by direct measures of ecosystem resilience or counteractive capacity, and by evaluation of risks or threats from human activity and natural forces which may decrease the supply of ecological services. The focus of this essay is on what is and what is not implied by the ecosystem health metaphor. It also elaborates a research agenda for this emerging transdisciplinary science. One can argue that beyond the metaphor is the potential for systematic diagnosis of ecosystem ills, development of indicators of ecosystem health, development of early warning indicators of ecosystem dysfunction, development of diagnostic protocols and preventive strategies for maintaining ecological services. KEYWORDS: Ecosystem stress; early warning indicators; ecosystem health; ecosystem medicine. Rapport is in environmental science, University of Guelph. (EV)

Rapport, David J., Connie L. Gaudet, and Peter Calow, eds. Evaluating and Monitoring the Health of Large-Scale Ecosystems. Springer-Verlag, 1995. \$60. Defining ecosystem health, quantitative indices for ecosystem health assessment, diagnostic approaches, recovery and rehabilitation, methodological issues on design and analysis. Rapport is at the University of Guelph, Ontario and president of the International Society for Ecosystem Health. (v6,#1)

Rappuoli, Rino, Miller, Henry I., and Falkow, Stanley, "The Intangible Value of Vaccination," Science 297(9 August 2002):937-937. Developing and distributing vaccines has high social value, but is not very profitable for pharmaceutical companies. Yet poor health, according to the World Bank, is a main obstacle to the economic development of poor countries. More vaccination would be a first step to improved economies. Present economic studies of vaccines probably underestimate the benefits to society by a factor between 10 and 100. (v.13,#4)

Rasband, James R, "The Rise of Urban Archipelagoes in the American West: A New Reservation Policy," Environmental Law 31(no.1, 2001):1-. Mr. Rasband suggests that there are unfortunate echoes of nineteenth century Indian policy in current public land policy and argues for less certainty and greater skepticism about the nobility of our new preservation preference. He argues that participation of rural communities is critical to a principled public lands policy. (v.12,#4)

Rasband, JR, "Priority, Probability, and Proximate Cause: Lessons from Tort Law About Imposing ESA Responsibility for Wildlife Harm on Water Users and Other Joint Habitat Modifiers," Environmental Law 33(no.3, 2003):595-656. (v.14, #4)

Rashid, Ahmed, Jihad: The Rise of Militant Islam in Central Asia. Reviewed by Batabyal, Amitrajeet A., Journal of Agricultural and Environmental Ethics 16(2003):93-96. (JAEE)

Rasker, R, "An Exploration Into the Economic Impact of Industrial Development Versus Conservation on Western Public Lands," Society and Natural Resources 19 (no. 3, March 2006).

Rasker, Raymond, and Hackman, Arlin. "Economic Development and the Conservation of Large Carnivores." Conservation Biology 10, no.4 (1996): 991. (v7, #3)

Rasmussen, Larry L. Earth Community, Earth Ethics. Geneva: World Council of Churches, 1996. 384pp. \$26.50 paper. Environmental ethics from a Christian perspective, although the author warns at the outset that the term "environment" is misleading if it is understood to refer only to that which surrounds us, a world separate from ourselves. The situation of the earth today shows that "the world around us is also within. We are an expression of it; it is an expression of us. We are made of it; we eat, drink and breathe it ... This is not so much 'environment' as the holy mystery of creation." (v.7,#4)

Rasmussen, Larry, "The Late Great Planet Poll," Christian Century, October 9, 1991. A satire relating a poll among Earth's species whether the arrival of humankind was a good thing. (v2,#4)

Rasmussen, Larry L. "The Planetary Environment: Challenge on Every Front," Theology and Public Policy 2(no. 1, 1990).

Rasmussen, Larry, "Toward an Earth Charter," Christian Century 108 (no. 30, October 23, 1991):964-967. The Earth Summit at Rio de Janeiro is inviting NGO's, including Christian Churches, for guidance in formulating an Earth Charter. What might Christian say, drawing on the World Council of Churches' Canberra Assembly? Models are dominion, stewardship, partnership, sacramentalism, ecofeminism, a prophet-teacher model, and an evolutionary. Rasmussen proposes an evolutionary sacramentalist cosmology. The Rio conference is really an assignment in philosophical metaphysics that can be made operational on a global scale. Rasmussen is professor of social ethics at Union Theological Seminary, New York.

Rasmussen, Larry L. Earth Community Earth Ethics. Maryknoll, New York: Orbis Books. 1996. 366 pp. Paper \$20. Probably the most insightful analysis yet produced from a theological perspective of social justice and ecological concerns, though Michael Northcott's The Environment and Christian Ethics still excels in his dialogue with philosophers. "An attempt to lean into the world in a way that receives earth, with its distress, graciously" (p. 319). A green critique of history, of the human desires for dominion over earth that have driven Western science, development, technology, industry, politics, and religion since the Enlightenment. An underlying theme is "justice, peace, and the integrity of creation" (World Council of Churches), where Rasmussen was influential.

To conceive of humans as apart from nature, rather than a part of nature is "nature/humanity apartheid" (pp. 32-33, 328). "The essence of sin in this perspective is to try to rise above nature" (p. 274), seeking arrogant dominion over nature, denying the wholeness of creation. But, Rasmussen, as an ethicist, in the end has to notice some apartness. "Humans, as a part of nature, cannot escape their distinctive work as moral creatures" (p. 347). We intervene in "a nature too casual about pain, suffering, and death" (p. 347).

"For all their power as articulations of faith amidst several historical crises, canonical Protestant theologies from the 1930's to the 1970's were miserably deficient as cosmologies. They located human beings in the cosmos in ways that alienated us from the rest of nature and set the living substance of nature's infinite variety over against us. Nature was submissive objects at the disposal of creative subjects, human beings. ... A cosmic community of a million living subjects became little more than a collection of user-friendly objects. ... The need now is for those symbols that effect a 'reenchantment of the world' that edges out the deadly cosmology of mindless and valueless nature ... in which the Spirit is the energy and power of God present in all creation as its very animation. ... The Spirit's presence is not

amidst, nor its work for, one species only." Rasmussen is Reinhold Niebuhr Professor of Social Ethics at Union Theological Seminary, New York. (v9,#2)

Rasputin, Valentin, Siberia on Fire. DeKalb, IL: Northern Illinois University Press, 1989. Selected, translated, and introduced by Gerald Mikkelson and Margaret Winchell. 230 pages. Rasputin is one of the most influential leaders of his country's environmental protection movement, deeply concerned over the resources of Siberia, and their exploitation. He writes with skill and the translation is excellent. "Every now and then I recall the 'philosophy' of one old man, Grandpa Yegor, from my own native village, which still stood on the banks of the Angara River back then (but was being moved to make way for a large dam, inundating much of the area). ... Illuminated by the sunset that caressed the Angara, we were sitting on some logs when Grandpa Yegor ... nodded vaguely toward the river--before us unfolded a scene of rare beauty ... 'If you want to know, I never harmed my own land.' ... I cannot say that the Siberian's feeling for the land of his forefathers is more intense than that of a European Russian, but it is undoubtedly fresher and more self-engrossed, more tangible, it would seem, more personal. ... [But] Siberians today are ceasing to exist as the composite of their former stable features and are outliving their distinctiveness, wearing it out like old clothes" (pp. 174-175). Rasputin, a literary figure in Siberia, lives in Irkutsk and spends much of his time in a cottage on the Angara River near Lake Baikal. (Thanks to Phil Pister.)

Rastetter, Edward B., "Validating Models of Ecosystem Response to Global Change", Bioscience, 46(No.3, 1996):190- . How can we best assess models of long-term global change?

Ratcliffe, Derek. "More thoughts on nature conservation and the voluntary principle." Environmental Values 4(1995):71-72. John Francis' article (Environmental Values 3: 267-71) is a welcome exposure of a serious problem, but skates around the political nature of the voluntary principle and fails to challenge its validity head-on. The voluntary principle is an integral part of the current British Government's ideological obsession with minimising controls and the intervention of the state. Applied to nature conservation, it is particularly intended to protect the rights of property in land. Ratcliffe resides in Cambridge, U.K. (EV)

Ratner, Ty. "An Environmentalist's Lament on Predation." Environmental Ethics 30(2008):417-434. That some animals need to prey on others in order to live is lamentable. While no one wants predators to die of starvation, a world in which no animal needed to prey on others would, in some meaningful sense, be a better world. Predation is lamentable for four primary reasons: (1) predation often inflicts pain on prey animals; (2) it often frustrates prey animals' desires; (3) anything other than lamentation—which would include relishing predation as well as being indifferent to it—is in tension with sensitivity to many other forms of hardship and suffering; and (4) lamenting is demanded by the virtues of compassion and gentleness. One can lament predation even while acknowledging respects in which predation is genuinely praiseworthy. One can esteem admirable traits developed through and displayed in predation without esteeming the mechanism through which they are developed or the activity in which they are displayed. In addition, appreciating the check on population that predation provides does not preclude lamenting predation. While holding these positions does involve (in some sense) opposing nature itself and failing to appreciate predators for exactly what they are, doing so does not disqualify a person as an environmentalist. Finally, one can lament predation without being logically committed thereby to preventing or disrupting it. (EE)

Ratner, B., "A Review of: O'Rourke, Dara. Community Driven Regulation: Balancing Development and the Environment in Vietnam," Society and Natural Resources 18(no. 7, August 2005): 672-674.

Rauch, Jonathan, "Will Frankenfood Save the Planet?" The Atlantic Monthly, October 2003, pages 103-108. "Over the next half century genetic engineering could feed humanity and solve a raft of environmental ills--if only environmentalists would let it." Rauch is a correspondent for The Atlantic.

(v.14, #4)

Raustiala, Kal. "Domestic Institutions and International Regulatory Cooperation: Comparative Responses to the Convention on Biological Diversity," World Politics 49(no.4, 1997):482. (v8,#3)

Raustiala, Kal. "The Political Implications of the Enforcement Provisions of the NAFTA Environmental Side Agreement: The CEC as a Model for Future Accords." Environmental Law 25 (no. 1, 1995): 31-- . A powerful and effective Commission for Environmental Cooperation (CEC) could use the enforcement provisions of NAFTA's environmental side agreement against the United States in a way that would reduce agency- and technology-forcing statutes and lessen the substantive scope of environmental legislation. (v6,#1)

Raustiala, Kal., Victor, David G. "Biodiversity Since Rio: The Future of the Convention on Biological Diversity." Environment 38(May 1996):16. The Convention on Biological Diversity has serious conceptual and practical shortcomings, and it will take a special effort to make it an effective instrument for preserving biodiversity. (v7,#2)

Rauwald, KS; Moore, CF, "Environmental Attitudes as Predictors of Policy Support Across Three Countries," Environment and Behavior 34(no.6, 2002): 709-739.

Ravaioli, Carla. Economists and the Environment: A Diverse Dialogue. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1995. Economists from a range of intellectual positions engage in conversations with the author. Contributors include Milton Friedman, John Kenneth Galbraith, Immanuel Wallerstein. (v7,#1)

Raval, Shashir R., "The Gir National Park and the Maldharis: Beyond 'Setting Aside.'" Pages 68-86 in West, Patrick C., and Brechin, Steven R., Resident Peoples and National Parks: Social Dilemmas and Strategies in International Conservation. Tucson, AZ: The University of Arizona Press, 1991. The Gir National Park is situated in the western Indian state of Gujarat, home to diverse wildlife, including panthers, jackals, jungle cats, hyena, spotted deer, Indian gazelle, nilgai, and antelope. It also protects the last population of the Asiatic lion, a subspecies distinct from the African lion, smaller in size, with shorter mane, and different behavioral characteristics. The Asiatic lion once roamed throughout southwest Asia through Greece and northern Africa. Only about 250 remain in the park.

The park has been under some kind of protection for most of the twentieth century, but there are still about 4,800 Maldhari people living in and around the park. Typically poor, they herd cattle, and make ghee from the milk. Lions occasionally prey on their cattle. Their cattle overgraze the park and diminish wildlife on which the lions might prey. The Maldhari people poison the lions. There are varied and complex factors, but a basic choice seems clear: Either choose the Maldhari or the Asiatic lion.

Raven Peter H., "Science, Sustainability, and the Human Prospect," Science 297 (9 August 2002):954-958. The presidential address of a noted conservationist to the American Association for the Advancement of Science, with as much ethics in it as science. We looked forward to a world with (Franklin Delano Roosevelt's) four freedoms: freedom of speech, freedom to worship, freedom from want, freedom from fear. Where have those dreams gone? Most of the world is no better off today than then, despite advances in science and technology. Americans enjoy more privilege than most and show little responsibility for a planetary future in crisis. "It is against our common interests that hundreds of millions of women and children, living in extreme poverty, are unable to make the best use of their abilities. Such discrimination, whether we focus on it or not, is morally abhorrent" (p. 957). Raven is director of the Missouri Botanical Garden, St. Louis. (v.13,#4)

Raven, Peter. "Appreciating Diversity: Human and Botanical." *Public Garden* Vol. 22, no. 2 (2007): 5-7.

Raven introduces a themed issue on the work of botanical gardens in international plant conservation, with education and culturally-based appeals integral to plant conservation. Raven directs the Missouri Botanical Garden.

Ravetz, Jerome R., "Food Safety, Quality, And Ethics--A Post-Normal Perspective," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):255-265. I argue that the issues of food quality, in the most general sense including purity, safety, and ethics, can no longer be resolved through "normal" science and regulation. The reliance on reductionist science as the basis for policy and implementation has shown itself to be inadequate. I use several borderline examples between drugs and foods, particularly coffee and sucrose, to show that "quality" is now a complex attribute. For in those cases the substance is either a pure drug, or a bad food with drug-like properties; both are marketed as if they were foods. An example of the inadequacy of old ways of thinking is obesity, whose causes are as yet outside the purview of medicine, while its effects constitute an epidemic disease. The new drug/food syndrome needs a new sort of science, what we call "post-normal." This is inquiry at the contested interfaces of science and policy; typically it deals with issues where facts are uncertain, values in dispute, stakes high, and decisions urgent. With the perspective of post-normal science, we can better understand some key issues. We see that "safety" is different from "risk," being pragmatic, moral, and recursive. Also, we understand that an appropriate foundation for regulation and ethics is not so much "objectivity" as "awareness." In an age when "consumers" are becoming concerned "citizens," the relevant science must become post-normal. KEY WORDS: ethics, food safety, post-normal science, quality. Ravetz is with The Research Methods Consultancy Ltd., London. (JAEE)

Ravetz, Joe. City-Region 2020. London: Earthscan, 2000. Review by John Whitelegg, Environmental Values 10(2001):558. (EV)

Ray, Charles. "1995 River Operations Under the Endangered Species Act: Continuing the Salmon Slaughter." Environmental Law 26, no.2 (1996): 675. (v7, #3)

Ray, Dixy Lee, Trashing the Planet. Washington, D. C.: Regnery Gateway, 1990. \$ 18.95. Ray, former chair of the Atomic Energy Commission, lambasts environmental activists and their puppets in the media for confusing and frightening the public about complex scientific issues. Her answer for the most part is technology. "A well tended garden is better than a neglected woodlot." (v1,#4)

Ray, Jenisse, Ecology of a Cracker Childhood. Minneapolis: Milkweed Editions, 1999. Memoirs of a Georgia "cracker" (poor white farmer) childhood, with a keen sense of her ancestors' history and attachment to the land. Part autobiography and part ecological treatise. Her experiences as a naturalist and environmental activist working there. (v.12,#4)

Ray, Justina C. and Ginsberg, Joshua R. "Endangered Species Legislation beyond the Borders of the United States." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):956- . (v10,#4)

Raymond, L., "The State of the Natural Resources Literature Sovereignty Without Property? Recent Books in Public Lands Scholarship," Natural Resources Journal 43(no. 1, 2003): 313-329.

Raymond, L; Fairfax, SK, "The "Shift to Privatization" in Land Conservation: A Cautionary Essay," Natural Resources Journal 42(no.3, 2002): 599-640.

Raymond, Lee R., "Climate Change: Don't Ignore the Facts," The Lamp 78 (no. 3, Fall 1996): 2-3. The Lamp is the Exxon publication sent to shareholders. "Achieving economic growth remains one of the world's critical needs.... Precipitous, poorly considered action on climate change could inflict severe

economic change on industrialized nations and dramatically change your way of life. Those who say otherwise are drawing on bad science, faulty logic or unrealistic assumptions. We must reject policies that will clearly impose a heavy burden of costs but offer benefits that are largely speculative and undefined." Good, short, industry-view piece sure to provoke discussion in class. Couple it with Wilkinson, Rick, "Living with Tigers," immediately following in that issue. Dixon is Chairman, Exxon Corporation. (v8,#1)

Raymond, Leigh. "The Ethics of Compensation: Takings, Utility, and Justice." Ecology Law Quarterly 23, no.3 (1996): 577. (v7, #3)

Rayner, Steve, and Malone, Elizabeth L, eds., Human Choice and Climate Change. Four volumes: Volume 1: The Societal Framework. Volume 2: Resources and Technology. Volume 3: Tools for Policy Analysis. Volume 4. What Have We Learned? Abingdon, Oxon, UK: Marston Book Services and Battelle Press, 1998. (v9,#1)

Raynolds, Laura, Douglas Murray, and John Wilkinson, eds. *Fair Trade: The Challenges of Transforming Globalization*. London: Routledge Press, 2007. Contents include: (1) "Globalization and its Antinomies: Negotiating a Fair Trade Movement" by Douglas L. Murray and Laura T. Raynolds, (2) "Fair / Alternative Trade: Historical and Empirical Dimensions" by Laura T. Raynolds and Michael A. Long, (3) "Fair Trade in the Agriculture and Food Sector: Analytical Dimensions" by Laura T. Raynolds and John Wilkinson, (4) "Northern Social Movements and Fair Trade" by Stephanie Barrientos, Michael E. Conroy and Elaine Jones, (5) "Fair Trade Bananas: Broadening the Movement and Market in the United States" by Laura T. Raynolds, (6) "Fair Trade Coffee in the U.S.: Why Companies Join the Movement" by Ann Grodnik and Michael E. Conroy, (7) "Mainstreaming Fair Trade in Global Production Networks: Own Brand Fruit and Chocolate in UK Supermarkets" by Stephanie Barrientos and Sally Smith, (8) "Fair Trade in the Global South" by John Wilkinson and Gilberto Mascarenhas, (9) "Fair Trade Coffee in Mexico: At the Center of the Debates" by Marie-Christine Renard and Victor Pérez-Grovas, (10) "The Making of the Fair Trade Movement in the South – The Brazilian Case" by John Wilkinson and Gilberto Mascarenhas, (11) "Fair Trade and Quinoa from the Southern Bolivian Altiplano" by Zina Cáceres, Aurelie Carimentrand, and John Wilkinson, (12) "Reconstructing Fairness: Fair Trade Conventions and Worker Empowerment in South African Horticulture" by Sandra Kruger and Andries du Toit, and (13) "Fair Trade: Contemporary Challenges and Future Prospects" by Laura T. Raynolds and Douglas L. Murray.

Reader, John, Africa: A Biography of the Continent. New York: Alfred A. Knopf, 1998. London: Hamish Hamilton, 1997. 801 pages. "Africa as a dynamic and exceptionally fecund continent, where the evolution of humanity is merely one of many developmental trajectories that are uniquely evident there. The narrative follows the development of the continent from its earliest manifestation to the present; it identifies the physical processes which have determined the course of the developmental progressions and, where relevant, defines the ecological context in which they occurred. Human evolution is an important case in point, because critical stages of human evolution were adaptive responses to the ecological imperatives of the African environment" (p. xi). "Once established for a few generations, civilization might seem durable enough to last forever. But the skin of enlightened self-interest is very delicate, easily eroded, and the human capacity for unspeakable barbarity lies just beneath its surface. Africa's horrors are chilling examples of what people are capable of doing to another when short-term exploitation has taken over from long-term regulation, when the notion of accountability has been swept aside and the promise of the future is hidden by the trials of surviving in the present. Africa's tragedies diminish everyone, for humanity evolved in Africa, and we hold everything in common--not least our destiny, now that the limits of global exploitation are understood" (pp. x-xi). "Africa is the 'dark continent,' ... the place where a very particular form of darkness is found--the darkness of humanity" (p. x). Reader is a British/African photojournalist. (v.9,#3)

Reading, R.P., Clark, T.W., Griffith, B. "The Influence of Valuation and Organizational Considerations on the Success of Rare Species Translocations," Biological Conservation 79(no.2/3 1997):217.

Reading, Richard P., Miller, Brian J., and Kellert, Stephen R., "Values and Attitudes toward Prairie Dogs," Anthrozoos 12(no. 1, 1999):43-52. A survey of 900 residents of Montana, rural, urban, ranchers, members of conservation organizations. On average, all sample groups except members of conservation organizations displayed little regard for prairie dogs, with the level of antagonism increasing from conservation organization members to urban residents, rural residents, and finally ranchers. Still, the average respondent from each group supported maintaining some prairie dogs. Reading and Miller are with the Denver Zoo and Northern Rockies Conservation Cooperative. Kellert is with Yale University School of Forestry and Environmental Studies.

Reaka-Kudla, Marjorie L., Don E. Wilson, and E. O. Wilson, eds. Biodiversity II: Understanding and Protecting Our Biological Resources. Washington: National Academy Press, 1996. 560 pages. \$ 34.95. The sequel to E. O. Wilson, Biodiversity, published now almost a decade ago, and one of the more influential of the books of the last decade. 32 papers from a symposium by 47 authors. Part 1: what biodiversity is and why it is important. Part 2: how many species are there, and why we do not know. Other indices of biodiversity, such as molecular markers. Part 3: known and potential losses of species, again with much that we do not know. Part 4: taxonomic groups of organisms of special interest. Part 5: search for solutions, new directions, and applications. Part 6: the institutional and information infrastructure of conservation.

Some new emphases are: electronic data collection and analysis, the proposed U.S. National Biodiversity Information Center, application of techniques from the human genome project to species identification and classification, the Gap Analysis Program of the National Biological Survey, the significant contribution of museum collections to identifying and categorizing species. Reaka-Kudla is in zoology at the University of Maryland, Don Wilson is at the Smithsonian Institution, and E. O. Wilson is in zoology at Harvard University. (v8,#1)

Real, Leslie A. "Sustainability and the Ecology of Infectious Disease." Bioscience 46(no.2, Feb.1996):88. Diseases and their pathogenic agents must be viewed as important parts of any ecosystem management strategy. (v7,#1)

Reams, Margaret A., Geaghan, James P., and Gendron, Raye C., "The Link Between Recycling and Litter: A Field Study," Environment and Behavior 28, no. 1 (Jan. 1996): 92- . (v6,#4)

Rebuffoni, Dean. "'Big' Red Forces Rethink on Floods." The Christian Science Monitor 89.103 (23 April 1997): 1.

Rechel, Jennifer, "After the Fires: The Ecology of Change in Yellowstone National Park," Landscape Ecology 21 (no.3, April 2006): 463-464 (2).

Redclift, M.R., J. N. Lekakis and G. P Zaniias, eds. Agriculture and World Trade Liberalization: Socio-Environmental Perspectives on the Common Agricultural Policy. Review by D. P. Stonehouse, Journal of Agricultural and Environmental Ethics 14(2001):102-106. (JAEE)

Redclift, Michael, ed. Sustainability: Life Chances and Livelihoods. London: Routledge, 1999. Review by Inge Ropke Environmental Values 10(2001):422. (EV)

Redclift, Michael R. Frontiers: Histories of Civil Society and Nature. Cambridge: The MIT Press, 2006. Nature and society in frontier areas, as contested zones in which rival versions of civil society vie with

one another, often over the definition and management of nature itself. A dialectical process in which human societies and their environments influence and illuminate one another. The frontier can be seen as a crucible in which both nature and civil institutions develop and “co-evolve.”

Redclift, Michael, "Sustainable Development: Needs, Values, Rights." Environmental Values Vol.2 No.1(1993):3-20. ABSTRACT: `Sustainable development' is analyzed as a product of the Modernist tradition, in which social criticism and understanding are legitimized against a background of evolutionary theory, scientific specialization, and rapid economic growth. Within this tradition, sustainable development emphasizes the need to live within ecological limits, but allows the retention of an essentially optimistic idea of progress. However, the inherent contradictions in the concept of sustainable development may lead to rejection of the Modernist view in favour of a new vision of the world in which the authority of science and technology is questioned and more emphasis is placed on cultural diversity. KEYWORDS: Development, environment, modernism, needs, post-modernism, sustainability, values. Wye College, University of London, Near Ashford, Kent TN25 5AH, UK.

Redclift, Michael R. *Frontiers: Histories of Civil Society and Nature*. Cambridge, MA: MIT Press, 2006. Redclift defines frontier areas as contested zones in which rival versions of civil society vie with one another, and he examines five case studies: the Spanish Pyrenees, the forest frontier of Canada, coastal Ecuador, the Yucatán peninsula, and the Mexican Caribbean coast where civil societies emerged in frontier areas to either legitimize private holdings or manage common property. He argues that the frontier is a crucible where both civil institutions and nature develop and co-evolve in a dialectical fashion, and resistance to economic market pressures in frontier areas can create new avenues for political activity and the representation of cultural identity.

Redclift, Michael R. *Frontiers: Histories of Civil Society and Nature*. Cambridge, MA: MIT Press, 2006. Redclift defines frontier areas as contested zones in which rival versions of civil society vie with one another, and he examines five case studies: the Spanish Pyrenees, the forest frontier of Canada, coastal Ecuador, the Yucatán peninsula, and the Mexican Caribbean coast where civil societies emerged in frontier areas to either legitimize private holdings or manage common property. He argues that the frontier is a crucible where both civil institutions and nature develop and co-evolve in a dialectical fashion, and resistance to economic market pressures in frontier areas can create new avenues for political activity and the representation of cultural identity.

Redclift, Michael. "Environmental Security and the Recombinant Human: Sustainability in the Twenty-first Century," Environmental Values 10(2001):289-300. Examining the concepts of "security" and "sustainability", as they are employed in contemporary environmental discourses, the paper argues that, although the importance of the environment has been increasingly acknowledged since the 1970s, there has been a failure to incorporate other discourses surrounding "nature". The implications of the "new genetics", prompted by research into recombinant DNA, suggest that future approaches to sustainability need to be more cognisant of changes in "our" nature, as well as those of "external" nature, the environment. This broadening of the compass of "security" and "sustainability" discourses would help provide greater insight into human security, from an environmental perspective. Keywords: Nature, discourse, recombinant DNA, security, sustainability, carbon politics. Michael Redclift is in the Department of Geography, Kings College London, London, UK. (EV)

Redford, Kent H., "The Ecologically Noble Savage," Orion Nature Quarterly, vol. 9, no. 3, 1990, pp. 25-29. Indigenous knowledge is important because "it reflects the accumulated wisdom of unique cultures ... and occasionally, though only occasionally, it offers methods that, when modified, can be of use to inhabitants, native and nonnative, in the modern Neotropics." Nevertheless "the ecologically noble savage" is a myth; "the recently accumulated evidence ... refutes this concept of ecological nobility." "These people behaved as humans now do; they did whatever they had to to feed themselves and their

families," often with adverse environmental results. Redford is with the Center for Latin American Studies and the Department of Wildlife at the University of Florida. (v4,#1)

Redford, Kent and Richter, Brian, "Conservation of Biodiversity in a World of Use," Wild Earth 10(no. 2, Summer 2000):9- . (v.12,#2)

Redford, Kent H., and Andrew Taber, "Writing the Wrongs: Developing a Safe-Fail Culture in Conservation," Conservation Biology 14(no.6, Dec. 2000): 1567-. (v.12,#3)

Redford, Kent, "Natural Areas, Hunting, and Nature Conservation in the Neotropics," Wild Earth 10(no.3, Fall 2000):41- . (EE v.12,#1)

Redford, Kent H. and Christine Padoch, eds., Conservation of Neotropical Forests: Working from Traditional Resource Use. New York: Columbia University Press, 1992. 475 pages. Redford is in the Department of Wildlife and Range Science at the University of Florida. Padoch is at the New York Botanical Garden. (v4,#2)

Redford, KH, "Review of: Mahesh Rangarajan, India's Wildlife History: An Introduction", Environmental History 8(no.2, 2003):318-319.

Redick, Thomas P., "Biotechnology, Biosafety and Sustainable Development," Natural Resources and Environment 12 (Fall 1997):114-. (v.8,#4)

Redifer, John., and Davis, Sandra. "Building Regimes in Groundwater Policy: Contaminating the Message." Society and Natural Resources 9, no.2 (1996): 177. (v7, #3)

Redlinger, Robert Y. et al., Wind Energy in the 21st Century: Economics, Policy, technology and the Changing Electric Industry. Reviewed by Daniel Weisser, Environmental Values 12(2003):405-407. (EV)

Redpath, SM; Arroyo, BE; Leckie, FM; Bacon, P; Bayfield, N; Gutierrez, RJ; Thirgood, SJ, "Using Decision Modeling with Stakeholders to Reduce Human-Wildlife Conflict: a Raptor-Grouse Case Study", Conservation Biology 18 (no.2, 2004): 350-359.

Reed Christopher, "Driving Birds Away," Harvard Magazine 107 (no. 5, May-June, 2005):11-13. Ecologist Richard T. T. Forman has discovered that grassland birds (such as bobolinks and meadowlarks) are quite susceptible to the noise from busy highways. They will tolerate 3,000-8,000 vehicles per day, are affected seriously by two-lane highways with 15,000-30,000 vehicles per day, and will neither breed nor go within three-quarters of a mile of multi-lane highways with over 30,000 vehicles per day. Tree nesting birds are not similarly affected. His theory is that grassland birds depend on warning clicks to their nestlings, hidden in nests in the grass, when predators are nearby. Such clicks cannot be heard by the nestlings because of the traffic noise. In busy New England, this quite adversely affects grassland birds.

Reed, Edward S., Toward an Ecological Psychology. New York: Oxford University Press, 1996. 224 pp. \$ 35.00. The human niche, and the psychology by means of which humans, and animals, make their way through the natural, and social, worlds. Reed is at Franklin and Marshall College. (v9,#1)

Reed, MG, "An Introduction to Sustainable Development, 2nd Ed. Jennifer Elliott," Environments 29(no.3, 2001):119-120. (v.13, #3)

Reed, Peter, and David Rothenberg, eds., Wisdom in the Open Air: The Norwegian Roots of Deep Ecology. Minneapolis, MN: University of Minnesota Press, 1993. Seven Norwegian thinkers, including Zapffe, Naess, Kvaloy, Faarlund, Galtung, and Dammann. With a bibliography of further works. (Norway)

Reed, Peter, "Man Apart: An Alternative to the Self-Realization Approach," Environmental Ethics 11(1989):53-69. A discussion from within the perspective of deep ecology suggesting an alternative to the principle of self-realization. Reed emphasizes the sense of "otherness" and "holiness" of nature. He attempts to make sense of the notion of "awe" and to make it a respectable philosophical position. But Reed realizes that all deep ecology (including his view) rests on intuitions that may not be universal. (Reed died in an avalanche in March 1987. The philosophical community has lost an able commentator on deep ecology.)

Reed, Peter and David Rothenberg, eds., Wisdom in the Open Air: The Norwegian Roots of Deep Ecology. University of Minnesota Press, 1992. 288 pages. \$ 44.95 cloth, \$ 18.95 paper. A collection of papers by prominent Norwegian thinkers on humanity and nature, most never before published in English. (v3,#2)

Reed, Peter. "Man Apart: An Alternative to the Self-Realization Approach." Environmental Ethics 11(1989):53-69. Seeing nature as ultimately separate from us rather than as a part of us is the source of a powerful environmental ethic. The work of Martin Buber, Rudolf Otto, and Peter Wessel Zapffe forms the conceptual framework for a view of nature as a Thou or a "Wholly Other," a view which inspires awe for the nonhuman intrinsic value in nature. In contrast to the Self-realization approach of Naess and others, intrinsic value is here independent of the notion of a self. This approach suggests an ethic of humility and respect for nonhuman nature--to the degree that the continued existence of humans should be considered an open question. Reed worked at the Council of Environmental Studies in Oslo, Norway from the fall of 1986 until his accidental death in March 1987. (EE)

Reed, Rebecca A.; Johnson-Barnard, Julia; and Baker, William L. "Contribution of Roads to Forest Fragmentation in the Rocky Mountains." Conservation Biology 10, no.4 (1996): 1098. (v7, #3)

Rees, Amanda, "Anthropomorphism, Anthropocentrism, and Anecdote: Primatologists on Primatology," Science, Technology, & Human Values 26(no.2, Sprg 2001):227-. (v.12,#4)

Rees, Martin, Our Final Hour: A Scientist's Warning: How Terror, Error, and Environmental Disaster Threaten Humankind's Future in This Century--On Earth and Beyond. New York: Basic Books (Perseus), 2003. Foreboding dangers on this planet are so horrendous that human life will not be safe until we colonize elsewhere in space--and maybe not safe even then. Rees is a prominent British astronomer. Reviewed in Science 301(12 September 2003):1483-1484. (v.14, #4)

Rees, William E., and Wackernagel, Mathis, Our Ecological Footprint. Gabriola Island, B.C., Canada: New Society Publishers, 1996. The authors propose an ecological worldview in contrast with the prevailing expansionist worldview. "An ecological economic perspective would see the human economy as an inextricably integrated, completely contained, and wholly dependent subsystem of the ecosphere" (p. 4) "The ecological footprints of individual regions are much larger than the land areas they physically occupy" (p. 16)

Rees, William, "Ecological Footprint, Concept Of," Encyclopedia of Biodiversity 2: 229-244. Ecological footprint analysis is a quantitative tool that represents the ecological load imposed on the earth by humans in spatial terms. Thus, the ecological footprint of a defined population is the total area of land and water ecosystems required to produce the resources that the population consumes, and to assimilate the wastes

that the population generates, wherever on earth the land/water are located. Ecofootprinting can be used to assess the ecosystem area effectively "appropriated" in support of any specified human population or economic activity. (v.11,#4)

Reflections: Newsletter of the Program for Ethics, Science, and the Environment, Department of Philosophy, Oregon State University, Special Issue 3, August 1998, is devoted to Aldo Leopold, after fifty years. "Aldo Leopold: A Critical Celebration of his Land Ethic." With short contributions by Peter List (Oregon State University), Laura Westra (University of Windsor, Canada), Lawrence E. Johnson (Flinders University, Australia), Kathleen Dean Moore (Oregon State University), Karen J. Warren (Macalaster College), Holmes Rolston, III (Colorado State University), Robin Attfield (University of Wales, Cardiff), Alan McQuillan (forest management, University of Montana), Richard E. Roy (environmental law, Northwest Earth Institute, Portland, OR), Kristin Shrader-Frechette (University of Notre Dame), J. Baird Callicott (University of North Texas). Copies by request from Courtney S. Campbell, Coordinator, Program for Ethics, Science, and the Environment, Department of Philosophy, Hovland 101, Oregon State University, Corvallis, OR 97331-3902. 541/737-5648. e-mail: PESE@orst.edu

Reforestation Scotland is published twice a year, Spring and Autumn, a publication of Reforestation Scotland, a group devoted to the restoration of Scottish forests, raising awareness and promoting understanding of the deforestation of Scotland and its implications in ecological, social, and economic terms. It seeks to develop community participation in ecological restoration, forest management, and integrated land use. Sam Murray is administrator. Reforestation Scotland, 21a Coates Crescent, Edinburgh, EH3 7AF, Scotland. Phone 44 (0)131 226 2496. Fax 44 (0)131 226-2503. Website: <http://www.scotweb.co.uk/Environment/reforest>. (v9,#1)

Regan, Tom, "Ethical Perspectives on the Treatment and Status of Animals" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 159-71. (v6,#2)

Regan, Tom, ed. Animal Sacrifices. Reviewed in Environmental Ethics 10(1988):181-82.

Regan, Tom, Empty Cages: Facing the Challenge of Animal Rights. Lanham, MD: Rowman and Littlefield, 2004. Regan asks readers to confront the miserable conditions we have inflicted on animals--not only in the familiar cases of factory farming, product testing, and hunting, but in less well-documented areas such as greyhound racing and circus performances. Advocates for animal rights are not crazy extremists, but thoughtful people who follow an argument to its logical conclusion, and when others do so animals everywhere will benefit.

Regan, Tom, Animal Rights, Human Wrongs: An Introduction to Moral Philosophy. Lanham, MD: Rowman and Littlefield, 2003. The argument for animal rights through the exploration of two questions central to moral theory: What makes an action right? What makes an act wrong? Contractarianism, utilitarianism, and Kantian ethics. A theoretical framework to ground a responsible pro-animal rights perspective. How asking moral questions about other animals can lead to a better understanding of ourselves. Regan is emeritus professor of philosophy at North Carolina State University.

Regan, Tom, The Thee Generation: Reflections on the Coming Revolution. Temple University Press, forthcoming January 1991. \$ 24.95. Essays with the central philosophical theme that an anthropocentric ethics cannot be rationally defended and that moral consideration extends further than humans to include animals and a responsibility to protect the larger community of life. "The human life is but one life form among many, and what distinguishes us from the larger community of life is not our power to subdue but our responsibility to protect." Includes essays in biomedical research, feminism and vivisection, child

pornography (paradigmatically wrong by a logic from which it also follows that vivisection is wrong), abolishing animal agriculture, on Christians and what they eat, on the harmony and also irreconcilable differences between ecofeminists and deep ecologists, especially Carolyn Merchant, Marti Kheel, George Sessions and Bill Devall. Those interested in environmental ethics will be especially interested in Regan's analysis of environmental holism (Leopold's land ethic) in the essay on animal agriculture. Christians will be interested in Regan's analysis of whether Christians ought to eat meat. (v1,#2)

Regan, Tom, ed., Animal sacrifices: Religious perspectives on the use of animals in science. Philadelphia: Temple University Press, 1986.

Regan, Tom, ed., Earthbound: New Introductory Essays in Environmental Ethics. New York: Random House, 1984. Pp. x, 371. This is the third anthology in a series that attempts to provide high quality introductory essays on various ethical problems. It covers a wide range of issues, but not all equally well. Tibor R. Machan's essay on "Pollution and Political Theory" (pp. 74-106) has little to do with environmental ethics; it is just another argument for libertarianism. Annette C. Baier's "For the Sake of Future Generations," (pp. 214-246) is hardly an introductory essay. Rather than present an overview of future generations arguments, she examines Parfit's identity problem in some detail--an argument that will confuse the beginning student for whom the book is designed. The last two essays, Alastair Gunn, "Preserving Rare Species," (pp. 289-335) and Edward Johnson, "Treating the Dirt," (pp. 336-365) are each clear comprehensive reviews of issues that form the heart of environmental ethics. Also of interest are: K. S. Shrader-Frechette, "Ethics and Energy," (pp. 107-146), which canvasses several arguments in favor of both soft and hard energy policies. Neither policy is "risk-free" despite the rhetoric of environmentalists who advocate soft energy. The real issue is thus the "ethical desirability of particular risk displacements" (p. 122). Mark Sagoff, "Ethics and Economics in Environmental Law" (pp. 147-178), provides a good introduction to, and a criticism of, economic rationality (cost-benefit analysis) and its relation to social policy. It is legislative procedures, and not cost-benefit analyses, which best express the social values, goals, and ideals of the citizen and the community. William Aiken, "Ethical Issues in Agriculture," (pp. 247-288), provides not only an introduction to the ethics of agricultural issues but also an excellent review of the major anthropocentric and non-anthropocentric theories of environmental ethics. Aiken tries to develop a compromise position he calls "eco-humanism": this view places value both in natural ecological systems and in the human ability for self-conscious cognitive activity. The book also includes an introductory essay on ethics by Tom Regan, an essay on the urban environment by Dale Jamieson, and an essay on the use of ocean resources by Robert L. Simon. One major flaw of this text is that there is no comprehensive bibliography. (Katz, Bibl # 1) Reviewed in Environmental Ethics 7(1985):373-75.

Regan, Tom, The Philosophy of Animal Rights. A booklet for distribution from Culture and Animals Foundation (address above), \$ 2. There are bulk rates. During the past year, Regan has taken his appeal for animal rights to South Korea, Switzerland, Italy, and Spain. In the U.S., he has spoken on over fifteen campuses. (v3,#2)

Regan, Tom, "Animals, Treatment of," in Lawrence C. Becker and Charlotte B. Becker, eds., Encyclopedia of Ethics, in 2 vols, Vol. II (New York: Garland Publishing Co., 1992), pages 42-46.

Regan, Tom, and Peter Singer, eds. Animal Rights and Human Obligations. (Englewood Cliffs, N.J.: Prentice Hall, 2nd ed., 1989.) Reviewed in Environmental Ethics 1(1979):365-70.

Regan, Tom, Review of Pluhar, Evelyn, Beyond Prejudice: The Moral Significance of Human and Nonhuman Animals. Journal of Agricultural and Environmental Ethics 10(1997):79-82.

Regan, Tom, ed., Matters of Life and Death. First published by Random House, now bought by McGraw

Hill. 2nd ed., 1986. 3rd ed., 1993. Chapter 9 is Peter Singer, "Animals and the Value of Life." Chapter 10 is J. Baird Callicott, "The Search for an Environmental Ethic." In the first edition this chapter was by William T. Blackstone. (v2,#4)

Regan, Tom, "Animal Rights and Welfare," in Donald M. Borchert, ed., The Encyclopedia of Philosophy Supplement. New York: Macmillan Reference, Simon and Schuster and Prentice Hall International, 1996. Brief survey and brief bibliography. (v7,#2)

Regan, Tom, ed. Matters of Life and Death: New Introductory Essays in Moral Philosophy. Reviewed in Environmental Ethics 3(1981):181-85.

Regan, Tom. "On the Connection between Environmental Science and Environmental Ethics." Environmental Ethics 2(1980):363-67. I critically assess Don Marietta's thesis that obligations are not dictated of reason but rather are imbedded in a person's "world view." The notion of "a view of the world" is both vague and leads to consequences common to all forms of subjectivism in ethics, since world views can and sometimes do vary from person to person. Marietta cannot avoid these consequences by arguing that some views of the world are "more reasonable" than others, since counting rationality as an appropriate basis for choosing between world views is itself to favor a particular view of the world. Neither then can Marietta consistently argue for the preferability of a world view which grounds our obligations regarding the ecosystem in environmental science. Given his general position, this can only tell us what he prefers, not what is preferable. Regan is at the department of philosophy and religion, North Carolina State University, Raleigh. (EE)

Regan, Tom. The Case for Animal Rights. Berkley: University of California Press, 1983. Reviewed in Environmental Ethics 7(1985):365-72.

Regan, Tom. "The Nature and Possibility of an Environmental Ethic." Environmental Ethics 3(1981):19-34. A conception of an environmental ethic is set forth which involves postulating that nonconscious natural objects can have value in their own right, independently of human interests. Two kinds of objection are considered: (1) those that deny the possibility (the intelligibility) of developing an ethic of the environment that accepts this postulate, and (2) those that deny the necessity of constructing such an ethic. Both types of objection are found wanting. The essay concludes with some tentative remarks regarding the notion of inherent value. Regan is at the department of philosophy and religion, North Carolina State University, Raleigh. (EE)

Regan, Tom. All That Dwell Therein. Reviewed in Environmental Ethics 7(1985):81-86.

Regan, Tom. "Animal Rights, Human Wrongs." Environmental Ethics 2(1980):99-120. In this essay, I explore the moral foundations of the treatment of animals. Alternative views are critically examined, including (a) the Kantian account, which holds that our duties regarding animals are actually indirect duties to humanity, (b) the cruelty account, which holds that the idea of cruelty explains why it is wrong to treat animals in certain ways; and (c) the utilitarian account, which holds that the value of consequences for all sentient creatures explains our duties to animals. These views are shown to be inadequate, the Kantian account because some of our duties regarding animals are direct duties to animals; the cruelty account because it confuses matters of motive or intent with the question of the rightness or wrongness of the agent's actions; and the utilitarian account because it could be used to justify identifiable speciesistic practices. I defend a fourth view. Only if we postulate basic moral rights in the case of humans, can we satisfactorily account for why it is wrong to treat humans in certain ways, and it is only by postulating that these humans have inherent value that we can attribute to them basic moral rights. Consistency requires that we attribute this same kind of value to many animals. Their having inherent value provides a similar basis for attributing certain basic moral rights to them, including

the right not to be harmed. Possession of this right places the onus of justification on anyone who would harm these animals. I set forth conditions for such a justification which those who would abuse animals have failed to meet. Regan is at the department of philosophy and religion, North Carolina State University, Raleigh. (EE)

Regan, Tom. *The Empty Cage: Facing the Challenge of Animal Rights*. Translators: Mang Ping and Ma Tianjie. (Beijing: Chinese Politics and Law University Press, 2005). (in Chinese)

Regan, Tom. "Obligations to Animals are Based on Rights: Individual Rights Are Not Grounded in Prejudice." Journal of Agricultural and Environmental Ethics 8(1995):171-180. Some feminist philosophers criticize the idea of human rights because, they allege, it encapsulates male bias; it is therefore misguided, in their view, to extend moral rights to non-human animals. I argue that the feminist criticism is misguided. Ideas are not biased in favour of men simply because they originate with men, nor are ideas themselves biased in favour of men because men have used them prejudicially. As for the position that women should abandon theories of rights and embrace an ethic that emphasizes care: women who made this choice would not so much liberate themselves from "the patriarchy" as they would conform to its representation of women as emotional, subjective and irrational. There is, then, no good reason to withhold ascribing rights to non-human animals, based on the criticisms of rights made by some feminists. (JAEE)

Regenstein, Lewis G., Replenish the Earth: A History of Organized Religion's Treatment of Animals and Nature. New York: Crossroad/Continuum, 1990. 256 pages. \$ 14.94 paper. "Includes the Bible's message of conservation and kindness to animals." (v1,#4)

Regier, Henry A., "Ecosystem Integrity in the Great Lakes Basin: An Historical Sketch of Ideas and Actions," Journal of Aquatic Ecosystem Health 1(1992):25-37. A study of the concepts of "ecosystem" and "integrity" in the binational political arena in the Great Lakes Basin, since 1970. Regier traces a series of documents that have helped to clarify and make operational these terms, a process in which he himself has been participant. Regier is at the Institute for Environmental Studies, University of Toronto. (v3,#3)

Regier, Henry A., "The Notion of Natural and Cultural Integrity," in Stephen Woodley, James Kay, and George Francis, eds., Ecological Integrity and the Management of Ecosystems (Waterloo, Ontario: Heritage Resources Centre, University of Waterloo, and St. Lucie Press, 1993). "A living system exhibits integrity if, when subjected to disturbance, it sustains an organizing, self-correcting capability to recover toward an end-state that is normal and 'good' for that system. End-states other than the pristine or naturally whole may be taken to be 'normal and good.'" "There is room for choice in the kinds of ecosystems with integrity that humans might prefer. In human-dominated ecosystems, it is really a matter of: 'What kind of garden do we want? What kind of garden can we get?'" Also: "Forecasts of future ecosystems are not possible, but some future imagining of preferred ones is." Regier is at the Institute for Environmental Studies, University of Toronto. (v4,#3)

Regier, Henry. "Self Organization and the Ecosystem Approach: the New Science and the New Scholarship", Environments 24(no. 1, 1996):153. (v7,#4)

Regosin, Jonathan V., and Frankel, Michelle, "Conservation Biology and Western Religious Teachings," Conservation Biology 14 (2000):322-324. Two Jewish conservation biologists call attention to how Jewish teachings promote awareness of the interconnections of humans with their environment, as well as a reverence for that environment. Regosin is with the Nature Conservancy; Frankel is in biology, Boston University. (v.11,#3)

Rehmann-Sutter, Christoph, "Biological Organicism and the Ethics of the Human-Nature Relationship," Theory in Biosciences/Theorie in den Biowissenschaften 119(2000):334-354. A "hermeneutic approach" to organisms where their description as organisms matters ethically. The term "organism" seems to have been introduced in the early 1700's in contrast to "mechanism." "Organism" can be used to transcend "mechanism" and to specify the ontological difference. This ontological analysis has ethical implications. Rehmann-Sutter is with the Institute für Geschichte und Ethik der Medizin der Universität Basel, Switzerland.

Rehmann-Sutter, Christoph. "Involving Others: Towards an Ethical Concept of Risk." Risk: Health, Safety & Environment 9 (1998): 119-36. Criticizes the economic concept of risk that is widely used as the standard model in risk assessment literature, and develops an outline for an ethical concept of risk based on jurisprudential discussions on causation. Combines risk assessment procedures with the perspective of an ethic of care. (v.9,#3)

Rehmann-Sutter, Christoph; Vatter, Adrian; Seiler, Hansjörg. Partizipative Risikopolitik. Opladen/Wiesbaden: Westdeutscher Verlag, 1998. 366 pp. DM 58. ISBN 3-531-13222-9. In German. This book contains the results from an interdisciplinary research project on technico-ecological risks, their implications for political and ethical thinking, and the need to develop new democratic political institutions. The project was based at the University of Basel in Switzerland. Several models for a democratic management of technico-ecological risks are screened and evaluated. An adapted form of mediation seems to fit best the given environmental requirements. A thorough analysis of the ethical problem of imposing risks intends to show the biggest hindrances for participative politics and to describe the positive effects for the political culture. Included perspectives are ethics, political science, and jurisprudence. Existing experiences are combined into a detailed new practical concept that should be implementable. (v.9,#3)

Rehmann-Sutter, Cristoph. 1996 Leben Beschreiben: Ueber Handlungszusamme, "Hange in der Biologie." Würzburg: Königshausen & Neumann, 1996. 392 pages. SFr. 70.90. In German. The first part of the book deals with molecular biology as a paradigm of modern scientific description of living nature, and tries to analyze hidden pre-thoeretic (moral) decisions in its specific approach. The second part is a discussion of Aristotle's biology in the context of moral philosophy based on the dichotomy between "poiesis" and "praxis" (Nichomachean Ethics). The third part draws a trans-functionalistic description of life as organic practice: processes are in themselves the goal of being lived. (v7, #3)

Reice, Seth R., The Silver Lining: The Benefits of Natural Disasters. Princeton, NJ: Princeton University Press, 2001. Every tornado's funnel cloud, every forest fire's billowing cloud of smoke, every flood's raging water has tremendous benefits for the ecosystem it impacts. The shortsightedness of conceiving such events as disastrous to nature, and the resulting misinformed environmental policy, and how to form better policy. Reice is in biology and ecology at the University of North Carolina, Chapel Hill. (v.12,#4)

Reice, Seth R., "Nonequilibrium Determinants of Biological Community Structure," American Scientist 82(1994):424-435. Biological communities are always recovering from the last disturbance, their "normal" state. Natural systems are so frequently disturbed that equilibrium is rarely achieved. On the other hand, disturbance is scale dependent. If the area studied is large enough, all disturbances are predictable and "normal." If a disturbance is predictable, the biota can and will adapt to it; a disturbance that is unpredictable will have a greater impact. Disturbance and heterogeneity, not equilibrium, generate biodiversity. Disturbance should be viewed as both natural and beneficial to the world's biodiversity. We need to value, nurture, and preserve our planet's biodiversity. Understanding that heterogeneity and disturbance are important contributors to biodiversity will help us achieve these goals. Reice is in ecology at the University of North Carolina, Chapel Hill. (v5,#4)

Reichart, Joel E., "A New Environmental Ethic" (Critical Review of Laura Westra, A Proposal for Environmental Ethics), Business Ethics Quarterly 5(1995):795-804. (v7,#2)

Reichelderfer, Katherine H., "The Expanding Role of Environmental Interests in Agricultural Policy," Resources (Resources for the Future), Winter 1991, No. 102. (v2,#2)

Reichenbach, Bruce R., "On Obligations to Future Generations," Public Affairs Quarterly 6(1992):207-225. (v3,#2)

Reichenbach, Bruce R., and Anderson, V. Elving. On Behalf of God: A Christian Ethic for Biology. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1995. 348 pages. Paper. With a section on environmental ethics. "Conservation of the tropical forests must include measures to control human population growth, to find family-sustaining jobs for the disenfranchised rural poor, and to curb the developed world's exploitation of the developing world's resources." Any environmental ethic must tie into "a broader ethic that considers social, economic, political and spiritual problems and obligations." Reichenbach is in philosophy at Augsburg College, Minneapolis. Anderson, now retired, taught genetics at the University of Minnesota. (v7, #3)

Reichert, Joshua. "Shark-Eating Men Threaten Wolves of the Deep." The Christian Science Monitor, vol. 89, 3 Jan. 1997, p. 19.

Reid, Duncan, "The End of Matter: Some Ecojustice Principles in the Neo-Patristic Vision," Ecotheology No 7 (July 1999):59-70.

Reid, Herbert, and Taylor, Betsy, "John Dewey's aesthetic ecology of public intelligence and the grounding of civic environmentalism," Ethics and the Environment 8(no. 1, 2003):74-92. This paper argues for the importance of John Dewey's aesthetic philosophy to recent efforts to cultivate civic environmentalism while critiquing narrowly conservationist environmentalisms. We call for a strong version of civic environmentalism oriented towards holistic integration of ecological concerns into all aspects of social, political, economic, and cultural life. Both authors are at the University of Kentucky. (E&E)

Reid, John W., Bowles, Ian A. "Reducing the Impacts of Roads on Tropical Forests," Environment 39(no.8, 1997):10. Conservationists have several options for preventing the damage that roads do to tropical forests, but to exercise them they will have to get more involved in the decisionmaking process. (v8,#3)

Reid, Walter V., "Biodiversity, Ecosystem Change, and International Development: Issues for the New U.S. Administration," Environment 43(no.3, Apr. 2001): 20-. Unless major steps are taken to restore and protect the Earth's ecosystems, scientists predict that tens of thousands of species will likely go extinct. Why is it in the best interest of the United States to address the biodiversity problem? What domestic and international actions should the U.S. administration take? (v.12,#3)

Reid, Walter V. and Kenton R. Miller, Keeping Options Alive: The Scientific Basis for Conserving Biodiversity. Washington, DC: World Resources Institute, October 1989. 1709 New York Avenue, N. W. Washington, DC 20006. \$ 10.00. (v1,#2)

Reiger, J. F., "Review of: William McGucken, Lake Erie Rehabilitated: Controlling Cultural Eutrophication, 1960s-1990s," Environmental History 7(no.3, 2002): 521-22. (v.13,#4)

Reiger, John F. Review of Aldo Leopold: His Life and Work. By Curt Meine. Environmental Ethics 11(1989):369-72.

Reigota, Marcos, "Brazilian Art and Literature: Oswald de Andrade's Contribution to Global Ecology." Pages 359-365 in Murphy, Patrick D., ed., Literature of Nature: An International Sourcebook. Chicago: Fitzroy Dearborn Publishers, 1998. ISBN 1-57958-010-6. Oswald de Andrade (1890-1954) was a Brazilian intellectual and poet, a critic of the modern transformation of Brazilian society, with significant ecological insights. Reigota is at the Universidade de Sorocaba, Brazil. (v.10,#2)

Reigota, Marcos, "Tempo e Ecologia. Time and Ecology," Utopía y Praxis Latinoamericana: Revista Internacional de Filosofía Iberoamericana y Teoría Social, Año 3, No. 5, Julio-Diciembre 1998. As we analyze the notion of time in ecology, we must consider the history of life, its relation, to culture, values and representations that reflect the complex daily relationships between human beings throughout evolution of the Earth. The human presence is important on the evolutionary time scale, no matter how small it is. In ecological time there are elements that are inseparable and complementary. They are the improvised (unusual) instant, the limitless historical, geological and biological time and the question about the possibilities to come. Reigota is at the Universidade de Sorocaba, Brazil. (v.10,#2)

Reila, Heiki, Teoloogiline keskkonnaeetika ja inimkeskne traditsioon. Mõnede uudsete keskkonnaeetika lähete võrdlev analüüs (Environmental Ethics and the Tradition of Anthropocentrism. A Comparative Analysis of Some New Approaches in Contemporary Theological Ethics Confronting Environmental Problems) (in Estonian). University of Tartu, Estonia, Master's Thesis, 1996. Three approaches are featured: (1) stewardship, chapter 2, with Ronald Preston and James Gustafson as examples; (2) Christian ecofeminism (chapter 3), with Rosemary Radford Ruether and Sallie McFague as examples; and (3) the reverence for life (Chapter 4), with Andrew Linzey as an example. The three are critical of classical Christianity on grounds of (1) the dominion of man, (2) androcentrism, and (3) speciesism. There is a discussion of anthropocentrism versus non-anthropocentrism, and an argument that Christianity has been mostly anthropocentric. There is a need to shift to a more complicated ethics, based on biological and ecological knowledge. The advisor was Jaanus Noormägi. Reila is a Lutheran pastor at Vandra, Estonia (Address: Heiki Reila, Vandra EE 3461, Estonia). (v8,#2)

Rasmussen, Larry. Earth Community, Earth Ethics. Maryknoll, NY: Orbis Books, 1996.

Reilly, Sean. "Alabama Sturgeon Vanishing." *Mobile (AL) Press Register* (December 9, 2007): 1A, 4A. Only one Alabama sturgeon has been caught in eight years. Biologists now fear there are too few for a captive breeding program. The fish is a listed endangered species, about 30 inches long, and one of only 25 sturgeon species in the world. At the turn of the last century, Alabama harvested 42,000 pounds of sturgeon. Biologists think the principal trouble is that damming of rivers has interrupted its spawning cycle.

Reilly, William K. on intrinsic value. The U.S. Environmental Protection Agency chief in a speech prepared for a gathering of Catholic leaders in Washington, declared that "natural systems have an intrinsic value--a spiritual worth--that must be respected for its own sake." A new "spiritual vision" of conservation and "an ethic of environmental stewardship grounded in religious faith ... could be a powerful force." Quoted in the Los Angeles Times, April 19, 1990, p. A3. (v1,#2)

Reiman, R. John, Toward an Ecological Ethic, Ph.D. thesis at Vanderbilt University, December 1991, in the Graduate Department of Religion. Reiman attempts a systematic introduction to a comprehensive environmental ethic. Chapter titles: Chapter 1: Nature and Humanity (Cartesianism, is/ought, facts/values; evolution and ecology). Chapter 2. Value Theory and the Use and Protection of the Natural World (value theory, the degradation of the natural world, conservation and preservation). Chapter 3: Approaches to Environmental Ethics (deontological and utilitarian approaches; cost/benefit analysis, holism). Chapter IV: The Boundaries of An Ecological Ethic (responsibilities to future generations, the extension of moral community, the question of human capacity seriously to consider the natural environment as a realm of duty). The thesis builds principally from the work of Holmes Rolston and of

H. Richard Niebuhr. Thesis advisors were Howard Harrod and Peter Paris. (v5,#1)

Reimer, Monica, "Competitive Injury as a Basis for Standing in Endangered Species Act Cases", Tulane Environmental Law Journal, 9(No.1, 1995):109- . (v7,#1)

Reiner, David M., "Climate Impasse: How the Hague Negotiations Failed," Environment 43(no.2, Mar. 2001): 36-. The recent climate negotiations at The Hague, which promised to build on progress made during earlier talks, ended in disappointment. Ambiguities in the Kyoto Protocol and the intransigence of individual nations and alliances contributed to this failure. (v.12,#3)

Reinhart, Daniel P., et al, "Effects of Exotic Species on Yellowstone's Grizzly Bears," Western North American Naturalist 61(no. 3, 2001):277-288. Exotic species may lead to the loss of substantial quality grizzly bear foods, including much of the bison, trout, and pine seeds that Yellowstone grizzly bears currently depend on. (v.12,#3)

Reisner, Ann and Walter, Gerry, "Journalists' Views of Advertiser Pressures on Agricultural News", Journal of Agricultural and Environmental Ethics 7(1994):157-172. All major journalism ethical codes explicitly state that journalists should protect editorial copy from undue influence by outside sources. However, much of the previous research on agricultural information has concentrated on what information various media communicate (gatekeeping studies) or communication's role in increasing innovation adoption (diffusion studies). Large minorities suggested that advertising pressures affect the overall environment in which agricultural journalists work, and more than one in ten said they allow advertiser pressures to influence editorial decisions. The newspaper reporters who cover agricultural beats showed slightly more resistance to advertiser pressure than did farm magazine editors in a parallel study. Reisner and Walter are in agricultural communications and education at the University of Illinois, Urbana.

Reisner, Marc and Sarah Bates. Overtapped Oasis. Reviewed in Environmental Ethics 14(1992):93-94.

Reisner, Marc, Game Wars: The Undercover Pursuit of Wildlife Poachers. Viking, 294 pp, \$ 19.95. Features Dave Hall, a special agent with the U. S. Fish and Wildlife Service, recounting the exploits, dangers, and sheer adventure of undercover work to prevent the incredible destructive, cruel, and illegal slaughter of animals. Also some philosophizing about the American hunting ethic: "To a starving European peon, who was shot on sight if he entered the duke's wildlife preserve, a game law was simply another instrument of oppression. ... In a nation of immigrants just liberated from landlessness and crowdedness and monarchy, game laws, like forestry laws and zoning laws and gun-control laws, were resisted with a singular passion. The yeoman American citizen, intoxicated by his right to bear arms, made giddy by the omnipresent wildlife he could hunt at will, could not recalibrate his values as the game ran out, could not constrain his impulse (always described as a God-given right) to hunt." Reiser and Hall also explore the absence of a hunting ethic in Asia, the largest market for ivory and the destination of 98 percent of the illegal elephant ivory. (v2,#2)

Reisner, Marc. Cadillac Desert. Rev. ed. New York: Penguin. \$14.00. (v5,#2)

Reiss, Michael J. and Straughan, Roger, Improving Nature: The Science and Ethics of Genetic Engineering. Cambridge: Cambridge University Press, 1996. Chapters: Practicalities of genetic engineering. Moral and ethical concerns. Theological concerns. Genetic engineering of microorganisms. Of plants. Of animals. Of humans. Public understanding of genetic engineering. Useful and comprehensive introduction to the issues. Reiss is a biologist at Homerton College, Cambridge, and also a priest in the Church of England. Straughan is a moral philosopher, University of Reading, UK. (v.13,#4)

Reiss, Michael J., Straughan, Roger. Improving Nature? The Science and Ethics of Genetic Engineering. Cambridge, UK: Cambridge University Press, 1996. 288 pp., index. Review by Eva M. Buccioni, Dept. of Philosophy, University of Guelph, Journal of Agricultural and Environmental Ethics 11(1998):54-55.

Reiss, Michael J. and Roger Straughan. Improving Nature? The Science and Ethics of Genetic Engineering. Review by Eva M. Buccioni Journal of Agricultural and Environmental Ethics 11(1999):49-55. (JAEE)

Reiss, Michael. "Ethical Considerations at the Various Stages in the Development, Production, and Consumption of GM Crops." Journal of Agricultural and Environmental Ethics 14(2001):179-190. The aim of this paper is to clarify the ethical issues surrounding GM crops by examining the various stages or levels in their development, production, and consumption. Previous work about the acceptability or non-acceptability of GM crops has tended to conflate these various levels, partly as a result of which GM crops are all-too-often simply said to be "good" or "bad." There are, though, various problems with such a binary categorization. I look in particular at the duties of scientists, companies, regulatory systems, farmers, retailers, and consumers. Keywords: consensus, crops, discourse ethics, genetic modification. Reiss is at the Institute of Education University of London, London, UK. (JAEE)

Reiss, Michael. Review of: Berry, R. J., God's Book of Works. Environmental Values 13(2004):138-138. (EV)

Reitan, Eric H., "Deep Ecology and the Irrelevance of Morality," Environmental Ethics 18(1996):411-424. Both Arne Naess and Warwick Fox have argued that deep ecology, in terms of 'Self-realization,' is essentially nonmoral. I argue that the attainment of the ecological Self does not render morality in the richest sense 'superfluous,' as Fox suggests. To the contrary, the achievement of the ecological Self is a precondition for being a truly moral person, both from the perspective of a robust Kantian moral framework and from the perspective of Aristotelian virtue ethics. The opposition between self-regard and morality is a false one. The two are the same. The ecological philosophy of Naess and Fox is an environmental ethic in the grand tradition of moral philosophy. Reitan teaches philosophy, Pacific Lutheran University, Tacoma, WA. (EE)

Reitan, Eric, "Private Property Rights, Moral Extensionism and the Wise-Use Movement: A Rawlsian Analysis," Environmental Values 13(2004):329-347. Efforts to protect endangered species by regulating the use of privately owned lands are routinely resisted by appeal to the private property rights of landowners. Recently, the 'wise-use' movement has emerged as a primary representative of these landowners' claims. In addressing the issues raised by the wise-use movement and others like them, legal scholars and philosophers have typically examined the scope of private property rights and the extent to which these rights should influence public policy decisions when weighed against other moral considerations. Whether from an anthropocentric standpoint or from a perspective of moral extensionism, the key question seems to be the extent to which prima facie property rights are overridden by other moral interests, not whether such rights claims can reasonably be appealed to at all in public discussions of environmental justice. I argue, however, that a morally extensionist perspective not only introduces more potential defeaters of prima facie property rights, but actually strips appeals to private property rights of their moral significance. Hence, I argue on Rawlsian grounds that appealing to private property rights in the way that the wise-use movement does is unreasonable in a pluralistic society. In so doing, I show that a Rawlsian perspective may be more congenial to the interests of moral extensionists than is typically thought. Reitan is in philosophy, Oklahoma State University, Stillwater, OK. (EV)

Reitze, Arnold W., Jr., Air Pollution Control Law: Compliance and Enforcement. Washington, DC: Environmental Law Institute, 2002. \$ 100. Analysis and guide to the Clean Air Act and the body of air pollution control law. Court decisions. Reitze is in law, George Washington University Law School.

(v.13,#1)

Reitze, Jr., Arnold W., "Population, Consumption, and Environmental Law," Natural Resources and Environment 12 (Fall 1997):89-. (v.8,#4)

Rejmanek, M. "A Theory of Seed Plant Invasiveness: The First Sketch", Biological Conservation 78(no.1/2, 1996):171.

Rekola, M., E. Pouta, and C.-Z. Li, "Incommensurable Preferences in Contingent Valuation: The Case of Natura 2000 Network in Finland," Environmental Conservation 27(no.3, Sept. 2000): 260-. (v.12,#3)

Rolph, Edward. Rational Landscapes and Humanistic Geography. Reviewed in Environmental Ethics 5(1983):181-83.

Remington, D. L., "Ecology, Evolution, and the Genome: A "Whole Elephant" Readers Guide," BioScience 54(no. 10, 2004): 950-965(16). (v.14, #4)

Remington, David L, "Ecology, Evolution, and the Genome: A "Whole-Elephant" Readers Guide", BioScience 54(no.10, 1 October 2004):950-965(16).

Remmerde, Jon. "Tic, Tac, Toe: Trees in a Row." The Christian Science Monitor, vol. 89, 27 Feb. 1998, p. 17.

Remond-Gouilloud, Martine. Du Droit de detruire: essai sur le droit de l'environnement. Reviewed in Environmental Ethics 14(1992):371-72.

Ren Chunxiao, "Some Philosophical Argumentation about Ecological Ethics", Fudan Xuebao (Fudan Journal) 2(2000): 44-49. In Chinese. (EE v.12,#1)

Ren Junhua. "On the Value of the Confucian Ideas of Ecological Ethics in Modern Society." Studies in Dialectics of Nature No. 3 (2006): 63-66.

Ren Yongtang, "The Main Approach to Green Higher Education." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Renner, Rebecca, "Conflict Brewing over Herbicide's Link to Frog Deformities," Science 298(1 November 2002):938-938. Is the use of atrazine related to the decline of amphibians, turning male frogs into hermaphrodites? Earlier experiments suggested yes, but later experiments are more inconclusive. (v.13,#4)

Rensenbrink, John. The Greens and the Politics of Transformation. Reviewed in Environmental Ethics 15(1993):185-90.

Renzong, Qiu, editor-in-chief, Guowai Ziranxue Zhexueweni 1990 (International Philosophical Problems in Natural Science 1990), Chinese Academy of Social Sciences, Institute of Philosophy. Beijing: Social Science Press, 1991. ISBN 7-5004-0885-4/B 181. There are section introductions, but all the articles are translations from Western books and journals. Section I is on Philosophy of Science: Scientific Materialism. Section II is on Science and Society: The Relationship between Human Beings and Nature. The section editor is Yu Mouchang, Institute of Philosophy, who gives an introduction to environmental ethics, "Current Focus of the Study of the Relationship between Human Beings and Nature." The section contains three articles (1) G. A. Davedova, "Problems of the Relationship between Human Beings and Nature in Marxist Historical Philosophy" (pp. 104-129, translated from Russian; (2)

M. B. Kushkova, Human Beings and Nature (pp. 130-145, translated from Russian; (3) Holmes Rolston, III, "Is There an Ecological Ethic? (pp. 146-157, translated by Ye Ping (Northeast Forestry University, Harbin) from English in Philosophy Gone Wild, originally in Ethics. Section III is on Philosophical Problems of Nature: the Self-Organization of Nature. It contains a dozen articles, for example Ilya Prigogine on irreversible thermodynamics and several articles inquiring how evolutionary creation has taken place through the self-organization of nature. In China, this book has sold well, though many books of this kind in China are as much "distributed" to libraries and agencies as sold. Already about 3000 copies have been sold or distributed. (China)

Repetto, Robert, "Accounting for Environmental Assets," Scientific American 266 (no. 6, June):94-100. A country can cut down its forests, erode its soils, pollute its aquifers, and hunt its wildlife to extinction, but its measured income is not affected as these assets disappear. Impoverishment is taken for progress. Repetto is with the World Resources Institute in Washington, formerly a professor of economics at Harvard University. (v3,#3)

Repetto, Robert, Rothman, Dale S., Faeth, Paul, Austin, Duncan. Has Environmental Protection Really Reduced Productivity Growth? Washington, D.C.: World Resource Institute, 1996. 46pp. \$14.95 paper. This report shows how the conventional measure of productivity growth misrepresents the industrial process by taking into account only pollution abatement costs and ignoring pollution damages averted. (v8,#1)

Repetto, Robert, compiler, The "Second India" Revisited. Washington, DC: World Resources Institute, 1994. \$ 14.95 paper. 90 pages. A study produced by a team of nine Indians and others. The "Second India" is the near doubling of the population of India in the last twenty years. The much-admired green revolution in agriculture, coupled with a quadrupling of the rate at which contraceptives are used, has enabled India to do little more than mark time in per capita food production in the last twenty years. Though parts of India, where women have better education and higher status, have reduced births to the replacement rate, in much of India the rate is over five births per woman. Population is still increasing, and India's population is projected to exceed that of China in the next century. There is no foreseeable method of continuing the green revolution to feed such population growth. Also, the increased food production has come at considerable environmental degradation. Repetto is a senior economist at the World Resources Institute.

Repetto, Robert. Jobs, Competitiveness, and Environmental Regulation: What are the Real Issues? Washington, D.C.: World Resource Institute, 1995. 60pp. \$12.95 paper. Repetto shows how greater use of market incentives in regulatory policy, reduction of economically unwarranted subsidies, better use of cost-benefit analysis in regulatory decision-making, and other measures could help the United States protect the environment with far greater economic efficiency. (v8,#1)

Report from the Institute for Philosophy and Public Policy, The, vol. 10, nos. 3 and 4, a double issue, summer/fall 1990, contains the following short articles:

Mark Sagoff, "The Greening of the Blue Collars."

H. P. Young, "Sharing the Burden of Global Warming."

Peter G. Brown, "Greenhouse Economics: Think Before You Count."

Leo Marx, "Post-Modernism and the Environmental Crisis." (v2,#1)

Reppert, Barton, "The Biodefense Buildup: Fallout for Other Research Areas?," BioScience 55(no.4, April 2005):310-310(1).

--Reprinted in Richard G. Botzler and Susan J. Armstrong, eds., Environmental Ethics: Divergence and Convergence (Boston: McGraw-Hill, 1998), pp. 71-86.

--Reprinted in Susan J. Armstrong and Richard G. Botzler, eds., Environmental Ethics: Divergence and Convergence, 3rd ed. (Boston: McGraw-Hill, 2004), pages 74-87.

--Reprinted in Michael Boylan, ed., *Environmental Ethics* (Upper Saddle River, NJ: Prentice Hall, 2001), pages 228-247.

--Reprinted in David Schmidtz and Elizabeth Willott, eds., *Environmental Ethics: Introductory Readings* (New York: Oxford University Press, 2002), pages 33-38.

--Reprinted, translated into Chinese, in Ch'iu Jen-tsung, ed., Kuo wai tzy jan k'o hsueh che hsueh wen t'i (Philosophical Problems in Foreign Natural Science). Chung-kuo she hui k'o hsueh, 1994. Beijing: Chinese Social Science Press, 1994. ISBN 7-5004- 1514-1. Pages 276-295.

Download/print in PDF format (in Chinese):

<<http://lamar.colostate.edu/~rolston/Env-Eth-V-D-N-W.pdf>>

--Reprinted, translated into Spanish as "Ética ambiental: Valores y deberes en el mundo natural," pages 293-317 in Teresa Kwiatkowska and Jorge Issa, eds, Los caminos de la ética ambiental (The Ways of Environmental Ethics) (C.P. 06470, Mexico, D.F.: Plaza y Valdés Editores, 1998).

--Summarized with commentary by Panagiotis Perros, Philosophy, National University in Athens, Greece, 2004. In Greek. Online at

<<http://filosofia.gr/ecoethics/>>.

Alternatively, download/print at:

<<http://lamar.colostate.edu/~hrolston/Rolston-Greek.htm>>.

--Reprinted in James P. Sterba, ed., Earth Ethics: Environmental Ethics, Animal Rights, and Practical Applications (Englewood Cliffs, NJ: Prentice-Hall, 1995), pp. 317-328.

--Reprinted in James E. White, ed., Contemporary Moral Problems, 6th ed. (Belmont, CA: Wadsworth Publishing Co., 2000), pages 585-594.

--Reprinted in Frederick A. Kaufman, Foundations of Environmental Philosophy: A Text with Readings (Boston: McGraw Hill, 2003), pp. 67-73.

--Reprinted in J. Baird Callicott and Clare Palmer, eds., Environmental Philosophy: Critical Concepts in the Environment (London: Routledge, 2005), vol. 4, pp. 263-277.

Rescher, Nicholas, Complexity: A Philosophical Overview. Somerset, NJ: Transaction Publishers, 1998. The world is enormously sophisticated and nature's complexity is literally inexhaustible. As a result, projects to describe and explain natural science can never be completed. The nature of complexity and its bearing on our world and how we manage our affairs within a socially, technologically, and cognitively complex environment with vast management problems and risks of mishap. "Technological escalation" is a sort of arms race against nature in which scientific progress requires more powerful technology for observation and experimentation, and, conversely, scientific progress requires the continual enhancement of technology. The increasing complexity of science and technology means problems growing faster than solutions, and major management and decision problems. Rescher is in philosophy at the University of Pittsburgh. (v.9,#3)

Rescher, Nicholas. Risk. Reviewed in Environmental Ethics 9(1987):91-95.

Rescher, Nicholas. Unpopular Essays on Technological Progress. Reviewed in Environmental Ethics 4(1982):363-67.

Research in Philosophy and Technology, vol. 12, Spring 1992, is an entire volume on Technology and the Environment. Articles: Part One: Technology and Environmental Ethics: J. A. Doeleman, "Environment and Technology: Speculating on the Long Run"; David Strong, "The Technological Subversion of Environmental Ethics"; José M. de Cózar, "Technology, The Natural Environment, and the Quality of Life"; Andrew Light, "The Role of Technology in Environmental Questions: Martin Buber and Deep Ecology as Answers to Technological Consciousness. Part Two: Ethics versus Activism? An Exchange:

Paul Durbin, "Environmental Ethics and Environmental Activism"; George Allan, "Environmental Philosophizing and Environmental Activism"; Paul Durbin, "Reply to George Allan." Part Three: Technological Hazards, Economics and Environmental Management: Alastair S. Gunn, "Engineering Ethics and Hazardous Waste Management: Why Should We Care About Future Generations?"; Kristin Shrader Frechette, "Calibrating Assessors of Technological and Environmental Risk"; Hans Lenk and Matthias Maring, "Ecology and Ethics: Notes about Technology and Economic Consequences"; Earl R. MacCormac, "Environmental Management: Values, Knowledge, and Categories." Part IV: Technology and Harvesting the Earth: Egbert Schuurman, "Crisis in Agriculture: Philosophical Perspectives on the Relation Between Agriculture and Nature"; Nancy Farm Männikkö, "If a Tree Falls in the Forest: A Refutation of Technological Determinism." Part Five: Technology and Nature: Struggle or Synthesis? Eric Katz, "The Big Lie: Human Restoration of Nature"; Eric Higgs, "Musings at the Confluence of the Rivers Techné and Oikos." (For a reply by Richard Sylvan to the Katz paper, see Sylvan, "Mucking with Nature, noted in the Newsletter, Winter 91.) Also included: Eric Katz, "Environmental Ethics: A Select Annotated Bibliography II, 1988-1990. Part I appeared in Research in Philosophy and Technology 9(1989): 251-285, "Environmental Ethics: A Select Annotated Bibliography, 1983-1987. These two bibliographies form the best introduction to the recent literature in the field. Contact: JAI Press, Inc., 55 Old Post Road--No. 2, P. O. Box 1678, Greenwich, CT 06836-1678. Phone 203/661-7602. Research in Philosophy and Technology is edited by Frederick Ferré, Department of Philosophy, University of Georgia. Volume 13, 1993 will be on Technology and Feminism; volume 14, 1994, on Technology and Everyday Life. (v3,#1)

Reser, Joseph P. "Whither Environmental Psychology? The Transpersonal Ecopsychology Crossroads," Journal of Environmental Psychology, vol. 15, no. 3 (September 1995): 235-57. Ecopsychology and its relationship to psychology and environmental psychology, with particular attention to Theodore Rozak. The nature and role of the "self" as the ultimate target and agent of meaningful change. Ecopsychology in Australia, and indigenous "earth wisdom." The prognosis for the greening of psychology is explored. Reser is in psychology at James Cook University, Townsville, Australia. (v7, #3)

Resnik, David, "Bioethics of Gene Therapy." In J. Bottrill, ed., The Encyclopedia of Life Sciences. London: MacMillan Press, 2002. Volume 3, pp. 166-173. (v.13,#4)

Resources (Resources for the Future) Vol. 165 (Spring 1007). This is a themed issue entitled "Putting a Value on Nature's Services," mostly with attention to putting an economic value on nature's services. The claims are of considerable success and simultaneously of much frustration about what values get left out or inadequately measured thereby. In "The Endpoint Problem," James W. Boyd claims: "Look at an average refereed economic valuation of something in nature and what you'll see is a very narrow view of nature" (p. 27).

Resources for Green Work, Alternatives 27(no. 1, Winter 2001):33- . Alternatives provides a sample of some of the many green work resources. (v.12,#2)

Resources for the Future (ISSN 0048-7376), a quarterly publication of news and policy analysis, is sent free to individuals and institutions. The Spring 1994 issue contains the following articles: Winston Harrington and Margaret A. Walls, "Shifting Gears: New Directions for Cars and Clean Air"; Anna Alberini, David Edelstein, and Virginia D. McConnell, "Will Speeding the Retirement of Old Cars Improve Air Quality?"; Vicki Been, "Unpopular Neighbors: Are Dumps and Landfills Sited Equitably?"; and David Gardiner and Paul R. Portney, "Does Environmental Policy Conflict with Economic Growth?" To obtain a free subscription, write: Resources for the Future, 1616 P Street NW, Washington, DC 20036-1400. (v5,#2)

Ress, Judith, "Conference Report: Introduction to the Shared Garden Seminar, Washington 1997,"

Ecotheology No 4 (Jan 1998):77-82.

Restani, M. and Marzluff, J. M., "Funding Extinction? Biological Needs and Political Realities in the Allocation of Resources to Endangered Species Recovery," Bioscience 52(no.2, 2002): 169-78. (v.13,#2)

Restani, M. and Marzluff, J. M., "Avian Conservation under the Endangered Species Act: Expenditures Versus Recovery Priorities," Cons. Biology 15(2001): 1292-99. (v.13,#2)

Restoration Ecology is the journal of the Society for Ecological Restoration, now in its sixth volume. Published by Blackwell Science. Society of Ecological Restoration, University of Wisconsin, Madison Arboretum, 1207 Seminole Highway, Madison, WI 53711. (v9,#1)

Restoration Ecology is a newly launched journal, the official journal of the Society for Ecological Restoration. Blackwell Scientific Publications will publish it. Both practical and fundamental considerations are to be covered. Restoration ecology is defined as the intentional alteration of a site to establish an indigenous, historic ecosystem. Contact: William Niering, Department of Botany, Connecticut College, 270 Mohegan Avenue, New London, CT 06320. (v4,#1)

Retallack, S., "Why Are We Failing the Planet? Why Has Economic Development Not Solved the Problems of the World?," Ecologist 32(no.7, 2002): 12-17. (v.13,#4)

Retallack, Simon, "Where next for the WTO?," The Ecologist. 30 (No. 2, 2000 Apr 01): 30- . Simon Retallack reviews last year's 'Battle of Seattle' and asks whether December's protests can change the World Trade Organisation for the better. (v.11,#4)

Retallack, Simon, "God Protect Us from Those Who 'Protect the Skies.'" The Ecologist. 27 (Sept. 1997):188-. The Montreal Protocol celebrated its tenth anniversary last September. Initially hailed as a landmark in environmental protection, what actually emerged was an agreement as ridden with holes as the ozone layer it was designed to protect. (v.8,#4)

Reuther, Rosemary Radford. *Integrating Ecofeminism, Globalization, and World Religions*. Lanham, MD: Rowman & Littlefield, 2004. Economic conflicts, polarization of corporate globalization, conflicts based on religious identities, ecological degradation, and the possibilities for a different world order. The importance of gender in shaping the present crisis. The importance of religious orientations in its solution.

Reuther, Rosemary Radford, Gaia and God: An Ecofeminist Theology of Earth Healing. San Francisco: Harper and Row, 1992. \$ 22.00, hardcover. "Ecological healing is a theological and psychic-spiritual process." "Classical traditions did not only sacralize patriarchal hierarchy over women, workers, and the earth. They also struggled with what they perceived to be injustice and sin and sought to create just and loving relations between people in their relation to the earth and to the divine. Some of this effort to name evil and struggle against it reinforced relations of domination and created victim-blaming spiritualities and ethics. But there are also glimpses in this heritage of transformative, biophilic relationships. These glimpses are a precious legacy that needs to be separated from the toxic waste of sacralized domination." "A healed relation to each other and to the earth calls for a new consciousness, a new symbolic culture and spirituality" (Introduction). Reuther does not want either a male God or a female Gaia. Reuther is professor of theology at Garrett-Evangelical Theological Seminary. (v3,#4)

Reuther, Rosemary Radford, "Ecofeminism: First and Third World Women," Ecotheology No 2 (Jan 1997):72-83.

Reuther, Rosemary R., "Ecofeminism: First and Third World Women," Ecotheology, No. 2, January,

1998, p. 72- . (v9,#2)

Reuther, Rosemary Radford, Gaia and God: An Ecofeminist Theology of Earth Healing. San Francisco: Harpers, 1992. 288 pages. \$ 22.00 cloth. Reuther sifts through the legacy of the Christian and Western cultural heritage to critique beliefs and stories that have negatively influenced our relationships with each other and with the Earth. "A healed relation to each other and to the earth calls for a new consciousness, a new symbolic culture and spirituality." "We must see the work of ecojustice and the work of spirituality as interrelated, the inner and outer aspects of one process of conversion and transformation." John Cobb says, "Reuther brings her encyclopedic knowledge of the history of human life on this planet to bear on questions more often treated in sweeping generalizations. ... This is Christian theology at its best: tough-minded, convincing, and dealing with matters of utmost importance." (v3,#3)

ReVelle, Penelope, and Charles ReVelle, The Global Environment: Securing a Sustainable Future. Boston: Jones and Bartlett, 1992. Cloth. 480 pages. Designed as a text. Part I. Ecology: The Background. Part II. Human Population Issues. Part III. Land and Wildlife. Part IV. Energy Resources and Recycling. Part V. Air and Water Resources. Part VI. Sustainable Global Societies. With two dozen box essays by guest authorities. A sample: Paul D. Raskin, "Sustainability and Equity." The authors are at Johns Hopkins University. (v5,#1)

Revesz, Richard L. Foundations of Environmental Law and Policy. New York: Oxford University Press, 1996. 352pp. \$19.95 paper, \$45 cloth. A collection of 40 readings by lawyers, economists, environmentalists, and legal scholars, which introduce students to the major theoretical approaches in the field. A companion volume to case materials for use as a textbook for environmental law policy. (v8,#1)

Revesz, Richard L., Foundations of Environmental Law and Policy, Oxford Press

Revkin, Andrew C., "A Far-Reaching Fire Makes a Point About Pollution," New York Times, July 27, 2004, D1. Fires in Alaska have dropped soot on Louisiana. Satellites are revealing much wider distribution of air pollutants than earlier supposed. (v. 15, # 3)

Revkin, Andrew C., "New Research Questions Uniqueness of Recent Warming," New York Times, October 5, 2004, p. D2. New research, or at least new methods of analysis of old data, suggest that there has been more global warming at times in the last 1,00 years than previously thought. But the research does not challenge the claim that the present global warming is human caused. (v.14, #4)

Revkin, Andrew, "Bush Offers Plan for Voluntary Measures to Limit Gas Emissions," New York Times (2/15/02): A6 and Suzanne Daley, "Europeans Give Bush Plan on Climate Change a Tepid Reception," New York Times (2/15/02): A6. Bush's global warming plan. In March of 2001, U.S. President George Bush rejected the international treaty (known as the Kyoto Protocol) aimed at cutting CO2 emissions to 1990 levels by 2012, a treaty that has been agreed to (although not yet ratified) by almost every other industrial power and developing country. Bush had argued that the treaty would burden the U.S. economy "throwing millions of U.S. citizens out of work" and that it unfairly exempted major developing countries from reductions. The U.S. is the single largest producer of greenhouse emissions, generating 20% of the total. Now the Bush Administration has announced that it would respond to concerns about global warming with voluntary measures aimed at slowing the rate of growth in CO2 emissions, while letting their total amount continue to rise. This voluntary approach would be encouraged by \$4.6 billion in tax credits for renewable energy sources and use of more efficient cars, and by future emission trading incentives. According to President Bush, "My approach recognizes that economic growth is the solution, not the problem"--for a thriving economy is necessary to build the wealth necessary to improve conditions on the planet. A French climate change official argued that the Bush proposal showed that the U.S. wanted change "at no cost and in a way that would not in any way challenge the American lifestyle and

especially its consumption." He also worried that the Bush approach will destabilize support for the Kyoto pact as countries less rich than the U.S. wonder why they should act forcefully when the U.S.'s approach is so modest. (v.13,#1)

Revkin, Andrew C., "Report to Endorse Expanding Forests To Fight Global Warming," New York Times, Feb. 16, 2001, p. A1, A5. Scientists endorse expanding forests and buying and selling credits to fight global warming. The Intergovernmental Panel on Climate Change is endorsing two strategies that have been points of contention between the U.S. and Europe in efforts to complete a climate treaty. The panel concludes that by protecting existing forests and planting new ones, countries could blunt warming by sopping up 10-20 percent of the heat-trapping carbon dioxide. Also the cost to industrialized countries could be cut in half if they were allowed to buy and sell credits earned by those that make the deepest reductions in carbon dioxide and other greenhouse gases. (v.12,#3)

Revkin, Andrew, "Hunting for Oil: New Precision, Less Pollution" New York Times (01/30/01): D1. New oil-drilling techniques that are environmentally less harmful. With the ongoing debate over whether to drill for oil in the Arctic National Wildlife Refuge, it may be useful to understand some of the new oil discovery and extraction technologies touted by industry as environmentally friendly. Instead of peppering the surface with wells over a broad area, new supercomputer simulations of the deep earth and new drilling equipment allow wells to be constructed on small gravel pads with drills branching out underground for four or five miles following thin layers containing oil. Instead of waste pits that overflow with drilling mud, contaminated water, spilled oil, and discarded chemicals, waste, garbage, and rock cuttings can now be ground into a slurry and pumped into the ground 2000 feet beneath the 2000 foot-thick permafrost. Roads that were once built of gravel mined from river beds and that spread far and wide on the fragile tundra can now be built from ice (either from water pumped from tundra ponds or from ice scraped from ponds and laid down like gravel). Ice roads melt away in the spring thaw and leave few traces. Even the maze of pipelines which are an unavoidable means of collecting the oil can be raised to allow animals to duck underneath and are punctuated with elevated elbows so that less oil is spilled if one section is punctured. Both sides agree that the new surveying techniques are a mixed blessing environmentally. Although no longer using dynamite, the new three-dimensional seismic technology that performs ultrasound on the earth involves the use of vibrating 10-ton vehicles that do not travel on ice roads but crisscross the open tundra in a much more intensive way than with the old surveying techniques. Scars are left on the tundra and there is a greatly increased chance of encountering and disrupting wildlife. The new surveying techniques have raised the success rate from 1 producing well for each 10 exploratory wells to 5 in 10. One environmental critic responding to the elaboration of these new technologies says that once the work shifts from exploration to extraction of oil, the result is always a sprawl of pipelines, roads, crew quarters, and fuel depots: "In the end, even with all this technology, you've got a massive industrial complex."

Revkin, Andrew, The Burning Season: The Murder of Chico Mendes and the Fight for the Amazon Rain Forest (Houghton Mifflin, 1990, \$ 19.95). Chico Mendes was a Brazilian frontier union leader, an organizer of a national federation of wild rubber tappers in the state of Acre. He came to the United States and England to promote the conservation of the forests, which the rubber tappers wish to maintain as "extractive reserves," a battle fought against land speculators who were burning down immense stretches of forest. The wild rubber trees grow scattered in the primary forest, but this requires 700 acres to obtain an amount of latex that can be gotten from a single acre of planted rubber, especially from planted Asian rubber. Mr. Mendes was murdered in December 1988, one of several hundred activists killed in Brazil that year. Subsequently there has been much interest in him as a martyr for both the cause of the poor and environmental conservation. (v1,#3)

Revkin, Andrew C., "Save the Whales! Then What?" New York Times, August 17, 2004, p. D1, D4. Some whale species have recovered well. Pressure is building to resume hunting of whales like the

plentiful minke, and international regulators are negotiating quotas and rules. (v. 15, # 3)

Revkin, Andrew C., "A Message in Eroding Glacial Ice: Humans Are Turning Up the Heat," New York Times, Feb. 12, 2001, p. A1, A4. Kilimanjaro's icecap is on a hasty retreat, at a pace such that the snows of Kilimanjaro will disappear in fifteen years. Snow and ice on tropical alpine mountains is disappearing fastest of all, though this is retreating from Montana to Mount Everest to the Swiss Alps. Scandinavia seems to be an exception, apparently because shifting storm tracks in Europe are dumping more snow there. Various adverse effects on people and wildlife. (v.12,#3)

Revkin, Andrew C., "Big Arctic Perils Seen in Warming," New York Times, Saturday, October 30, 2004, p. A1, p. A3. An eight nation survey finds that wildlife is at risk. Environmental alarms for a region that may not be able to adapt. Also sea levels will rise around the world. The survey involved 300 scientists, as well as elders from the native communities in the region. (v.14, #4)

Revkin, Andrew W., "Report Tallies Hidden Costs of Human Assault on Nature," New York Times, April 5, 2005, p. D2. The United Nations Millennium Ecosystem Assessment, now released, is a sweeping report that measures damage not so much to nature itself but to the things nature does for people. More than 1,300 ecologists and other researchers from 95 countries participated. The report is generally bleak and alarming, although it recognizes some successes. Sixty percent of ecosystem services to humans have been degraded by human activities, both through direct actions like overfishing and through indirect ones, like the tendency of deforestation to raise the risk of floods.

Many of the regions where such natural assets are being most rapidly degraded are also the world's poorest, compounding the problems to stem poverty, disease, and hunger in developing countries. Wealthy countries are also contributing greatly to some problems, for example in nitrogen runoff that disrupts coastal waters or in global warming. Tropical forests are being degraded, but the report also highlights arid areas, such as sub-Saharan Africa, where drought, combined with ever-growing populations and demands for water, has contributed to recent social upheavals and bloodshed in Sudan. A lead author of the report is Harold A. Mooney, biologist at Stanford University. The report is online at: www.millenniumassessment.org

Revkin, Andrew, "A West African Monkey Is Extinct, Scientists Say," New York Times (9/12/00): A20. Primate goes extinct. For the first time in several centuries a member of the primate order—the taxonomic group to which humans belong—has become extinct. Miss Waldron's red colobus, a loud-mouthed, red-cheeked monkey from the rainforest of Ghana and Ivory Coast has not been seen since the 1970s and a seven-year effort to visit every remaining piece of its habitat ended without finding any evidence of its presence. Biologists fear that this is the beginning of a stream of extinctions of West African primates and other wildlife. Fragmentation of forests by roads and logging leaves isolated islands of animals that are then easily trapped or shot by hunters supplying the lucrative trade in bush meat that ends up in urban restaurants. (v.11,#4)

Revkin, Andrew C., "China Is Bright Spot in Dark Report on the World's Diminishing Forests," New York Times, November 15, 2005. Widespread tree planting in China has slowed the rate at which the Earth's forested area is dwindling, but the clearing of tropical forests, much of it in areas never previously cut, continues to grow, according to a new United Nations Report. The study is published by the UN Food and Agriculture Organization (FAO) and is online at:

fao.org/forestry

China's new forest policy has resulted in a turnaround, from a loss of about 3,000 square miles of forest a year in the 1990's to a gain of about 4,000 square miles annually since 2000. See also Global Forest Watch:

globalforestwatch.org

Revkin, Andrew C., "No Escape: Thaw Gains Momentum," New York Times, October 25, 2005. All the

computer modelling predicts sea-ice will largely disappear under global warming by 2050, though some models predict this can be with erratic warming and cooling in some regions. Melting of the Greenland ice cap has become a major concern. Although the ice cap has grown a little thicker, due to recent increase in snowfall, the edges of the icecap are melting faster, with net loss. That ice cap contains as much water as is in the Gulf of Mexico, and melting would raise sea levels worldwide more than twenty feet.

Revkin, Andrew C., "Eavesdropping on Secrets of Elephant Society," New York Times, January 9, 2001, pp. D1, D4. Reporting the work of Katharine Payne, Bioacoustics Research Program, Cornell Laboratory of Ornithology, on low frequency elephant communication. She concludes: "Our hope is to get out of our own minds a little bit and into the minds of these amazing animals. ... They are at least as emotional and as attached to family members as human beings are. They are very much aware of the experience of others." (EE v.12,#1)

Revkin, Andrew, "New Studies Warn of Effects of Melting Polar Ice," New York Times. 23 March 2006. <http://www.nytimes.com/2006/03/23/science/23cndmelt.html>.

According to new observations and analysis by teams of scientists, the growing human influence on earth's climate could lead to an irreversible rise in sea levels by eroding Earth's vast polar ice sheets. One team used computer models of climate and ice and found that about 2100, average temperatures could be 4 degrees warmer. However, many experts say there are still uncertainties about timing, extent and causes.

Revkin, Andrew C., "Antarctic Glaciers Quicken Pace to Sea; Warming is Cited," New York Times, September 24, 2004. Warmer coastal air and water have accelerated the melting of Antarctica's ice shelves and increased the flow of glaciers into the sea. Some of the warming may be natural; some of it is human-caused. Similar shifts have been measured in the Arctic. (v.14, #4)

Revkin, Andrew C. "Arctic Melt Unnerves the Experts." *New York Times* (October 2, 2007). Reprinted with further commentary in *The Polar Times* Vol. 3, no. 12 (January 2008) 3-5. Scientists were astonished by the shrinking of the Arctic ice cap during the summer of 2007, unparalleled in over a century. One million square miles (six Californias) of open water appeared beyond the average since satellites made possible accurate measurements in 1979. Warming and also winds that pushed freed ice further south were responsible. One result is that the north polar nations of Russia, Canada, Denmark, Norway, Finland, and the United States have started making claims about military control, shipping routes, fishing rights, and mineral rights to what lies under the Arctic Ocean. Russia has planted a capsule with a flag at 13,200 feet beneath the (still frozen) surface at the North Pole, claiming that the Lomonosov Ridge beneath is an extension of its continental shelf and that the 460,000 square miles of resource-rich Arctic waters fall under the Kremlin's jurisdiction. See also "Water Wrestling" by Moki Kokoris (*The Polar Times* Vol. 3, no. 12 (January 2008): 6).

Revkin, Andrew. "Poorest Nations Will Bear Brunt as World Warms." *New York Times* (April 1, 2007): 1, 6. While wealthy countries spend billions on themselves in preparation for global warming, they spend only millions on other nations, the latter of whom will bear the most damage from drought and rising sea levels caused by the wealthy nations.

Reyers, B; Fairbanks, DH; Wessels, KJ; VanJaarsveld, AS, "A multicriteria approach to reserve selection: addressing long-term biodiversity maintenance," Biodiversity and Conservation 11(no.5, 2002):769-793. (v.13, #3)

Reynolds, Elizabeth. Review of *The Splendor of Creation: A Biblical Ecology*. By Ellen Bernstein. *Environmental Ethics* 29(2007):435-436. (EE)

Reynolds, John D., Mace, Georgina M., Redford, Kent H., and Robinson, John G., eds., Conservation of Exploited Species. New York: Columbia University Press, 2001. Sustainable use of exploited populations. Reynolds is at the University of East Anglia, Norwich, UK. (v.13,#4)

Reynolds, Laura, T., Douglas Murray, and John Wilkinson, eds., *Fair Trade: The Challenges of Transforming Globalization* (London: Routledge, 2007). Reviewed by Philip H. Howard in *Journal of Agricultural and Environmental Ethics* 21(2008)::495-497.

Rhodes, Barbara K. and Rice Odell, A Dictionary of Environmental Quotations. New York: Simon and Schuster, 1992. \$ 35.00. 343 pages. 3700 quotations from proverbs, slogans, bumper stickers, speeches, periodicals, scientific papers, and philosophical works. Arranged alphabetically in 143 categories, and within categories chronologically. Ranges from early Greek history through George Bush. Author and subject index. (v3,#4)

Rhodes, M, Book Review: Irrigated Eden The Making of an Agricultural Landscape in the American West. By Mark Fiege. University of Washington Press, Seattle, 1999. Human Ecology 30(no.1, 2002):139-142. (v.13, #3)

Ribe, RG, "Is Scenic Beauty a Proxy for Acceptable Management? The Influence of Environmental Attitudes on Landscape Perceptions," Environment and Behavior 34(no.6, 2002): 757-780.

Ribot, Jesse C.; Magalhaes, Antonio Rocha; and Panagides, Stahis, eds. Climate Variability, Climate Change and Social Vulnerability in the Semi-Arid Tropics. New York: Cambridge University Press, 1996. 270 pages. \$74.95 cloth. Rather than focus on the "impacts" that result from climatic fluctuations, the authors look at the underlying conditions that cause social vulnerability. By using case studies from across the globe, the authors explore past experiences with climate variability, and the likely effects of--and the possible policy responses to--the types of climatic events that global warming might bring. (v7, #3)

Ricciardi, Anthony, Steiner, William , W.M, and Simberloff, Daniel, "Computers in Biology: Toward a Global Information System of Invasive Species," Bioscience 50 (No. 3, Mar 01 2000): 239- . (v.11,#2)

Ricciardi, Anthony and Rasmussen, Joseph B. "Extinction Rates of North American Freshwater Fauna." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):1220- . (v10,#4)

Rice, Robert A. "Noble Goals and Challenging Terrain: Organic and Fair Trade Coffee Movements in the Global Marketplace." Journal of Agricultural and Environmental Ethics 14(2001):39-66. Social relations associated with conventional agricultural exports find their origins in long term associations based on business, family, and class alliances. Working outside these boundaries presents a host of challenges, especially where small producers with little economic or political power are concerned. Yet, in many developing countries, alternative trade organizations (ATOs) based on philosophies of social justice and/or environmental well-being are carving out spaces alongside traditional agricultural export sectors by establishing new channels of trade and marketing. Coffee provides a case in point, with the fair trade and certified organic movements making inroads into the market place. In their own ways, these movements represent a type of economic and social restructuring from below, drawing upon and developing linkages beyond the traditional boundaries of how coffee is produced and traded. An examination of the philosophies of the fair trade and organic coffee movements reveal that the philosophical underpinnings of both certified organic and fair-trade coffee run counter to the historical concerns of coffee production and trade. Associations of small producers involved in these coffees face

stiff challenges - both internal and external to their groups. More work, especially in "situ" fieldwork aimed at uncovering the challenges, benefits, tensions, and successes, is needed to understand better the ways these networks operate in the dynamic agro-food complex. Keywords: Alternative trading organizations. certified organic, coffee, fair trade. Rice is at the Smithsonian Migratory Bird Center National Zoological Park, Washington, D.C. (JAEE)

Rich, Bruce, Mortgaging the Earth: The World Bank, Environmental Impoverishment, and the Crisis of Development. Boston: Beacon Press, 1994.

Rich, Catherine, and Travis Longcore, eds., *Educational Consequences of Artificial Night Lighting*. Washington, DC: Island Press, 2005. Contributors explore the dark side of lighting up the night, "photopollution." Lights confuse many animals, for example they disorient sea turtle hatchlings. They disorient many nocturnal animals that use only the rod system for night vision, and bright lighting saturates their retinas. Upward of half of all Americans live in locations where it does not become sufficiently dark for the human eye to complete the transition from cone to rod vision. Hundreds of thousands of nocturnal bird migrants are killed each year by aircraft warning lights on towers, a situation that could be much improved if red lights, which disorient birds, were replaced with white lights, which reduce the disorienting. The editors run the Urban Wildlands Group, a nonprofit conservation organization in Los Angeles.

Richard, Wildred E., "The International Appalachian Trail," International Journal of Wilderness 3(no. 1, 1997):33-38. An extension of the Appalachian Trail running north another 435 miles into Canada, in New Brunswick and Quebec, is now being worked out. Richard is a wilderness guide and adjunct professor of geography at the University of Southern Maine. (v8,#2)

Richards, John F., ed., Land, Property, and the Environment. Oakland, CA: ICS (Institute for Contemporary Studies) Press, 2002. (v.13,#1)

Richards, Norm R., Beechey, Tom J. "Planning and Managing for Protected Heritage Areas in Ontario: Accomplishments, Challenges, Directions:," Environments 24(no. 1, 1996):42.

Richards, Rebecca T., and Creasy, Max. "Ethnic Diversity, Resource Values, and Ecosystem Management: Matsutake Mushroom Harvesting in the Klamath Bioregion." Society and Natural Resources 9, no.4 (1996): 359. (v7, #3)

Richards, Rebecca Templin. "What the Natives Know: Wild Mushrooms and Forest Health," Journal of Forestry 95(no.9, 1997):4. (v8,#3)

Richards, Roberta M., How Should We Think About Loggers and Owls? Principles for an Applied Environmental Ethic, Ph. D. thesis at the University of Southern California, School of Religion, May 1994. Our dominant moral traditions, rooted in anthropocentrism, offer little guidance about how to resolve public policy conflicts when these involve the balancing of human and extra-human goods. Richards develops a theory grounded in process theologian John Cobb's "rich experience" conception of value; one ought to maximize rich experience. She develops nine moral principles for achieving this goal. These can be used generally in environmental conflicts, but are here specifically applied to the conservation of endangered species, and, more specifically still, to the loggers versus owls crisis that has paralyzed the Pacific Northwest. William W. May is the dissertation advisor. Copies from Micrographics Department, Doheny Library, USC, Los Angeles, CA 90089-0912. Roberta M. Richards, 238 S. Berendo St., # 302, Los Angeles, CA 90004-5721. (v5,#1)

Richardson, CW, "Mary Joy Breton, Women Pioneers for the Environment," Environmental History

6(no.2, 2001):328-329. (v.12,#4)

Richardson, Jean. Partnerships in Communities: Reweaving the Fabric of Rural America. Covelo, CA: Island Press, 2000. 256 Pages. Paper \$25. Sustainable rural community development. Community-based and community-driven responses to the challenges facing rural America. What works, what doesn't, and how financial and human resources can be most effectively focused in rural communities. (v.11,#4)

Richardson, N 1992. The ecumenical roots of JPIC and its significance for South Africa. *Journal of Theology for Southern Africa* 80, 50-64. (Africa)

Richardson, Robert C. Review of The Darwinian Revolution: Science Red in Tooth and Claw. By Michael Ruse. *Environmental Ethics* 3(1981):75-83.

Richardson, S. D., Forests and Forestry in China (Corvelo, CA: Island Press, 1990). 353 pages. Excellent, thorough, by a New Zealand forester who has observed forestry in China over thirty years. Balanced portrayal of the successes against the massive failures. An earlier book, of which this is a major revision, is Forestry in Communist China, 1966. (China)

RichardsonKageler, SJ, "Large mammalian herbivores and woody plant species diversity in Zimbabwe", *Biodiversity and Conservation* 12(no.4, 2003):703-715.

Richerson, Peter J., "Ecology and Human Ecology: A Comparison of Theories in the Biological and Social Sciences," *American Ethnologist* 4(no. 1, Feb. 1997):1-26. Ecology has been used frequently by social scientists as a source of theoretical models, and biological ecologists have often applied their theory to human populations. Several problems have attended these cross-disciplinary enterprises, including inappropriate uses of teleological models and a failure by both biologists and social scientists to understand the theoretical implications of culture and technology for ecological models. Attention to these problems will increase the applicability of ecological theories in the social sciences. Richerson is at the University of California, Davis.

Richter, Judith. "'Vaccination' Against Pregnancy: The Politics of Contraceptive Research." *The Ecologist* (1979)26(Mar.1996):53. For the past 25 years, scientists have been researching a new birth control method--an immuno-contraceptive--which aims to turn the body's immune system against the reproductive system. Some researchers doubt whether the method will actually prevent pregnancy without severe health risks. Analysis of the method suggests that research has been motivated by the goal of developing an easy means of "population control."

Ricketts, Taylor, "Conservation Biology and Biodiversity." In J. Bottrill, ed., The Encyclopedia of Life Sciences. London: MacMillan Press, 2002. Volume 5, pp. 82-88. (v.13,#4)

Ricketts, Taylor H., Dinerstein, Eric, and Loucks, Colby, "Who's Where in North America?" *Bioscience* 49(No.5, 1999):369-. Patterns of species richness and the utility of indicator taxa for conservation. (v.10,#2)

Ricklefs, Robert E. and Dolph Schluter, eds., Species Diversity in Ecological Communities: Historical and Geographical Perspectives. Chicago: University of Chicago, 1993. 414 pages. \$ 35.00 paper. New theoretical developments, analyses, and case studies to explore large scale mechanisms that generate and maintain diversity. Fifty contributors, often with an emphasis on the historically unique aspects of ecosystems. Ricklefs is in biology at the University of Pennsylvania; Schluter is in biology at the University of British Columbia. (v4,#2)

Riddel, Mary Schwer, R. Keith, "Grand Canyon Visitors: The Challenges of Regulatory Schemes for Balancing Alternative Interests," Natural Resources Journal 41(no.1, Wint 2001):153-. (v.12,#4)

Ridder, Ben, "An Exploration of the Value of Naturalness and Wild Nature," *Journal of Agricultural and Environmental Ethics* 20(2007):195-213. The source of the value of naturalness is of considerable relevance for the conservation movement, to philosophers, and to society generally. However, naturalness is a complex quality and resists straightforward definition. Here, two interpretations of what is "natural" are explored. One of these assesses the naturalness of species and ecosystems with reference to a benchmark date, such as the advent of industrialization. The value of naturalness in this case largely reflects prioritization of the value of biodiversity. However, the foundation of our understanding of naturalness is that it describes processes that are free of human intervention. Conflict between the two interpretations of naturalness is apparent in the claim that naturalness can be enhanced by human intervention, in the form of ecological restoration. Although naturalness in its purest form precludes human intervention, some human activities are also apparently more natural than others. This continuum of naturalness relates to the autonomy of the individual from abstract instrumentalism, which describes a particular form of influence ubiquitous in contemporary society. The value of naturalness reflects both dissatisfaction with these threats to personal autonomy, and respect for wild nature as the embodiment of a larger-than-human realm. Keywords: abstract instrumentalism - autonomy - naturalness - rational agency - values. Ridder is at School of Geography and Environmental Studies, University of Tasmania, Hobart, Tasmania, Australia.

Ridder, Ben. Review of *Recognizing the Autonomy of Nature: Theory and Practice*. Edited by Thomas Heyd. *Environmental Ethics* 29(2007):95-98. (EE)

Ridley, Matt, The Origins of Virtue. London: Penguin Books, 1997. Chapter 11 is on "Ecology as Religion," where Ridley, following the prevailing biological theory of humans as always self-interested, dislikes any Romanticism, especially about aboriginal peoples, since peoples ancient and modern always act selfishly if they can get by with it, although they are also evolved to cooperate in their own self-interest. "The conclusion that seems warranted is that there is no instinctive environmental ethic in our species--no innate tendency to develop and teach restrained practice. Environmental ethics are therefore to be taught in spite of human nature, not in concert with it. They do not come naturally. We all knew that anyway, did we not? Yet we persist in hoping that we'll find an ecological noble savage somewhere inside our breast. ... He's not in there." (p. 225)

The book concludes (Chapter 10, The Gains from Trade, and Chapter 12, The Power of Property) with a defense of free markets property rights. "Wherever you look, the reason for the environmental troubles in the Third World turns out to be caused by the lack of clear property rights. ... The poverty of the Third World is to be cured largely by creating secure property rights." (pp. 238-239). "Private property is often the friend of conservation, government regulation is often the enemy" (p. 243). "If we are to recover social harmony and virtue, if we are to build back into society the virtues that made it work for us, it is vital that we reduce the power and scope of the state" (p. 264). Government regulations and participatory democracy require too much faith in the common good. A good example of scientism, elevating a biological theory into a comprehensive worldview, including politics, getting Thatcherite politics and free market environmentalism out of selfish genes. (v.8,#4)

Ridley, Matt, Down to Earth: A Contrarian View of Environmental Problems. London: Institute of Economic Affairs, 1995. 80 pages. Some claims:

1. World population growth is decelerating; food, oil and copper are all cheaper and more abundant than ever before.
2. Global temperatures may actually be falling, according to satellite sensors.
3. The ozone layer is getting thicker, not thinner, over temperate latitudes.
4. Winter sown corn, not pesticide use, is responsible for the decline of songbirds on farmland.

5. Some scientists say 20 per cent of species will be extinct in 30 years, yet the actual extinction rate of birds and mammals is 0.00008 per cent a year.
6. Big-game hunters are the best hope for the survival of Africa's wildlife outside a few well-financed national parks.
7. Environmental lobbying organisations are spending more money on lawyers and marketing men to grow their own budgets and less on naturalists and volunteers.
8. Forty per cent of all tress in Britain belong to the government, whose record of mismanagement of forest ecology, public access and finance is second to none.
9. Government conservation schemes are too defensive; their some aim is to protect rich habitats rather than to improve impoverished ones.
10. Exaggeration, nationalisation and central planning are the enemies of the environment, not the allies." (See back cover.)

Ridley is a former zoologist at Oxford University, now a science writer, also a self-appointed iconoclast. A disciple of Richard Dawkins, he derives virtue from selfish genes in The Origins of Virtue (Penguin, 1997), from which he also derives free market environmentalism and Thatcherite politics. (v.9,#4)

Riebsame, William E. "Ending the Range Wars?" Environment 38(May 1996):4. Innovative approaches to land management may help bring to a close the long-standing battle between ranchers and environmentalists over the use of the western range. (v7,#2)

Rieff, David. "The Humanitarian Trap," World Policy Journal 12(no.4, Winter 1995):1- . (v6,#4)

Rieley, Jack, and Page, Susan. "The Biodiversity, Environmental Importance, and Sustainability of Tropical Peat and Peatlands." Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Riells, S., "Book Review: Food Webs at the Landscape Level. By Gary A. Polis, Mary E. Power, and Gary R. Huxel (eds.), University of Chicago Press, Chicago. 2004, 548 pp., illus.," Landscape Ecology 20(no. 4, May 2005): 495-496.

Riffle, Dale, Brewer, Jim. "Animal Sanctuaries: A Labor of Love," The Animals' Agenda 17(no.1, 1997):28. The challenges of running a sanctuary. (v8,#2)

Rifkin, Jeremy, "Beyond Beef," Utne Reader, March/April 1992. The cattle industry threatens the environment, human health, and the world food supply. Our beef-eating habits are killing us, and the rest of the world. (v4,#1)

Rifkin, Jeremy, ed., The Green Lifestyle Handbook: 1001 Ways You Can Heal the Earth. New York: Henry Holt, 1990. \$ 10.95 paper. (v1,#4)

Rifkin, Jeremy, Biosphere Politics: A New Consciousness for a New Century. New York: Crown Publishers, 1991. Cloth. 388 pages. Rifkin argues that the human species is entering the third stage of human consciousness, signaling the most significant change in human culture since the Neolithic revolution. He wants security based on increased autonomy, efficiency, and mobility replaced by a new form of security grounded in deep re-participation. He argues that politics along the conservative/liberal spectrum should give way to a new Earth-directed politics dedicated to preserving, enhancing, and resacralizing life within the biosphere. Rifkin is the author of Entropy and is president of both the Foundation on Economic Trends and the Greenhouse Crisis Foundation in Washington, DC. (v3,#3)

Rifkin, Jeremy. "Dolly's Legacy: The Implications of Animal Cloning," The Animals' Agenda 17(no.3,1997):31. Rifkin claims animal cloning is "the most fundamental violation of animal rights in history." (v8,#3)

Rifkin, Jeremy. Time Wars. Reviewed in Environmental Ethics 11(1989):85-91.

Rigg, Catherine M., "Orchestrating Ecosystem Management; Challenges and Lessons from Sequoia National Forest," Conservation Biology 15(no.1, Feb. 2001): 78-. (v.12,#3)

Rikoon, J. Sanford. "Imagined Culture and Cultural Imaging: Cultural Implications of the USDA-SCS 'Harmony' Campaign", Society & Natural Resources 9(no.6, 1996):583. Soil "harmony" as promoted by the U. S. Department of Agriculture, Soil Conservation Service. (v7,#4)

Riley, Laura, and William Riley. *Nature's Strongholds: The World's Great Wildlife Reserves*. Princeton: Princeton University Press, 2005. There are over 600 reserves in over 80 countries. Most of the world's charismatic endangered species owe their continued existence to such reserves.

Rinehart, James R., Pompe, Jeffrey J. "Property Rights and Coastal Protection: Lucas and the U.S. Supreme Court," Society & Natural Resources 8(no.2, Mar.1995):169 . (v6,#4)

Ringquist, Evan J. Environmental Protection at the State Level: Politics and Progress in Controlling Pollution. Armonk, NY: M.E. Sharpe, 1993. 256pp. \$67.95 cloth. \$28.95 cloth. This is a statistical analysis of the environmental pollution control and state public policy.

Riordan, Robert M., ed., Uncommon Wealth: Essays on Virginia's Wild Places. Helena, MT: Falcon Publishing, 1999. Supported by The Nature Conservancy. Twenty essays, all by Virginia authors.

Rippe, Klaus Peter and Peter Schaber. "Democracy and Environmental Decision-Making." Environmental Values 8(1999):75-88. ABSTRACT: It has been argued that environmental decision-making can be improved by introducing citizen panels. The authors argue that citizen panels and other models of citizen participation should only be used as a consulting forum in exceptional cases at the local level, not as a real decision-making procedure. But many problems in the field of environmental policy need nonlocal, at least regional or national, regulation due to the fact that they are of national importance. The authors argue that there are good reasons not to institutionalise national citizen panels. They advocate the view that more reasonable and more competent solutions can be found by introducing forms of direct democracy. KEYWORDS: Participation, citizen panels, consensus conferences, democracy. Klaus Peter Rippe and Peter Schaber, University of Zurich Ethik-Zentrum Zollikerstr. 117, 8008 Zurich, Switzerland. (EV)

Ripple, W. J. and Beschta, R. L., "Wolves and the Ecology of Fear: Can Predation Risk Structure Ecosystems?" BioScience 54(no. 8, 2004): 755-766(12). We investigated how large carnivores, herbivores, and plants may be linked to the maintenance of native species biodiversity through trophic cascades. The extirpation of wolves (*Canis lupus*) from Yellowstone National Park in the mid 1920s and their reintroduction in 1995 provided the opportunity to examine the cascading effects of carnivore herbivore interactions on woody browse species, as well as ecological responses involving riparian functions, beaver (*Castor canadensis*) populations, and general food webs. Our results indicate that predation risk may have profound effects on the structure of ecosystems and is an important constituent of native biodiversity. Our conclusions are based on theory involving trophic cascades, predation risk, and optimal foraging; on the research literature; and on our own recent studies in Yellowstone National Park. Additional research is needed to understand how the lethal effects of predation interact with its nonlethal effects to structure ecosystems. (v.14, #4)

Ripple, William J; Beschta, Robert L, "Wolves and the Ecology of Fear: Can Predation Risk Structure Ecosystems?" BioScience 54 (no. 8, 1 August 2004):755-766(12). We investigated how large carnivores,

herbivores, and plants may be linked to the maintenance of native species biodiversity through trophic cascades. The extirpation of wolves (*Canis lupus*) from Yellowstone National Park in the mid-1920s and their reintroduction in 1995 provided the opportunity to examine the cascading effects of carnivore-herbivore interactions on woody browse species, as well as ecological responses involving riparian functions, beaver (*Castor canadensis*) populations, and general food webs. Our results indicate that predation risk may have profound effects on the structure of ecosystems and is an important constituent of native biodiversity. Our conclusions are based on theory involving trophic cascades, predation risk, and optimal foraging; on the research literature; and on our own recent studies in Yellowstone National Park. Additional research is needed to understand how the lethal effects of predation interact with its nonlethal effects to structure ecosystems.

Ripple, WJ; Beschta, RL, "Linking Wolves and Plants: Aldo Leopold on Trophic Cascades," BioScience 55 (no. 7, July 2005): 613-621. Aldo Leopold, perhaps best known for his revolutionary and poignant essays about nature, was also an eloquent advocate during the 1930s and 1940s of the need to maintain wolves and other large carnivores in forest and range ecosystems. He indicated that their loss set the stage for ungulate irruptions and ecosystem damage throughout many parts of the United States. We have synthesized the historical record on the potential effects of wolf extirpation in the context of recent research. Leopold's work of decades ago provides an important perspective for understanding the influence of large carnivores, via trophic cascades, on the status and functioning of forest and range plant communities. Leopold's personal experiences during an era of extensive biotic changes add richness, credibility, and even intrigue to the view that present-day interactions between ungulates and plants in the United States have been driven to a large degree by the extirpation of wolves and other large carnivores.

Risk, Health, Safety, and Environment. A new journal published at the Franklin Pierce Law Center, a center for environmental law. Essays dealing with environmental ethics that deal with environmental risks are invited. Contact: Carol Ruh, Managing Editor, Franklin Pierce Law Center, 2 White Street, Concord, NH 03301. Phone 603/228-1541. Fax 603/228-0388. (v5,#1)

Risk, Paul, "Death, Suffering, Predation, Animal Rights and Interpretation," Journal of Interpretation 14 (no. 1, 1990):R-12-R-15. Suffering and death are part of the natural scheme of things, but pose a difficult problem to the environmental interpreter, especially when dealing with children, or with "bleeding hearts." We ought to incorporate honesty, entirety, and moral implications into environmental interpretation. Risk teaches parks, recreation, and tourism at the University of Maine. (v5,#4)

Rist, Michael, "Future Tasks for Agriculture", Journal of Agricultural Ethics 1(1988):101-108.

Rittner, Don, Ecolinking: Everyone's Guide to Online Environmental Information. Berkeley, CA: Peachpit Press, 1992. The basics of getting online and where to go online for environmental information, listservs, world wide web sites, other networks. (v6,#4)

Ritvo, H., The animal estate: The English and other creatures in the Victorian Age. Cambridge, MA: Harvard University Press, 1987.

Rival, Laura. Review of Kay Milton, ed. Environmentalism: The View from Anthropology: (London: Routledge, 1993). (EV)

River Colloquium: Who Runs The River? Environmental Law 25 no. 2 (1995): 349- . On November 4, 1994, the Northwest Water Law and Policy Project of Northwestern School of Law of Lewis and Clark College held a colloquium on issues affecting Columbia River salmon. The focal points of the colloquium were two decisions: *Northeast Resource Information Center v. Northwest Power Planning Council* and *Idaho Department of Fish and Game v. National Marine Fisheries Service*, that held that the

federal agencies responsible for running the river had violated the Northwest Power Act and the Endangered Species Act. Participants in the conference included attorneys who argued both sides of these cases. These articles are adaptations of remarks delivered at the colloquium. (v6,#2)

Rivera, J., "Institutional Pressures and Voluntary Environmental Behavior in Developing Countries: Evidence From the Costa Rican Hotel Industry," Society and Natural Resources 17(no. 9, 2004): 779-797(19).

Sorrensen, C., "Contributions of Fire Use Study to Land Use Cover Change Frameworks: Understanding Landscape Change in Agricultural Frontiers," Human Ecology 32(no. 4, 2004): 395-420(26). (v.14, #4)

Rivera, Jorge, "Institutional Pressures and Voluntary Environmental Behavior in Developing Countries: Evidence From the Costa Rican Hotel Industry", Society and Natural Resources 17(no.9, October 2004): 779-797(19).

Rivera-Monroy, Victor H et al., "A Conceptual Framework to Develop Long-Term Ecological Research and Management Objectives in the Wider Caribbean Region", BioScience 54(no.9, 1 September 2004):843-856(14). The Caribbean Sea and its watersheds show signs of environmental degradation. These fragile coastal ecosystems are susceptible to environmental impacts, in part because of their oligotrophic conditions and their critical support of economic development. Tourism is one of the major sources of income in the Caribbean, making the region one of the most ecotourism dependent in the world. Yet there are few explicit, long-term, comprehensive studies describing the structure and function of Caribbean ecosystems. We propose a conceptual framework using the environmental signature hypothesis of tropical coastal settings to develop a series of research questions for the reef-sea-grass-wetland seascape. We applied this approach across 13 sites throughout the region, including ecosystems in a variety of coastal settings with different vulnerabilities to environmental impacts. This approach follows the strategy developed by the Long Term Ecological Research program of the National Science Foundation to establish ecological research questions best studied over decades and large spatial areas.

Roach, Catherine M., Tim I. Hollis, Brian E. McLaren, Dean L. Y. Bavington, "Ducks, Bogs, and Guns: A Case Study of Stewardship Ethics in Newfoundland," Ethics and the Environment 11(2006):43-70. Three major strategies exist for the protection of endangered habitat and species: (1) land acquisition programs, (2) government legislation and regulatory agencies, and (3) "stewardship" programs that are voluntary and community-based. While all of these strategies have merit, we suggest that stewardship holds particular advantages and should be considered more often as a strategy of first choice. In this article, we examine the Municipal Wetland Stewardship program of Newfoundland, a popular and successful Canadian policy for the local protection of wetlands. Important issues are at stake: competing philosophical foundations for managerial ecology, the value of "local ecological knowledge," principles of community-based conservation, the question of whether stewardship empowers local communities or controls them from afar, and ethical conflicts around American colonialism, hunting, and ecotourism. The results suggest that despite some potentially problematic ironies, the Newfoundland program provides a model for a public policy aimed both at the pragmatics of biophysical sustainability and at the ideals of environmental ethics, social justice, and democratic politics. Roach is in religious studies, University of Alabama, Tuscaloosa; Hollis is in geography, University of Newfoundland; McLaren is in wildlife, Lakehead University, Faculty of Forestry. Bavington is in ecology at the University of Michigan. (Eth&Env)

Roach, Catherine. *Mother/Nature: Popular Culture and Environmental Ethics*. Blomington, IN: Indiana University Press, 2003.

Robb, Carol S. and Carl J. Casebolt, eds., Covenant for a New Creation: Ethics, Religion, and Public

Policy (Maryknoll, New York: Orbis Books, 1991). 350 pages. Paper \$17.95. Argues that degradation of the biosphere has evolved through the ownership mentality of a privileged few and that a covenant relationship with the Earth can restore and protect ecological integrity. Biblical economic principles, theologies of creation, exploitation of the Amazon in the light of liberation theology, speciesism, the creation-covenant-ethics relationship, the role of moral theology in environmental ethics, ecofeminism, and deep ecology. Robb and Casebolt are at the Center for Ethics and Social Policy, Graduate Theological Union, Berkeley. (v2,#1)

Robbins, Elaine, "How Did the Grizzly Cross the Road?" Sierra, July/August 2003, pp. 52-56. A growing network of bridges, underpasses, and fencing is helping animals safely traverse millions of miles of asphalt. Animal crossings are working in Florida (along the famous Alligator Alley), Massachusetts, Montana, Washington, and other states, as well as in Canada (especially the Trans-Canada Highway). Over the last three decades roadkill has overtaken hunting as the number one human-induced cause of direct death to wild animals on land. An estimated one million vertebrates perish on our roads each day. (v 14, #3)

Robbins, Jim, "In 2 Years, Wolves Reshaped Yellowstone," New York Times (12/30/97): F1. See under Kenworthy, Tom. (v.8,#4)

Robbins, Jim, "The Microbe Miners," Audubon 96 (no. 6, November-December, 1994):90-95. More on the hunt in Yellowstone for thermophilic bacteria, whose enzymes are proving of great value in the polymerase chain reaction (PCR) techniques used in DNA genetic fingerprinting, a process once sold for \$ 300 million, and now earning \$ 100 million a year. While such technological processes can be protected by patent, the question remains whether any royalties are due to Yellowstone Park, or to the U. S. government, or to anybody, for such prospecting, or whether microbes are a common good. Exobiologists are also interested, since the thermophiles are thought to be similar to primitive forms of life, and what is learned in Yellowstone might be used to detect life in space. Robbins is a Montana environmental writer. (v5,#4)

Robbins, Jim, "Engineers Plan to Send a River Flowing Back to Nature," New York Times, May 12, 1998, B9, B11. The Snake River near Jackson, Wyoming, was engineered for the better, to facilitate spring runoff and allow million dollar housing developments, only the results were worse instead. The river's ecology was dramatically altered, leaving long stretches of riverbank nearly barren. Now the Corps of Engineers hopes to put the river, to some extent at least, back like it was. (v9,#2)

Robbins, Jim, "Hunting Habits of Wolves Change Ecological Balance in Yellowstone," New York Times, October 18, 2005. Wolves have been back in the park for ten years, and this "apex predator" has caused "a trophic cascade." Elk are fewer and more wary, and feed more in the open, less in willow thickets, or among the cottonwoods and aspens, which have bounced back. There are fewer coyotes, but this means more foxes, more mice. Also from the leftover wolf kills, there is more food for other carnivores and scavengers. Alas, however, a big fear is from people, or, more accurately, from people's dogs, from which the wolves catch parvovirus. That has been killing 60-70 percent of the wolf pups. See also Smith, Douglas W., and Gary Ferguson, Decade of the Wolf: Returning the Wild to Yellowstone.

Robbins, Martha M., Sciote, Pascale, and Stewart, Kelly, eds., Mountain Gorillas: Thirty Years of Research at Karisoke. Cambridge: Cambridge University Press, 2001. What we have learned about gorillas and their conservation in the Virunga mountains of Uganda and the Congo. Robbins is at Max Planck Institute for Evolutionary Anthropology, Germany. (v.13, #3)

Robbins, Michael. "Southern Ontario Tourism Context and the Challenge for a Sustainable Future," Environments 24(no.3, 1997):50. (v8,#3)

Robbins, P., and T. Birkenholtz, "Turfgrass Revolution: Measuring the Expansion of the American Lawn," Land Use Policy 20(no. 2, 2003): 334-352. (v 14, #3)

Robbins, P., "Beyond Ground Truth GIS and the Environmental Knowledge of Herders, Professional Foresters, and Other Traditional Communities," Human Ecology 31(no. 2, 2003): 233-253. (v 14, #3)

Roberge, JM; Angelstam, P, "Usefulness of the Umbrella Species Concept as a Conservation Tool", Conservation Biology 18 (no.1, 2004): 76-85.

Robert, Jason Scott. "Wild Ontology: Elaborating Environmental Pragmatism." Ethics and the Environment 5(2000):191-210. ABSTRACT: I elaborate and critically evaluate the theses of "environmental pragmatism," especially as captured in a recent collection with that title. While I am hopeful about this new approach, I want nonetheless to make reparations for its shortcomings. The primary difficulty is that environmental pragmatist tend to express only implicitly the metaphysical commitments of, say, Wiilliam James, and yet the claims of environmental pragmatism would be profoundly strengthened by direct appeal to James' metaphysics. The ecosystem approach is particularly amenable to characterization in terms of pragmatic metaphysics. Thus, I offer the thesis of wild ontology in an effort to enrich the empirical basis of environmental philosophy, and also to help cure environmental ethics of its political impotence. (E&E)

Roberts, Adam. "The Trade in Drugs and Wildlife." The Animals' Agenda 16(1996):34. How smugglers victimize animals to maximize profits. (v8,#1)

Roberts, Bruce D. "Livestock Production, Age, and Gender Among the Keiyo of Kenya." Human Ecology 24(Jun. 1996):215. (v7,#2)

Roberts, Christopher C., Environmental Ethics and Wildlife Policy in Zimbabwe. A senior thesis for the B.S. degree, Department of Religious Studies and The Studies in the Environment Program, Yale University, April 1991. 104 pages. Author's address: 1204 St. Andrews Way, Baltimore, MD 21239. (v5,#2)

Roberts, G., "Review of: Ferdinand Muller-Rommel and Thomas Poguntke (Eds.), Green Parties in National Governments," Environmental Politics 12(no. 1, 2003): 262. (v 14, #3)

Roberts, Geoffrey K. "Developments in the German Green Party: 1992-95." Environmental Politics 4(Winter 1995):247. (v7,#2)

Roberts, J. Timmons, and Parks, Bradley C., A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy. Cambridge, MA: The MIT Press, 2006. The role that unequal distribution of the benefits of industry and development plays in shaping prospects for a global climate pact, with statistical and theoretical analysis and case studies. Roberts is in sociology, College of William and Mary. Parks is a development policy officer, Department of Policy and International Relations, Millennium Challenge Corporation, Washington, DC.

Roberts, JT, "Global Inequality and Climate Change," Society and Natural Resources 14(no. 6, 2001):501-510. (v.13,#1)

Roberts, Lawrence D., ed., Approaches to Nature in the Middle Ages. Binghamton, NY, Center for Medieval and Early Renaissance Studies, State University of New York at Binghamton, 1982. ISBN 0-86698-051-2. Contains James A. Weisheipl, "Aristotle's Concept of Nature: Avicenna and Aquinas," with commentary by William A. Wallace. How these thinkers conceived of nature as a cause of natural

motion. If we wish to appreciate what nature meant for them, we must put aside any mechanistic notions, and go back to a richer philosophical language, one teeming with "principles," "causes," and ultimate goals.

Roberts, Lawrence D., ed., Approaches to Nature in the Middle Ages. Binghamton, NY: Center for Medieval and Renaissance Studies, 1982.

Roberts, Leslie. "Battling Over Bed Nets." *Science* Vol. 318, no. 5850 (26 October 2007): 556-59. How best to deliver bed nets to combat malaria in Africa? Some say protect mothers and children first. Others say that this misunderstands how the disease spreads. Some say use the cheapest nets and give them away. Others say nets with insecticide work better and are more likely to be used if sold at a modest cost.

Roberts, Melinda A., Child vs. Childmaker: Future Persons and Present Duties in Ethics and the Law, Reviewed by Alel Gosseries, Ethics and the Environment 6(no. 2, 2001):114-118. (E&E)

Roberts, Paul Craig. "Quietly, Now, Let's Rethink the Ozone Apocalypse." Business Week, June 19, 1995, p. 26. Studies that show CFS's are not to blame for holes in the ozone have lawmakers questioning the coming ban on production. An unproven theory of ozone depletion is imposing heavy costs on the global economy. The scientific facts clearly indicate that there is no observational evidence that CFC's are thinning the ozone layer, and even if they did, the additional ultraviolet that would be let through is not the kind that causes cancer. The ozone threat is baseless hysteria. Roberts is in political economy at the Cato Institute, Washington. (v6,#3)

Roberts, Roxanne, "Wedding Day Butterflies," Washington Post (5/20/98): D2. According to a social life columnist for the Washington Post, the latest trend in "environmentally correct marriage" is the live butterfly display. Instead of throwing rice (which she says is bad for birds), guests release monarch or painted lady butterflies. For four dollars apiece, companies provided butterflies individually in small boxes with air holes. Each guest is given a box with instructions to open it at a specific time. The result is a "romantic, picture-perfect moment," unless of course the butterflies are dead, which sometimes happens. Some hire "butterfly handlers" to ensure success. The columnist suggests that throwing birdseed was popular until people started slipping and it became a liability issue, and that balloons are out because their remains are not good for the environment. A letter to the editor responds that "experts in the field of butterflying consider this practice a form of environmental pollution, spreading diseases and parasites to wild butterfly populations." (v9,#2)

Robertson, David. Real Matter. Salt Lake City: University of Utah Press, 1997. 182pp. 39.95 cloth, \$15.95 paper. Following the trail of some of America's famous nature writers--including Fitz Hugh Ludlow, John Muir, Mary Austin, Jack Kerouac, and Gary Snyder--Robertson seeks, through journal writing, literary criticism, and photography, "a secret at the heart of the universe." In his stories about these writers' mountain adventures and his own excursions, he discovers how important wilderness is to the framing of human narratives. (v8,#1)

Robertson, DP; Hull, RB, "Beyond Biology: toward a More Public Ecology for Conservation," Conservation Biology 15(no. 4, 2001):970-979. (v.13,#1)

Robertson, G. Philip, and Harwood, Richard R.."Agriculture, Sustainable," Encyclopedia of Biodiversity 1: 99-108. Sustainable agriculture describes a food and fiber production system that is economically viable, environmentally safe, and socially acceptable over long periods. (v.11,#4)

Robertson, M., Vang, K., and A. J. Brown, "Wilderness in Australia: Issues and Options--A Discussion Paper," Canberra, ACT: Australian Heritage Commission, 1992. (v7,#2)

Robertson, R. W., Helman, P., and Davey, A., Wilderness Management in Australia. Canberra: Canberra College of Advanced Education, 1980.

Robertson, W. A. "Sustainable Management and the Market in New Zealand." Land Use Policy 13, no.3 (1996): 213. (v7, #3)

Robinson, Nicholas A., "Colloquium: The Rio Environmental Law Treaties" IUCN's Proposed Covenant on Environment and Development," Pace Environmental Law Review 13 (no. 1, 1995):133-189. Robinson is in environmental law at Pace University School of Law, and is on the IUCN Commission on Environmental Law. (v8,#2)

Robinson, Christopher C.. Review of Christopher J. Preston, Wayne Ouderkirk (eds): *Nature, Value, Duty: Life on Earth with Holmes Rolston, III* (Berlin: Springer, 2007), *Journal of Agricultural and Environmental Ethics* 21(2008):477-484.

Robinson, Dave W., and Twynam, Dave. "Alternative Tourism, Indigenous Peoples, and Environment: The Case of Sagarmatha (Everest) National Park, Nepal." Environments 23, no.3 (1996): 13. (v7, #3)

Robinson, George R., et al, "Diverse and Contrasting Effects of Habitat Fragmentation," Science 257(July 24, 1992):524-526. Different parts of an ecosystem respond in very different ways to habitat fragmentation. Soil mineralization and plant succession may be relatively uninterrupted. Some measures of plant and animal diversity may not change with differing sizes of fragmentation. But vertebrate population dynamics are greatly affected, as well as are plant species that reproduce by cloning. (v3,#3)

Robinson, J. B., et al. Life in 2030: Exploring a Sustainable Future in Canada. 1996. 224pp. \$19.95 paper. Rather than forecasting events, the authors backcast from what they would like to see happen in order to develop feasible, working alternatives for designing our future. Their prescriptions develop scenarios that allow for an appraisal of the changes required to achieve a sustainable society. (v8,#1)

Robinson, John and Herbert, Deborah, "Back From the Future," Alternatives 26 (No. 2, Sprg 2000): 32- . Future scenarios can help us foresee where climate change is leading and how we can choose a more sustainable path. (v.11,#2)

Robinson, John G., Redford, Kent H., and Bennett, Elizabeth L., "Wildlife Harvest in Logged Tropical Forests," Science 284(1999):595-596. Logging opens up roads and the trucks that travel them become conduits for a vast commercial trade in wild meat. Government is often unable to enforce regulations in remote areas; the social institutions with the most power are the logging companies themselves. Some, though not enough, prohibit their vehicles from carrying wild meat. Also, reforestation in tropical forests, where seeds are often large, depends on mammals. (v.12,#2)

Robinson, John G., "The Limits to Caring: Sustainable Living and the Loss of Biodiversity," Conservation Biology 7(1993):20-28. The IUCN/UNEP/WWF World Conservation Strategy, Caring for the Earth, is a purely utilitarian document, where the conservation and development of resources is the same process. This strategy will lead irrevocably to the loss of biological diversity. Sustainable use, while a powerful approach to conservation, is not sufficient, and, taken alone, results in environmental degradation. Biological conservation also requires a preservationist approach. Robinson is with the Wildlife Conservation Society, New York Zoo. (v4,#4)

Robinson, John, and Bennett, Elizabeth, eds., Hunting for Sustainability in Tropical Forests. New York: Columbia University Press, 1999. Tropical forests can sustain no more than one person per square

kilometer harvesting wildlife, if wildlife is to be conserved and sustainably harvested. Traditional peoples often existed in much lower numbers than that. When game was depleted traditional peoples could move on to other areas. Such patterns have now been broken, when these peoples turn to agriculture and still hunt in nearby forests, with guns, flashlights, radios, and motorized vehicles. Early success produces more children, and more hunters, who need food and want modern goods.

As food sources, rainforests are surprisingly low in productivity, compared to grasslands with their ungulates and other grazers. Grasslands produce ten times as much edible meat. Even relatively small harvests for forest wildlife can deplete the populations. Robinson is at the University of Florida. Bennett is with the Wildlife Conservation Society. (v10,#4)

Robinson, John G.; Ginsberg, Joshua R., "Parks, People, and Pipelines," Conservation Biology 18(no.3, 2004):607-608. (v. 15, # 3)

Robinson, Marilynne, "Surrendering Wilderness," Wilson Quarterly 22(no. 4, 1998):60-64. Robinson is resigned to her conclusion: "We must surrender the idea of wilderness, accept the fact that the consequences of human presence in the world are universal and ineluctable, and invest our care and hope in civilization" (p. 64). (EE v.12,#1)

Robinson, Michael T., "What are Our Responsibilities to the Natural World: Should We Save the Rain Forests?" Anthrozoos 2:4 (Spring 1989): 221-235. Scientific facts and anthropocentric reasoning for the preservation of rainforests. Good, detailed overview of the problem. (Katz, Bibl # 2)

Robinson, Michael, "Jaguar and Wolf Recovery in the American Southwest: Politics and Problems," Wild Earth 9 (No. 4, Wint 1999): 62- . (v.11,#2)

Robinson, Michelle. "To End Bad Air As Well As Utility Monopolies." The Christian Science Monitor, vol. 89, 18 Feb. 1997. p. 18.

Robinson, Nich, "The European Union's Environmental Agenda," Environmental Politics 8(no. 2, Summer 1999):188- . (v.11,#1)

Robinson, Nicholas A., "Attaining Systems for Sustainability through Environmental Law," Natural Resources and Environment 12 (Fall 1997):86-. (v.8,#4)

Robinson, Nicholas A., ed., Agenda 21: Working toward a Global Partnership. Dobbs Ferry, NY: Oceana Publications (75 Main Street, Dobbs Ferry, NY: 10522), 1992. 700 pages. \$ 30.00. ISBN 0-379-21201-3. Published under the auspices of the IUCN Commission on Environmental Law and the World Conservation Union. An annotated version, which includes much of the history of negotiating the document, also includes the financial sections that were cut out of the final version. With preface and introduction. Robinson teaches law at Pace University School of Law and is a member of the IUCN Commission on Environmental Law.

Robinson, P 1993. Sending as geregtigheid teenoor die kosmos. Ned Geref Teologiese Tydskrif 34:4, 481-495. (Africa)

Robinson, PJ 1991. Integrity of creation and Christian mission. Missionalia 19:2, 144-53. (Africa)

Robinson, Thomas, and Westra Laura, eds., Thinking about the Environment: Our Debt to the Ancient and Medieval Past. Lanham, MD: Lexington Books, 2002. (v.13,#4)

Robinson, Wade L. Decisions in Doubt: The Environment and Public Policy. Hanover, NH: University

Press of New England, 1994. 277pp. \$39.95 cloth. Using examples from the area of waste management but touching also upon issues such as the ozone layer, contaminated foodstuffs, and asbestos removal, Robinson presents a new vision for rational decision-making on environmental issues. He points out faults in our old policy-making methodology and offers a rationale for a decision procedure based less on certainty but more adapted and adaptive to our times. (v8,#2)

Robinson, William S., "Some Nonhuman Animals Can Have Pains in a Morally Relevant Sense," Biology and Philosophy 12(1997):51-71. In a series of works, Peter Carruthers has argued for the denial of the title proposition. Here I defend that proposition by offering direct support drawn from relevant sciences and by undercutting Carruthers' argument. In doing the latter, I distinguish an intrinsic theory of consciousness from Carruthers' relational theory of consciousness. This relational theory has two readings, one of which makes essential appeal to evolutionary theory. I argue that neither reading offers a successful view. Robinson is in philosophy at Iowa State University, Ames. (v8,#3)

Robison, Wade L. and Michael S. Pritchard. "Justice and the Treatment of Animals: A Critique of Rawls." Environmental Ethics 3(1981):55-61. Although the participants in the initial situation of justice in John Rawls' Theory of Justice choose principles of justice only, their choices have implications for other moral concerns. The only check on the self-interest of the participants is that there be unanimous acceptance of the principles. But, since animals are not participants it is possible that principles will be adopted which conflict with what Rawls calls "duties of compassion and humanity" toward animals. This is a consequence of the initial situation's assumption that principles of justice can be determined independently of other moral considerations. We question this assumption, and show that satisfactory modifications of Rawls' initial situation undermine its contractarian basis and require the rejection of exclusively self-interested participants. Robison and Pritchard are in the department of philosophy, Western Michigan University, Kalamazoo, MI. (EE)

Roblan, Aaron and Sage, Samuel H., "Steel Company v. Citizens for a Better Environment: The Evisceration of Citizen Suits Under the Veil of Article II." Tulane Environmental Law Journal 12 (No.1, Winter,1998):59- . (v10,#4)

Rocha, Jorge, Manipulação de vida. Para um futuro bioético (Manipulation of Life. For a bioethical Future), Faculdade de Letras da Universidade de Lisboa, 2000. M.A. thesis on the manipulation of life. The primary object of our reflection is the manipulation of living reality. By means of a philosophical inquiry about progresses in biotechnology, we analyze the conquests, the consequences, the promises and the risks of biotechnological investigation, but we also go further seeking for the epistemological and ethical foundations of the attitude to adopt about the manipulation of life in the present stage of knowledge. To accomplish this task it is important to realize who is making the decisions and to define who should make them and also what values must be considered. So our argument starts with the exhibition of the impossibility of knowing nature in an absolute and definitive way (especially living nature, because of its enormous complexity); then we go on defending that human action is based on human knowledge--always imperfect and temporary. After discussing the potential, the power, and the risks of increasing biotechnology, we conclude defending the urgency to submit biotechnological inquiry to the principle of precaution. (v.12,#4)

Roche, M, "Rural geography: searching rural geographies," Progress in Human Geography 26(no.6, 2002): 823-830.

Rocheleau, Jordy. "Democracy and Ecological Soundness," Ethics and the Environment 4(1999):39-56. Though the goals of democracy and ecological soundness are largely believed to be necessarily linked, there is sometimes a lack of adequate argument demonstrating this connection. Defining ecological soundness and democracy and showing weaknesses in some typical attempts to link them, I argue that

democracy is in fact necessary for ecological improvement. The undemocratic practices of capitalism, ecological discrimination, and global inequality all play key roles in environmental degradation. Drawing on David Schweickart's (1996) recent argument for "Economic Democracy" I defend such a model of democratic socialism as the most ecologically sound political and economic form currently possible. Rocheleau is in philosophy at Michigan State University, East Lansing. (E&E)

Rockefeller, Steven, Summary and Survey: Principles of Environmental Conservation and Sustainable Development. 146 pages. 1995 in working draft for the Earth Charter Project. Forty-seven major principles of conservation and sustainability that have been formulated to date in international law and related reports. Examples of such principles: the unity of the biosphere, elimination of unsustainable production, non-violent conflict resolution, and equitable use of transboundary natural resources. Rockefeller teaches religious studies at Middlebury College, Vermont. Copies from Steven Rockefeller, P. O. Box 648, Middlebury, VT 05753. Phone 802/388-9933. Fax 802/388-1951. (v7,#1)

Röcklinsberg, Helena, "Consent and Consensus in Policies Related to Food - Five Core Values," Journal of Agricultural and Environmental Ethics 19(2006):285-299. When formulating a policy related to food in a heterogeneous context within a nation or between nations, oppositional positions are more or less explicit, but always have to be overcome. It is interesting to note, though, that such elements as culture and religion have seldom been the focus in discussions about methods of decision-making in food policy. To handle discrepancies between oppositional positions, one solution is to narrow differences between partners, another to accept one partner or position as dominant. In a solid and lasting policy, any of these options has to be agreed upon by all the partners involved. In this article, I argue that context sensitivity and a shared picture of the situation are necessary bases for a solid food policy. Two methods for policy discussion are elaborated on and religious slaughter is given as an example of a heterogeneous setting with strongly diverging ideals. Several aspects have to be respected from the outset, such as culture, religion, and value systems. This condition is partly met in a model of informed consent and in a consensus model. The informed consent model is regarded as insufficient, because it lacks both methods of dealing with hierarchies and the goal of finding a shared and nuanced picture of the situation. A consensus model meets these tasks but might on the other hand, among other things, be too difficult to follow and to administer. For both models, some difficulties with justification of decisions arise. Five essential elements emanating from a combination of these models are suggested as a basis for a decision process regarding food policies: respect for each discussion partner, context sensitivity, respect for arguments including emotions, a shared picture of the situation, and finally relating theory and practice. Keywords: consensus - context-dependent informed consent - decision-making - democracy - food policy - heterogeneous setting - religion. The author is in the Centre for Theology and Religious Studies, Lund University, Lund, Sweden. (JAEE)

Rodd, Rosemary, Review of Kiley-Worthington, Marthe, Animals in Circuses and Zoos. Environmental Values Vol.1 No.2(1992):175.

Rodd, Rosemary, Review of Johnson, William, The Rose-Tinted Menagerie. Environmental Values Vol.1 No.2(1992):175.

Rodd, Rosemary, "Evolutionary Ethics and the Status of Non-Human Animals," Journal of Applied Philosophy 13(No.2, 1996):63-. (v.10,#2)

Rodd, Rosemary, Biology, Ethics, and Animals. Oxford University Press, 1990. 280 pages. \$ 55.00. Rodd uses philosophy and biological approaches to address the various attitudes in the debate over animal rights. Rodd justifies ethical concern within a framework that is grounded in evolutionary theory and provides detailed discussion of practical situations in which ethical decisions have to be made. Rodd claims to offer to moral philosophers a biological background to the ethical questions involved and to

offer biologists an approach to the ethics of animal rights that is rooted in biological theory. (v1,#4)

Rodd, Rosemary, Review of Carruthers, Peter, The Animals Issue. Environmental Values Vol.2 No.4(1993):370.

Rodes, Barbara K., and Odell, Rice, compilers, A Dictionary of Environmental Quotations. Baltimore: The Johns Hopkins University Press, 1992. With a section on environmental ethics. (v.11,#1)

Rodgers, Jr., William H., "The Myth of Win-Win: Misdiagnosis in the Business of Reassembling Nature," Arizona Law Review 42(2000):297 - .

Rodick, David, "Poetic Dwelling and deep Ecology: Bill McKibben and Martin Heidegger on the End of Nature," Call to Earth, vol. 2, no. 1, 2001, p. 2-7. Each has things to say that complements the other. (v.12,#2)

Rodman, John R., "Theory and Practice in the Environmental Movement: Notes toward an Ecology of Experience." Pages 45-56 in The Search for Absolute Values in a Changing World, vol. 1, Proceedings of the Sixth International Conference on the Unity of the Sciences. New York: The International Cultural Foundation Press, 1978. Rodman is at Pitzer College and the Claremont Graduate School, California.

Rodman, John R., "Four Forms of Ecological Consciousness Reconsidered." Pages 82-92 in Scherer, Donald, and Attig, Thomas, eds., Ethics and the Environment (Englewood Cliffs, NJ: Prentice-Hall, 1983). The four forms are: 1. Resource conservation. 2. Wilderness preservation. 3. Moral extensionism. 4. Ecological sensibility. Rodman is at Pitzer College and the Claremont Graduate School, California.

Rodman, John R., "The Liberation of Nature?" Inquiry (Oslo) 20(1977):83-131. The liberation of nature is not the appropriate category for understanding how to treat natural things. Ecological sensibility is more plausible. Rodman is at Pitzer College and the Claremont Graduate School, California.

Rodrigues, A. S. and Gaston, K. J., "Maximising Phylogenetic Diversity in the Selection of Networks of Conservation Areas," Biological Conservation 105(no.ER1, 2002): 103-11. (v.13,#2)

Rodrigues, Ana S.L. "Are Global Conservation Efforts Successful?" Science Vol. 313, no. 5790 (25 August 2006): 1051-52. Global conservation efforts have prevented the extinction of 31 bird species over the past century, but none of these are yet safe from extinction. Some 1,200 bird species are threatened or endangered. So global conservation efforts with birds have had limited success and have bought time for more adequate conservation measures.

Rodrigues, M., "Privatization and Socioenvironmental Conditions in Brazil's Amazonia: Political Challenges to Neoliberal Principles," Journal of Environment and Development 1(no. 2, 2003): 205-238. (v 14, #3)

Rodrigues, MGM, "Advocating for the Environment: Local Dimensions of Transnational Networks", Environment 46 (no.2, 2004): 14-25.

Rodriguez, J. P., "Exotic Species Introductions into South America: An Underestimated Threat?," Biodiversity and Conservation 10(no.11, 2001): 1983-96. (v.13,#2)

Rodriguez, Jon Paul, and Rojas-Suarez, Franklin. "Guidelines for the Design of Conservation Strategies for the Animals of Venezuela." Conservation Biology 10, no.4 (1996): 1245. (v7, #3)

Rodriguez, J. P., A.B. Taber, P. Daszak, R. Sukumar, C. Valladares-Padua, S. Padua, L.F. Aguirre, R.A. Medellín, M. Acosta, A.A. Aguirre, C Bonacic, P. Bordino, J. Bruschini, D. Buchori, S. González, T. Mathew, M. Méndez, L. Mugica, L.F. Pacheco, A.P. Dobson, and M. Pearl "Globalization of Conservation: A View from the South." *Science* Vol. 317, no. 5839 (10 August 2007): 755-56. Successful global strategies for biodiversity conservation require increasing reliance on local leadership and major investment in local capacity. There are doubts about the global conservation agenda of large NGOs, with their biodiversity hotspots, global ecoregions, etc. as being too "top down" and not "bottom up" from local peoples. "Generalized global approaches fail for biodiversity conservation at local scales because solutions ... usually require a sense of community ownership."

Roebuck, Paul, and Phifer, Paul, "The Persistence of Positivism in Conservation Biology," Conservation Biology 13(No.2, 1999):444-. (v.10,#2)

Roebuck, Paul Kenneth, The Geography of Nature (Environmental Ethics, Indians, Water Rights), 1996, University of Minnesota, Ph.D. thesis in geography and philosophy. 279 pages. The Enlightenment tradition stresses scientism and instrumental reason. Reactions against this tradition--Expressivism, Romanticism and Indigenous Knowledge provide the underpinning for radical environmentalism. Insofar as naturalistic theories leave out meaning, they are implausible and distort human life and action. Enlightenment thought provided a theory of knowledge and humanity founded on atomism, mechanism, and materialism and a radically utilitarian ethics. This movement of ideas is usually treated as an epistemological revolution with anthropological consequences. Viewed differently, subjectivity underlies this revolution from the start. Western ideas of subjectivity, meaning, and identity shifted from the Medieval period through the Sturm und Drang and the Romantic period. Once we question essential notions about meaning and objectivity, social criticism can move beyond ethnocentric projection and offer a genuine critique of our practices. Native-American and European-American ideas of nature relating to water projects in the Southwest reveal this contrast. The advisor was Philip W. Porter. (v.10,#1)

Roemer, GW; Wayne, RK, "Conservation in Conflict: the Tale of Two Endangered Species," Conservation Biology 17(no.5, 2003):1251-1260. (v.14, #4)

Roger, A., and Guéry, F., eds., Maîtres et protecteurs de la nature. Seyssel, France: Champ Vallon, 1991. 329 pages.

Rogers, Adam, The Earth Summit: A Planetary Reckoning. Los Angeles: Global View Press (7095 Hollywood Blvd, Suite 717, LA 90028), 1993. Paper, 350 pages. \$ 16.95 plus \$ 2 shipping. Preparations for Rio, the Global Forum, the Summit, indigenous peoples there, the business presence, what the Summit cost, what it recommends spending, selected speeches, a summary and analysis of the convention on climate change, on biodiversity, the Rio Declaration, the statement of forest principles, and Agenda 21, missing agendas (what the Summit failed to do), alternative treaties (prepared by NGO's and others), and the road from Rio. A thorough account. Foreword by Noel Brown, afterword by David Suzuki. Rogers is editor of the Los Angeles based environmental journal, Earth News. See also The Earth Summit in video section. (v4,#1)

Rogers-Hayden, Tee, and Campbell, John R., "Re-negotiating Science in Environmentalists' Submissions to New Zealand's Royal Commission on Genetic Modification," Environmental Values 12(2003): 515-534. The debate about genetic modification (GM) can be seen as characteristic of our time. Environmental groups, in challenging GM, are also challenging modernist faith in progress, and science and technology. In this paper we use the case of New Zealand's Royal Commission on Genetic Modification to explore the application of science discourses as used by environmental groups. We do this by situating the debate in the framework of modernity, discussing the use of science by environmental groups, and deconstructing the science discourses evident within environmental groups'

submissions to the Commission. We find science being called into question by the very movement that has relied on it to fight environmental issues for many years. The environmental groups are challenging the traditional boundaries of science, for although they use science they also present it as a culturally embedded activity with no greater epistemological authority than other knowledge systems. Their discourses, like that of the other main actors in the GM debate, are thus part of the constant re-negotiation of the cultural construct of 'science'.

Rogers, Lesley J., The Development of Brain and Behaviour in the Chicken. Reviewed by Paul B. Siegel. Journal of Agricultural and Environmental Ethics 9(1996):88. (JAEE)

Rogers, Peter, A Genealogy of Guilt and Environmentalism, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Rogers, Peter, A Genealogy of Guilt and Environmentalism, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Rogers, Raymond A. "Are Environmentalists Hysterical or Paranoid? Metaphors of Care and 'Environmental Security'?" Ethics and the Environment 5(2000):211-228. ABSTRACT: While there has been an increasing prevalence of security concerns with regard to the environment, there has also been a spate of books by moderate environmentalists engaged in "green-bashing" the more radical discussions of environmental issues (Rogers 1995). Both trends reflect the intensification of the forces of economic globalization that are rendering the world into categories that suit those expanding realities and undermine significant analysis of the relationship between those expanding realities and current environmental problems.

The apparent denigration in the title of this article is meant to draw attention to the relationship between representations of environmental issues and economic realities, especially in the context of disagreement, where contested realities are discussed in dramatically different ways by various interests concerned with environmental issues. What is clear in the context of these disagreements is that "ownership" of the issue has significant ramifications for not only understanding the causes of problems, but also for what to do about them.

A starting point for this analysis is the increasingly common appearance of the word "security" in the titles of articles and books dealing with environmental issues. Concerns are expressed with regard to "food security," "security of resources," and the more generic "environmental security," among many. Indeed, the U.S. Central Intelligence Agency now has an environmental department. What interests me, then, is the significance for human communities and natural communities of the increasing appearance of the word "security"-as represented in the work of such analysts as Thomas Homer Dixon--and the way the concern for security tend to minimize any land dispossession. (E&E)

Rogers, Will, "It's Easy Being Green," New York Times, November 20, 2004, p. A31. The real surprise in the recent U.S. election was the environment. Across the country, in red states and blue states, Americans voted decisively to spend more money for natural areas, neighborhood parks, and conservation in their communities. Of 161 conservation ballot measures, 120, or 75 percent, were approved by voters. The cost of measures approved is 3 1/2 billion dollars. (v.14, #4)

Rogerson, Christian and Jeffrey McCarthy, eds., Geography in a Changing South Africa: Progress and Prospects. Cape Town: Oxford University Press, 1992. 306 pages. South African rand 51.75. With a section on environment, education and health. Rogerson is a geographer at the University of Witwatersrand, Johannesburg. McCarthy is a geographer at the University of Natal, Pietermaritzburg. (v5,#1)

Rogerson, John W., "Reflections on Air Travel and Transport," Ecotheology No 5/6 (Jul 98 / Jan 99):60-72.

Rogic, Ivan, "Modernity and Immediateness: A Brief Account of a Modernity Interpretation Model and a Position of Environmental Critique," Socijalna Ekologija: Journal for Environmental Thought and Sociological Research 4 (no. 4, 1995):301-319. (in Croatian) Modernity is not characterized by emphasis on expanding rationality, but rather by a defining of the immediate life, but both these opposite and complementary models characterize the postmodern period, a double-coding which is the basis of environmental critique. The author is in architecture, at the University of Zagreb. (v7,#1)

Rogn, Ketil, From Earth Ethics to Political Ecology: Theory and Practice in Environmental Philosophy. M.A. thesis, Colorado State University, spring 2002. In both environmental ethics and discourse ethics theory precedes and governs practice. Environmental ethics operates from theory that creates substantive recommendations for practice. The discourse ethicist argues that such recommendations can only be created in communication among those involved, but this communication is subject to certain formal demands. This thesis proposes an alternative model in which political and ethical organization precedes and gives rise to political and ethical principles. Adapting ideas from Spinoza about the concrete reality of the body, there arise assemblages of organizations concerned about environmental issues, engaged in political advocacy and advocating an ethic. We generate and revise principles in result and accordingly. Rogn is from Norway. (v.13,#1)

Rohde, David. "France Forced into Ground-Zero Test: Greenpeace ship boarded at nuke testing site." The Christian Science Monitor, July 11, 1995, pp. 1, 8. (v6,#2)

Rohde, David. "In Australia, Environment Wins Over Jobs." The Christian Science Monitor, June 27, 1995, pp. 10, 11.

Rohde, Rick, "Ideology, Bureaucracy and Aesthetics: Landscape Change and Land Reform in Northwest Scotland," Environmental Values 13(2004):199-221. Scottish devolution and land reform were high on the political agenda with Labour's victory at the general election in 1997. In the Highlands of Scotland, where disputes over the ownership and control of land have a long history, initiatives involving the community ownership of land were gathering pace, one of which was Orbost Estate in Skye. What began as an 'experiment' in building a new community with the intention of creating a model for land reform, by 2002 had become a symbol of community opposition and heavy-handed mismanagement by bureaucrats. The conflict between local objectors and the government-funded enterprise company that bought the estate, was fought on ideological, aesthetic and bureaucratic grounds. The discourse of conflict reflected opposing understandings of the social, historical and cultural environment - values that are associated with and 'naturalised' in the landscape. Rural development is increasingly subject to rigid planning guidelines based on notions of visual landscape aesthetics and imputed historical-cultural values associated with the area's tourist industry. In the absence of strong local democratic institutions, objectors and developers arrived at an uneasy compromise after several years of dispute, through the agency of the bureaucratic planning apparatus itself. This study illustrates how the multi-faceted concept of landscape mediates cultural, social and political issues, and is continually evolving in response to aesthetic, ideological and institutional agencies. Rohde lives in Edinburgh. (EV)

Rohr, C, "Review of: Simon Stoddart, ed., Landscapes from Antiquity" Environmental History 8(no.2, 2003):323.

Roht-Arriaza, Naomi, "Environmental Management Systems and Environmental Protection: Can ISO 14001 Be Useful Within the Context of APEC?" The Journal of Environment and Development 6 (no. 3, 1997):292. ISO 14001 is a set of environmental protection standards agreed upon by the 18 member

nations of the Asian Pacific Economic Cooperation forum, involving voluntary action by industries to better their environmental performance. The general conclusion is that this is useful but not nearly enough. (v8,#3)

Rohter, Larry, "Mapuche Indians in Chile Struggle to Take Back Forests," New York Times, August 11, 2004, A3. Mapuche Indians in Chile claim that false land titles and damage to the environment are undermining their traditional way of life and are struggling to take back land they claim is theirs. Much of their traditional forest is now tree farms for export timber. The current dispute continues a conflict that has existed since the arrival of the conquistadors. Chile's nominally Socialist government seeks to blunt the indigenous movement by invoking a modified version of an anti-terrorist law. Mapuches have burned forests or farmhouses or destroyed forestry equipment and trucks. But they claim they are not terrorists because they have harmed no people. (v. 15, # 3)

Rohter, Larry, "Record Drought Cripples Life Along the Amazon," New York Times, Dec. 11, 2005. The Amazon basin has the most devastating drought in a century of record-keeping. Hundreds of riverside settlements are cut off from the outside world. Scientists say the drought is most likely a result of the same rise in water temperatures in the tropical Atlantic Ocean that unleashed Hurricane Katrina. The warmer air over the ocean goes up, which triggers descending (and warming) air over the Western Amazon, dispersing clouds that would otherwise have given rain.

Rojas, Martha, "The Species Problem and Conservation: What Are We Protecting?" Conservation Biology 6(1992):170-178. "There is no agreement on what species are, how they should be delimited, or what they represent. But in conservation science ... species are either treated as types or as evolutionary units." Rojas finds difficulties, both theoretical and practical, with either approach, which result in insufficient protection of biodiversity. Much of the variation that it is desirable to protect may not be registered at the level of species. Rojas is with the Funcación Natura, Bogata, Columbia. (v3,#4)

Rojstaczer, Stuart, Sterling, Shannon M., and Moore, Nathan J., "Human Appropriation of Photosynthesis Products," Science 294(21 December 2001):2549-2552. A study by Vitousek et al 15 years ago, based largely on extrapolations from limited field based studies, estimated that humans co-opt about 42% of the global terrestrial production. This new study now provides an update based on recent, mainly satellite-based surveys and an error analysis. These authors reach a similar conclusion through this different methodology, but caution that the uncertainties are still very large for several key parameters, namely the productivity of agricultural and the biomass of secondary forests. With commentary, Field, Christopher B., "Sharing the Garden," Science 294:2490-2491. (v.13, #3)

Roleff, Tamara and Hurley, Jennifer A., eds., The Rights of Animals. San Diego, CA: Greenhaven Press, 1999. 223 pages. (EE v.12,#1)

Rolim, Samir G; Chiarello, Adriano G, "Slow death of Atlantic forest trees in cocoa agroforestry in southeastern Brazil", Biodiversity and Conservation 13(no.14, December 2004):2679-2694(16).

Rollin, B. E., and Kesel, M. L., eds., The experimental animal in biomedical research, volume 2. Boca Raton, FL: CRC Press, 1995.

Rollin, B. E., The Unheeded Cry: Animal Consciousness, Animal Pain and Science. New York: Oxford University Press, 1989.

Rollin, B. E., Farm animal welfare: Social, bioethical, and research issues. Ames, IA: Iowa State University Press, 1995.

Rollin, B. E., The Frankenstein Syndrome: Ethical and social issues in the genetic engineering of animals. New York: Cambridge University Press, 1995.

Rollin, B. E., Animal Rights and Human Morality. Buffalo, NY: Prometheus Books, 1981, 2nd ed., 1992.
Rollin, Bernard E., "Animals in Agriculture and Factory Farming" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 190-93. (v6,#2)

Rollin, Bernard E., "Ethical Obligations of Veterinarians and Animal Scientists in Animal Agriculture", Journal of Agricultural Ethics 2(1989):225-234. It is patent that society is evolving an ethic for the treatment of animals which goes well beyond the standard prohibitions against cruelty. This article explores the extent to which veterinary medicine and animal science, the major scientific fields relevant to animal agriculture, can accommodate the emerging ethic. Rollin is professor of philosophy, physiology and biophysics at Colorado State University, Fort Collins.

Rollin, Bernard E., ed., The Experimental Animal in Biomedical Research, Volume I: A Survey of Scientific and Ethical Issues for Investigators. 21 original articles covering such topics as the ethical issues associated with animal use, legal and regulatory matters, the issues of stress, pain, and suffering, anesthesia and analgesia, husbandry requirements and disease control. 464 pages. Inside the U.S., \$ 195, outside the U. S. \$ 230. Boca Raton, Florida: CRC Press. One needs to do well in biomedical research to be able to afford books like this. (v1,#2)

Rollin, Bernard E., "Farm Factories: The End of Animal Husbandry," Christian Century 118 (no. 35, Dec. 19-26, 2001):26-29. Industrial animal agriculture is a major departure from traditional agriculture and its core values. Our ancient contract with domestic animals is not on the minds of today's farmers. Yet despite the real problems in these farm factories, few Jewish and Christian leaders, theologians or ethicists have come forward to raise moral questions. If we take biblical ethics seriously, we must condemn any type of agriculture that violates principles of husbandry. It is a radical mistake to treat animals merely as products, as objects with no intrinsic value. A demand for agriculture that practices the ancient and fair contract with domestic animals is not revolutionary but conservative. Rollin is in philosophy at Colorado State University. (v.13,#1)

Rollin, Bernard E., Farm Animal Welfare: Social, Bioethical, and Research Issues. Ames, IA: Iowa State University Press, 1992. Rollin is in philosophy at Colorado State University.

Rollin, Bernard E., "Animal Welfare, Science, and Value", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. A main component of 20th century scientific ideology is the view that science is "value-free." This notion has dominated the view of animal welfare in the emerging field of animal welfare science. Science however, is neither value-free in general, nor ethics-free in particular. The value-laden nature of the concept of "animal welfare" is clear, and even what information is considered to count as facts is structured by valuational presuppositions. Animal pain and stress, which were, until recently, viewed strictly in physicalistic terms, have become increasingly viewed in terms of animal subjective experience, as society grows more and more concerned about animal suffering. The new ethic emerging for animals in society is thus calling for a concept of welfare significantly different from traditional views such as the one which equates welfare with productivity. Rollin is in the Department of Philosophy, Colorado State University, Fort Collins, CO.

Rollin, Bernard E., "Animal Production and the New Social Ethic for Animals," Journal of Social Philosophy 25 (June, 1994):71-84. Also in Proceedings of the Mid-America Veterinary Conference, 1994, pp. 3-11. (v5,#4)

Rollin, Bernard, "Send in the Clones...Don't Bother, They're Here," Journal of Agricultural and Environmental Ethics 10(1997):25-40. The creation of a cloned sheep from mammary tissue has raised major social concern and much talk about major ethical issues, occasioned by this technology. It is necessary to separate genuine from spurious ethical issues here, a task made more difficult than need be by the research community's failure to initiate ethical discussion and explanation of new technology as well as by fear reactions in society. As in genetic engineering of animals, issues about cloning fall into three categories--suggestions that the technology is inherently wrong, risk emerging from the technology and harm to the creature engendered. The issues regarding the cloning of humans can be analyzed using the same categories. (JAEE)

Rollin, Bernard, Animal Rights and Human Morality, revised edition. Buffalo, N. Y. Prometheus Books, 1992. A revised edition of a well-known work, the first edition published in 1981. (v1,#4). Reviewed in Environmental Ethics 5(1983):185-88.

Rollin, Bernard E. The Frankenstein Syndrome: Ethical and Social Issues in the Genetic Engineering of Animals. Reviewed by Hugh Lehman. Journal of Agricultural and Environmental Ethics 10(1997):84-87. (JAEE)

Rollin, Bernard E., The Unheeded Cry: Animal Consciousness, Animal Pain, and Science. Ames, IA: Iowa State University Press, 1998. Expanded edition of a book first published by Oxford University Press, 1989. (v.10,#3)

Rollin, Bernard E., An Introduction to Veterinary Medical Ethics. Ames, IA: Iowa State University press, 1999. 434 pages. Theory and method of making sound decisions about ethical matters commonly encountered by veterinarians and researchers. Includes 82 case studies, originally shared in the ethics columns of The Canadian Veterinary Journal. Questions and commentary. Rollin is in philosophy at Colorado State University, where he teaches veterinary medical ethics. (v.10,#3)

Rollin, Bernard E., "Social Ethics, Veterinary Medicine, and the Pet Overpopulation Problem," Journal of the American Veterinary Medical Association 198(no. 7, April 1, 1991):1153-1156. Companion animals differ from animals used for food or experimentation in the bonding that humans establish with their pets. Nevertheless, companion animals are subject to major abuses, where there is no semblance of justification for the abuse. Pet abuse is the worst sort of animal abuse, for it is totally wanton, senseless, and useless. Those concerned for animal welfare have not adequately addressed this issue. Veterinarians have a particular responsibility here. (v2,#3)

Rollin, Bernard E. Animal Rights and Human Morality, 3rd edition. Amherst, NY: Prometheus Books, 2006.

Rollin, Bernard. Review of Marc Bekoff, Strolling with our Kin: Speaking for and Respecting Voiceless Animals. 10(2001):349-350. (JAEE)

Rollin, Bernard. "Ethics, Science, and Antimicrobial Resistance." Journal of Agricultural and Environmental Ethics 14(2001):29-37. The issue of regularly feeding low levels of antibiotics to farm animals in order to increase productivity is often portrayed as a dilemma. On the one hand, such antibiotic use is depicted as a necessary condition for producing cheap and plentiful food, such that were such use to stop, food prices would rise significantly and our ability to feed people in developing nations would decrease. On the other hand, such antibiotic use seems to breed antibiotic resistance into pathogens affecting human health. Resolving this dilemma, it is alleged, will require great amounts of research into risk/benefit assessment. Contrary to this claim, we will argue that society has all the data it needs to make a reasonable ethical decision, which would be curtailing such use. Such curtailment will not harm consumers significantly, will not harm developing nations' evolving agriculture, and could produce

hitherto unnoticed benefits, namely restoring the possibility of a more husbandry-based, sustainable agriculture to replace the high-tech agriculture that has hurt animals, the environment, small farms, and sustainability. Keywords: antibiotics, antibiotic resistance, antimicrobial resistance, feeding of antibiotics to food animals, sustainability, farm animal welfare, husbandry. Rollin is in philosophy, Colorado State University, Fort Collins, Colorado. (JAEE)

Rollins, Kimberly, Lyke, Audrey, "The Case for Diminishing Marginal Existence Values," Journal of Environmental Economics and Management 36(No.3, 1998):324-. (v.10,#2)

Rollins, MG; Morgan, P; Swetnam, T, "Landscape-scale controls over 20th century fire occurrence in two large Rocky Mountain (USA) wilderness areas," Landscape Ecology 17(no.6, 2002): 539-557.

Rolston, Holmes, III, "The land ethic at the turn of the millennium," Biology and Conservation 9(2000):1045-1058. Abstract. Aldo Leopold's land ethic has proved more complex and subtle than he envisioned. Nevertheless, Leopold launched what, facing a new millennium, has proved urgent on the global agenda: an environmental ethics concerned is theory and practice about appropriate respect for values carried by the natural world and human responsibilities for the sustaining of these values. A blending of anthropocentric and biocentric values continues to be vital. These duties toward nature, involve analysis of ecosystem integrity and evolutionary dynamism at both scientific and philosophical levels; any responsible environmental policy must be based on plausible accounts of ecosystems and a sustainable biosphere. Humans and this planet have entwined destinies. We now envision an Earth ethic beyond the land ethic. Key words: Aldo Leopold, Earth ethics, environmental ethics, land ethic, naturalized ethics. Rolston is in philosophy, Colorado State University. (v.13,#1)

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/land-eth-millennium.pdf>>

--Reprinted in Susan J. Armstrong and Richard G. Botzler, eds., Environmental Ethics: Divergence and Convergence, 3rd ed. (Boston: McGraw-Hill, 2004), pages 392-399

Rolston, Holmes, III, Review of John Livingston, The Fallacy of Wildlife Conservation in Environmental Ethics 7(1985):177-180.

Rolston, Holmes, III, "The Wilderness Idea Reaffirmed," Environmental Professional 13(1991):370-377.

Download/print in PDF format, 790 kb.:

<<http://lamar.colostate.edu/~rolston/wilderness.pdf>>

Replies to Callicott, "The Wilderness Idea Revisited: The Sustainable Development Alternative." Both articles are reprinted in Gruen, Lori and Dale Jamieson, eds., Reflecting on Nature (New York: Oxford University Press, 1994).

Rolston, Holmes, III, "Values Gone Wild," Inquiry 26(1983):181-207.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/values-gone-wild.pdf>>

--Reprinted in Susan Armstrong and Richard Botzler, eds., Environmental Ethics: Convergence and Divergence (New York: McGraw-Hill, 1993), pages 56-65.

Rolston, Holmes, III, Zhexue Zou xiang huangye [Philosophy Gone Wild], Green Classical Library, Jilin: Julin renmin chubanshe (Jilin People's Publishing House), 2000. Authorized translation by Institute of Philosophy, Chinese Academy of Social Sciences, translators Liu Er and Ye Ping. ISBN 7-206-02818-7. (v.11,#4)

Rolston, Holmes, III, "Intrinsic Values in Nature." Pages 76-84 in II Congresso Brasileiro de Unidades de

Conservacao, Anais, vol 1., Conferencias e Palestras, organizers Miguel Serediuk Milano and Veronica Theulen (Proceedings of the Second Brazilian Congress on Conservation Areas), 2000. The Congress was held November 5-9 2000 in Campo Grande, Brazil, and this is a plenary address, in English. Although much of the urgency for conserving biodiversity arises from our duties to other humans, with nature instrumental to what humans have at stake in their environments, a deeper environmental ethics recognizes intrinsic values in and duties directly to nature. Such duties arise because values are present at the levels of animals, living organisms, endangered species, and ecosystems as biotic communities. Ultimately and increasingly, we are responsible for and to Earth as planet and biosphere. Only people can be ethical, but this does not mean that only people count in ethics; to the contrary we are fully human only when we appropriately respect life on Earth in all its rich biodiversity. (v.11,#4)

Rolston, Holmes, III, "Value in Nature and the Nature of Value," in Robin Attfield and Andrew Belsey, eds., Philosophy and the Natural Environment (Cambridge, UK: Cambridge University Press, 1994), pages 13-30. Download/print in PDF format, 780 kb.:

<<http://lamar.colostate.edu/~rolston/value-n.pdf>>

--Reprinted and translated into Chinese: "Zi ran di jiazhi uu jiazhi di benzhi (Value in Nature and the Nature of Value," Zi Ran Bian Lun Fa Yet Jiu (Studies in Dialectics of Nature) 15(no. 2, February, 1999):42-46. ISSN 1000-8934. Translated by Liu Er. The editor of Dialectics of Nature is Ma Huidi, Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. "Dialectics of Nature" in China means about what philosophy of science means in the West. (China) (v.10,#1)

Download/print in PDF format:

<<http://lamar.colostate.edu/~rolston/Value-in-nature-Chinese.pdf>>

--Reprinted, translated into Chinese (second time), "Ziran de jiazhi yu jiazhi de benzhi (Value in Nature and the Nature of Value)." Pages 5-12 in Ye Ping, ed., Huanjing yu kechixu fazhan yanjiu (For Environment and Sustainable Development). Harbin, China: Heilongjiang Science and Technology Press, 1998. ISBN 7-5388-3508-3. Selected proceedings of First All-China Conference on Environment and Development, held in Harbin, China, October 20-24, 1998.

--Reprinted in Andrew Light and Holmes Rolston, III, eds. Environmental Ethics: An Anthology (Oxford: Blackwell Publishing Ltd, 2003), pages 143-153.

--Reprinted, translated into German "Werte in der Natur und die Natur der Werte." In Angelika Krebs, ed., Naturethik. Grundtexte der gegenwertigen tier- und okoethischen Diskussion (Ethics of Nature: Fundamental Texts Discussing Contemporary Animal and Ecological Ethics) (Frankfurt: Suhrkamp, 1997), pages 247-270. Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/Value-in-nature-and-n-German.pdf>>

--Reprinted, translated into French, "La valeur dans la nature et la nature de la valeur," in Hicham-Stéphane Afeissa, editor and translator, Éthique de l'environnement: Nature, valeur, respect (Paris: Librairie Philosophique J. Vrin, 2007), pages 153-186. Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/Value-in-N-N-V-French.pdf>>

--Reprinted, translated into Danish, "Vaerdi i naturen og vaerdinens natur," in Mente Sorensen, Finn Arler, and Martin Ishoy, eds., Miljo og etik (Environment and Ethics) (Aarhus, Denmark: NSI Press, Nordisk Sommeruniversitet, 1997, pages. 17-38. Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston-Danish.pdf>>

Rolston, Holmes, III, "People, Population, Prosperity, and Place." Pages 35-38 in Noel J. Brown and Pierre Quibler, eds., Ethics and Agenda 21: Moral Implications of a Global Consensus (New York: United Nations Publications, United Nations Environment Programme, 1994). Ethical evaluation of the UN strategy document from the United Nations Conference on Environment and Development (Rio Earth Summit).

Rolston, Holmes, III. "From Beauty to Duty: Aesthetics of Nature and Environmental Ethics." Pages 127-141 in Berleant, Arnold, ed., Environment and the Arts: Perspectives on Environmental Ethics.

Aldershot, Hants., UK: Ashgate Publishing Co., 2002. In both environmental aesthetics and environmental ethics something of value is at stake. These are often connected: If beauty, then: duty. But not all duties are tied to beauties. Other premises, such as resource use or respect for life, might better yield duties, features often thought less subjective and more objectively present. Human aesthetic capacities depend, however, on aesthetic properties of value. Wildlife admirers focus on animal excellences, the conflict and resolution in wild lives. Biotic communities, ecosystems, have their integrities. In a participatory aesthetics, our sense of identity enlarges; an appropriate admiration for nature transforms into our caring.

Download/print in PDF format:

<<http://lamar.colostate.edu/~rolston/beauty-to-duty.pdf>>

Rolston, Holmes, III, Huanjing lunli xue: Dui ziranjie de yiwu yu ziranjie de jiazhi (Environmental Ethics: Duties to and Values in the Natural World), translated by Wang Ruixiang, and edited by Huang Daolin. Taipei, Taiwan: National Institute for Compilation and Translation, 1996. Address: 247 Chou Shan Road, Tapei, Taiwan, R.O.C. ISBN 957-00-8564-9. A Chinese translation of Rolston's Environmental Ethics (Temple University Press).

Rolston, Holmes, III. "What Is Responsible Management of Private Rangeland?" Pages 39-49 in Larry D. White, ed., Private Property Rights and Responsibilities of Rangeland Owners and Managers. College Station, Texas: Texas A&M University, 1995. Proceedings from a conference of the Texas Section of the Society for Range Management. Humans must manage rangelands but on landscape scales they must also manage themselves to fit in living on a landscape. Land is resource but it is also place of residence. In Leopold's words, "We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect." Landscape managers can handle the earth. But perhaps we should also remember that hands are also for holding in loving care. Rolston teaches philosophy at Colorado State University. (v6,#3)

Rolston, Holmes, III, "Values in Nature," translated by Yu Goping, an economist at Northeast Forestry University. Translated into Chinese in a special issue of Information of Ecophilosophy, an occasional publication of the Research Office in Ecophilosophy of the Northeast Forestry University, Harbin, 1989, No. 2. (China)

Rolston, Holmes, III. "Photo-Media Biography". Online streaming video, 43 minutes:
<http://cope.colostate.edu/lois/cla/philosopher.wmv>

Rolston, Holmes, III, Longer Book Review of Rosemary Radford Reuther, Gaia and God: An Ecofeminist Theology of Earth Healing, Interpretation 48 (April, # 2):188-190. Quite appreciative of Reuther's extended critique of exploitation, but doubtful if Gaia is relevant. "Meanwhile, no one bothers to notice that there is nothing in the scientific Gaia hypothesis that is feminine, as opposed to masculine. The earth superorganism, if there is one, is completely unsexed, and the equilibrating earth ecosystem is not even an organism, much less a female one. The religious discussion simply takes off on its own, puzzled about the male and female elements in the divine, echoed in an ancient mythology, and thought to shape a male domination of women, about which the science, seemingly claimed to back the feminist claim, really says nothing at all. Rolston is professor of philosophy at Colorado State University. (v5,#1)

Rolston, Holmes, III. "Environmental Ethics." Pages 517-530 in Nicholas Bunnin and E. P. Tsui-James, eds., The Blackwell Companion to Philosophy, 2nd ed. Oxford: Blackwell Publishing, 2003. An introductory article to the field. Environmental ethics was not present in the first edition as one of the leading twenty areas in the discipline of philosophy, but it has now made it into the second edition of the Companion. (v.13,#4)

Download/print in PDF format:

<<http://lamar.colostate.edu/~rolston/ee-blackwell-comp.pdf>>

Rolston, Holmes, III, "Using Water Naturally," Natural Resources Law Center, University of Colorado, Western Water Policy Project, Discussion Series Paper No. 9, 1991.

Rolston, Holmes, III, Review of: Joseph R. Des Jardins, Environmental Ethics: An Introduction to Environmental Philosophy Environmental Ethics 16(1994):219-224.

Rolston, Holmes, III, "Ethics and the Environment." Chapter 11 in Emily Baker and Michael Richardson, eds., Ethics Applied, edition 2 (New York: Simon & Schuster, 1999), pages 407-437. ISBN 0-536-01867-7. Introductory summary of environmental ethics in a text designed for junior college use. Twelve types of environmental ethics: 1. Humanistic and Naturalistic Ethics. 2. Humans, Animals, and a Land Ethic. 3. Biocentrism and Respect for Life. 4. Deep Ecology. 5. Theology and the Environment. 6. Expanding Communities. 7. Axiological Environmental Ethics. 8. Political Ecology. 9. Sustainable Development and Sustainable Biosphere. 10. Bioregionalism. 11. Ecofeminism. 12. Pluralism, Postmodernism, and a Sense of Place. Rolston is in philosophy at Colorado State University. (v.10,#2)

Rolston, Holmes, III, "Too Hot to Handle," Review of Bill McKibben, The End of Nature (Random House), in Philadelphia Inquirer, Sunday, October 8, 1989, pp. 1-F, 4-F. Review of book on global warming.

Rolston, Holmes, III, "Respect for Life: Christians, Creation, and Environmental Ethics," CTNS Bulletin (Center for Theology and the Natural Sciences, Graduate Theological Union, Berkeley), vol. 11, no. 2 (Spring 1991):1-8. An autobiographical account of a would-be philosopher and theologian gone wild, rediscovering a creation lost to both philosophy and theology. "There is something unChristian, something ungodly about living in a society where one species takes itself as absolute and values everything else relative to its national or personal utility." (v2,#2)

Rolston, Holmes, III. Review of South African Environments into the 21st Century. By Brian Huntley, Roy Siegfried, and Clem Sunter. Environmental Ethics 14(1992):87-91.

Rolston, Holmes, III, "Values Deep in the Woods." American Forests 94, nos. 5 & 6 (May/June 1988): 33, 66-69. The title is a typical Rolston device, a play on the word "deep." This short piece argues that the forest has a deep, objective, or intrinsic value as a source of the natural creative process that is far more important than the instrumental and commodity values produced as a managed resource. (Katz, Bibl # 2) Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/values-deep-w.pdf>>

Rolston, Holmes, III, "Aesthetic Experience in Forests," The Journal of Aesthetics and Art Criticism 56 (no. 2, Spring 1998):157-166. Forests are aesthetically challenging because of the sense of deep time confronted there, experiencing forests as an archetype of creation. Forests are both perennial and dynamic. Appropriate aesthetic encounter in forests requires knowledge of natural history, scientific appreciation, necessary though not sufficient for an intense, multisensory, participatory engagement when persons, immersed in forests, constitute their lived aesthetic experiences. Forests, although naturalized, are experienced as sublime, evoking also the sense of the sacred. At every level, aesthetic appreciation in forests radically differs from that appropriate for artworks. Rolston teaches philosophy at Colorado State University.

Download/print in PDF format, 792 kb.

<http://lamar.colostate.edu/~rolston/aes-exp-forests.pdf>>

--"Reprinted in Peter C. List, ed., Environmental Ethics and Forestry: A Reader (Philadelphia: Temple University Press, 2000), pages 80-92.

--Reprinted in Allen Carlson and Arnold Berleant, eds., The Aesthetics of Natural Environments (Peterborough, Ontario: Broadview Press, 2004), pages 182-196.

--Reprinted, translated into Finnish, in Yrjö Sepänmaa, ed. Metsään Mieleni (Helsinki: Maahenski, 2003), pages 31-47. Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/aes-for-finnish.pdf>>

Rolston, Holmes, III, "A Forest Ethic and Multivalued Forest Management," co-authored with James Coufal, College of Environmental Science and Forestry, State University of New York, Syracuse, Journal of Forestry 89(no. 4, 1991):35-40. Translated into Chinese in Information about Ecophilosophy, at Northeast Forestry University. (China)

Rolston, Holmes, III, "Biology Without Conservation: An Environmental Misfit and Contradiction in Terms," in David Western and Mary C. Pearl, eds., Conservation for the Twenty-first Century (New York: Oxford University Press, 1989), pp. 232-240.

Rolston, Holmes, III, "Wildlife and Wildlands: A Christian Perspective," in After Nature's Revolt: Eco-justice and Theology, Dieter T. Hessel, ed., (Minneapolis: Fortress Press, 1992), pages 122-143. First published in Church and Society 80 (no. 4, March/April 1990):16-40.

Rolston, Holmes, III, Huanjing Lunli xue: Daziran de jiazhi yiji ren dui daziran de yiwu [Environmental Ethics: Values in and Duties to the Natural World] (Beijing: Chinese Social Science Press [Zhongguo Shehui kexue Chubanshe], 2000). ISBN 7-5004-2743-3. Chinese translation, in a book series Waiguo Lunlixue Mingshu Yicong [Western Masterpieces in Ethics, Translation Series]. Other titles are Henry Sidgwick, The Methods of Ethics; Adam Smith, The Theory of Moral Sentiments; John Rawls, A Theory of Justice; Robert Nozick, Anarchy, State, and Utopia; Aristotle, Nicomachean Ethics; Tom Beauchamp, Philosophical Ethics. Translated by Yang Tongjin, Institute of Philosophy, Chinese Academy of Social Sciences. This is the second translation, done on mainland China, of this book. The first was done in Taiwan: Huanjing lunlixue: Dui ziranjie de yiwu yu ziranjie de jiazhi [Environmental Ethics: Duties to and Values in the Natural World], translated by Wang Ruixiang and edited by Huang Daolin (Taipei, Taiwan: National Institute for Compilation and Translation, 1996) ISBN 957-00-8564-9. (v.11,#4)

Rolston, Holmes, III, "Respect for Life: Can Zen Buddhism Help in Forming an Environmental Ethic?" in Zen Buddhism Today (Kyoto: Kyoto Seminar for Religious Philosophy, 1989), pp. 11-30. This article reviews the basic problems of environmental ethics and asks whether Zen Buddhism can offer insight or answers. Western and Eastern philosophies need to approach each other about the moral standing of animals, living individuals, species, and ecosystems. (Katz, Bibl # 2)

Rolston, Holmes, III, "Biodiversity and Spirit," Science and Spirit 11(no. 4, November/December 2000):34. "Looking for hallowed ground? Earth is it." Epilogue, one-page essay in a theme issue on Science, Religion, and the Stewardship of Earth. (v.11,#4)

Rolston, Holmes, III, "Fishes in the Desert--Paradox and Responsibility." Pages 39-108 in James E. Deacon and W. L. Minckley, eds., Battle Against Extinction: An Account of Native Fish Management in the West, an anthology of the Desert Fishes Council. Tuscon: University of Arizona Press, 1991.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/desert-fishes.pdf>>

Rolston, Holmes, III, "Aesthetics in the Swamps," Perspectives in Biology and Medicine 43 (no. 4, 2000):584-597. Wetlands are the most misunderstood of landscapes, typically experienced negatively as swamps, sloughs, and mires, and this includes their aesthetic appreciation. A scientific understanding of wetlands radically revises this estimate. Understanding wetlands ecology, knowledge of the specialized

flora growing there and their unusual adaptations, and awareness of wetlands diversity can enrich aesthetic appreciation of these typically unappreciated landscapes. This revises both our estimate of "swamps" and also our aesthetic norms. Aesthetic experiences include a sense of the primeval, admiration for ingenious and odd solutions to the challenges of wetlands living, appreciation of individually inconspicuous plants en masse in their cumulative sweep and flair, of waterfowl and other fauna, of spontaneous order in ecosystems, and of life persisting in the midst of its perpetual perishing. Keywords: aesthetics, beauty, swamps, mires, bogs, adaptive fitness, spontaneous order, primeval nature, persistence of life. (v.11,#4)

Download/print in PDF format, 783 kb.:

<<http://lamar.colostate.edu/~rolston/aes-swamps.pdf>>

Rolston, Holmes, III, Review of Christopher F. Stone, Earth and Other Ethics, in Philadelphia Inquirer, Sunday, March 13, 1988, page 4-F.

Rolston, Holmes, III, Philosophy Gone Wild: Essays in Environmental Ethics. Buffalo: Prometheus, 1986. Pp. 269. This is an extensive (but by no means comprehensive) collection of essays by one of the field's leading thinkers. Rolston has long grappled with the problem of articulating and justifying values in nature itself. His groundbreaking essay, "Is There an Ecological Ethic?" reprinted here, was the first to call for a revolutionary ethic, an ethic informed by and based on ecological principles. This collection serves the important purpose of bringing together fifteen of Rolston's essays. Several chapters begin on the level of personal experience and reflection regarding nature and wilderness. The essays date from 1968-1985; those from 1983 on are listed separately in this bibliography where they originally appeared. (Katz, Bibl # 1)

Rolston, Holmes, III, "International Conflict and Conservation of Natural Resources," combined critical review of: (1) Arthur H. Westing, ed., Cultural Norms, War and the Environment. Oxford and New York: Oxford University Press, 1988. (2) Arthur H. Westing, ed., Environmental Warfare: A Technical, Legal and Policy Appraisal. London and Philadelphia: Taylor and Francis, 1984. (3) Arthur H. Westing, ed., Herbicides in War: The Long-term Ecological and Human Consequences. London and Philadelphia: Taylor and Francis, 1984. (4) Arthur H. Westing, ed., Explosive Remnants of War: Mitigating the Environmental Effects. London and Philadelphia: Taylor and Frances, 1985. (5) Arthur H. Westing, ed., Global Resources and International Conflict: Environmental Factors in Strategic Policy and Action. Oxford and New York: Oxford University Press, 1986. In Conservation Biology 3(1989):322-326.

Rolston, Holmes, III. Genes, Genesis and God: Values and their Origins in Natural and Human History. Cambridge: Cambridge University Press, 1999, 400pp. Reviewed by John Hedley Brook. Environmental Values 9(2000):401.

Rolston, Holmes, III. "Can and Ought We to Follow Nature?" Environmental Ethics 1(1979):7-30. "Nature knows best" is reconsidered from an ecological perspective which suggests that we ought to follow nature. The phrase "follow nature" has many meanings. In an absolute law-of-nature sense, persons invariably and necessarily act in accordance with natural laws, and thus cannot but follow nature. In an artifactual sense, all deliberate human conduct is viewed as unnatural, and thus it is impossible to follow nature. As a result, the answer to the question, whether we can and ought to follow nature, must be sought in a relative sense according to which human conduct is sometimes more and sometimes less natural. Four specific relative senses are examined: a homeostatic sense, an imitative ethical sense, an axiological sense, and a tutorial sense. Nature can be followed in a homeostatic sense in which human conduct utilizes natural laws for our well-being in a stable environment, but this following is nonmoral since the moral elements can be separated from it. Nature cannot be followed in an imitative ethical sense because nature itself is either amoral or, by some accounts, immoral. Guidance for inter-human ethical conduct, therefore, must be sought not in nature, but in human culture. Nevertheless, in an axiological

sense, persons can and ought to follow nature by viewing it as an object of orienting interest and value. In this connection, three environments are distinguished for human well-being in which we can and ought to participate--the urban, the rural, and the wild. Finally, in a tutorial sense, persons can and ought to follow nature by letting it teach us something of our human role, our place, and our appropriate character in the natural system as a whole. In this last sense, "following nature" is commended to anyone who seeks in his or her human conduct to maintain a good fit with the natural environment--a sense of following nature involving both efficiency and wisdom. Rolston is in the department of Philosophy, Colorado State University, Fort Collins, CO. (EE) Also published in Philosophy Gone Wild. Also reprinted in Andrew Brennan, ed., The Ethics of the Environment, in The International Research Library of Philosophy (Aldershot, Hampshire, U.K.: Dartmouth Publishing Co., forthcoming 1994). U.S. Distributor: Ashgate Publishing Co., Brookfield, VT.

Rolston, Holmes, III, "Biology and Philosophy in Yellowstone," Biology and Philosophy 5 (no. 2, 1990):241-258. Philosophical issues in Yellowstone biology and policy, responding to the criticism of Alston Chase, Playing God in Yellowstone. Chase, formerly a professor of philosopher at Macalaster College, has been an acid critic of park policy and the naturalistic philosophy of "letting nature take its course" on which it is based. Chase favors a policy based on "sound, scientific management." A shortened version is "Yellowstone: We Must Allow It To Change," High Country News 23 (no. 10, June 3, 1991):12-13. (v1,#2)

A clear expression of Rolston's environmental philosophy of value, history, and place, set against a discussion of park management policy in Yellowstone National Park and a criticism of the work of Alston Chase. There is a spectrum of naturalness that should be respected; there is a size and scale which defies intervention; there is a dynamic natural history that ought to be appreciated and loved. (Katz, Bibl # 2)

--Reprinted in Susan Armstrong and Richard Botzler, eds., Environmental Ethics: Convergence and Divergence (New York: McGraw-Hill, 1993), pages 28-38.

Rolston, Holmes, III, "Creation and Recreation: Environmental Benefits and Human Leisure." In B. L. Driver, Perry J. Brown, and George L. Peterson, eds., Benefits of Leisure (State College, PA: Venture Publishing, Inc., 1991), pages 393-403.

Rolston, Holmes, III, "Science-Based vs. Traditional Cultural Values in a Global Ethic." In J. Ronald Engel and Joan Engel, eds., Ethics of Environment and Development. London: Belhaven Press and Tuscon: University of Arizona Press, 1990.

Rolston, Holmes, III, "The River of Life: Past, Present, and Future," in Ernest Partridge, ed., Responsibilities to Future Generations (Buffalo, NY: Prometheus Books, 1981), pp. 123-132.

Download/print at:

<<http://lamar.colostate.edu/~hrolston/river-of-life.pdf>>

--Translated into Italian: "Il fiume di vita: passato, presente e futuro," Aut Aut: rivista di filosofia e di cultura, Issue 316-317, July-October 2003, pages 139-144. Translated by Roberto Peverelli.

Rolston, Holmes, III, Review of Lawrence E. Johnson, A Morally Deep World: An Essay on Moral Significance and Environmental Ethics (Cambridge, England: Cambridge University Press, 1991) in Center for Theology and the Natural Sciences Bulletin, vol. 11, no. 4 (1992):17-19.

Rolston, Holmes, III, Review of Frederick W. Boal and David N. Livingstone, eds., The Behavioural Environment: Essays in Reflection, Application, and Re-evaluation (London and New York: Routledge, 1989) in The Environmental Professional 12(4)(1990):366-367.

Rolston, Holmes, III, "Biophilia, Selfish Genes, Shared Values" Pages 381-414 in Stephen R. Kellert and Edward O. Wilson, eds., The Biophilia Hypothesis: A Theoretical and Empirical Inquiry (Washington:

Island Press, 1993).

Rolston, Holmes, III, "Down to Earth: Persons in Place in Natural History." Pages 55-63 in Rana P. B. Singh, ed., Environmental Ethics: Discourses, and Cultural Traditions: Festschrift to Arne Naess (Varanasi, India: The National Geographical Society of India, 1993); also published as the National Geographical Journal of India, vol. 39, parts 1-4, 1993.

Rolston, Holmes, III, "Nature, the Genesis of Value, and Human Understanding," Environmental Values 6(1997):361-364. Reply to Thomas, Emyr Vaughan, "Rolston, Naturogenic Value and Genuine Biocentrism," Environmental Values 6(1997):355-360. Many anthropogenic values are indeed important, but I deny that nature is otherwise value free, and recommend to humans a psychological joining (with) ongoing natural history, since there is value wherever there is positive creativity. Epistemologically, it is impossible for any knower not to be participant in what he or she knows. We will have to use our eyes, ears, noses, hands, minds. What we know will be filtered through our percepts and concepts. But that does not make the discovery of valued features in nature assimilationist or anthropocentric. I defend a rather more critical realism. (EV)

Rolston, Holmes, III, "Environment, Nature, and God," co-authored with Jack Weir (Department of Philosophy, Hardin-Simmons University). Chapter 22, pages 229-240, in Frederick Ferre, ed., Concepts of Nature and God (Athens: University of Georgia, Department of Philosophy, 1989). Proceedings of 1987 National Endowment for the Humanities Summer Institute on Concepts of Nature and God.

Rolston, Holmes, III, "Whose Woods These Are. Are Genetic Resources Private Property or Global Commons?" Earthwatch, vol. 12, no. 3 (March/April 1993):17-18. Ownership of wild species, sometimes being claimed by Third World Nations, makes national resources out of a natural resource that has classically been part of the common heritage of humankind. There are conceptual and practical problems with claiming such wild species ownership. These species belong to us all, with a shared right to use and responsibility to protect. (v4,#2)

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/whose-woods.pdf>>

Rolston, Holmes, III, Review of Mary Anglemeyer and Eleanor S. Seagraves, compilers, The Natural Environment: An Annotated Bibliography of Attitudes and Values, in Environmental Ethics 8(1986):91-93.

Rolston, Holmes, III, Review of Bryan G. Norton, ed. Preservation of Species, in Canadian Philosophical Reviews, 6, no. 10 (December 1986): 519-521.

Rolston, Holmes, III, Review of McLaughlin, Andrew, Regarding Nature: Industrialism and Deep Ecology, Ethics 105(1994):201-202.

Rolston, Holmes, III, "Naturalizing Values: Organisms and Species." Pages 76-86 in Pojman, Louis P., ed., Environmental Ethics: Readings in Theory and Application, 3rd ed. Belmont CA: Wadsworth/Thompson Publishing Co., 2001. Original article first published in this anthology. Paper given at American Philosophical Association, Washington, DC, December 1998. With published commentary, Ned Hettinger, "Comments on Holmes Rolston's 'Naturalizing Values'," pages 86-89.

Philosophers are naturalizing ethics, epistemology, and metaphysics, but seem unable and unwilling to naturalize value. But values are deeply embedded in evolutionary and ecological natural history. Biologists are regularly discovering such values; survival value is a key to natural selection and adapted fit. Nevertheless, most philosophers insist that value is anthropocentric, allowing only dispositional value to nature, also value where there is sentient life. These psychological accounts are

incomplete. This is evidenced in non-sentient organisms, in species lines, and in genetic knowledge. Unless we naturalize values, we face an epistemic and axiological crisis. (v.11,#1)

Download/print in PDF format, 1.3 mb.:

<<http://lamar.colostate.edu/~rolston/value-o-s.pdf>>

Rolston, Holmes, III, Review of Andrew Brennan, Thinking about Nature: Nature, Value and Ecology (London: Routledge and Kegan Paul), Environmental Ethics 11(1989):259-267.

Rolston, Holmes, III. "Values in Nature." Environmental Ethics 3(1981):113-28. Nature is examined as a carrier of values. Despite problems of subjectivity and objectivity in value assignments, values are actualized in human relationships with nature, sometimes by (human) constructive activity depending on a natural support, sometimes by a sensitive, if an interpretive, appreciation of the characteristics of natural objects. Ten areas of values associated with nature are recognized: (1) economic value, (2) life support value, (3) recreational value, (4) scientific value, (5) aesthetic value, (6) life value, (7) diversity and unity values, (8) stability and spontaneity values, (9) dialectical value, and (10) sacramental value. Each is analyzed and illustrated with particular reference to the objective precursors of value as these are described by natural science. Rolston is in the department of Philosophy, Colorado State University, Fort Collins, CO. (EE) Also published in Philosophy Gone Wild. Translated into Chinese by Yu Goping, Northeast Forestry University in Information of Ecophilosophy, an occasional publication of the Research Office in Ecophilosophy of the Northeast Forestry University, Harbin, 1989, No. 2.

Rolston, Holmes, III, "The Preservation of Natural Value in the Solar System," in Eugene C. Hargrove, ed., Beyond Spaceship Earth: Environmental Ethics and the Solar System (San Francisco: Sierra Club Books, 1986), pp. 140-182. Originally presented at conference on "Environmental Ethics and the Solar System," June 5-8, 1985, University of Georgia, Athens, and sponsored by EVIST, National Science Foundation, and the Planetary Society

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/pres-nv-solar-system.pdf>>

Rolston, Holmes, III, Review of J. Ronald Engel, Sacred Sands: The Struggle for Community in the Indiana Dunes, in Zygon: Journal of Religion and Science 19(1984):508-511.

Rolston, Holmes, III, Review of "Despoilers of the Amazon," Review of Susanna Hecht and Alexander Cockburn, The Fate of the Forest: Developers, Destroyers and Defenders of the Amazon, and Anthony Smith, Explorers of the Amazon: Four Centuries of Adventure Along the World's Greatest River in New York Newsday, Books, January 14, 1990, p. 22.

Rolston, Holmes, III, "Just Environmental Business" Chapter 11 in Tom Regan, ed., Just Business: New Introductory Essays in Business Ethics (New York: Random House, 1984), a college text in business ethics.

Download/print in PDF format: <http://lamar.colostate.edu/~hrolston/just-env-business.pdf>>

--Reprinted in Dale Westphal and Fred Westphal, eds., Planet in Peril: Essays in Environmental Ethics (Fort Worth: Harcourt Brace College Publishers, 1994), pp. 149-170.

Rolston, Holmes, III, "Human Values and Natural Systems," Society and Natural Resources 1(1988):271-283.

Rolston, Holmes, III. Genes, Genesis and God: Values and Their Origins in Natural and Human History. Reviewed by Theodore W. Nunez. Environmental Ethics 22(2000):111-112.

Rolston, Holmes, III. See Sellman, James D., and Rolston, Holmes, III, "Environmental Ethics in

Micronesia, Past and Present," Part I. "Living on the Edge: Traditional Micronesian Environmental Ethics." By James D. Sellmann, Philosophy, University of Guam, from a presentation at the Pacific Science Inter-Congress, June 2000. Part II. "Guam Today: Still 'on the Edge.' Colonial Legacy and American Presence, by Holmes Rolston, III, also at the Pacific Science Inter-Congress. ISEE Newsletter, vol. 12, no. 3, Fall 2001, pp. 11-14. (v.12,#3)

Rolston, Holmes, III, Review of Arne Naess, Ecology, Community and Lifestyle (Cambridge, England: Cambridge University Press, 1989) in Ethics: International Journal of Social, Political, and Legal Philosophy 101(1991):907.

Rolston, Holmes, III, "Does Nature Need to Be Redeemed?" Zygon: Journal of Religion and Science 29(1994):205-229. Also in Horizons in Biblical Theology 14 (no. 2, 1993):143-172.

In the light of evolutionary biology, the biblical idea that nature fell with the coming of human sin is incredible. Biblical writers, classical theologians, and contemporary biologists are ambivalent about nature, finding in natural history both a remarkable genesis of life and also much travail and suffering. Earth is a land of promise, and there is the conservation, or redemption, of life in the midst of its perpetual perishing. Life is perennially a struggling through to something higher. In that sense even natural history is cruciform, though human sinfulness introduces novel tragedy. Humans now threaten creation; nature is at more peril than ever before. Keywords: conservation of nature; creation; ecological crisis; evolution; natural evils; nature; redemption; sin; suffering, wildness. (v5,#2)

Download/print in PDF format, 1.3 mb.:

<<http://lamar.colostate.edu/~rolston/redeemed.pdf>>

Rolston, Holmes, III, "Life in Jeopardy on Private Property," in Kathryn A. Kohm, ed., Balancing on the Brink of Extinction: The Endangered Species Act and Lessons for the Future (Washington, D. C.: Island Press, 1991), pages 43-61. Shortened version of "Property Rights and Endangered Species," University of Colorado Law Review 61(1990):283-306.

Rolston, Holmes, III, "Hewn and Cleft from this Rock: Meditation at the Precambrian Contact," Main Currents in Modern Thought 27(1971):79-83. Also published in Philosophy Gone Wild.

Download/print in PDF format, 436 kb.

<<http://lamar.colostate.edu/~rolston/hewn&cleft.pdf>>

Rolston, Holmes, III, "Environmental Business: An Ethic for Commerce." In Westphal, Dale, and Fred Westphal, Planet in Peril: Essays in Environmental Ethics (Fort Worth, TX: Harcourt Brace College Publishers, 1994), pages 149-170. Reprinted from Chapter 8 of Rolston, Environmental Ethics.

Rolston, Holmes, III and others, "Declaração de Porto Alegre Sobre Universidade, Ética e Meio Ambiente" (Porte Alegre Declaration on University, Ethics, and the Natural Environment) (in Portuguese). Pages 99-100 in Revista do Instituto de Filosofia e Ciências Humanas da Universidade Federal do Rio Grande do Sul (Review of the Institute of Philosophy and Human Sciences of the Federal University of Rio Grande do Sul, Porto Alegre, Brazil), Vol. 15, 1992. ISSN 0302-217X. A declaration on the role of the university in addressing the environmental crisis, prepared in 1992 at the pre-conference on the "University and the Natural Environment," held there, just prior to the United Nations Conference on Environment and Development in Rio de Janeiro. Fernando J. da Rocha, chair of the Department of Philosophy there, was conference Coordinator. (v4,#4) Also printed in Callicott, J. Baird, and Da Rocha, Fernando J. R., Earth Summit Ethics.

Rolston, Holmes, III, "Property Rights and Endangered Species," University of Colorado Law Review 61(1990):283-306. Rolston examines especially endangered plant species on private property and claims that property ownership is an imperfect right and does not include the right to jeopardize endangered

species, a constraint consistent with the Endangered Species Act. Nor do landowners whose expectations of development are so constrained have any claim to compensation under the "just takings" clause of the Fifth Amendment of the U. S. Constitution. Rather, they are precluded from doing harm in the tradition of police power. Protecting such species from harm involves a development of law with an appropriate respect for natural history. (v1,#3)

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/property-rights-U-Colo.pdf>>

Rolston, Holmes, III. "Are Values in Nature Subjective or Objective?" Environmental Ethics 4(1982):125-51. Prevailing accounts of natural values as the subjective response of the human mind are reviewed and contested. Discoveries in the physical sciences tempt us to strip the reality away from many native-range qualities, including values, but discoveries in the biological sciences counterbalance this by finding sophisticated structures and selective processes in earthen nature. On the one hand, all human knowing and valuing contain subjective components, being theory-laden. On the other hand, in ordinary natural affairs, in scientific knowing, and in valuing, we achieve some objective knowing of the world, agreeably with and mediated by the subjective coefficient. An ecological model of valuing is proposed, which is set in an evolutionary context. Natural value in its relation to consciousness is examined as an epiphenomenon, an echo, an emergent, an entrance, and an education, with emphasis on the latter categories. An account of intrinsic and instrumental natural value is related both to natural objects, life forms and land forms, and to experiencing subjects, extending the ecological model. Ethical imperatives follow from this redescription of natural value and the valuing process. Rolston is in the department of philosophy, Colorado State University, Fort Collins, CO. (EE)

--Also published in Robert Elliot and Aaran Gare, Environmental Philosophy (St. Lucia, New York, London: University of Queensland Press and University Park, PA and London: Pennsylvania State University Press, 1983).

--Reprinted in Louis P. Pojman, ed., Environmental Ethics: Readings in Theory and Application, second edition (Belmont, CA: Wadsworth Publishing Co., 1998), pages 70-81, with response by Ernest Partridge, "Values in Nature: Is Anybody There?" and response by Rolston, "Values at Stake: Does Anything Matter?", pages. 88-90.

--Reprinted, translated into Chinese, "Ziran zhong de jiashi shi zhuguande haishi keguande?" in Huanjing yu Shehai (Environment and Society) 1(no. 1, 1998):49-55, First half. Second half, 2(no. 1, 1999):53-57, second half. Liu Er, Ye Ping, translators.

Download/print in PDF format (in Chinese):

<<http://lamar.colostate.edu/~rolston/subj-or-object-Chinese.pdf>>

Rolston, Holmes, III, "Respect for Life: Can Zen Buddhism Help in Forming an Environmental Ethic?" in Zen Buddhism Today, Annual Report of the Kyoto Zen Symposium, No. 7, September 1989. This issue results from the Seventh Annual Kyoto Zen Symposium, held in March 1989 in Kyoto. (v1,#1)

Rolston, Holmes, III, "Treating Animals Naturally?" Between the Species 5(1989):131-137.

Rolston, Holmes, III, "Natural and Unnatural; Wild and Cultural," Western North American Naturalist 61(no. 3, 2001):267-276. In a theme issue on exotic species in Yellowstone National Park. Originally the Aubrey L. Haines Distinguished Lecture at the Fifth Biennial Scientific Conference on the Great Yellowstone Ecosystem, National Park Service, Yellowstone National Park, WY, October 11-13, 1999.

Yellowstone National Park's mission and policy can be clarified by analysis of the "natural" and the "unnatural." "Nature" is a comprehensive word, on some uses excluding nothing; more useful is a contrast distinguishing "nature" and "culture." Specifying "wild nature" denotes spontaneous nature absent human influence. Critics claim that the meaning of "wild nature," especially of "wilderness" is a foil of "culture." Pristine nature, often romanticized, is contrasted with a technological and industrial culture. By this account, "wilderness" is a social construction.

Nevertheless "wild nature" successfully denotes, outside culture, an evolutionary and ecological natural history, which remains present on the Yellowstone landscape, jeopardized by numerous human influences, including the invasions of exotic species. Natural processes have returned in the past, as when native Americans left the landscape. Natural processes can be preserved today, because of, rather than in spite of, park management. Over much of the North American landscape nature is managed and at an end. Yellowstone provides an opportunity to encounter and to conserve "untrammelled" nature as an end in itself, past, present, and future. Key words: nature, natural, wild, pristine, wilderness, culture, management, exotics. Rolston is in philosophy at Colorado State University. (v.12,#3)

Download/print at:

<<http://lamar.colostate.edu/~rolston/natural-and-unnatural.pdf>>

Rolston, Holmes, III, "Nature and Human Emotions" in Fred D. Miller, Jr., and Thomas W. Attig, eds., Understanding Human Emotions (Bowling Green, Ohio: Bowling Green State University Studies in Applied Philosophy, 1979), volume 1, pages 89-96.

Download/print at:

<<http://lamar.colostate.edu/~hrolston/nature-human-emotions.pdf>>

Rolston, Holmes, III, "Valuing Wildlands," Environmental Ethics 7(1985):23-48. An important discussion of a "taxonomy of value" for wilderness, with a critique of cost-benefit reductions of these values to economic terms. Serious proposals for "decision rules" regarding the preservation and use of wilderness. (Katz, Bibl # 1)

Download/print at:

<<http://lamar.colostate.edu/~hrolston/valuing-wildlands.pdf>>

Rolston, Holmes, III, Environmental Ethics: Duties to and Values in the Natural World. Philadelphia: Temple University Press, 1987. Pp. xiii, 416. This is a culmination of a twenty year investigation into the nature of environmental value and ecological ethics by the foremost scholar in the field. Although much of this book has appeared before in different forms, Rolston's position and argument gain immeasurably from a book length presentation. Here for the first time is Rolston's complete view of environmental ethics: his theory of objective natural value, his view of humanity's place in the environment, his analysis of the value of (and thus duties to) animals, organisms, species, ecosystems, and his practical policy recommendations for environmental managers and businessmen. Rolston presents a philosophy of nature, but this is no traditional metaphysic; it is a philosophy of nature imbued with ecological science and value. Its goal is to provide mankind with an ethic that is a residence, a "significant place to dwell" (p. xii). Perhaps the most important theoretical point is Rolston's establishment or discovery of a third kind of value in ecological systems: in addition to intrinsic and instrumental values there is systemic value. "Systemic value is the productive process; its products are intrinsic values woven into instrumental relationships" (p. 188). Of great importance is his defense of objective, intrinsic value in natural entities--value that transcends a valuing consciousness. "Values are objectively there--discovered, not generated, by the valuer" (p. 116). One of the strengths of this book is that Rolston is reluctant to close the door on any kind of natural value. He presents his case in steps, starting with anthropocentric instrumental values of nature, moving to the intrinsic value of sentient life experiences in the animal kingdom, to the intrinsic good-of-its-kind of natural organisms, on to the environmental fitness of species in ecosystems. The argument is supported by many real life examples. Rolston also tackles some persistent problems in environmental ethics; e.g., individual rights in a holistic value system, the superiority of human life, and the clash between a culture-based and a natural ethic. My one criticism is that some chapters seem "patched" together from the earlier versions of these arguments in other articles. But this is a minor problem when one views the overall organization of the book. Like the ecosystem itself, this book as a whole has more value than its individual parts. (Katz, Bibl # 1) Reviewed in Environmental Ethics 8(1986):163-77.

Rolston, Holmes, III, "Duties to Endangered Species," encyclopedia article in Encyclopedia of Environmental Biology, 4 vols. San Diego, CA: Academic Press, Harcourt Brace Jovanovich, 1994.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/duties-end-sp-Enc-Env-B-rev.pdf>>

Rolston, Holmes, III, "On Behalf of Bioexuberance," Garden 11, no. 4 (July/August 1987): 2-4, 31-32. Download/print at:

<<http://lamar.colostate.edu/~hrolston/Behalf-of-Bioexuberance.pdf>>

Reprinted in The Trumpeter (Canada) 5, no. 1 (Winter 1988): 26-29.

Reprinted in Wilderness Record: Proceedings of the California Wilderness Coalition, vol 17, no. 4, April 1992, p. 4.

Rolston, Holmes, III, "Human Values and Natural Systems." Society and Natural Resources 1 (1988): 271-283. An elegant descriptive taxonomy of value, with an argument that values in nature are neither subjective nor objective: nature "carries" value---value for survival, economics, diversity, religion, and so forth. "The natural history that envelopes us is of value, not only because we humans place value there, but because value there is endorsed by the signature of time and eternity" (pp. 282-283). (Katz, Bibl # 2)

Rolston, Holmes, III, "Duties to Endangered Species," BioScience 35(1985):718-726. Download/print at: <http://lamar.colostate.edu/~hrolston/Duties_Endangered_Species.pdf> For printing.

<http://lamar.colostate.edu/~hrolston/Duties_Endangered_Species_Web.pdf> Read online.

--Reprinted in Raymond Bradley and Stephen Duguid, eds., Environmental Ethics, Volume II (Burnaby, BC: Simon Fraser University, Institute for the Humanities, 1989), pp. 67-83.

--Reprinted in Andrew Brennan, ed., The Ethics of the Environment, in The International Research Library of Philosophy (Aldershot, Hampshire, U.K.: Dartmouth Publishing Co., 1994). U.S. Distributor: Ashgate Publishing Co., Brookfield, VT.

--Extracted as "The Value of Species" in the anthology, Tom Regan and Peter Singer, eds., Animal Rights and Human Obligations, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1989), pp. 252-255.

--Reprinted in Robert Elliot, ed., Environmental Ethics, Oxford Readings in Philosophy Series (Oxford: Oxford University Press, 1995), pp. 60- 75.

Rolston, Holmes, III, "Community: Ecological and Ecumenical" in The Iliff Review 30(1973):3-14 (Iliff Theological Seminary, Denver).

Rolston, Holmes, III, "Nature for Real: Is Nature a Social Construct? Pages 38-64 in Chappell, T. D. J., ed., The Philosophy of the Environment. Edinburgh: Edinburgh University Press, 1997, and New York: Columbia University Press, 1997. The claim that "nature" is a social construct has become commonplace, confusedly mixing cultural ideas of "nature" with nature in itself. Humans have no unmediated access to nature; we do not and cannot know nature for real--so it is claimed. "The world" is variously "constituted" by diverse cultures; and there is doubt about what, if anything, is "privileged" about the prevailing Western concepts. All such word-ideas, world-ideas, have been made up historically by peoples in their multifarious cultures. "Nature," "environment," "wilderness," "science" in its descriptions of "nature," and "Earth" as planet and world viewed--all now have a modernist color to them, and the make-up of the words colors up what we see.

More radically, all human knowing colors whatever people see, through our percepts and concepts. The skepticism runs deep. Many question whether humans know nature at all, in any ultimate or objective sense. The pejorative word is "absolute," comparably to "privileged" as revealing our bias in "right" or "true". Rather we know nature only provisionally or operationally; "pragmatically" is the favored word). There is an epistemic crisis in our philosophical culture, which, on some readings, can seem to have reached consummate sophistication, and, the next moment, can reveal debilitating failure of nerve.

Philosophers need to ask, in theory, whether nature is for real, to know, in practice, whether and how ethicists ought to conserve it. The less we really know about nature, the less we can or ought save nature for what it is in itself, intrinsically. We cannot correctly value what we do not to some degree correctly know. The epistemic crisis is as troubling as the environmental crisis, and one must be fixed before the other can. Rolston teaches philosophy at Colorado State University. (v.8,#4)

Download/print in PDF format, 1.4 mb.:

<<http://lamar.colostate.edu/~rolston/social-construct.pdf>>

Rolston, Holmes, III, "Environmental Ethics: Some Challenges for Christians," The Annual, Society of Christian Ethics, 1993, pages 163-186. Boston: The Society of Christian Ethics, 1993; distributed by Georgetown University Press. Christianity is a religion for people, relating persons to persons, yet it also has an environmental ethics. But the Christian ethics for persons, calling for love, justice, benevolence, and compassion does not transfer easily to duties toward wildlife, who may not be appropriate subjects for compassion, benevolence, or justice, and the difficulties compound with an ethic toward plants, species, and ecosystems. The Biblical faith began with a land ethic, a covenanted promised land, and Christians find a nature that is sacred and good in itself, regardless of its human utility. Earth is a planet with promise, the nature found on Earth is graced with creativity, if also with persisting in the midst of its perpetual perishing. Nature is also cruciform, the beauty approaches the sublime, death is perpetually redeemed with the renewal of life, and in that sense the central themes of Christianity are congenial to an environmental ethic. Rolston is professor of philosophy at Colorado State University. (v4,#4)

Rolston, Holmes, III, "Respect for Life: Can Zen Buddhism Help in Forming an Environmental Ethic?" In Zen Buddhism Today, No. 7, September 1989, pp. 11-30. Annual Report of the Kyoto Zen Symposium, Kyoto Seminar for Religious Philosophy, Institute for Zen Studies, Hanazono College and Kyoto University.

Rolston, Holmes, III, "Values Deep in the Woods." American Forests 94, nos. 5 & 6 (May/June 1988):33, 66-69. Also published in The Trumpeter (Canada) 6, no. 2 (Spring 1989):39-41.

-Reprinted in Alan Drengson and Duncan Taylor, eds., Wild Forestry: Practising Nature's Wisdom (Gabriola Island, BC, Canada: New Society Publishers, 2009), pages 12-16.

Rolston, Holmes, III, "Disvalues in Nature," The Monist 75(1992):250-278. Also in Andrew Brennan, ed., The Ethics of the Environment, in The International Research Library of Philosophy (Aldershot, Hampshire, U.K.: Dartmouth Publishing Co., forthcoming, 1994). U.S. Distributor: Ashgate Publishing Co., Brookfield, VT.

Download/print in PDF format, 1.5 mb.:

<<http://lamar.colostate.edu/~hrolston/disvalues.pdf>>

Rolston, Holmes, III, "Challenges in Environmental Ethics." In Michael E. Zimmerman, J. Baird Callicott, George Sessions, Karen J. Warren, and John Clark, eds., Environmental Philosophy: From Animal Rights to Radical Ecology (Englewood Cliffs, NJ: Prentice-Hall, 1993), pages 135-157.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/challenges-ee.pdf>>

"Challenges in Environmental Ethics," condensed version. In David E. Cooper and Joy A. Palmer, eds., The Environment in Question (London: Routledge, 1992), pages 135-146.

Rolston, Holmes, III, "Values Deep in the Woods: The Hard-to-Measure Benefits of Forest Preservation." Pages 315-319 in Economic and Social Development: A Role for Forests and Forestry Professionals--Proceedings of the Society of American Foresters, 1987 National Convention, Minneapolis. Bethesda, MD: Society of American Foresters, 1988. Also published in B. L. Driver, ed., Contributions of Social Sciences to Multiple-Use Management: An Update (Fort Collins, CO: Rocky Mountain Range and

Experiment Station, 1990), USDA Forest Service General Technical Report RM-196, October, pp. 6-19.

Rolston, Holmes, III, "The Human Standing in Nature: Fitness in the Moral Overseer," in Wayne Sumner, Donald Callen, and Thomas Attig, eds., Values and Moral Standing (Bowling Green, OH: Bowling Green State University Studies in Applied Philosophy, 1986), volume 8, pp. 90-101.

Rolston, Holmes, III, Review of H. Paul Santmire, The Travail of Nature: The Ambiguous Ecological Promise of Christian Theology. Fortress Press, Philadelphia, 1985, 1991. Interpretation: Journal of Bible and Theology 47:(July 1993):335-336.

Rolston, Holmes, III, "Earth Ethics: A Challenge to Liberal Education." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Rolston, Holmes, III, "Genes for Sale: Gargantuan Computer System Wanted," Conservation Biology 9 (1995):1659-60. Review of J. H. Vogel, Genes for Sale: Privatization as a Conservation Policy (New York: Oxford University Press, 1994).

Rolston, Holmes, III, Review of Les Brown, Conservation and Practical Morality. Ethics: International Journal of Social, Political and Legal Philosophy 100(1989):230-231.

Rolston, Holmes, III, "Duties to Ecosystems," in J. Baird Callicott, ed. Companion to a Sand County Almanac (Madison, WI: University of Wisconsin Press, 1987), pp. 246-274.

Rolston, Holmes, III, "Beauty and the Beast: Aesthetic Appreciation of Wildlife," in D. J. Decker and G. Goff, Valuing Wildlife Resources: Economic and Social Perspectives (Boulder, CO: Westview Press, 1987), pp. 187-207. Also published in The Trumpeter (Canada) 3, no. 3 (Summer 1986):29-34.

Download/print in PDF format:

<<http://lamar.colostate.edu/~rolston/beauty&beast.pdf>>

Rolston, Holmes, III, Conserving Natural Value. New York: Columbia University Press, 1994. 259 pages. Paper, \$ 19.50. Cloth \$ 49.50. Chapter titles and sections: Chapter 1. Natural and Cultural Values: Nature and Culture; Entwined Destinies, Nature Supporting Culture; Residence and Resource, Commodity and Community; Urban, Rural, and Wild; Environmental Values and Human Rights; Future Generations; Environmental Policy; Balancing Natural and Cultural Values. Chapter 2. Diversity and Complexity Values: Diversity; Complexity; The Evolution of Diversity and Complexity; Rarity; Biodiversity and the Commons; Richness; Balancing Biodiversity Values and Cultural Values. Chapter 3. Ecosystem Integrity and Health Values: Ecosystem Integrity and Health; Stability and Historical Change; Community; Sustainability; Restoration; Balancing Integrity and Health Values. Chapter 4. Wildlife Values: Lower and Higher Animals; Animal Rights?; Animal Welfare and Managed Wildlife; Feral and Exotic "Wildlife"; Aesthetic Appreciation of Wildlife; Using Wildlife: Animal Sports; Using Wildlife: Animal Commerce; Wildlife in Culture. Chapter 5. Anthropocentric Values: Human Values Carried by Nature; Winning or Losing in Environmental Ethics?; Rich and Poor, Population and Consumption; Human Rights to Development; Democracy, Economics, and Environment; Anthropocentric and Anthropogenic Values; Human Excellences and Natural Values; Chapter 6. Intrinsic Natural Values: Life as Conservation; Intrinsic, Instrumental, Systemic Values; Storied Achievement; Integrity of Place; Wilderness; Objective and Subjective Natural Value; The End of Nature? Chapter 7. The Home Planet: Land Ethics and Earth Ethics: National Resources and Common Natural Heritage; International Law and Environmental Ethics; Mother Earth?; Managing the Planet?; Balancing Global Natural and Human Cultural Values; Inheriting the Earth. The book is written for freshmen and sophomore level, for use in classes alike in biological and natural resource conservation and

in environmental philosophy, ethics, and policy. Rolston is professor of philosophy at Colorado State University.

Rolston, Holmes, III and James E. Coufal, "A Forest Ethic and Multivalue Forest Management," Journal of Forestry, April 1991. The Society of American Foresters currently has under active consideration adopting a professional statement including a land ethic, and the April issue of the Journal of Forestry addresses that issue. Rolston and Coufal call for a shift from a multiple use ethic to an ethic of multiple values, a shift to deepen a commodity orientation to a community orientation, and a joining of human and biotic values, recognizing that "the forest itself is value-laden." "A forest ethic will require an unprecedented use of science and conscience, applied science and applied ethics." "Deeper appreciation of forests could be forestry's greatest benefit to society." "The integrity of foresters and the integrity of forests are bound together." Rolston is professor of philosophy at Colorado State University. Coufal is professor of forestry, College of Environmental Science and Forestry, State University of New York, Syracuse. (v2,#1)

Rolston, Holmes III, "Down to Earth: Persons in Place in Natural History." Light is in philosophy and environmental studies, State University of New York, Binghamton. (v.11,#1)

Rolston, Holmes, III. "Valuing Wildlands." Environmental Ethics 7(1985):23-48. Valuing wildlands is complex. (1) In a philosophically oriented analysis, I distinguish seven meaning levels of value, individual preference, market price, individual good, social preference, social good, organismic, and ecosystemic, and itemize twelve types of value carried by wildlands, economic, life support, recreational, scientific, genetic diversity, aesthetic, cultural symbolization, historical, character building, therapeutic, religious, and intrinsic. (2) I criticize contingent valuation efforts to price these values. (3) I then propose an axiological model, which interrelates the multiple levels and types of value, and some principles for wildland management policy. Rolston is in the department of philosophy, Colorado State University, Fort Collins, CO. (EE) Also published in Philosophy Gone Wild.
Download/print in PDF format:
<<http://lamar.colostate.edu/~hrolston/valuing-wildlands.pdf>>

Rolston, Holmes, III, "Global Environmental Ethics: A Valuable Earth." Pages 349-366 in Richard L. Knight and Sarah F. Bates, eds., A New Century for Natural Resources Management (Washington: Island Press, 1995).

Rolston, Holmes, III, Conserving Natural Value. Reviewed by Bryan G. Norton. Environmental Ethics 18(1996): 209-214. (EE)

Rolston, Holmes, III, "Endangered Species and Biodiversity", Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 671-75. (v6,#2)

Rolston, Holmes, III, "Is There an Ecological Ethic?" Ethics: An International Journal of Social and Political Philosophy 85(1975):93-109.

Download/print in PDF format:

<<http://lamar.colostate.edu/~rolston/eco-ethic.pdf>>

Reprinted in Donald Scherer and Thomas W. Attig, eds., Ethics and the Environment (Englewood Cliffs, NJ: Prentice Hall, 1983).

Reprinted in Martin Wachs, ed., Ethics in Planning (New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1985).

Reprinted and translated into Chinese in Qiu Renzong, editor, Guowai Ziranhexue Zhaxuewenji 1990 (International Philosophical Problems in Natural Science 1990), Chinese Academy of Social Sciences, Institute of Philosophy. Beijing: Social Science Press, 1991. Translated by Ye Ping, Northeast Forestry University, Harbin.

Download/print online (in Chinese):

<<http://lamar.colostate.edu/~hrolston/Is-there-ee-Chinese.pdf>>

Reprinted and translated into Russian in L. I. Vasilenko and V. E. Ermolaeva (Institute of Philosophy, Russian Academy of Sciences) eds., Globalniye Problemy i Obshechelovecheskiye Tsennosti (Global Problems and Human Values) (Moscow: Progress Publishers, 1990), pp. 258-288.

Download/print in PDF format (in Russian):

<<http://lamar.colostate.edu/~hrolston/Is-there-ee-Russian.pdf>>

Reprinted and translated into Italian in Mariachiara Tallacchini, ed., Etiche della terra: Antologia di filosofia dell' ambiente (Milan: Vita e Pensiero, 1998), pages 151-171.

Download/print in PDF format (in Italian):

<<http://lamar.colostate.edu/~hrolston/ee-Italian.pdf>>

Rolston, Holmes, III, ed., Biology, Ethics, and the Origins of Life, Boston: Jones and Bartlett, 1995 (released October 1994). 248 pages. Paper. Eight papers. Of particular interest in environmental ethics are Niles Eldredge, "Mass Extinction and Human Responsibility," and Thomas R. Cech, "The Origin of Life and the Value of Life." Eldredge is curator of invertebrates at the American Museum of Natural History and a well-known paleontologist. Cech won the Nobel Prize for discovering that RNA can be both an informational molecule and a biocatalyst, thus self-organizing and self-replicating. Other contributors: Dorion Sagan and Lynn Margulis, Francisco Ayala, Michael Ruse, Elliott Sober, Langdon Gilkey, Charles Birch.

Rolston, Holmes, III, "Environmental Ethics: Values in and Duties to the Natural World." In F. Herbert Bormann, and Stephen R. Kellert, Ecology, Economics, Ethics: The Broken Circle (New Haven: Yale University Press, 1991), pp 73-96.

Download/print in PDF format, 1.1 mb.:

<<http://lamar.colostate.edu/~rolston/ee-values-duties.pdf>>

--Reprinted in Lori Gruen and Dale Jamieson, eds., Reflecting on Nature: Readings in Environmental Philosophy (New York: Oxford University Press, 1994) pp. 65--84.

--Reprinted in Earl R. Winkler and Jerrold R. Coombs, eds., Applied Ethics: A Reader (London: Blackwell, 1993), pp. 271-292.

--Reprinted in Donald VanDeVeer and Christian Pierce, eds., The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics (Belmont, CA: Wadsworth Publishing Co., 1994), pp. 88-93, 485-492.

--Reprinted in part as "Why Species Matter," in Donald VanDeVeer and Christine Pierce, eds., The Environmental Ethics and Policy Book, 2nd ed. (Belmont, CA: Wadsworth Publishing Co., 1998), pages 504-511

Rolston, Holmes, III, "Feeding People versus Saving Nature?" Pages 248-67 in William Aiken and Hugh LaFollette, World Hunger and Morality. 2nd ed. Upper Saddle River, NJ: Prentice-Hall, 1996. One ought to feed people rather than save nature? Hungry loggers eat spotted owls! But the seemingly simple question is configured in a complex gestalt. People widely value many worthwhile things over feeding the hungry; they post national boundaries across which the poor may not pass; there is unjust distribution of wealth; escalating birthrates offset any gains in alleviating poverty; there is low productivity on already domesticated lands; sacrificed wildlands are often low in productivity; and significant natural values may be at stake. In some circumstances, one ought to save nature rather than feed people. Rolston teaches philosophy at Colorado State University. (v6,#4)

Download/print in PDF format, 1.1 mb.:

<<http://lamar.colostate.edu/~rolston/feeding-people.pdf>>

Rolston Holmes, III, "Biology Without Conservation: An Environmental Misfit and Contradiction in Terms." In Conservation for the Twenty-first Century, eds. David Western and Mary C. Pearl (New York: Oxford University Press, 1989), pp. 232-240. Discussion of the scientific, cultural, and moral meanings

of conservation. "Conservation in physics pervades the universe as a natural law. Conservation in biology has to defend a local, earth-bound self-organization" (p. 234). The unique character of biological conservation leads to a moral role for humans as the conservors of natural history. (Katz, Bibl # 2)

Rolston, Holmes, III, "Can the East Help the West to Value Nature?" Philosophy East and West 37, no. 2 (April 1987):172-190). Surveys some mainstream Eastern religious ideas to see if they can help the West in a re-orientation of values regarding nature; his answer is that the East will not help in the specific area of concrete action.

Rolston, Holmes, III, "Beyond Recreational Value: The Greater Outdoors," in Laura B. Szwak, ed., Americans Outdoors: A Literature Review (Washington: Government Printing Office, 1987) Paper commissioned by President's Commission on Americans Outdoors.

Rolston, Holmes, III, "Environmental Protection and an Equitable International Order: Ethics after the Earth Summit," Business Ethics Quarterly 5(1995):735-752. The UNCED Summit established two new principles of international justice: an equitable international order and protection of the environment. Wealth is asymmetrically distributed; approximately one-fifth of the world produces and consumes approximately four-fifths of goods and services. This difference can be interpreted as both an earnings differential and as exploitation; responses may require justice or charity, producing and sharing.

Rolston, Holmes, III, "Saving Nature, Feeding People, and the Foundations of Ethics," Environmental Values 7(1998): 349-357. I reply to Robin Attfield's and Andrew Brennan's criticisms of my claim that, at difficult times, one ought to conserve nature preferentially to caring for persons who are poor. They argue that such tradeoffs are avoidable, also that I fail to lay blame and responsibility for such lamentable circumstances in the right places. I argue that tiger conservation in Royal Chitwan National Park, Nepal, does and ought to give tiger conservation priority over some of the desires for development of locally impoverished peoples. Ben Minter argues that nature conservation ought to be "culturally-occupied"; I argue respect for intrinsic value in nature. KEYWORDS: poverty, democracy, environmental justice, Royal Chitwan National Park, Nepal, tigers. Holmes Rolston, III is at Colorado State University. (EV) Download/print in PDF format, 500 kb.:
<<http://lamar.colostate.edu/~rolston/saving-foundations.pdf>>

Rolston, Holmes, III, Review of J. Baird Callicott, In Defense of the Land Ethic. Ethics: International Journal of Social, Political, and Legal Philosophy 100(1990):714-715.

Rolston, Holmes, III, Review of Don Mannison, Michael McRobbie, and Richard Routley, eds., Environmental Philosophy, in Environmental Ethics 4(1982):69-74.

Rolston, Holmes, III, "Lack of a Philosophical Touch," review of Daniel B. Botkin, Margriet F. Caswell, John E. Estes, and Angelo A. Orio, eds., Changing the Global Environment: Perspectives on Human Involvement (Boston: Academic Press, Harcourt, Brace, Jovanovich, 1989) in Forum for Applied Research and Public Policy (Energy, Environment, and Resources Center, University of Tennessee, Knoxville) 5 (no. 4, Winter, 1990):104.

Rolston, Holmes, III, "In Defense of Ecosystems," Garden 12, no. 4 (July/August 1988): 2-5, p. 32. Download/print in PDF files at:
<<http://lamar.colostate.edu/~hrolston/Defense-of-Ecosystems.pdf>>

Rolston, Holmes, III, "Rights and Responsibilities on the Home Planet," Yale Journal of International Law 18 (no. 1, 1993):251-279. From a Symposium on Human Rights and the Environment, Yale Law School and the American Association for the Advancement of Science, April 1992. Short version

reprinted in Zygon: Journal of Religion and Science 28(1993):425-439. Earth is the home planet, right for life. But rights, a notable political category, is, unfortunately, a biologically awkward word. Humans, nonetheless, have rights to a natural environment with integrity. Humans have responsibilities to respect values in fauna and flora. Appropriate survival units include species populations and ecosystems. Increasingly the ultimate survival unit is global; and humans have a responsibility to the planet Earth. Human political systems are not well suited to protect life at global ranges. National boundaries ignore important ecological processes; national policies do not favor an equitable distribution of sustainable resources. But there are signs of hope. Rolston is professor of philosophy at Colorado State University. (v4,#4)

Rolston, Holmes, III, "What Is our Duty to Nature?", one-page box essay, p. 681 in William K. Purves, David Sandava, Gordon H. Orians, and H. Craig Heller, Life: The Science of Biology, 7th ed. Sunderland MA: Sinauer Associates; W. A. Freeman, 2004.

Download/print inPDF format:

<<http://lamar.colostate.edu/~hrolston/Sinauer.pdf>>

Rolston, Holmes, III, "In Situ and Ex Situ Conservation: Philosophical and Ethical Concerns." Pages 21-39 in Guarrant, Jr., Edward O., Kayri Havens, and Mike Maunder, eds., Ex Situ Plant Conservation: Supporting Species Survival in the Wild. Washington, DC: Island Press, 2004. Understandings of "natural" and "artificial" lie in the background of discussions about in-situ and ex-situ conservation. Plants growing ex-situ in botanic gardens are hybrids of the natural and the artificial. There will be temptations to substitute ex-situ for in situ conservation, believing this to protect the desired resource base. More radical ethical issues arise regarding intrinsic values in plants. A plant is a living organism with a good of its own, autonomous intrinsic value. In their defense of their lives and species lines, plants are evaluative organisms independently of humans. The intrinsic values in plants are ecosystemically situated. In this sense intrinsic plant value is in-situ. Removed to an ex-situ location, a plant--especially a domesticated or captive plant--becomes something else, compromised in its integrity. Such compromise may be pragmatically and politically necessary, but it needs to be recognized philosophically and ethically as prejudicing the values carried by plants. Unless done with great care and clarity of purpose, ex-situ conservation will undercut in-situ conservation, with a resulting sacrifice of value. Originally a paper for the Chicago Botanic Garden. Rolston is in philosophy at Colorado State University.

Rolston, Holmes, III, "Die Umweltethik und der Mensch: Über intrinsische Werte in der Nature" (Environmental Ethics and Humans: On Intrinsic Value in Nature)," Scheidewege: Jahresschrift für skeptisches Denken 33, 2003/2004, pages 251-266.

Rolston, Holmes, III, "The Nonhuman Dimensions in Wildlife." Human Dimensions in Wildlife, 8, no. 2 (Spring 1989): 6-8.

Rolston, Holmes, III. Review of Apartheid's Environmental Toll. By Alan B. Durning. Environmental Ethics 14(1992):87-91.

Rolston, Holmes, III. Review of Rotating the Cube: Environmental Strategies for the 1990s, An Indicator South Africa Issue Focus. Edited by Rob Preston-Whyte and Graham House. Environmental Ethics 14(1992):87-91.

Rolston, Holmes, III, Review of Peter Wenz, Environmental Justice. Between the Species 5(1989):147-153, with reply by Wenz 5(1989):155-157.

Rolston, Holmes, III, Review of Leroy S. Rouner, ed., On Nature, in Canadian Philosophical Reviews 5(1985):388-390.

Rolston, Holmes, III, Review of Aurelio Peccei and Daisaku Ikeda, Before It Is Too Late, in Environmental Ethics 9(1987):269-271.

Rolston, Holmes, III, "Die Umweltethik und der Mensch: Über intrinsische Werte in der Nature" (Environmental Ethics and Humans: On Intrinsic Value in Nature)," Scheidewege: Jahresschrift für skeptisches Denken 33, 2003/2004, pages 251-266. ISSN 0048-9336. ISBN 3-925158-19-7. (v.14, #4)

Rolston, Holmes, III, "Engineers, Butterflies, Worldviews," The Environmental Professional 9(1987):295-301. Special issue: "Environmental Science and Values."

Rolston, Holmes, III, "Philosophical Aspects of the Environmental Crisis," in Phillip O. Foss, ed., Environment and Colorado: A Handbook, (Fort Collins Colorado: Environmental Resources Center, Colorado State University, 1973), pages 41-46. Also published in Philosophy Gone Wild.

Rolston, Holmes, III, "Ethical Responsibilities toward Wildlife," Journal of the American Veterinary Medical Association 200(1992):618-622.

Rolston, Holmes, III, "The Pasqueflower" Natural History (Magazine of the American Museum of Natural History), April 1979. Reprinted in Wilderness, vo. 29, no. 30, July 1990 (South Africa, Wilderness Leadership School), pp. 5-7. Also reprinted in Philosophy Gone Wild.

Download/print, PDF file, 392 kb.:

<<http://lamar.colostate.edu/~rolston/Pasquefl.pdf>>

Reprinted, translated into Chinese in:

-Chen, Tzu-Mei, ed., *Introduction to Environmental Ethics (Huan-Jing Luun-Li-Shei Ru-Men)* (Tapei: Taiwan Ecological Stewardship Association, 2007). pages 192-200.

ISBN 978-986-84047-0-0.

Rolston, Holmes, III, "Wildlife Conservation and Management" (Animal Welfare and Rights), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995),176-80. (v6,#2)

Rolston, Holmes, III, "The Bible and Ecology" Interpretation: A Journal of Bible and Theology 50 (no. 1, January 1996):16-26. The Bible is not a book of science, and therefore not of ecology. It does, however, sketch a vision of human ecology, and contemporary readers encounter claims about how to value nature. The Bible's vision is simultaneously biocentric, anthropocentric, and theocentric. The Hebrews discovered who they were as they discovered where they were, and their scriptures can be a catalyst in our ecological crisis.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/Bible-and-ecology.pdf>>

Rolston, Holmes, III, "Winning and Losing in Environmental Ethics," in Frederick Ferré and Peter G. Hartel, eds., Ethics and Environmental Policy: Theory Meets Practice (University of Georgia Press, 1994), pages 217-234. Short version in John Echeverria and Raymond Booth Eby, Let the People Judge: Wise Use and the Private Property Rights Movement (Washington: Island Press, 1995), pages 263-267.

Rolston, Holmes, III, "Technology versus Nature: What is Natural" in CPTS Ends and Means: Journal of the University of Aberdeen Centre for Philosophy, Technology & Society 2(no. 2, Spring 1998):3-14.

This journal was intended to be principally an electronic journal:

<<http://www.abdn.ac.uk/cpts/techno.htm>>

However, it was printed twice a year (University of Aberdeen, Old Brewery, Old Aberdeen, Scotland

AB24 3UB, UK.) Currently lapsed publication.

In some meanings "nature" includes everything and thus includes technology. In other meanings "nature" refers only to spontaneous or wild nature and excludes all artifacts of culture, including technology. Nature continues environing culture; culture is always construct out of, superposed on nature. Natural is often also a normative term, while artificial is pejorative. A prevailing philosophy is that humans should become the planetary managers. This has become increasingly possible with the transition from muscle and blood to engines and gears, from about 1850 onward, coupled with the information explosion more recently, which have brought an epochal change of state, and makes a postnatural world possible. To some extent this is inevitable, though not wholly desirable. Significant areas of the planet are still relatively natural, and these areas might become increasingly humanized. Both appropriate respect for nature and moral responsibility require significant conservation of nature. Technological humans are still in search of a sustainable relationship with nature. Finally, there is a sense in which once and future nature is never at an end, since, when humans vanish, nature returns. Rolston is in philosophy at Colorado State University. (v9,#1)

Rolston, Holmes, III, "Naturalizing and Systematizing Evil." Pages 67-86 in Willem B. Drees, ed., Is Nature Ever Evil?. London: Routledge/Taylor and Francis, 2003. Negative evils (disvalues, rather than moral evils) in natural systems, though real enough to fauna and flora adversely affected, must be fitted into an ecosystemic and evolutionary framework. Over the epochs of natural history, Earth has proved a positive value-generating and life-supporting system. A characteristic feature is both the conservation of life and the generating and testing of novel life forms. Life is perpetually renewed in the midst of its perpetual perishing, resulting in the remarkable biodiversity on a fertile Earth. Such genesis is always by conflict and resolution. More provocatively put: Earth is a land of promise, where there is cruciform creation. Rolston is in philosophy, Colorado State University.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/nature-evil.pdf>>

Rolston, Holmes, III, "Lake Solitude: The Individual in Wildness," Main Currents in Modern Thought 31(1975):121-126. Also published in Philosophy Gone Wild.

Download/print in PDF format, 524 kb.:

<<http://lamar.colostate.edu/~rolston/Solitude.pdf>>

Rolston, Holmes, III, "God and Endangered Species," in K. C. Kim and R. D. Weaver, eds., Biodiversity and Landscapes (New York: Cambridge University Press, 1994) Also in Lawrence S. Hamilton, ed., Ethics, Religion and Biodiversity (Cambridge, UK: White Horse Press, 1993), pp. 40-64. Endangered species have religious value for many Americans. Although religious value is not mentioned in the Endangered Species Act, it soon appears in the nickname for the "God Committee." Biologists and religious persons share a concern for conservation, respect for life passes over into reverence for life. Although Bible and theology are at times thought to be difficult to join, apart from the question of design (a somewhat archaic concept), creativity is evident in natural systems as Earth brings forth swarms of creatures. Biologists find struggle in nature, but such elements are fully recognized by Bible writers who lived closer to nature than often do we modern persons. The continual redemption of life over generations is a familiar theological idea. Biologists may not find a supernature, but they often find a nature that is superb, a nature that is the ground of our being. Life is a kind of gift; the plenitude of being in the myriads of species once so vast and now vanishing is of concern both to biologists and to religious persons. (v5,#2)

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/God-End-Species.pdf>>

Rolston, Holmes, III, Review of Keekok Lee, Social Philosophy and Ecological Scarcity (London and New York: Routledge, 1989) in Canadian Philosophical Reviews/Revue Canadienne de Comptes rendus

en Philosophie 11 (no. 3, June)(1991): 202-204.

Rolston, Holmes, III, Review of Rosemary Radford Reuther, Gaia and God: An Ecofeminist Theology of Earth Healing (San Francisco: Harper/Collins, 1992), Interpretation: Journal of Bible and Theology 48(1994):188-190.

Rolston, Holmes, III, "Our Duties to Endangered Species." Pages 30-31, box essay in Gary K. Meffe and C. Ronald Carroll, eds., Principles of Conservation Biology (Sunderland, MA: Sinauer and Associates, 1994).

Rolston, Holmes, III, "Enforcing Environmental Ethics: Civic Law and Natural Value." Pages 349-369 in James P. Sterba, ed., Social and Political Philosophy: Contemporary Perspectives (London: Routledge, 2001). How far ought environmental values be enforced by legislation? Although caring and virtue may be preferred over law-like ethics, enforcement is more widespread than often recognized, extending from Acts of Congress to lighting campfires. The environment is a commons and this necessitates our acting in concert, with enforcements ranging from incentives to penalties, prison, even death. Environmental ethics needs and stands in some tension with democracy. Legislation ought protect animals, species, and ecosystems. Ought it ever defend these against basic human interests? Can such legislated ethics function internationally, as with a universal human right to a quality environment? Rolston is in philosophy at Colorado State University. (v.12,#3)

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/enforce-ee.pdf>>

Rolston, Holmes, III, Review of K. S. Shrader-Frechette, Environmental Ethics, in Zygon: Journal of Religion and Science 17(1982):95-98.

Rolston, Holmes, III, "Nature, Culture, and Environmental Ethics / Narava, kultura in etika okolja." Pages 25-42 in Dusan Ogrin, ed., Varstvo narave zunaj zavarovanih obmocij / The Conservation of Nature Outside Protected Areas Ljubljana, Slovenia: Urad RS za prostorska planiranje, Ministrstvo za okolje in prostor / Office for Physical Planning, Ministry of Environment and Physical Planning, Republic of Slovenia, and Institut za krajinsko arhitekturo, Biotehniška fakulteta / Institute of Landscape Architecture, University of Ljubljana, 1996. In English and also translated into Slovenian. Conference proceedings from European Union, Conference on the Conservation of Nature Outside Protected Areas, Ljubljana, Slovenia, November 1995.

Rolston, Holmes, III, "Ecology," entry in Carl Mitcham, ed., Encyclopedia of Science, Technology, and Ethics (Farmington, MA: Macmillan Reference, USA, Thomson/Gale, 2005), vol. 2, pp. 580-583.

Rolston, Holmes III. "Environmental Virtue Ethics: Half the Truth but Dangerous as a Whole." Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Rolston, Holmes, III, *Intellectual Biography: Christopher J. Preston, Saving Creation: Nature and Faith in the Life of Holmes Rolston, III*. San Antonio, TX: Trinity University Press, 2009. Preston documents the evolution of Rolston's theology of nature and concern for saving creation from his childhood in the Shenandoah Valley of Virginia through his four decades at Colorado State University, where Rolston gained an international reputation as the "father of environmental ethics." The biography starts with Rolston's being dismissed as pastor of a Southwest Virginia church for being "too wild," and ends with Rolston's giving the Gifford Lectures at Edinburgh and receiving the Templeton Prize in Religion from Prince Philip in Buckingham Palace. Preston is in the Philosophy Department, University of Montana. More detail at:

<http://lamar.colostate.edu/~rolston/Preston.htm>

Rolston, Holmes, III. *Philosophy Gone Wild: Environmental Ethics*. Translators: Ye Ping and Liu Er. (Changchun: Jilin People's Press, 2000). (in Chinese)

Rolston, Holmes, III. Review of Ecology Redesigning Genes: Ethical and Sikh Perspective. By Surjeet Kaur Chahal. *Environmental Ethics* 30(2008):215-216. (EE)

Rolston, Holmes, III, "The Future of Environmental Ethics," *Teaching Ethics* (Society for Ethics Across the Curriculum):8(Fall 2007):1-27. Environmental ethics has a future as long as there are moral agents on Earth with values at stake in their environment. Somewhat ironically, just when humans, with their increasing industry and development, seemed further and further from nature, having more power to manage it, just when humans were more and more rebuilding their environments with their super technologies, the natural world emerged as a focus of ethical concern. The environment is on the world agenda, also on the ethical frontier, for the foreseeable future. (1) A Managed Earth and the End of Nature? (2) Global Warming: Too Hot to Handle? (3) Human Nature: Pleistocene Appetites? (4) Sustainable Development vs. Sustainable Biosphere. (5) Biodiversity: Good for us/Good in itself. (6) Earth Ethics. Download/Print in PDF format:

<http://lamar.colostate.edu/~hrolston/Future-EE.pdf>

Rolston, Holmes, III. "Mountain Majesties above Fruited Plains: Culture, Nature, and Rocky Mountain Aesthetics." *Environmental Ethics* 30(2008):3-20. Those residing in the Rocky Mountains enjoy both nature and culture in ways not characteristic of many inhabited landscapes. Landscapes elsewhere in the United States and in Europe involve a nature-culture synthesis. An original nature, once encountered by settlers, has been transformed by a dominating culture, and on the resulting landscape, there is little experience of primordial nature. On Rocky Mountain landscapes, the model is an ellipse with two foci. Much of the landscape is in synthesis, but there is much landscape where the principal determinant remains spontaneous nature, contrasted with the developed, rebuilt landscape in which the principal determinant is culture. Life in the Rockies permits both use and admiration of nature (fruited plains), with constant reminders (mountain majesties) that the human scale of values is rather tentatively localized in a more comprehensive environment. (EE) Download/Print in PDF format:

<http://lamar.colostate.edu/~hrolston/Mtn-Majesties.pdf>

Rolston, Holmes, III. *Environmental Ethics: Duties to and Values in The Natural World*. Translator: Yang Tongjin. (Beijing: Chinese Social Science Press, 2000). (in Chinese)

Rolston, Holmes, III. *Genes, Genesis and God: Values and Their Origins in Natural and Human History*. Translators: Fan Dainian and Chen Yanghui. (Changsha: Hunan Science and Technology Press, 2003). (in Chinese)

Rolston, III, Holmes, "F/Actual Knowing: Putting Facts and Values in Place," *Ethics and the Environment* 10(no. 2, 2005):137-174. Knowing needs to be actualized, an act of ours, yet also a discovery of what is actually, factually there. How do our facts depend on our acts? Do we humans always put in place, or sometimes find put, placed there before us, what we variously value on Earth? We are embodied, knowledgeable persons, subjects placed among objects. We need grounds (though not "foundations") for our beliefs. In place ourselves, we manage some awareness of other places. Agents in our knowing, we co-respond with Earth, and this emplaces us. But we humans have powers of dis-placement too, of taking up, whether empathetically or objectively, the situations of others, other humans, sometimes others than humans. Our human genius both requires and transcends location. Surrounding ourselves, we find values in fact and this generates ethics en-acted. Rolston is in philosophy, Colorado State University, Fort Collins. (Eth&Env).

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/F-actual-knowing.pdf>><

Rolston, III, Holmes, "Duties to Endangered Species." Bioscience Vol. 35, no. 11 (December 1985):718-726. An excellent paper by one of the leading theorists in environmental ethics. Rolston reviews the inadequacy of current ethical theories based on individual rights, sentience, or personhood, to insure species preservation. He then argues that species ought to be protected as "dynamic life forms preserved in historical lines" (p. 722). The species line is more important than individuals. (Katz, Bibl # 1)

Download/print at:

<http://lamar.colostate.edu/~hrolston/Duties_Endangered_Species.pdf> For printing.

<http://lamar.colostate.edu/~hrolston/Duties_Endangered_Species_Web.pdf> Read online.

Rolston, III, Holmes. Review of Environment and the Moral Life: Towards a New Paradigm. By Surjeet Kaur Chahal. Environmental Ethics 21(1999):441-443.

Rolston, III, Holmes, "Does Aesthetic Appreciation of Landscapes Need to be Science-Based?" British Journal of Aesthetics 35(1995):374-386.

Download/print in PDF format, 713 kb.:

<<http://lamar.colostate.edu/~rolston/aes-sci-based.pdf>>

Rolston III, Holmes, "Down to Earth: Persons in Place in Natural History," Philosophy and Geography 3 (1998): 285-296. Rolston is university distinguished professor of philosophy at Colorado State University. (P&G)

Rolston, III, Holmes. "Environmental Ethics in Antarctica. "The concerns of environmental ethics on other continents fail in Antarctica, which is without sustainable development, or ecosystems for a "land ethic," or even familiar terrestrial fauna and flora. An Antarctic regime, developing politically, has been developing an ethics, underrunning the politics, remarkably exemplified in the Madrid Protocol, protecting "the intrinsic value of Antarctica." Without inhabitants, claims of sovereignty are problematic. Antarctica is a continent for scientists and, more recently, tourists. Both focus on wild nature. Life is driven to extremes; these extremes can intensify an ethic. Antarctica as common heritage transforms into wilderness, sanctuary, wonderland. An appropriate ethics for the seventh continent differs radically from that for the other six. Environmental Ethics 24(2002):115-134. (EE)

Rolston, III, Holmes, "Das berücksichtigen, was Singer als belanglos ansieht." In German. Natur und Kultur: Transdisziplinäre Zeitschrift fuer oekologische Nachhaltigkeit. 2(no. 1, 2001):97-116. A translation of "Respect for Life: Counting what Singer Finds of no Account, in Jamieson, Dale, ed., Singer and His Critics (Oxford: Blackwell, 1999), pp. 247-268. Abstract: Singer's ethics is inadequate as an environmental ethic. Beyond the higher animals Singer insists that 'there is nothing to be taken into account'. But most of the biological world has yet to be taken into account: myriad other animals, plants, species, ecosystems, and the global biosphere. Singer can count everything else only instrumentally with reference to higher animals. From a biological point of view, this is little better than humans valuing everything else, higher animals included, as their own resources. A deeper respect for life must value life more directly. (v.12,#2)

Rolston, III, Holmes, "Caring for Nature: What Science and Economics Can't Teach Us but Religion Can," Environmental Values 15(2006): 307-313. Neither ecologists nor economists can teach us what we most need to know about nature: how to value it. The Hebrew prophets claimed that there can be no intelligent human ecology except as people learn to use land justly and charitably. Lands do not flow with milk and honey for all unless and until justice rolls down like waters. What kind of planet ought we humans wish to have? One we resourcefully manage for our benefits? Or one we hold in loving care? Science and economics can't teach us that; perhaps religion and ethics can. (EV)

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/sci-eco-cant.pdf>>

Rolston, III, Holmes, "Values Gone Wild." Inquiry 26 (1983): 181-207. Humans should not view wilderness as a resource for the production of human satisfaction. Rather, wild nature is a source of human value, as well as the place where we encounter similar beings ("neighbors") and different beings ("aliens") whom we recognize as the possessors of intrinsic value. Wilderness is valuable because it is a "storied achievement" important to human life and culture. (Katz, Bibl # 1) Also in Susan Armstrong and Richard Botzler, eds., Environmental Ethics: Convergence and Divergence (New York: McGraw-Hill, 1993), pages 56-65. Also in Rolston, Philosophy Gone Wild.

Download/print in PDF format:

<<http://lamar.colostate.edu/~hrolston/values-gone-wild.pdf>>

Rolston III, Holmes. "Perpetual Perishing, Perpetual Renewal." *The Northern Review* Number 28 (Winter 2008): 111-23. *The Northern Review* is published at Yukon College (Canada). Darwinian nature is in dialectic: conflict and resolution. Human life evolved out of such dialectical nature. If that began in Africa, it continues when humans migrate far North. Religious encounters with such nature, whatever their differences with Darwinism, also find that life is perpetually renewed in the midst of its perpetual perishing. Life is ever "conserved," as biologists might say; life is ever "redeemed," as theologians might say. In this generating of new life, nature is cruciform, beyond the dialectical. Such processes, set in their ecological settings, perennially transform disvalues in nature into prolific values, generating the global richness of evolutionary natural history and its exuberance of life. Such somber beauty in life is nowhere better exemplified than in boreal and Arctic nature. Online at: <http://lamar.colostate.edu/~hrolston/Perpetual-perishing.pdf>

Rolston is in the Department of Philosophy at Colorado State University.

Rolston-Rollin Debate. 50 minutes. A debate before a Colorado State University introductory philosophy class, November 1989. Bernard Rollin defends duties directly to sentient animals only, with other components of the environment having only instrumental value. Holmes Rolston defends an ethic of respect for all forms of life, flora as well as fauna, including ethical concern at the level of species and ecosystems. Includes questions from class members. For a DVD copy for \$ 10, contact Holmes Rolston, Department of Philosophy, Colorado State University, Fort Collins, CO 80523. Phone 303/491-6315. (v1,#1)

Streaming media at:

<http://cope.colostate.edu/lois/cla/rollin_rolston.wmv>

<http://ethics.sandiego.edu/video/Catalogue/detail.asp?ID_Video=339>

Rome, A, "What Really Matters in History? Environmental Perspectives on Modern America," Environmental History 7(no.2, 2002):303-318. (v.13, #3)

Romero, C; Andrade, G, "International Conservation Organizations and the Fate of Local Tropical Forest Conservation Initiatives", Conservation Biology 18 (no.2, 2004): 578-580.

Romme, William H. and Don G. Despain, "The Yellowstone Fires," Scientific American, November 1989, vol. 261, no. 5. (v1,#2)

Ronald Sandler, "An Aretaic Objection to Agricultural Biotechnology," Journal of Agricultural and Environmental Ethics 17(2004):301-317. Considerations of virtue and character appear from time to time in the agricultural biotechnology literature. Critics of the technologies often suggest that they are contrary to some virtue (usually humility) or do not fit with the image of ourselves and the human place in the world that we ought to embrace. In this article, I consider the aretaic or virtue-based objection that to engage in agricultural biotechnology is to exhibit arrogance, hubris, and disaffection. In section one, I discuss Gary Comstock's treatment of this objection. In section two, I provide an alternative

interpretation of the objection that more accurately reflects the concerns of those who offer the criticism than does Comstock's standard interpretation. In sections three and four, I assess the objection. I argue that despite its merits, the objection does not justify global opposition to agricultural biotechnology. Instead, it favors a limited endorsement position not unlike the one defended by Comstock. Keywords: agricultural biotechnology, aretaic objection, Gary Comstock, humility, limited endorsement, virtue ethics,

Sandler is in philosophy and religion, Northeastern University, Boston. (JAEE)

Roome, Nigel J., ed. Sustainability Strategies for Industry: The Future of Corporate Practice. Washington, D.C.: Island Press, 1998. \$60 cloth, \$30 paper. 208 pp. (v9,#2)

Rooney, Thomas P. "Wildlands Recovery in Pennsylvania", Wild Earth 6(no.3, 1996):89. (v7,#4)

Roose, R, "Review of: The Greening of Conservative America by John R.E. Bliese," Natural Resources Journal 42(no.3, 2002): 692-696.

Roosevelt IV, Theodore, "The Froth and the Fury," Yellowstone Science, vol. 11, no. 4, Autumn 2003. Theodore Roosevelt IV speaking at the Yellowstone National Park arch, one hundred years after his great-grandfather, Theodore Roosevelt, dedicated the arch, April 25, 2003. Roosevelt advocates Leopold's land ethic. "In terms of our use of the natural world. I believe that we enter into a covenant not only with God, our nation, and our neighbors, but with future generations. ... The question the radical center poses for the rest of us is: 'How can we develop a land ethic if our people are lost from the land?'"

Root, KV; Akcakaya, HR; Ginzburg, L, "A Multispecies Approach to Ecological Valuation and Conservation", Conservation Biology 17(no.1, 2003):196-206.

Root, Terry L. and Stephen H. Schneider. "Ecology and Climate: Research Strategies and Implications." Science 269(1995):334-341. Estimates of models that may help us understand the behavior of complex environmental systems and allow more reliable forecasts of the ecological consequences of global changes. (v6,#3)

Rootes, C., "Greens and the Environment in the Australian Election of November 2001," Environmental Politics 11(no.2, 2002): 145-53. (v.13,#4)

Rootes, C., "Review of: Andrew Jamison, The Making of Green Knowledge: Environmental Politics and Cultural Transformation," Environmental Politics 12(no. 2, 2003): 160.

Rootes, CA, "Environmentalism in Australia," Environmental Politics 10(no. 2, 2001):134-139. (v.13,#1)

Rootes, Christopher, ed., Environmental Protest in Europe. Oxford: Oxford University Press, 2003. Reviewed by Ingolfur Blühdorn, Environmental Values 13(2004):550-552.

Rootes, Christopher. Review of Bjorn Lomborg, "The Skeptical Environmentalist: Measuring the Real State of the World", Organization and Environment, 15, (No. 3, 2002): 340-42. Rootes is a reader in political sociology and environmental politics at the University of Kent at Canterbury, England.

Roozen, Tyler, "A Case of Need: The Struggle to Protect Bigleaf Mahogany." Natural Resources Journal 38(No. 4, Fall 1998):603- . (v10,#4)

Ropke, Inge. Review of Michael Redclift, ed., Sustainability: Life Chances and Livelihoods, London:

Routledge, 1999, Environmental Values 10(2001):422. (EV)

Rosa, Eugene A., "The Quest to Understand Society and Nature: Looking Back, but Mostly Forward," Society & Natural Resources 12(no.4, 1999):371- . (v10,#4)

Rosa, Humberto D., and Jorge Marques Da Silva, "From Environmental Ethics to Nature Conservation Policy: Natura 2000 and the Burden of Proof," Journal of Agricultural and Environmental Ethics 18(2005):107-130. Natura 2000 is a network of natural sites whose aim is to preserve species of interest to the European Union. The underlying policy has received widespread opposition from land users and received extensive support from environmentalists. This paper addresses the ethical framework for Natura 2000. Arguments for and against were classified according to "strong" or "weak" versions of the three main theories of environmental ethics--anthropocentrism, biocentrism, and ecocentrism. Land users seemed to fall between weak and strong anthropocentrism. Natura 2000 achieves a strong reversal of the burden of proof from conservation to economic development and land use change under anthropocentrism. The alleged theoretical divide between anthropocentrism and non-anthropocentrism in relation to the burden of proof does not seem to hold in practice. Weak versions of anthropocentrism, biocentrism, and ecocentrism are likely to converge extensively in respect to nature conservation measures. The authors are in biology, Universidade de Lisboa, Lisboa, Portugal. (JAEE)

Rosa, Luiz Pinguelli; Schaeffer, Roberto; and dos Santos, Marco Aurelio. "Are Hydroelectric Dams in the Brazilian Amazon Significant Sources of 'Greenhouse' Gases?" Environmental Conservation 23, no.1 (1996): 2. (v7, #3)

Rosak, T., The Voice of the Earth: An Exploration of Ecopsychology. New York: Touchstone, 1993.

Rosak, T., Gomes, M., and Kanner, A. Ecopsychology and the Deconstruction of Whiteness. San Francisco: Sierra Club Books, 1995.

Roschke, S. H., "Review of: Colfer, Carol J. Pierce, and Yvonne Byron, eds. People Managing Forests: The Links between Human Well-Being and Sustainability," Society and Natural Resources 15(no.3, 2002): 287-89. (v.13,#2)

Rose, Aubrey, ed., Judaism and Ecology, 142 pages. In a series; the others are: Batchelor, Martine, and Kerry Brown, ed., Buddhism and Ecology, 114 pages. Breuilly, Elizabeth and Martin Palmer, ed., Christianity and Ecology, 118 pages. Ranchor Prime, Hinduism and Ecology, 118 pages. Khalid, Fazlun with Joanne O'Brien, ed., 111 pages. The editors in each case include a variety of perspectives from that tradition (Prime is a single author, but interviews various persons). All in paper. London: Cassell Publishers Limited, for the World Wide Fund for Nature, 1992. \$ 5.99 each. A review of the series is in CTNS (Center for Theology and Natural Sciences) Bulletin 16 (no. 3, Summer, 1996):18-19.

Rose, Carol M., "Given-ness and Gift: Property and the Quest for Environmental Ethics," Environmental Law 24(1994):1 - .

Rose, Chris, "Beyond The Struggle For Proof: Factors Changing The Environmental Movement." Environmental Values Vol.2 No.4(1993):285-298. EDITORS' NOTE: This article is a new and politically significant statement by a key figure in one of Britain's best-known environmental organization, Greenpeace UK. Chris Rose is a leading environmental campaigner, who has recently piloted landmark changes in Greenpeace's approach to environmental campaigning, for the 1990s and beyond. His account of these changes appears here in print for the first time. ABSTRACT: Until the 1990s environmental non-governmental organizations focused on 'issues' to raise public awareness. Recently it appears that though awareness of environmental problems has increased, the high media profile and superficial

'greening' of politics and business have actually exacerbated people's feelings of helplessness and detachment. Greenpeace UK is currently addressing its strategies to counter this change. KEYWORDS: Environmentalism, Greenpeace, media, non-governmental organizations, risk. Programme Director, Greenpeace UK, Canonbury Villas, London, N1 2PN, UK.

Rose, Deborah Bird, Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness. Canberra: Australian Heritage Commission, 1996. 95 pages. ISBN 0 642 23561 9. "There is no such thing as a 'natural' landscape." There is no wilderness. There is no place in Australia "where the country was not once fashioned and kept productive by Aboriginal people's land management practices" (p. 19). Rose, an anthropologist, is with the North Australia Research Unit of the Australian National University, Canberra. (v7,#4)

Rose, Deborah Bird, Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness. Canberra, ACT: Australian Heritage Commission, 1996. 95 pages. ISBN 0 642 23561 9. Features Aboriginal peoples explanations, stories, poetry, songs, song-poems, reflecting Aboriginal identity and history on the Australian landscape. Were Aboriginals conservationists? Some say no, for there were wasteful practices and extinctions by the Aboriginals. Some say yes, since they had little destructive impact on the land, compared to the Europeans. There is much to learn from Aboriginal people about land management with fire, about the species of the continent, about their interrelationships, about seasonal forces, about how to understand human society as part of living systems, taking humanity seriously without making it the center of creation. Australians are perhaps the most ecologically conscious people in the world, and nowhere else in the world are there greater possibilities for the regeneration of ecosystems, and for the development of a truly coherent relationship between human and ecological rights. Aboriginals and Europeans need to develop a sustainable relation to the land together (pp. 1-5, pp. 83-84). Rose is at the North Australia Research Unit, Australian National University, Canberra. (v.9,#3)

Rose, Naomi A., "Risky Business," The Animals' Agenda 19(no. 6, Nov 01 1999):30- . Why swimming with dolphins isn't harmless fun and games. (v.11,#1)

Rose, Naomi. "Marine Mammals in Captivity." The Animals' Agenda 16(Jul. 1996):31. (v7,#2)

Rose, Robin and Coate, Jeremy, "Reforestation Rules in Oregon: Lessons Learned from Strict Enforcement," Journal of Forestry 98 (No. 5, 2000 May 01): 24- . Oregon's Forest Practices Act, enacted in 1971 and revised several times since, is one of a number of comprehensive state regulatory programs that mandate desired outcomes for the practice of forestry on private land. What happens when a landowner doesn't comply with, for example, its requirements for reforestation? (v.11,#4)

Rose, Roger, Bellamy, Margot, and Tanner, Carolyn, eds. Issues in Agricultural Competitiveness: Markets and Policies. Brookfield, VT: Ashgate, 1997. 512 pp. \$29.95. The 44 papers contributed to the twenty-second conference of the International Association of Agricultural Economists in Zimbabwe, August 1994 with abstracts of poster papers. (v9,#2)

Rose, Roger, Bellamy, Margot, Tanner, Carolyn, eds. Issues in Agricultural Competitiveness: Markets and Policies. Brookfield, VT: Ashgate, 1997. 200pp. \$38.95 paper. The 44 contributed papers to the 22nd conference of the International Association of Agricultural Economists meeting in Harare, Zimbabwe, August 1994.

Rosegrant, Mark W., and Cline, Sarah H., "Global Food Security: Challenges and Policies," Science 302(12 December 2003):1917-1919. "Global food security will remain a worldwide concern for the next 50 years and beyond. Recently, crop yield has fallen in many areas because of declining investments in

research and infrastructure, as well as increasing water scarcity. Climate change and HIV/AIDS are also crucial factors affecting food security in many regions. Although agroecological approaches offer some promise for improving yields, food security in developing countries could be substantially improved by increased investment and policy reforms." The authors are with International Food Policy Research Institute, Washington.

Rosegrant, Mark W., and Livernash, Robert. "Growing More Food, Doing Less Damage." Environment 38, no.7 (1996): 6. Increasing agricultural output without inflicting further damage on the environment will require major changes in policy. (v7, #3)

Rosegrant, MW; Cai, X; Cline, SA, "Will the World Run Dry? Global Water and Food Security," Environment 45(no.7, 2003):24-36. (v.14, #4)

Rosen, CM, "Review of: Gerald Markowitz and David Rosner. Deceit and Denial: The Deadly Politics of Industrial Pollution", Environmental History 9 (no.1, 2004): 147.

Rosen, Robert, Life Itself: A Comprehensive Inquiry into the Nature, Origin, and Fabrication of Life. New York: Columbia University Press, 1991. 285 pages. Rosen argues that life modeled as mechanism is neither necessary nor sufficient for understanding what life is, despite three centuries of such presumption in science. What is life? "The initial presupposition that we are dealing with mechanism already excludes most of what we need to arrive at an answer." Drawing from biology, physics, and mathematics, he proposes an alternative radically different from mechanism. With lots of mathematics. Rosen is professor of physiology and biophysics, Faculty of Medicine, Dalhousie University. (v4,#2)

Rosen, Yereth, "Exxon Will Appeal \$5 Billion Penalty for 1989 Oil Spill," The Christian Science Monitor 86 (20 September 1994): 9. (v5,#3)

Rosen, Yereth. "No Roads Lead to Alaskan Town Living Under One Roof--Yet." Christian Science Monitor 89 (21 July 1997): 5. Two of every three residents in Whittier, Alaska, live in one 14-story tower. (v8,#3)

Rosen, Yereth. "Pushing Frontiers of Oil Exploration: Old Alaska Fields Stir New Interest." The Christian Science Monitor, July 6, 1995, pp. 1, 18. (v6,#2)

Rosen, Yereth. "Quest to Wring More Oil From Alaska North Lopec." The Christian Science Monitor, vol. 88, 8 Oct. 1996, pp. 1, 14.

Rosen, Yereth. "Oil Debate in Alaska Is All in a Name." The Christian Science Monitor, June 29, 1995, p. 4. (v6,#2)

Rosenbaum, David, "Senate Deletes Higher Mileage Standard in Energy Bill," New York Times (3/14/02): A26; Rosenbaum, David, "Two Sides Push on Arctic Oil, but Proposal Lacks Votes," New York Times (4/18/02), and Rosenbaum, David, "Senate Passes an Energy Bill Called Flawed by Both Sides," New York Times (4/26/02): A16. The issue of drilling for oil in the Arctic National Wildlife Refuge involved intense lobbying in the Senate. Since the House had approved the drilling and President Bush supports it, the Senate vote would decide the issue. Arctic Power, a multimillion dollar lobbying group funded mainly by the state of Alaska, sent Inupiat Eskimos to Washington to lobby the Senators in favor of drilling (and the economic development it would involve for some Native Alaskans).

Stephen Moore, president of The Club for Growth, a fund-raising group for conservative political candidates, explained why conservatives see arctic drilling as a matter of principle: "There is a belief on the environmentalist side that we're running out of oil, that we have to conserve energy. I'm adamantly

opposed to energy conservation. We're not running out. All we have to do is go out and find it and produce it." The League of Conservation voters, which publishes an annual scorecard of environmental votes, announced that the vote on drilling would count double, calling it a "litmus test on who favors a flawed energy policy that relies on fossil fuels." One Senator who was trying to promote a compromise of limited drilling in the Arctic for tougher fuel efficiency standards gave up when he realized environmental organizations would not budge in their opposition to drilling: "If you told the environmentalist we would end global warming once and for all in return for ANWR, they'd still say no." (v.13,#2)

Rosenbaum, Stuart and Robert Baird, eds., Animal Experimentation: The Moral Issues. Buffalo, N. Y. Prometheus Books, forthcoming March 1991. (v1,#4)

Rosenberg, John S., "Of Ants and Earth: E. O. Wilson's View of Life," Harvard Magazine 105(no. 4, March/April 2003):37-41. Profile of E. O. Wilson and his celebration of life, from ants to the planetary Earth.

Rosenthal, Ann T., "Teaching systems thinking and practice through environmental art," Ethics and the Environment 8(no. 1, 2003):153-168. Teaching environmental art provides a venue for integrating the disciplines and promoting systems thinking. It can translate insights from the humanities and the sciences into functional and elegant responses to our environment. This paper discusses my pedagogical approach to teaching environmental art at the college level and its potential for fostering systems thinking and practice. Rosenthal teaches eco-art, design, and digital media, currently at the University of Maryland Baltimore County. (E&E)

Rosenthal, Elizabeth J. *Birdwatcher: The Life of Roger Tory Peterson*. Guilford, CT: The Lyons Press, 2008. Rosenthal provides an illustrated history of the birding and natural history guru Roger Tory Peterson who invented the modern field guide with his 1934 landmark *Field Guide to the Birds*.

Rosenthal, Joel H., ed., Ethics and International Affairs: A Reader. Washington, DC: Georgetown University Press, 1995. 314 pages. Paper, \$ 18.95.

Rosenthal, Sandra and Buchholz, Rogene A. "Bridging Environmental and Business Ethics: A Pragmatic Framework." Environmental Ethics 20(1998):393-408. In the last few years, some attempts have been made to overcome the disparity between environmental ethics and business ethics. However, as the situation now stands the various positions in business ethics have not incorporated any well-developed theoretical foundation for environmental issues, and conversely, environmental ethics is failing to capture an audience that could profit greatly from utilizing its theoretical insights and research. In this paper, we attempt to provide a unified conceptual framework for business ethics and environmental ethics that can further the dialogue that has recently begun, perhaps bringing it to a deeper theoretical level. The authors are in philosophy and business administration, Loyola University, New Orleans. (EE)

Rosenwasser, Penny. Visionary Voices: Women on Power. San Francisco: Aunt Lute, 1992. (v7, #3)

Rosenzweig, Cynthia, Hillel, Daniel. Climate Change and the Global Harvest: Potential Impacts of a Greenhouse Effect on Agriculture. New York: Oxford University Press, 1997. The nature of predictable changes on the world's agricultural system caused by the so-called greenhouse effect. The aim is to educate students at the undergraduate level about how the climatic factors affecting agriculture may be modified in the future and what practical adaptations might be undertaken to prevent or overcome any possible adverse impacts on our ability to feed the world's population. (v8,#1)

Rosenzweig, Cynthia and Daniel Hillel. Climate Change and the Global Harvest: Potential Impacts of the Greenhouse Effect on Agriculture. Review by Hugh Lehman, Journal of Agricultural and Environmental

Ethics 11(1999):71-74. (JAEE)

Rosenzweig, Cynthia, Hillel, Daniel. Climate Change and the Global Harvest: Potential Impacts of the Greenhouse Effect on Agriculture. Oxford: Oxford University Press, 1998. 324 pp., Index. Reviewed by Hugh Lehman, Journal of Agricultural and Environmental Ethics 11(1998):71-74.

Rosenzweig, Cynthia, and William D. Solecki, "Climate Change and a Global City: Learning from New York," Environment 43(no.3, Apr. 2001): 8-. This case study of metropolitan New York--supported by data from the Metropolitan East Coast Regional Assessment--analyzes the multidimensional and interactive effects of climate change on megacities. The complex nature of these impacts promises to challenge urban environmental managers worldwide. (v.12,#3)

Rosenzweig, Michael L., "Heeding the Warning in Biodiversity's Basic Law," Science 284(9 April 1999):276-277. Ecology's oldest law is that large areas harbor more species than smaller ones. Recent efforts to mathematize this law. Species-area relationships suggest that because humans have wrested away some 95% of Earth's surface from the world of nature, life faces a mass extinction in three phases. (1) Endemic species. (2) Sink species (those that cannot reproduce fast enough to replace themselves). (3) Rare accidents, such as the introduction of new diseases. "The problem suggests its own solution. The land remains. Share it more generously with other species. Do the research to discover gentler ways to occupy the land, ways to reconcile our uses with those of the many species that also need it to sustain life." Rosenzweig is in evolutionary biology at the University of Arizona, Tucson, also editor of Evolutionary Biology Research. (v.10,#1)

Rosenzweig, Michael L., Species Diversity in Space and Time. Cambridge: Cambridge University Press, 1995. (v7,#2)

Rosenzweig, Michael L., Species Diversity in Space and Time. Cambridge: Cambridge University Press, 1995. 458 pages. Evolutionary speciation in space and time, with a view to setting an agenda for diversity research in conservation. (v8,#2)

Rosenzweig, Michael, Win-Win Ecology: How Earth's Species Can Survive in the Midst of Human Enterprise. New York: Oxford University Press, 2003. Conservation must discover how we can blend a rich natural world into the world of economic activity. Rosenzweig is at the University of Arizona.

Rosenzweig, Michael L., Win-Win Ecology: How the Earth's Species can Survive in the Midst of Human Enterprise. New York: Oxford University Press, 2003. Reviewed by Alessandro Gimona in Environmental Values 14(2005):278-281.

Roshchin, Mikhail, "Eco-News: March for Peace," Ecotheology No 1 (July 1996):99-102.

Rosin, Jeffrey M. New Chapter 9: "An Analysis of the Proposed Sentencing Guidelines for Organizational Environmental Offenders and the Historic Evolution of a Compliance Nightmare," New York University Environmental Law Journal 3(no.2, 1995):559- . (v6,#4)

Rosner, Hilary, "Turning Genetically Engineered Trees into Toxic Avengers," New York Times, August 5, 2004, p. D2. Trees, especially cottonwood trees, have been genetically engineered to take up chemicals, especially mercury, from contaminated soils. Other such GM trees may follow. But environmentalists worry that tree pollen carries great distances in the wind or by insects and that the genes will soon be in natural trees on forested lands, with unknown results. Some claim the trees can be genetically modified to be sterile also. (v. 15, # 3)

Ross, A; Pickering, K, "The Politics of Reintegrating Australian Aboriginal and American Indian Indigenous Knowledge into Resource Management The Dynamics of Resource Appropriation and Cultural Revival," Human Ecology 30(no.2, 2002):187-214. (v.13, #3)

Ross, Elizabeth, "Cape Cod Resists Next Wave: Superstores," The Christian Science Monitor 86 (1 August 1994): 8. (v5,#3)

Ross, Heather L., "Producing Oil or Reducing Oil: Which is Better for U.S. Energy Security," Resources (Resources for the Future), Issue 148, Summer 2002, pp. 18-21. When it comes to lowering the risk of an energy shock to our economy, measures to reduce domestic oil demand outperform measures to increase domestic oil supply. U.S. total oil consumption returned in 2000 to the highs of the late 1970's, but what more relevant is that U.S. oil consumption to produce \$ 1,000 of Gross Domestic Product has steadily declined from 1.5 barrels to almost half that, 0.8 barrels. Ross is a visiting scholar at Resources for the Future. (v.13,#4)

Ross, John, and Ross, Beth. Prairie Time: The Leopold Reserve Revisited. Madison: The University of Wisconsin Press, 1998iss. (v10,#4)

Ross, L. M., "The Chicago Wilderness and its Critics: I. The Chicago Wilderness: A Coalition for Urban Conservation," Restoration and Management Notes 15(1997):17-24.

Ross, Lester, Environmental Policy in China. Bloomington, ID: Indiana University Press, 1988. 240 pages. Ross maintains that "exhortation and environmental ethics" (p. 60) have been massively tried in China and massively failed. By this he means that earlier Marxist environmental campaigns, such as those for reforestation, exhorted the Chinese to good environmental citizenship, to do what was in the larger public interest, such as plant trees for future generations, and that, although this resulted in the largest tree planting program in human history during waves of enthusiasm, the tree programs failed because there was no sustained monitoring and interest waned as soon as the enthusiasm passed. The trees died for lack of care. No one owned them; everybody owned them. In contrast, all that will work is programs that appeal to the self-advantage of the person over a foreseeable future, such as woodlot planting for fuel. Somebody owns the trees. Or at least is entitled to the wood and responsible for their care. Incentive changes behavior, not moral exhortation. S. D. Richardson, Forests and Forestry in China, q.v., is not so sure. (China)

Ross, Stephanie, What Gardens Mean. Chicago: University of Chicago Press, 1998. 272 pages. \$ 40.00. Ross ponders our capacity to relate to the natural world through the gardens we create. Garden and art history, philosophy, psychology, and literature, with particular attention to English gardens. "I propose to use this episode [the English garden] in the history of taste as a springboard for investigating important and enduring philosophical issues. ... What sorts of meanings can gardens possess? ... What philosophical and aesthetic theories supported eighteenth-century gardening practice? ... Why isn't gardening considered a full-fledged art today?" Among her other claims, "certain contemporary works of art--earthworks and environmental art--should be viewed as the descendants of the eighteenth-century landscape garden" (Preface). Ross is in philosophy at the University of Missouri, St. Louis. (v.9,#4)

Ross, Stephanie. "Landscape Perception: Theory-Laden, Emotionally Resonant, Politically Correct." Environmental Ethics 27 (2005):245-263. Our primal ability to see one thing in terms of another shapes our landscape perception. Although modes of appreciation are tied to personal interests and situations, there are many lines of conflict and incompatibility between these modes. A religious point of view is unacceptable to those without religious beliefs. Background knowledge is similarly required for taking an arts or science-based view of landscape, although this knowledge can be acquired. How to cultivate responses grounded in imagination, emotion, and instinct is less clear, but advocates are eager to spell out

notions of virtuous exercise and effective schooling. Carlson's science-based theory often gets the most attention because he has refined and defended it over many years, but there is a place in aesthetic nature appreciation for the formal or design elements he dismisses as well as for religious, imaginative, emotional, and ambient responses. To date, the normative aspects of these theories have been presented sketchily at best. Working out these details will chart a way for landscape appreciation to become politically correct. (EE)

Ross, Stephen David, The Gift of Kinds: The Good in Abundance! An Ethic of the Earth. Albany, NY: State University of New York Press, 1999. Kinds in the natural world and their contribution to human life, also with its diversity in gender, race, class, and nationality. Natural and human kinds as requisite to any thought of heterogeneity and any resistance to neutrality, developed in relation to ecological and environmental issues. Kinds are interpreted as intermediary figures between histories of domination and celebrations of responsibility, between essentialism and identity politics. Ross is in philosophy and comparative literature, State University of New York, Binghamton. (v.10,#3)

Ross, Stephen David, The Gift of Property: Betraying Genitivity, Economy, and Ecology. An Ethic of the Earth. Albany, State University of New York Press, 2001. (v.12,#3)

Ross, Stephen David, ed. Plenishment in the Earth: An Ethic of Inclusion. Albany: SUNY Press, 1995. 440 pp. \$74.50 hardcover; \$24.95 pb.

Ross-Bryant, Lynn, "The Land in American Religious Experience," Journal of the American Academy of Religion 58(1990):333-355. The images Americans have used for the land as they have attempted to define themselves have shaped their conceptions and experience of the land. Conversely, the land has shaped the American imagination. Concentrates on literary naturalists, with particular focus on Gretel Ehrlich, with attention to Annie Dillard and Barry Lopez, all related to historical background. Ross-Bryant is in the Department of Religious Studies, University of Colorado, Boulder. (v2,#1)

Rosser, AM; Mainka, SA, "Overexploitation and Species Extinctions," Conservation Biology 16(no.3, 2002):584-586. (v.13, #3)

Rosser, Tim. Review of: Daily, Gretchen C., and Katherine Ellison, The New Economy of Nature: The Quest to Make Conservation Profitable. Environmental Values 13(2004):139-140. (EV)

Rossi, Vincent, "Sacred Cosmology in the Christian Tradition," The Ecologist 30 (No. 1, Jan 01 2000): 35- . Vincent Rossi shows how the fathers of the Christian Church still saw their Religion as a relationship between man and the cosmos. (v.11,#2)

Rossi, Vincent, "Liturgizing the World: Religion, Science and the Environmental Crisis in Light of the Sacrificial Ethic of Sacred Cosmology," Ecotheology No 3 (July 1997):61-84.

Rossmann, E. J., "Review of: Vira, Bhaskar, and Jeffery, Roger, eds. Analytical Issues in Participatory Natural Resource Management," Society and Natural Resources 16(no. 3, 2003):268-269.

Roszak, Theodore, Mary E. Gomes, and Allen D. Kanner, eds. Ecopsychology: Restoring the Earth, Healing the Mind. Reviewed by Tim Boston. Environmental Ethics 19(1997):101-103. (EE)

Roszak, Theodore, "Beyond the Reality Principle," Sierra, March April 1993. Planet sanity; why we need an eco-therapy. "Traditional psychiatry regards consciousness as an accident of nature, doomed--like life itself--by the entropic destiny of the physical universe. But the Gaia hypothesis, which views the biosphere as a self-regulating, essentially eternal mechanism, may point the way to an ecological

conception of sanity." "Ecopsychology commits itself to understanding people as actors on a planetary stage who shape and are shaped by the biospheric system." (v4,#1)

Roszak, Theodore, Mary E. Gomes, and Allen D. Kanner, ed., Ecopsychology: Restoring the Earth, Healing the Mind. San Francisco: Sierra Club Books, 1995. Paper, \$15. The roots of our destructive and exploitative environmental attitudes are psychological, and laws alone won't alter our behavior. Carl Anthony, "Ecopsychology and the Deconstruction of Whiteness," maintains: "People of color often view alarmist threats about the collapse of the ecosystem as the latest stratagem by the elite to maintain control of political and economic discourse." (v6,#2)

Roszak, Theodore, The Voice of the Earth. New York: Simon and Schuster, 1992. 368 pages. \$ 23. Ecopsychology, a blend of ecology, psychology, and cosmology, can "span the gap between the person and the planetary." Roszak wants to "carry science forward to the boundary of metaphysics." (v3,#2)

Roszell, Jane. "Planning and Managing Natural and Cultural Resources: A Parks Canada Perspective", Environments 24(no. 1, 1996):26.

Rotating the Cube: Environmental Strategies for the 1990s, An Indicator SA (South Africa) Issue Focus. Durban: Department of Geographical and Environmental Sciences and Indicator Project South Africa, University of Natal, April 1990. 118 pages. Twenty eight authors on various environmental issues--water, air, pollution, soil loss, mining, again excellent descriptions of a degrading environment, but this time with more misgivings about the inability of government successfully to regulate industries and agribusiness in the common good. (v1,#4)

Roth, Dennis M. The Wilderness Movement and the National Forests, 2nd ed., rev. College Station, Texas: Intaglio Press, 1995. 105 pp. \$14.95 paperback. As chief historian for the U.S. Forest Service from 1979 to 1989, the author was witness to some of the important conflicts over protection of this land. More importantly he had ready access to the records and many of the people involved in the struggle that has stretched from the 1920s to the present. Interviews with the combatants and selections from their letters and internal memorandums provide detailed insights that make this book what Roderick Nash has called "a model of careful and original research."

Roth, LC, "Enemies of the Trees? Subsistence Farmers and Perverse Protection of Tropical Dry Forest," Journal of Forestry 99(no. 10, 2001):20-28. (v.13,#1)

Roth, S, "The horrors of intensive salmon farming," The Ecologist 31(no.5, 2001):35-38. (v.12,#4)

Roth, Stephanie, "The Cosmic Vision of Hildegard of Bingen," The Ecologist 30 (No. 1, Jan 01 2000): 40- . The medieval German mystic Hildegard of Bingen saw nature as central to God's creation - and humanity's duty to protect it. (v.11,#2)

Rothenberg, David, "No World but in Things: The Poetry of Naess's Concrete Contents," Inquiry 39(no. 2, June, 1996):225-272. Arne Naess introduced the notion of "concrete contents" to posit that the qualities we perceive in nature are intrinsic to the things themselves, and not just projections of our senses on to the world. This gives environmentalism more credence than if secondary qualities about the environment are considered subjective in a pejorative sense. But the concrete contents position pushes philosophy toward poetry because it suggests that felt qualities are as primary as logic. For a philosophy to justify itself, it sometimes needs to find resonance with qualities outside its borders. Examples are presented from Italian writer Italo Calvino, the music of the Kaluli people of New Guinea, a film by John Sayles, and a poem by Thomas Tranströmer. The concrete philosophical contents of the world are found in the relationships between philosophy and experience, never inside philosophy alone. Rothenberg is at

the Center for Policy Studies, New Jersey Institute of Technology, Newark. (v8,#3)

Rothenberg, David, ed. Wild Ideas. Minneapolis: University of Minnesota Press, 1995. 225 pages. Papers mostly from the Fifth World Wilderness Congress in Tromso, Norway, September 1993. R. Edward Grumbine, "Wise and Sustainable Uses: Revisioning Wilderness"; Denis Cosgrove, "Habitable Earth: Wilderness, Empire, and Race in America"; Max Oelschlaeger, "Earth Talk: Conservation and the Ecology of Language"; Marvin Henberg, "Pancultural Wilderness"; Lois Ann Lorentzen, "Reminiscing about a Sleepy Lake: Borderland Views of Women, Place, and the Wild"; Douglas J. Buege, "Confessions of an Eco-Colonialist: Responsible Knowing among the Inuit"; David Abram, "Out of the Map, into the Territory: The Earthly Topology of Time"; Irene Klaver, "Silent Wolves: The Howl of the Implicit"; David Rothenberg, "The Idea of the North: An Iceberg History"; R. Murray Schafer, "The Princess of the Stars: Music for a Wilderness Lake"; Tom Wolf, "Beauty and the Beasts: Predators in the Sangre de Cristo Mountains," Robert Greenway, "Healing by the Wilderness Experience"; and Andrew Light, "Urban Wilderness." Rothenberg teaches philosophy at the New Jersey Institute of Technology. (v6,#3)

Rothenberg, David, "Who Needs Wild Philosophy?" International Journal of Wilderness 5 (no. 2, August) 1999:4-8. www.ijw.org

Rothenberg, David, "Soul of the Wilderness: Who Needs Philosophy?" International Journal of Wilderness 5(no. 2, August 1999):4-8. What philosophy can do strengthening arguments for wilderness. Against Cronon and Callicott, whose arguments against wilderness are confused, we ought to save wilderness and need the wilderness concept. "Wilderness' is probably not the most important way humanity should look at nature, though it is one of many important ways we can relate to the world around us." 1. Wilderness is not an idea that all peoples in all cultures have needed, but we modern peoples need the idea. 2. Wilderness is not everything, its preservation has never been the only goal of the environmental movement, or even the most important goal." 3. "Wilderness does imply conflict between nature and people. ... Setting a place aside as wilderness does take it out of the marketplace, and whether we like it or not, this often sets it against the interests of people who live nearby and have had to earn their living from the land." Rothenberg is in philosophy at New Jersey Institute of Technology. (v.10,#3)

Rothenberg, David, Review of: Michael Zimmerman et al.,Environmental Philosophy, Peter C. List, ed., Radical Environmentalism, Susan J. Armstrong and Richard G. Botzler, eds., Environmental Ethics: Divergence and Convergence, Environmental Ethics 16(1994):215-218.

Rothenberg, David, "The Greenhouse from Down Deep: What Can Philosophy Do for Ecology?" Pan Ecology 7(no. 2, Spring, 1992):1-3. "The philosopher of ecology can only implore you to try to conceive of your self and your purpose not in opposition to an environment which is beginning to fight back, but through the surrounding world which may support us forever if we learn to base our cultures upon ideals that allow the earth to flourish." "It is the idea of nature independent of humanity which is fading, which needs to be replaced by a nature that includes us, which we can only understand to the extent that we can find a home in the enveloping flow of forces which is only ever partially in our control. ... There is no such thing as a pure, wild nature, empty of human conception. The moment we identify it as such, it becomes ours! The minute we call some area of the earth separate from our influence, we are putting human constraints on the environment. We are blocking it out. It is a human thing. Wilderness is a consequence only of a civilization that sees itself as detached from nature. ... This a romantic, exclusive and only-human concept of a nature pure and untrammled by human presence. It is this idea of nature which is reaching the end of its useful life." Rothenberg is professor in the Department of Humanities, New Jersey Institute of Technology. (v3,#4)

Rothenberg, David, "You make my heart sing," Ethics and the Environment 8(no. 1, 2003):112-125. An account of playing music life with wild birds. Rothenberg is at New Jersey Institute of Technology. (E&E)

Rothenberg, David, Always the Mountains. Athens: University of Georgia Press, 2003. The meaning of mountains, the hazy provenance of Chief Seattle's famous speech, ecoterrorism, suburbia, the difference between knowledge and information, and the art of humans vs elephants. Wandering in Manhattan with John Cage, climbing Mt. Ventoux with Petrarch and, with Zen master Dogen, walking along the blue mountains. David Rothenberg is in philosophy at the New Jersey Institute of Technology.

Rothenberg, David and Ulvaeus, Marta, eds., The World and the Wild. Tucson, AZ: University of Arizona Press, 2001. Wilderness as a global issue. Wilderness has an important place in the environmental thought and policy of any nation, industrial or developing. With contributions from Nepal, Borneo, Brazil, Chile, Mexico, Papua New Guinea, Kenya, India, South Africa, and the United States. Wilderness is not a northern colonialist conceit irrelevant in the plans of third world countries. Contributors include: Vance Martin, Pramod Parajuli, Zeese Papanikolas, Sahotra Sarkar, Philip Cafaro and Monish Verma, David Western in exchange with John Terborgh, Ian Player, William W Bevis, Kathleen Harrison, Tom Vanderbilt, Antonio Carlos Diegues, Dan Imhoff, Edward A. Whitesell, Evan Eisenberg, and Damien Arabagali. Reprints, often from Terra Nova. (v.12,#3)

Rothenberg, David, "Quiet Preservation: Don't Make It a National Park," Wild Earth 10(no. 2, Summer 2000):57- . (v.12,#2)

Rothenberg, David and Marta Ulvaeus, eds. The New Earth Reader: The Best of Terra Nova. Reviewed in Environmental Ethics 25(2003):105-108. (EE)

Rothenberg, David, "Music in Nature," Alternatives 27(no.2, Sprg 2001):30-. For the alternative listener, the final task is to hear each noise as a melody in the vast improvisation that creates the world's soundscape. (v.12,#4)

Rothenberg, David, "Individual or Community? Two Approaches to Ecophilosophy in Practice." Environmental Values Vol.1 No.2(1992):123-132. ABSTRACT: Should environmental philosophers--or practical conservationists--focus their attentions on particular living creatures, or on the community of which they, and we, are part? The individualist ethos of the United States is reflected in legislation to protect endangered species in which particular species are portrayed as individuals with rights that must be protected. By contrast, the planning of environmental protection in Norway, exemplified by the Samla Plan for the management of water resources, emphasizes the importance of community integrity, where 'community' includes the whole of nature. These differing approaches are considered in the light of moral monism and pluralism, with special reference to Christopher Stone's recent work. Despite their differences, and the reservation that each method inevitably takes a human perspective, it can be hoped that each may contribute to enabling people and political systems to consider nature more seriously. KEYWORDS: Ecophilosophy, Endangered Species Act (US), environmental assessment, moral pluralism, Samla Plan (Norway). 351 Harvard Street, #2F, Cambridge MA 02138, USA.

Rothenberg, David, Hand's End: Technology and the Limits of Nature. Berkeley: University of California Press, 1993. 299 pages. Hardcover, \$ 29.95. Rothenberg offers a radical new look at technology as the fundamental way in which we experience and define nature--the tool as humanity extended. Our view of the natural world has changed continually through history, according to the new ways society has invented to use nature. Tools extend our presence in the world, while reconfiguring nature according to human understanding. As we extend the hand in different ways, we perceive what we can touch anew. The natural world changes, and so do we. Nature emerges as something that cannot

meaningfully be opposed to human civilization. Instead, we need to consider the diverse meanings of nature during the various epochs of human civilization and look at nature as a changing foil for our perceived role in the world. Once aware of the limits that technology reveals, we need then to temper technical progress with ideals that the development of machinery tends to elude. Innovations should not be opposed to the surrounding environment. Instead, we should use technique to make a home in the world. Rothenberg is assistant professor of humanities at the New Jersey Institute of Technology; he is known for his work interpreting Arne Naess. (v4,#3)

Rothenberg, David, and Ulvaeus, Marta, eds., The Book of Music and Nature: An Anthology of Sounds, Words, Thoughts Cambridge: The MIT Press, 2001. A Terra Nova Book. This innovative book and CD, assembled by the editors of the periodical Terra Nova, is the first anthology published on the subject of music and nature. Yoking together the simplicities and complexities of the world of natural sound and the music inspired by it, this collection includes essays, illustrations, and plenty of sounds and music. Celebrates our relationship with natural soundscapes while posing stimulating questions about that relationship. The compact disc includes fifteen tracks of music made out of, or reflective of, natural sounds, ranging from Babenzele Pygmy music to Australian butcherbirds. (v.12,#2)

Rothenberg, David, Is It Painful to Think? Conversations with Arne Naess University of Minnesota Press, 1992. 248 pages, \$ 44.95 cloth, \$ 16.95 paper. This book is in Norwegian as David Rothenberg, Arne Naess: Gjør det vondt å tenke? Oslo: Grondahl og Dreyer Forlag, 1992. Rothenberg presents "the grand old man of natural philosophy in his own words." What emerges is "the personal vision of a life imbued with ecology, which reveals in most human terms how respect for and contact with the natural world can provide a foundation for a total view of the vast problems of humanity and our place in the world." (v3,#2) (Norway)

Rothenberg, David, and Ulvaeus, Marta, eds., Writing on Water. Cambridge: The MIT Press, 2001. A Terra Nova Book. Water links all aspects of our existence. From the politics of watersheds to the romance of turtles climbing up from the sea, from Leonardo da Vinci to Octavio Paz, from murder at a hot spring to the cool facts on liquidation, the writings in this collection flow through all the ways humans encounter this most refreshing of elements. There is a bit of science, some management plans for the protection of water, and plenty of stories, poems, essays, and photography. Here is a fresh way of looking at one of the oldest subjects there is. Rothenberg is in philosophy at the New Jersey Institute of Technology and the founder of Terra Nova, the journal from which these articles are taken. Marta Ulvaeus was an editor of TDR (The Drama Review) becoming the Associate Editor of Terra Nova. (v.12,#2)

Rothenberg, David, ed., Wild Ideas. Reviewed by David R. Keller. Environmental Ethics 19(1997):315-318. (EE)

Rothenberg, David, Improvisation, Sound, Nature. Athens: University of Georgia Press, 2002. With CD. Music takes us home to a natural world that functions outside of logic, where harmony and dissonance, tension and release work in surprising ways. Music, like wind, is the lungs of the world, and Brownian motion seethes at its heart. (v.13,#1)

Rothenberg, David, and Ulvaeus, Marta, eds., The New Earth Reader: The Best of Terra Nova. Cambridge, MIT Press, 1999. \$24.95. Explores the complex and multifarious ways humanity is loose in the natural world. Find out who really wrote the famous Chief Seattle speech. Read why Jaron Lanier wants to turn us all into giant squid so we can talk to one another without language. Rick Bass travels to the country with the most grizzly bears per square mile: Romania. Gary Nabhan dreams of raven stew. Val Plumwood is half-swallowed by a crocodile and lives to tell the tale and affirm her vegetarianism. Charles Bowden enters Tuna Country in Mexico and struggles to find his way back across the border.

Ray Isle fights with a wild turkey; see who wins. And find out why filmmaker Errol Morris thinks that human dreamers are the most endangered species around. Rothenberg is editor of Terra Nova, and in philosophy at the New Jersey Institute of Technology. Ulvaeus is the associate director of continuing Terra Nova projects at the New Jersey Institute of Technology. (v.11,#1)

Rothenberg, David, Why Birds Sing: A Journey into the Mystery of Bird Song. New York: Basic Books, 2005, Penguin UK. An introduction to the world of bird song that combines the insights of science, poetry, and music. We need all three human ways of knowing to find the fullest understanding of these beautiful, natural sounds which resound around us every spring. Rothenberg begins with his own experience playing clarinet along with birds in the National Aviary, and when he finds that the birds seem to respond much more to his music than he expected, he embarks on a journey from ancient writings on to the modern neuroscience, ending deep in the Australian rainforest where he tries to play along with an Albert's lyrebird, using all he has picked up along the way. "This book is exuberant! Exuberantly intellectual, exuberantly alive. And when you are finished with it the world will seem more alive as well, which is an awful lot for one book to accomplish." Bill McKibben Visit www.whybirdssing.com for excerpts, sound clips, pictures, videos, and book tour details. David Rothenberg is professor of philosophy the New Jersey Institute of Technology.

Rothenberg, David. Review of The Ecological Indian: Myth and History. By Shepard Krech III. Environmental Ethics 22(2000):425-429.

Rothenberg, David. Hand's End: Technology and the Limits of Nature:(Berkeley: University of California, 1993). Reviewed by Richard Gault in Environmental Values 4(1995):79-81. (EV)

Rothenberg, David. Review of The Way of the Human Being. By Calvin Luther Martin. Environmental Ethics 22(2000):425-429.

Rothenberg, David. Review of The Great, New, Wilderness Debate. Edited by J. Baird Callicott and Michael Nelson. Environmental Ethics 22(2000):199-202.

Rothenberg, David. Review of Peder Anker. Imperial Ecology: Environmental Order in the British Empire, 1895–1945. Environmental Ethics 25(2003):321-324. (EE)

Rothenberg, David. Book Review of On Biocultural Diversity: Linking Language, Knowledge, and the Environment. Edited by Luisa Maffi. Environmental Ethics 26(2004):97-99. (EE)

Rothenberg, David. Review of Nina Witoszek and Andrew Brennan, eds., Philosophical Dialogues: Arne Naess and the Progress of Philosophy, Lanham, MD and Oxford: Rowman and Littlefield, 1999, Environmental Values 10(2001):418. (EV)

Rothenberg, David. "Feet on the Ground: Responses to Hand's End." Research in Philosophy and Technology 15 (1995): 191. (v7, #3)

Rothman, Dale S., Review of: Paul Ekins, The Prospects for Green Growth, Environmental Values 11(2002):114-116.

Rothman, HK, "Review of: Ted Steinberg, Down to Earth: Nature's Role in American History", Environmental History 8(no.2, 2003):324-325.

Rothman, Stanley, and Lichter, S. Robert, "Is Environmental Cancer and Political Disease?", pp. 231-245. Scientists working in cancer epidemiology have a far different view of what constitutes a serious threat of environmental cancer than nonscientists who regard themselves as activists for environmental sanity.

Rothman teaches government at Smith College. Lichter is the author of Keeping the News Media Honest. In Gross, Paul R., Levitt, Norman, and Lewis, Martin W., eds., The Flight from Science and Reason. New York: New York Academy of Sciences, 1996. Distributed by Johns Hopkins University Press. (v9,#2)

Roughgarden, Joan, Evolution and Christian Faith: Reflections of an Evolutionary Biologist. Washington: Island Press, 2006. "I'm an evolutionary biologist and a Christian. Here's my perspective on what to teach about evolution and on how to understand today's collision between science and Christian faith" (p. 3). "Is there then a conflict between the Bible and evolution? No. To the contrary, the discovery that all of life is one body through its union into one family tree extends St. Paul's teaching on Christian community to all of living creation. This finding is a source of joy and I rejoice." (p. 23). "A long and solid tradition testifies to biologists' search for direction in evolution. Many, maybe most, evolutionary biologists do see evolution as having a direction under the guidance of natural breeding even though the mutation-generating piece within the evolutionary process is random. ... Thus evolution is not automatically in opposition to religion concerning a direction for evolutionary change. ... For myself, I'm comfortable feeling that evolution by natural breeding is revealing God's design for nature in the fullness of time." (pp. 49-52). Roughgarden is in biology and geophysics at Stanford University.

Rouner, Leroy ed., The Longing for Home. Notre Dame; IN: Notre Dame University Press, 1977.

Rouner, Leroy S., ed. The Longing for Home. Notre Dame: University of Notre Dame Press, 1997. 248 pp. \$34 cloth. Explores the spiritual and emotional depths of our human sense of home, mixing intellectual engagement and personal reflection. Three autobiographical essays about the personal experience of home, followed by philosophical explorations of the meaning of home. The final section relates the theme of home to various problems of modern life. (v.7,#4)

Routley, Richard, "Is There a Need for a New, an Environmental Ethic?" Proceedings of the XVth World Congress of Philosophy, September 17-22, 1973, Varna, Bulgaria, vol. 1., Philosophy and Science, Morality and Culture, Technology and Man. Sofia, Bulgaria, 1973, pp. 205-210. Perhaps the first paper in environmental ethics as a modern discipline. Richard Routley later wrote under the name Richard Sylvan. He was research professor of philosophy, Australian National University, Canberra, and died in 1996.

Routley, Richard. See also Sylvan, Richard.

Routley, Val. "On Karl Marx as an Environmental Hero." Environmental Ethics 3(1981):237-44. Donald C. Lee's "On the Marxian View of the Relationship between Man and Nature" is one of a number of recent attempts to interpret Marxian doctrine in an environmentally attractive way. I argue that Lee does not really succeed, that many of the assumptions of the Marxian theory which Lee still retains are in conflict with a satisfactory environmental ethic and with the current process of revision of the conventional ethic. The central doctrine Lee expounds, the superficially attractive Marxian thesis of unity between man and nature, is attractive only because the real basis of this "unity"--the transformation of nature into a human expression--is not spelled out. Such unity-through-transformation is incompatible with retention and respect for untransformed nature, i.e., wilderness. The Marxian position Lee expounds is environmentally unsatisfactory in many other ways also: it continues to laud the "objectification" of nature, retains a highly homocentric view of man's relation to nature, and encourages human hubris. Other specific elements of the position Lee presents which are in conflict with environmentalism are the doctrine of the historical necessity of the capitalist stage, with its acquiescence in the destructive technology of advanced capitalism, the chauvinistic Marxian material on animals appealed to by Lee, and the treatment of liberation as the maximization of leisure and the minimization of bread labor. To obtain an environmentally sound noncapitalist society it is necessary to discard many central elements of

Marxian doctrine and to move beyond Marx. Val Routley is now Val Plumwood. She resides in Braidwood, Australia. (EE)

Routley, Val. See also Plumwood, Val.

Rowan, A. N., Loew, F. M., and Weer, J. C., The animal research controversy: Protest, process & public policy--an analysis of strategic issues. Medford, MA: Tufts University School of Veterinary Medicine, 1995.

Rowan, Andrew W. Of Mice, Models and Men: A Critical Evaluation of Animal Research. Albany: Suny Press, 1984. Reviewed in Environmental Ethics 8(1986):83-87.

Rowan, Andrew N. Review of David Goodman and Michael J. Watts, eds. Globalising Food: Agrarian Questions and Global Restructuring. Journal of Agricultural and Environmental Ethics 11(1999):61-63. (JAEE)

Rowan, Andrew N., Review of David Goodman and Michael J. Watts, eds., Globalising Food: Agrarian Questions and Global Restructuring. London and New York: Routledge. Journal of Agricultural and Environmental Ethics 11(1998):61-63.

Rowe, Garry M. "Shortage and Tension on the Upper Rio Grande: Protecting Endangered Species during Times of Drought--The Role of the Bureau of Reclamation, A Brief Overview of Relationships in the Upper Rio Grande Basin." Natural Resources Journal 39(No. 1, Winter 1999):141- . (v10,#4)

Rowe, Sharon and James D. Sellmann. "An Uncommon Alliance: Ecofeminism and Classical Daoist Philosophy." Environmental Ethics 25(2003):129-148. Classical philosophical Daoism and ecofeminism converge on key points. Ecofeminism's critique of Western dualistic metaphysics finds support in Daoism's nondualistic, particularist, cosmological framework, which distinguishes pairs of complementary opposites within a process of dynamic transformation without committing itself to a binary, essentialist position as regards sex and gender. Daoism's epistemological implications suggest a link to ecofeminism's alignment with a situational and provisional model of knowledge. As a transformative philosophy, the cluster of concepts that give specificity to the Daoist notion of transformation offers content and direction for the notion of transformation central to many ecofeminist philosophies. These affinities offer possibilities for developing the relevance of both philosophies to bear upon a theoretical understanding of how we can live in a respectful and sustainable relationship with our natural environment. (EE)

Rowe, Stan, "Eine Erd-Ethik für die Menschheit (article in German). An Earth-based ethics for humanity. Natur und Kultur, Vol. 1/2, 2000, pp. 106-120. Nature in the large sense is Earth, the ecosphere, the source of Life and therefore the best metaphor for Life. Humans are co-evolved parts of nature, and their achievements of language and Culture are derived in many ways from the creative Earth. This ecological fact suggests an ethical imperative: Revere the Earth and its sectoral ecosystems, for their importance is greater than that of any single species. An Earth-ethic--a modern form of Animism--goes beyond humanism and biocentrism, broadening the basis of religious sensibility. (v.11,#4)

Rowe, Stan. *Earth Alive: Essays On Ecology*. Edmonton: NeWest Press, 2006. Included are thirty-three short essays or articles, seven book reviews, and the "Manifesto for Earth" (co-authored with Ted Mosquin) by the Canadian ecologist-philosopher Rowe, recently deceased. Rowe was employed by the Canadian Forestry Service from 1948 until 1967. From 1968 until 1985, he was employed as a professor of plant ecology at the University of Saskatchewan. He retired in 1990 and moved to New Denver in British Columbia. For Rowe, living and non-living ecosystem components are not absolutely divided

from each other, and they claim equal importance.

Rowell, Andrew. "Crude Operators: The Future of the Oil Industry," The Ecologist (1979) 27(no.3 1997):99. Technological advances and the maturity of existing oil fields have spurred oil companies to explore for oil and extract it from previously inaccessible or "frontier" areas, both offshore and onshore, so as not to be totally reliant upon Middle Eastern resources. In many cases, such prospecting and production is having severe environmental impacts and serious social, ethical and cultural consequences. (v8,#3)

Rowell, Andrew. Green Backlash. Review by J. Quentin Merritt, Environmental Values 7(1998):370.

Rowell, Andrew. "Beating the Green Backlash," The Ecologist (1979) 27(no.3 1997):86. (v8,#3)

Rowland, F. Sherwood, "Climate Change and Its Consequences: Issues for the New U.S.," Environment 43(no.2, Mar. 2001): 28-. Most scientists agree that global warming exists. Although uncertainty remains about its effects, its threat should be addressed by implementing actions to control the drivers of climate change, developing climate models with greater predictive power, and exploring responses to its possible effects. (v.12,#3)

Rowlands, Ian H. "Political Warming," Alternatives 23(no.2, 1997):8. The Geneva Climate Change Conference offers limited hope for reducing greenhouse gas emissions. (v8,#2)

Rowlands, Ian H. "The Climate Change Negotiations: Berlin and Beyond," The Journal of Environment and Development 4, no. 2 (Summer 1995): 145- . (v6,#4)

Rowlands, Mark, The Body in Mind: Understanding Cognitive Processes, Cambridge: Cambridge University Press, 1999. This book challenges the Cartesian view of the mind as a self-contained monadic entity, and offers in its place a radical externalist or environmentalist model of cognitive processes. Cognition is not something done exclusively in the head, but fundamentally something done in the world. Drawing on both evolutionary theory and a detailed examination of the processes involved in perception, memory, thought, and language use, Rowlands argues that cognition is a process whereby creatures manipulate and employ relevant objects in their environment. It is not simply an internal process of information processing; equally significantly, it is an external process of information processing. This innovative book provides a foundation for an unorthodox but increasingly popular view of the nature of cognition, and a systematic dismantling of the distinction between mental and environmental processes. (v.11,#3)

Rowlands, Mark, Environmental Crisis: Understanding the Value of Nature. Basingstoke, Hampshire, UK: Macmillan, 2000. New York: St. Martin's Press, 2000. 191 pages. Attempts to understand the nature of environmental value founded on an inadequate conception of the nature of mental processes. Critiquing both subjectivist and objectivist accounts of environmental value, the book argues that proper understanding of this nature requires a breaking down of the distinction between mind and world. However, previous attempts to do this, being in the grip of the essentially idealistic trends that have dominated philosophy since Kant, all involve trying to "pull the world into the mind", showing that the world is, in one sense or another, a construction of the mind. This, it is argued, is anathema to environmental thinking. What is required to arrive at a satisfactory account of environmental value is to "pull the mind into the world", that is, to show how mental processes possess, quite literally, have environmental constituents. Rowlands, in philosophy at the University of Ireland, Cork, is transferring to University of London, Birkbeck College. Reviewed by Jennifer Baker in Environmental Ethics 24(2002):321-324. (v.11,#3)

Rowlands, Mark, Animal Rights: A Philosophical Defence, Basingstoke, Hampshire, UK: Macmillan, 2000. New York: St. Martin's Press, 1998. The question of the nature and extent of our obligations to non-human animals has featured prominently in recent moral debate, underlying and informing discussion on topical issues such as factory farming, animal experimentation, and hunting. This book defends the novel position that certain ideas stemming from the social contract tradition in philosophy--the tradition which sees moral rights as deriving from implicit agreements between individuals--can be used to justify the claim that our obligations to animals are far more substantial than we commonly think. Critiquing the rival accounts of writers such as Peter Singer and Tom Regan, this book shows how an influential form of the social contract idea--one deriving from the work of John Rawls--can be used to make sense of and justify the concept of animal rights. Rowlands, in philosophy at the University of Ireland, Cork, is transferring to University of London, Birkbeck College. (v.11,#3)

Rowlands, Mark, "Environmental Ethics in Ireland," ISEE Newsletter, vol. 11, no. 3, fall 2000, pp. 13-17. Rowlands is in the Department of Philosophy, University College, Cork, Ireland. (v.11,#3)

Rowlands, Mark, "Environmental Epistemology," Ethics and the Environment 10(no. 2, 2005):5-28. "Externalism" in all its forms possesses two essential theses, one concerning the nature of the states to which the externalist thesis applies, and the other concerning the properties of those states in virtue of which it applies. The first thesis is that externalism applies only to the so-called propositional attitudes. It applies to beliefs, desires, hopes, fears, expectations, anticipations, and the like, all of which are (i) attributed to a subject by way of a that-clause, and (ii) are individuated, in part, by way of the proposition that follows this clause. The second thesis is that the externalist claim applies to such states because they possess semantic content; because they are individuated by way of the proposition that follows the that-clause. Externalism doesn't go far enough. I'll try to develop a form of externalism that reaches parts other externalisms cannot reach. This can be called vehicle externalism, but I adhere to my somewhat tendentious label: environmentalism. Rowlands is in philosophy, University of Hertfordshire, UK. (Eth&Env)

Rowley, Christopher, The Benefits and the Problems of the Proposed Merger of Development and Environmental Education, Master's Thesis, Department of Philosophy, Lancaster University, September 1993. (v7,#1)

Rowley, Christopher, The Benefits and the Problems of the Proposed Merger of Development and Environmental Education, Master's Thesis, Department of Philosophy, Lancaster University, September 1993.

Rowley, W. D., "Review of: Karen R. Merrill, Public Lands and Political Meaning: Ranchers, the Government, and the Property Between Them," Environmental History 8(no. 3, 2003): 495.

Rowthorn, Anne W. *Caring for Creation: Toward an Ethic of Responsibility*. Wilton, CT: Morehouse, 1989.

Roy, Arundhati, Power Politics. Reviewed by Batabyal, Amitrajeet A., Journal of Agricultural and Environmental Ethics 16(2003):96-98. (JAEE)

Royal, Robert, The Virgin and the Dynamo: The Use and Abuse of Religion in Environmental Debates. Grand Rapids, MI: Eerdmans, 1999. 247 pages. Royal wishes to correct overly romantic approaches to the natural world, including common images of the world as sacred. He has many doubts about the use of religion ("the virgin"), deep ecology, ecofeminist theology, creation spirituality, and others; better hard science ("the dynamo") brings more sober truth about the dark side of nature. Nor does he want biologisms of any sort. Humanity is the crown of creation and humans enjoy considerable creativity in

coping with nature. (EE v.12,#1)

Royte, Elizabeth, "Wilding America," Discover, September 2002, pp. 42-47. The importance of wildlife corridors connecting wilderness and conservation areas. A radio-collared mountain lion has been tracked using a wildlife passageway, a culvert under a heavily traveled freeway near Santa Anna, California. The lion used the culvert twenty-two times over nineteen months. Also the culvert was often used by coyotes and foxes. California authorities plan to close off some existing highway underpasses and convert them to wildlife corridors. (v.13,#4)

Rozak, Theodore, The Voice of the Earth, Reviewed by Joseph Meeker in Environmental Ethics 16(1994):111

Rozzi, Ricardo, John Silander, Jr., Juan J. Armesto, Peter Feinisinger, and Francisca Massardo. "Three Levels of Integrating Ecology with the Conservation of South American Temperate Forests: The Initiative of the Institute of Ecological Research Chirac, Chile," Biodiversity and Conservation 9(no. 8, 2000):1199-1217. Abstract. The diversity of native species assemblages and that of indigenous cultures that once characterized the temperate forests of southern Chile have experienced a process of homogenization ever since the Spanish conquest. Today this process continues to erode both biotic and cultural diversity. With the goal of linking ecological research with actions to conserve the biological and cultural richness of this region, we established the Institute of Ecological Research Chiloe. The Institute's philosophy and activities involve three approaches: (1) participation of professional ecologists in environmental education and decision making, through collaboration with the community at local, regional, and global scales; (2) programs of ecological education, which include planting indigenous trees in urban areas and creating a local botanical garden with representative Chilean forest species; (3) critical analyses of the narrow economic and utilitarian environmental ethics that currently prevail in Chile, and often in other Latin American nations, and examination of traditional or novel alternative ethics and perspectives that address multiple interrelations between biological and cultural dimensions. Key words: biological and cultural diversity, ecological education, environmental values, South American temperate forests, sustainable biosphere initiative.

Rozzi, Ricardo, "The Reciprocal Links between Evolutionary-Ecological Sciences and Environmental Ethics," BioScience 49(1999):911-921. Darwinian evolution and its implications for ecologists and ethicists. This is an important case because (1) the social influences and historical circumstances that led Darwin to formulate his theory have been well examined. (2) Darwinian theory is a foundational basis for both ecology and environmental ethics. (3) Darwinian theory cuts both ways. It can encourage respect for the natural environment by weakening anthropocentrism. But it can also favor patterns of overconsumption and exploitation of the environment by strengthening individualism with ideas of the struggle for existence and natural selection. This paper was first presented at an International Society for Environmental Ethics session at the World Congress of Philosophy in Boston, August 1998. Rozzi is at the Institute of Ecological Research Chiloé, Chile, though currently at the Departments of Philosophy and of Ecology and Evolutionary Biology, University of Connecticut, Storrs. (v10,#4)

Rozzi, Ricardo, Silander, John, Jr, Armesto, Juan J., Feinsinger, Peter, and Massardo, Francisca, "Three levels of integrating ecology with the conservation of South American temperate forests: The initiative of the Institute of Ecological Research Chiloé, Chile," Biology and Conservation 9(2000):1199-1217. Abstract. The diversity of native species assemblages and that of indigenous cultures that once characterized the temperate forests of southern Chile have experienced a process of homogenization ever since the Spanish conquest. Today this process continues to erode both biotic and cultural diversity. With the goal of linking ecological research with actions to conserve the biological and cultural richness of this region, we established the Institute of Ecological Research Chiloé. The Institute's philosophy and activities involve three approaches: (1) Participation of professional ecologists in environmental

education and decision making, through collaboration with the community at local, regional, and global scales. (2) Programs of ecological education, which include planting indigenous trees in urban areas and creating a local botanical garden with representative Chilean forest species. (3) Critical analyses of the narrow economic and utilitarian environmental ethics that currently prevail in Chile, and often in other Latin American nations, and examination of traditional or novel alternative ethics and perspectives that address multiple interrelations between biological and cultural dimensions. Key words: biological and cultural diversity, ecological education, environmental values, South American temperate forests, sustainable biosphere initiative. The authors are with the Institute of Ecological Research, Chiloé, Chile. (v.13,#1)

Rozzi, Ricardo, Juan J. Armesto, and Robert Frodeman. "Integrating Ecological Sciences and *Environmental Ethics* into Biocultural Conservation in South American Temperate Sub-Antarctic Ecosystems." *Environmental Ethics* 30(2008):229-234. This special issue of *Environmental Ethics* is based on the workshop "Integrating Ecological Sciences and *Environmental Ethics*: New Approaches to Understanding and Conserving Frontier Ecosystems," held in the temperate sub-Antarctic region of southern Chile, in March 2007. The workshop was jointly organized by the Department of Philosophy and Religion Studies of the University of North Texas (UNT) and the Institute of Ecology and Biodiversity (IEB-Chile), in collaboration with the Center for Environmental Philosophy, and followed a three-week field graduate course, "Conservation and Society: Biocultural Diversity and *Environmental Ethics*," involving graduate students from the U.S. and Latin America. These events built on a decade of collaboration between UNT environmental philosophers and Chilean ecologists, and were followed by two symposia held subsequently at two annual meetings of the Ecological Society of America (2007 and 2008). (EE)

Rubel, Alan and Robert Streiffer, "Respecting The Autonomy of European and American Consumers: Defending Positive Labels on Gm Foods," *Journal of Agricultural and Environmental Ethics* 18(2005):75-84. In her recent article, "Does autonomy count in favor of labeling genetically modified food?," Kirsten Hansen argues that in Europe, voluntary negative labeling of non-GM foods respects consumer autonomy just as well as mandatory positive labeling of foods with GM content. We argue that Hansen's arguments are mistaken in several respects. She underestimates the demands of respecting autonomy and overestimates the cost of positive labeling. Moreover, she mistakenly implies that only a small minority of people desire information about GM content. We also explore the extent to which her arguments would apply to the US context. Keywords autonomy - genetically modified foods - GM foods - labeling. The authors are in philosophy, University of Wisconsin-Madison, Madison, WI. (JAEE)

Rubin, Charles T., *Conservation Reconsidered: Nature, Virtue, and American Liberal Democracy*. Lanham, MD: Rowman and Littlefield, 2000. A collection under the auspices of the Political Economy Research Center (PERC), a right-wing think tank pressing for deregulation and private property rights. American's canonical figures in environmental conservation saw preservation and conservation as two sides of the same coin rather than as divergent outlooks on nature.

Rubin, Charles T., "Environmental Policy and Environmental Thought: Ruckelshaus and Commoner," *Environmental Ethics* 11(1989):27-51. Excellent discussion of the role of political and moral values which underlie scientific, technological, and environmental decision-making. An examination of the work of Barry Commoner reveals his utopian optimism in the power of an ecologically-driven technology; he is thus an heir to Bacon. Rubin suggests we need a new sense of values and a new vision of the world to limit our desires and re-define the good. (Katz, Bibl # 2)

Rubin, Charles T., *The Green Crusade: Rethinking the Roots of Environmentalism*. New York: The Free Press, Macmillan, 1994. 312 pages. Environmentalism has changed public attitudes as rapidly and profoundly as any other movement in American history. But environmentalism would do well to drop

their tiresome warnings of impending disaster and instead reexamine their own principles. The acceptance of utopian ideals commonly leads to the most extreme manifestations as the purest approach to those ideals. The unintended consequences of noble intentions can be a green totalitarianism. Analyzes Rachel Carson, Barry Commoner, Paul Ehrlich, E. F. Schumacher and finds a radical project, but doubtful scientific accuracy. Rubin teaches political science at Duquesne University. (v5,#3)

Rubin, Charles T. "Environmental Policy and Environmental Thought: Commoner and Ruckelshaus." Environmental Ethics 11(1989):27-51. A close examination of the major works of Barry Commoner provides insight into some of the assumptions that characterize current environmental debate, particularly over the risk/benefit approach brought to the EPA by William Ruckelshaus. Commoner's analysis of environmental problems depends much more on what Ruckelshaus would call his own "vision of how we want the world to be" than on scientific findings. I trace this vision through Commoner's commitment to socialist political change to a profound belief in the ability of technology to rationalize man's relationship to nature. I argue that this widely shared but utopian perspective hampers the serious consideration of environmental issues, even by those who, like Ruckelshaus, believe that they are presenting an alternative to it. Rubin is at the Political Science department, Duquesne University, Pittsburgh, PA. (EE)

Rubin, Charles T. ed. Conservation Reconsidered: Nature, Virtue and American Liberal Democracy. Lanham, MD: Rowman & Littlefield, 2000. Review by Keekok Lee, Environmental Values 10(2001):552. (EV)

Rubinoff, D., "Evaluating the California Gnatcatcher as an Umbrella Species for Conservation of Southern California Coastal Sage Scrub," Conservation Biology 15(no.5, 2001): 1374-83. (v.13,#2)

Rudel, T. K., "Sociologists in the Service of Sustainable Development?: NGOs and Environment-Society Studies in the Developing World," Society and Natural Resources 15(no.3, 2002): 263-68. (v.13,#2)

Rudel, Thomas K. with Bruce Horowitz, Tropical Deforestation: Small Farmers and Land Clearing in the Ecuadorian Amazon. New York: Columbia University Press, 1993. 234 pages. Rudel teaches sociology and human ecology at Rutgers University. Horowitz is a lawyer and professor at Universidad San Francisco de Quito, Ecuador. (v4,#2)

Rudel, Thomas K., with Bruce Horowitz, Tropical Deforestation: Small Farmers and Land Clearing in the Ecuadorian Amazon. New York: Columbia University Press, 1993. Paper. 234 pages. Why forest clearing has taken place in the Ecuadorian Amazon, taking into account the perspectives and actions of all the local actors over the past seventy years. Rudel is professor of sociology and of human ecology at Rutgers; Horowitz is a lawyer and professor in Ecuador. This is the first volume in what is projected to be a major series "Methods and Cases in Conservation Science," edited by Mary C. Pearl (of Wildlife Conservation International of the New York Zoological Society) and published by Columbia. (v4,#4)

Rudel, TK, "Introduction to Controlling Climate Change: Sociological Perspectives," Society and Natural Resources 14(no. 6, 2001):489-490. (v.13,#1)

Rudig, W., "Between Ecotopia and Disillusionment: Green Parties in European Government," Environment 44(no.3, 2002): 20-33. (v.13,#2)

Rudig, Wolfgang, ed., Green Politics (Three). Reviewed by Avner De-Shalit. Environmental Values 5(1996):371-372. (EV)

Rudolph, VJ, "Modifying Forest Management for Biodiversity," Conservation Biology 17(no.5, 2003):1463-1464. (v.14, #4)

Rudy, Alan. Review of Marx and Nature: A Red and Green Perspective. By Paul Burkett. Environmental Ethics 23(2001):91-94. (EE)

Rue, Loyal, By the Grace of Guile: The Role of Deception in Natural History and Human Affairs. New York: Oxford University Press, 1994. With a chapter extensively detailing the role of deception in natural history, both structural (camouflage and mimicry) and behavioral (hiding, stalking, the angler fish that uses its tongue as a worm, for bait). Animals are repeatedly naturally selected to deceive each other; plants deceive insects; those that can do so survive better, though there is also adaptive value in being able to detect deception. Humans arise in this genetic tradition, and are genetically disposed, in part, to be deceivers. Deception is required in culture, though there is a long cultural tradition that judges deception negatively.

Metaphysically, the natural world is meaningless; nihilism is true. But humans need myths otherwise, and hence the religious and philosophical traditions. Science erodes these myths, revealing these deceptions about nature and within culture. Unfortunately, we need some such myths to survive, else science will prove maladaptive. Nature is objectively valueless, but we need to deceive ourselves into believing in its intrinsic value. We have to be saved from the truth. We need "the saving grace of noble lies." We can only live "by the grace of guile." Rue teaches philosophy and theology at Luther College (Luther College?!), and he seems to have managed to practice the self-deception he preaches; he describes himself as a "theoretical nihilist and an existential biophilic" (p. 278). (v5,#4)

Rue, Loyal, Everybody's Story: Wising Up to the Epic of Evolution. Albany, NY: State University of New York (SUNY) Press, 2000. 176 pages, \$ 17, paper. The traditional stories, myths, ethics, philosophies are becoming more and more irrelevant, but Rue argues that he can replace them with a new story based on fact, the epic of evolution; and everybody and everything gets into the story: every race, every species, every star, everybody. Rue teaches religion at Luther College, Decorah, IA. (v.11,#1)

Ruether, Rosemary Radford. Gaia and God: An Ecofeminist Theology of Earth Healing. San Francisco: Harper, 1992.

Ruether, Rosemary Radford, ed. Women Healing Earth: Third-World Women on Ecology, Feminism, and Religion. Maryknoll, NY: Orbis Books, 1997. 175pp. \$17 paper. Contributors are from South America, Central America, India, Philippines, Korea, and Africa. (v8,#1) Reviewed by Rita Lester, Environmental Ethics 20(1998):195-98.

Ruffner, Charles M.; Groninger, John W., "Making the Case for Fire in Southern Illinois Forests," Journal of Forestry 104 (no.2, March/April 2006): 78-83 (6).

Ruhl, J.B., "Section 7(a)(1) of the 'New' Endangered Species Act: Rediscovering and Redefining the Untapped Power of Federal Agencies' Duty to Conserve Species", Environmental Law, 25(No.4, 1995):1107- . Ruhl discusses the history of section 7(a)(1) of the Endangered Species Act, which imposes a duty to conserve species on all federal agencies, and explores the recent administrative and Congressional actions affecting this duty. He argues that the provision should be interpreted to require federal agencies to implement programs for the recovery of endangered species.

Ruhl, J.B. "An Environmental Rights Amendment: Good Message, Bad Idea," Natural Resources & Environment 11(1997):46. (v8,#1)

Ruhl, JB; Lant, C; Loftus, T; Kraft, S; Adams, J; Duram, L, "Proposal for a Model State Watershed Management Act", Environmental Law 33 (no.4, 2003): 929-948.

Ruiz, Gregory M. and James Carlton, eds., Invasive Species: Vectors and Management Strategies. Washington: Island Press, 2003.

RuizPerez, M; Maoyi, F; Xiaosheng, Y; Belcher, B, "Bamboo Forestry in China: Toward Environmentally Friendly Expansion," Journal of Forestry 99(no. 7, 2001):14-20. (v.13,#1)

RuizTagle (Ruiz-Tagle), Maria Teresa. Review of P. Koutstaal, Economic Policy and Climate Change: Tradable Permits for Reducing Carbon Emissions, Cheltenham: Edward Elgar, 1997, Environmental Values 10(2001):277. (EV)

Rumbaugh, Duane M., and David A. Washburn. *The Intelligence of Apes and Other Rational Beings*. New Haven: Yale University Press, 2003. What apes and monkeys know and how we know it.

Runkle, Deborah, and Granger, Ellen, "Animal Rights: Teaching or Deceiving Kids," Science 278 (5 September 1997):1419. Editorial claiming that animal rights groups focus on children, educating the next generation against the use of animal in research, and that the research community needs to be vocal to counter this misinformation with better information. Various letters in response are in subsequent issues of Science. (v.8,#4)

Running S.W.; Nemani R.R.; Heinsch F.A.; Zhao M.; Reeves M.; Hashimoto = H., "A Continuous Satellite-Derived Measure of Global Terrestrial Primary Production," BioScience 54(no.6, 1 June 2004):547-560(14). (v. 15, # 3)

Runte, Alfred, Yosemite: The Embattled Wilderness. University of Nebraska Press, 1990. (v1,#4)

Ruse, M, "Stewardship for the Earth: A Review of Some Recent Books on Biology and Values," BioScience 53(no.9, 2003):876-879. (v.14, #4)

Ruse, Michael, and Castle, David, eds., Genetically Modified Foods: Debating Biotechnology. Buffalo, NY: Prometheus, 2002. Sample contents: The Prince of Wales, "Reith Lecture 2000"; Richard Dawkins, "An Open Letter to Prince Charles"; Biotechnology Case Study: Golden Rice; Ethics in Agriculture; Paul B. Thompson, "Bioethics in a Bio-Based Economy"; Gary Comstock, "Ethics and Genetically Modified Foods"; Jack Wilson, "Intellectual Property Rights in Genetically Modified Agriculture: The Shock of the Not-So-New". (v.13,#4)

Ruse, Michael, "Stewardship for the Earth: A Review of Some Recent Books on Biology and Values," BioScience 53(no. 9, 2003):876-879. Ruse generally comments on the increasing concern with values in biology, particularly as this relates to conservation and to intrinsic values in nature. He does this in the course of reviewing Holmes Rolston, III, Genes, Genesis and God; Edward O. Wilson, The Future of Life; Stephen Jay Gould, The Structure of Evolutionary Theory; Bryan Norton, ed., Searching for Sustainability; and Nicholas Agar, Life's Intrinsic Value: Science, Ethics, and Nature. There is also passing reference to other works, and he recommends Rolston's "Environmental Ethics" in the Bunnin and Tsui-James Blackwell Companion to Philosophy, 2nd ed. Ruse is in philosophy, Florida State University.

Ruse, Michael, and Castle, David, eds., Genetically Modified Foods: Debating Biotechnology. Amherst, NY: Prometheus Books, 2002. With case studies of golden rice, ethics in agriculture, religion, labeling, food safety and substantial equivalence, risk assessment, precautionary principle, developing countries, environmental impact. With a sharp exchange between Prince Charles and Richard Dawkins. Ruse is in philosophy at Florida State University. Castle is in philosophy, University of Guelph, Ontario. (v.14, #4)

Ruse, Michael, "Respecting Animals Values--A Discussion Review of Tom Regan, The Case for Animal Rights, Journal For Agricultural Ethics 1(1988):225-232.

Ruse, Michael. The Darwinian Revolution: Science Red in Tooth and Claw. Reviewed in Environmental Ethics 3(1981):75-83.

Ruse, Michael. Review of The Expanding Circle: Ethics and Sociobiology. By Peter Singer. Environmental Ethics 6(1984):91-94.

Ruse, Michael. Sociobiology: Sense or Nonsense? Reviewed in Environmental Ethics 2(1980):173-77.

Ruse, Michael. Review of Sociobiology and Behavior. By David P. Barash. Environmental Ethics 1(1979):181-85.

Ruse, Michael. Review of The Biological Origin of Human Values. By George Edgin Pugh. Environmental Ethics 1(1979):181-85.

Rusong, Wang, editor in chief, Zhao Jingzhu and Dai Xiaolong, editors, Human Ecology in China: Annual Report of the Department of Systems Ecology 1989, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences. Beijing: China Science and Technology Press, 1990. 251 pages, all in English. The reports are apparently seldom printed in English but this one was made possible by a UNESCO Man and the Biosphere grant. (China)

Russel, Duncan, Review of: Michael Mason, The New Accountability: Environmental Responsibility Across Borders, Environmental Values 15(2006):258-260.

Russell, A. Wendy, and Robert Sparrow, "The case for regulating intragenic GMOs," *Journal of Agricultural and Environmental Ethics* 21(2008):153-181. This paper discusses the ethical and regulatory issues raised by "intragenics" – organisms that have been genetically modified using gene technologies, but that do not contain DNA from another species. Considering the rapid development of knowledge about gene regulation and genomics, we anticipate rapid advances in intragenic methods. Of regulatory systems developed to govern genetically modified organisms (GMOs) in North America, Europe, Australia, and New Zealand, the Australian system stands out in explicitly excluding intragenics from regulation. European systems are also under pressure to exclude intragenics from regulation. We evaluate recent arguments that intragenics are safer and more morally acceptable than transgenic organisms, and more acceptable to the public, which might be thought to justify a lower standard of regulation. We argue that the exemption of intragenics from regulation is not justified, and that there may be significant environmental risks associated with them. We conclude that intragenics should be subject to the same standard of regulation as other GMOs. Russell is at the School of Biological Sciences, University of Wollongong, Australia. Sparrow is at the School of Philosophy and Bioethics, Monash University, Australia.

Russell, Colin A., The Earth, Humanity and God. London: UCL (University College, London) Press, 1994. 193 pages. ISBN 1-85728-145-4. The present condition and future prospects of our planet, taking into account both the responsibilities of human beings and the over-riding providence of God. A Christian perspective on environmental problems that takes very seriously both the scientific and theological issues. Christians have no monopoly on environmental policy but they do have something to contribute to the solution of environmental issues. "I am persuaded that to discuss the fate of the Earth without reference to God would not only be like playing Hamlet without the Prince; it would also be like acting, producing or criticizing the play without reference or acknowledgment to Shakespeare" (p. 3).

Chapter titles: The Earth in Space; The Earth in Time; Fragile Planet, "Hurt not the Earth"; Foes of the Earth; "Mother Earth?"; Gaia; Surveying the Prospects; Hope for the Earth. Russell is at The Open University.

Russell, Colin, A. *Saving Planet Earth—A Christian Response*. Milton Keynes, UK: Authentic Media, 2008. Russell's book is intended for the church population at large as an introduction and aid to Christian action in the environmental crisis.

Russell, Colin A., The Earth, Humanity and God. The Templeton Lectures, Cambridge, 1993. London: UCL Press, 1994. The Earth in space. The Earth in time. Fragile planet. "Hurt not the Earth" (Science and environmental problems, the chemical industry, nuclear technology). Foes of the Earth (Human ignorance, greed, aggression, arrogance). "Mother Earth?" Gaia (Self-regulating systems). Surveying the prospects. Hope for the Earth (intrinsic value, creation and restoration, human stewardship, divine destiny, a new creation). Russell dislikes materialist science, but equally a postmodernist pantheism with an organismic view of nature, a kind of "return to myth," neither good science nor good theology. Stewardship, combining biblical and scientific outlooks, is the most adequate model. Russell is at the Open University, UK. (EE v.12,#1)

Russell, David, "Forestry and the Art of Frying Small Fish," Environmental Values 7(1998): 281-289. This paper is in the form of a narrative exploration of trees and woods. It embraces both the rational and the non-rational dimensions of experience, and mingles science with a little fancy. It begins by questioning some contemporary attitudes towards woods, then proceeds to consider how they function, it continues with some reflections on the cultural significance of trees and woods, and concludes with some ideas on the implications for woodland management. KEYWORDS: woods, forestry, ecosystem dynamics, significance. David Russell is with The National Trust, UK. (EV)

Russell, Denise, "Animal Experimentation in Psychology and the Question of Scientific Merit," Ethics and the Environment 2(1997):43-52. Nonhuman animals are widely used in psychological research and the level of suffering and death is high. This is usually said to be justified by appealing to the scientific merit of the research. This article looks at notions of scientific merit, queries whether they are as clear-cut as commonly supposed, and argues that with contemporary conceptions it is too easy for any research to count as meritorious. A tightening of the notion of scientific merit is suggested, providing a ground for rejection of certain psychological research. Russell is in philosophy at the University of Sydney, Australia. (E&E)

Russell, Denise, "‘Piracy’ on the High Seas," *Ethics and the Environment* 12(no. 2, 2007):93-116. In "Thinking Like a Mackerel," Susan Power Bratton attempts to develop a sea ethic based on the writings of Rachel Carson. This article critically evaluates Bratton's position using an analysis of a contemporary problem on the high seas as a basis: the theft of the Patagonian tooth fish in the Southern Ocean. Various possibilities for providing philosophical and legal bases for the protection of the sea realm are explored. Russell is in philosophy, University of Wollongong, Australia.

Russell, Emily W.B. People and the Land Through Time. New Haven: Yale University Press, 1997. 388 pp. \$35. A commentary on the human imprint on ecological patterns. Practical information on kinds, sources, and interpretations of historical documents and paleo-ecological records that ecologists need to know in order to understand ecological processes. An effort to understand the lingering consequences of human history on current ecosystems and landscapes, and conversely to understand the role that changing environments have played in human history. (v8,#3)

Russell III, Edmund P. "Lost Among the Parts Per Billion: Ecological Protection at the United States Environmental Protection Agency, 1970-1993," Environmental History 2(1997):29.

Russell, Keith C., and Chuck Harris, "Dimensions of Community Autonomy in Timber Towns in the Inland Northwest," Society & Natural Resources 14(no.1, Jan. 2001): 21-. (v.12,#3)

Russell, Lisa A., Goltz, James D., and Bourque, Linda B. "Preparedness and Hazard Mitigation Actions Before and After Two Earthquakes," Environment and Behavior 27(no.6, Nov. 1995):744- . (v6,#4)

Russell, W. M. S. (William Moy Stratton), and Burch, R. L., The principles of humane experimental technique. London: Methuen 1959. Springfield, IL: Thomas, 1959. Reprinted 1992.

Russell, WH; Jones, C, "The effects of timber harvesting on the structure and composition of adjacent old-growth coast redwood forest, California, USA," Landscape Ecology 16(no.8, 2002):731-741. (v.13, #3)

Russell-Smith, Jeremy, Lucas, Diane, Chaloupka, George. "Aboriginal Resource Utilization and Fire Management Practice in Western Arnhem Land, Monsoonal Northern Australia: Notes for Prehistory, Lessons for the Future," Human Ecology 25(no.2 1997):159. (v8,#3)

Russian Conservation News. Russian conservation news. Website: www.russianconservation.org This site is maintained by the Center for Russian Nature Conservation, and also publishes Russian Conservation News. (v10,#4)

Russian Conservation News is a quarterly publication of the Biodiversity Conservation Center, a Moscow-based center that coordinates a wide range of conservation projects. Contact: Eugene Simonov, 4 Cherniakovskogo Street, Apt. 10, Moscow 125319. In the U.S., contact: Mikhail Binnikov, 2126 West 16th Ave., Eugene, OR 97402. Subscriptions in U.S. \$10 to PEEC/RCN, RR 2, Box 1010, Dingman's Ferry, PA 18328. (v6,#1)

Russian Conservation News is the only English language publication presenting articles on environment and nature conservation in countries of the former Soviet Union. A joint publication of The Center for Russian Nature Conservation and The Biodiversity Conservation Center. Published quarterly, \$ 15 a year to individuals, \$ 25 to organizations. Russian Conservation News, c/o Pocono Environmental Education Center, R.R. 2, Box 1010, Dingmans Ferry, PA 18328, 717/828-2319. Fax 717/828-9695. <http://www.igc.apc.org/bcc-west>

Russon, A. E., Erman, A., and Dennis, R., "The population and distribution of orangutans (Pongo pygmaeus pygmaeus) in and around the Danau Sentarum Wildlife Reserve, West Kallmantan, Indonesia," Biological Conservation 97(no. 1, 2001):21- . (v.12,#2)

Russow, Lilly-Marlene. "Why Do Species Matter?" Environmental Ethics 3(1981):101-12. One seldom-noted consequence of most recent arguments for "animal rights" or against "speciesism" is their inability to provide a justification for differential treatment on the basis of species membership, even in cases of rare or endangered species. I defend the claim that arguments about the moral status of individual animals inadequately deal with this issue, and go on, with the help of several test cases, to reject three traditional analyses of our alleged obligation to protect endangered species. I conclude (a) that these traditional analyses fail, (b) that there is an important conceptual confusion in any attempt to ascribe value to a species, and (c) that our obligation must ultimately rest on the value--often aesthetic--of individual members of certain species. Russow is in the department of philosophy, Purdue University, West Lafayette, IN. (EE)

Russow, Lilly-Marlene. Review of Animals and Why They Matter. By Mary Midgley. Environmental Ethics 7(1985):171-75.

Russow, Lilly-Marlene. "Ecosystem Health: An Objective Evaluation?" Environmental Values 4(1995):365-369. Some ecologists and philosophers have tried to develop a concept of ecosystem health that would support more 'objective' means of evaluating an ecosystem. I argue (following Dale Jamieson) that the concept of health is itself too subjective to justify such an attempt, and then suggest that part of the problem is that the goal of achieving greater objectivity is itself unclear. I analyse and evaluate three different ways of drawing the distinction between subjective and objective evaluations as a first step towards clarifying that goal. KEYWORDS: Ecosystem health, Jamieson, subjective values, objective values. Russow is in the philosophy department, Purdue University. (EV)

Rutherford, P., "'Talking the Talk': Business Discourse at the World Summit on Sustainable Development," Environmental Politics 12(no. 2, 2003): 145-150.

Rutledge, Daniel T., Christopher A. Lepczyk, and Jianguo Liu, "Spatiotemporal Dynamics of Endangered Species Hotspots in the United States," Conservation Biology 15(no.2, Apr. 2001): 475-. (v.12,#3)

Rutledge, Ron, and Terje Vold, "Canada's Wilderness," International Journal of Wilderness 1(no. 2, December):8-14. Canada is a large country with close ties to its wilderness heritage. An analysis of the extent of Canada's wilderness, both protected wilderness and remaining roadless areas. Canada has continued to increase the size of its protected area systems, continued to give more protection, and increasingly given special recognition to protecting wilderness. The authors are with the British Columbia Ministry of Forests, Victoria, BC. (v7,#1)

Ruttan, Lore M. "Closing the Commons: Cooperation for Gain or Restraint?" Human Ecology 26(no.1, Mar. 1998):43- . (v9,#2)

Ruttan, Vernon W., ed., Agriculture, Environment, and Health: Toward Sustainable Development in the 21st Century. Minneapolis: University of Minnesota Press, 1993. 384 pages. Paper, \$ 19.95. The changes in institutional design and policy reforms now underway will ultimately provide sustainable growth in agricultural production. Especially important are the institutions that conduct research and implement advances in technology and practice in the fields of agriculture and health, as well as those that monitor the changes in resource endowments, the quality of the environment and of health, and the productivity of humans employed in agricultural production. Ruttan is in agricultural economics at the University of Minnesota. (v4,#2)

Ruttan, Vernon W., "The Continuing Challenge of Food Production," Environment 42(no. 10, Dec. 1, 2000):25- . Have efforts to create a global system of agricultural research been successful in responding to the food security, resource management, and poverty reduction challenges of the 21st century? (v.12,#2)

Ryan, Karen-Lee, Trails for the Twenty-First Century: Planning, Design, and Management Manual for Multi-Use Trails. Washington, DC: Island Press, 1993. Paper, \$ 24.95. 290 pages. Thousands of miles of abandoned railroad corridors, former canals, and other now unused transportation routes are being converted to trails that provide a wide range of recreational and functional uses, including walking, cycling, horseback riding, cross country skiing, and more, all helping persons to re-establish contacts with the natural world and with their landscapes. Karen-Lee Ryan is program manager for the Rails-to-Trails Conservancy. (v4,#2)

Ryan, Maura A., and Todd David Whitmore, eds., The Challenge of Global Stewardship: Roman Catholic Responses. Notre Dame, IN: University of Notre Dame Press, 1997. 288 pages. \$ 15.00 ppaer. Among

other contributors, John Kavanaugh maintains that it is only by developing the capacity to experience the moral claims exerted on us by all living things that we develop the habits of responsible existence in community. George Weigel on the population problem. Bryan Massingale on the problem of "human welfare ecology."

Ryan, Pam. Review of Environmentalism for a New Millennium: The Challenge of Coevolution. By Leslie Paul Thiele. Environmental Ethics 24(2002):221-222. (EE)

Ryan, Philip. "Gare, MacIntyre, and Tradition." Environmental Ethics 22(2000):223-224.

Rydell, Robert W., Review of Matt Cartmill, A View to a Death in the Morning: Hunting and Nature Through History (Cambridge: Harvard University Press, 1993), Science 261 (September 17, 1993): 1609-1610. The idea that human beings are natural-born hunters is rooted less in science and nature than in culture and politics--another myth about human origins that cannot be privileged over other myths. Cartmill concludes that since boundaries between humans and animals are cultural, not natural, constructs, they must be redefined when they lose intellectual credibility. Hierarchical distinctions between masters and slaves and men and women have collapsed. If the cognitive boundary between man and beast is equally indefensible, we cannot defend human dignity without extending some sort of citizenship to the rest of nature--which means ceasing to treat the nonhuman world as a series of means to human ends (see p. 223). Rydell adds that Cartmill ought to have addressed conservation-based arguments that regard hunting as an ethical and environmentally sound means for controlling population imbalances among some species. But the book is "a razor-sharp analysis that succeeds in raising doubts about deeply rooted and widely shared assumptions concerning the position of human beings in nature." Rydell is in the Department of History, Montana State University. (Thanks to Ned Hettinger.)

Ryden, Hope, God's Dog: A Celebration of the North American Coyote. New York: Viking Press, 1979. 315 pages. The coyote is a remarkable animal. A hundred years ago it was only in the American West, but has now spread and been seen in every state except Hawaii. Every year 400,000 are exterminated in the U.S, yet the wily creature continues to flourish. There are more now in the U.S. than ever before. Also see Finkel, Mike, "The Ultimate Survivor," Audubon, May, June 1999, pp. 52-59.

Ryder, Oliver A. "Zoological Parks and the Conservation of Biological Diversity: Linking 'ex situ and in situ' Conservation Efforts," The Journal of Environment and Development 4, no. 2 (Summer 1995): 105-114. (v6,#4)

Ryder, Richard D., and Singer, P., eds., Animal welfare and the environment. London: Gerald Duckworth & Company, 1992.

Ryder, Richard D., ed., Animals and the Environment. London: Duckworth, 1992. In association with the Royal Society for the Prevention of Cruelty to Animals. Twenty contributors address the relationship between concern for animals, domestic and wild, and environmental conservation. Ryder is past Chair of the RSPCA Council. Includes:

--Wilkins, David, "Animal Welfare and the Environment: Are They Always Compatible?", pages 73-80. Wilkins is the Chief Veterinary Officer of the RSPCA.

Ryder, Richard D.. "Toward Kinship," The Animals' Agenda 17(no.1, 1997):44. "Speciesism and 'Painism'," explains Richard Ryder, are the grounds for opposing animal exploitation. (v8,#2)

Ryder, Richard D., Animal Revolution: Changing attitudes towards speciesism. Oxford: Blackwell, 1989.

Rydin, Yvonne. "Can We Talk Ourselves into Sustainability? The Role of Discourse in the Environmental Policy Process." Environmental Values 8(1999):467-484. ABSTRACT: There has been a recent expansion of work within a variety of theoretical frameworks which looks at the role of discourses in policy and politics, much of it focused on environmental issues. Within this there is a particular category of polemical material which argues for discourse management and for managing discourse between actors towards achieving a particular goal, such as sustainable development. The paper examines the different ways in which the significance of environmental discourse is recognised and its influence analysed. It critically examines the claims made for normative discourse management and highlights the need to consider carefully the institutions through which environmental policy discourse is mediated. KEYWORDS: Sustainability, discourse, environmental policy, policy agendas, collaborative planning. Yvonne Rydin, Department of Geography and Environment London School of Economics and Political Science London WC2A 2AE, UK Email: Y.Rydin@lse.ac.uk. (EV)

Rye, Tom. Review of: Low, Nicholas and Brendan Gleeson, eds., Making Urban Transport Sustainable. Environmental Values 13(2004):133-135. (EV)

Rykiel, EJ, "Scientific Objectivity, Value Systems, and Policymaking," Bioscience 51(no. 6, 2001):433-436. (v.13,#1)

Ryland, Elisabeth K. Review of Paul Hawken, Amory Lovins, & J. Hunter Lovins, "Natural Capitalism: Creating the Next Industrial Revolution", Organization and Environment 14 (No. 4, December 2001) pp. 466-69. Ryland is professor of management at California State University, San Bernardino. (v.13,#2)

Ryszkiewicz, Marcin, Matka Ziemia w przyjaznym kosmosie. Gaja i zasada antropiczna w dziejach myśli przyrodniczej (Mother Earth in the Friendly Universe. Gaia and the Anthropic Principle in the History of Natural Sciences), PWN, 1994. In Polish. (v9,#2)

Saarinen, K and Jantunene, J; "Grassland Butterfly Fauna under Traditional Animal Husbandry: Contrasts in Diversity in Mown Meadows and Grazed Pastures," Biodiversity and Conservation 14 (no. 13, December 2005): 3201-3213.

Saayman, Graham S., ed., Modern South Africa in Search of a Soul: Jungian Perspectives on the Wilderness Within Boston, MA: Sigon Press, 1990. Ten articles interpreting the psychological and spiritual dimensions of wilderness experience. (v6,#3)

Saayman, M. and E. Slabbert, "A Profile of Tourists Visiting Kruger National Park," Koedoe: Research Journal, South African National Parks, 47/1 (2004):1-8. Kruger is one of the world's best-known, one of the world's largest, and most profitable parks. Negotiations are underway with neighboring countries to form the Limpopo Transfrontier Conservation Area, which would be the largest park in the world. There are approximately 950,000 visitors per year. With shrinking budgets for conservation, and with growth in the number of privately owned parks, however, it is increasingly important to understand whose these tourist are and what they want in park experience. (v. 15, # 3)

Saberwal, Vasant, Rangarajan, Mahesh, and Kothari, Ashish. People, Parks and Wildlife: Towards Coexistence. Hyderabad, India: Orient Longman Limited, 2001 (Tracts for the Times #14). 143 pages. "There are two opposing ways of thinking about conservation. One is an exclusionist policy that seeks to exclude resident people from within protected areas, restrict local human access to them, and prohibit customary use rights; a policy that considers the interests of local residents as irreconcilably opposed to the logic of conservation. There is a contrary way of looking at the question, one that opposes total

exclusion, argues for the rights of resident people within the forests, and sees no ineluctable hostility between humans and animals. It is a mode of thinking that considers the politics of total exclusion to be ecologically unsound, practically unviable, and socially unjust. This tract develops the second argument against the first." Focusing on wildlands management in India, the authors saddle "exclusionists" with outmoded or extreme positions (natural systems are always in equilibrium, local interests are necessarily opposed to conservation) and fail to discuss the actual effects of subsistence use on biodiversity in a detailed or objective manner. (Contributed by Phil Cafaro). (EE v.12,#1)

Saberwal, Vasant K., Kothari, Ashish. "The Human Dimension in Conservation Biology Curricula in Developing Countries", Conservation Biology 10(no.5,1996):1328. (v7,#4)

Saberwal, Vasant K. "Pastoral Politics: Gaddi Grazing, Degradation, and Biodiversity Conservation in Himachal Pradesh, India." Conservation Biology 10, no.3 (1996): 741. (v7, #3)

Saberwal, Vasant K. "Saving the Tiger: More Money or Less Power?" Conservation Biology 11 (no.3, 1997): 815-17. Local communities near tiger reserves have great animosity toward state-initiated conservation programs. Decisions must be more local-level, and it is unreasonable to translocate people, who can rather be educated to live with tigers, as they already do with lions. Translocation programs, already associated with dams, do not work in India. Persons in the United States would not be translocated to save mountain lions. Compensation systems for those whose livestock are preyed upon are abused; fatalities from tiger attacks run into the hundreds annually. Saberwal is Indian, currently at the Harvard Center for Population and Development Studies. (v8,#2)

Sachs, Albie, Protecting Human Rights in a New South Africa. Cape Town: Oxford University Press, 1990, 1991. With a chapter on "Rights to the Land," and "Conservation and Third Generation Rights: The Right to Beauty." Sachs is a lawyer and writer, long a member of the African National Congress (ANC) and a member of the ANC Constitutional Committee. (v6,#3)

Sachs, Jeffrey D., *End of Poverty: Economic Possibilities for Our Time*. New York: Penguin, 2005. An economic rescue book. Sachs proposes a much grander project than the UN's Millennium Development Goal of cutting extreme poverty in half by 2015. He wants the global economy totally to eradicate poverty by 2025. He outlines a number of "poverty traps," which doom most development projects to failure, by not considering feedback loops in the local systems. Sachs is director of the Earth Institute at Columbia University.

Sachs, Jeffrey D., "Sustainable Development," Science 304(30 April 2004):649. An editorial. With scientists, there is an overriding concern that the growing human population is putting global-scale processes under increasing strain. Larger global society is caught between competing visions of the future: one of fear and one of hope. Both acknowledge the stress, but the vision of fear sees increasing clashes over resources, with military defenses of natural resources. The vision of hope, offered often by the apprehensive scientists, holds that science and technology offer a suite of options for combining economic well-being and environmental sustainability. Sachs directs the Earth Institute at Columbia University. (v.14, #4)

Sachs, Jeffrey D. *Common Wealth: Economics for a Crowded Planet*. New York: The Penguin Press, 2008. Sachs uses economic data, demographic trends, and climate science to explore how to mitigate global warming and environmental destruction, stabilize the world's population, end extreme poverty, and break barriers such as unilateral, militarized approaches to international problems that hinder global cooperation. He argues that there are concrete, low-cost, and pragmatic remedies with benchmarks and budgets for these problems.

Sachs, Wolfgang, ed., Global Ecology: A New Arena of Political Conflict. Reviewed by Peter Stoett. Environmental Values 5(1996):92-93. (EV)

Sachs, Wolfgang, ed., Global Ecology. London: Zed Books, 1993. 320 pages. Essays with the common theme of the contradictions in the fashionable notion of sustainable development. (v4,#1)

Sachs, Wolfgang, ed., Global Ecology: A New Arena of Political Conflict. London: Zed Books, 1993. (v5,#1)

Sachs, Wolfgang. Planet Dialectics: Explorations in Environment and Development. London and New York: Zed Books, 1999. Review by Matthew Paterson, Environmental Values 10(2001):521. (EV)

Sack, R.D., "Human territoriality: its theory and history. Commentary 1: John Agnew, Commentary 2: Anssi Paasi, Author's response: R.D. Sack.," Progress In Human Geography 24 (No. 1, 2000): 91- . (v.11,#2)

Safonov, Paul I., Review of: Randal Bluffstone and Bruce A. Larson (eds.), Controlling Pollution in Transition Economies: Theories and Methods, Environmental Values 11(2002):116-118.

Sagoff, "Carrying Capacity and Ecological Economics," BioScience 45(1995):610-620. Sagoff generally argues that ecological economics is not much better than classical economics at forming a basis for environmental conservation. "I cast doubt on hopes that the utilitarian logic of ecological economics is any more able than is the logic of mainstream economics to provide a strong foundation for the claims of environmentalism" (p. 610). Reply: Daly, Herman E., "Reply to Mark Sagoff's 'Carrying Capacity and Ecological Economics,'" BioScience 45(1995):621-624. "After we have recognized the intrinsic value of the natural world, then we have an obligation to protect and increase that value. That realization leads us to pay attention to instrumental value. ... It is a further mistake to identify intrinsic value with morality and instrumental value with prudence and then set up an opposition between them, as Sagoff does." Daly's reply shows that economists, at least ecological economists, are not going to be upstaged by philosophers either on their own turf or with moralist arguments. A spirited exchange that should get the reader (or the classroom) thinking. Sagoff is at the Institute for Philosophy and Public Policy, Daly in economics, at the University of Maryland. (v7,#1)

Sagoff, Mark, "Zuckerman's Dilemma: A Plea for Environmental Ethics." Hastings Center Report 21(September-October 1991):32-40. Zuckerman is the farmer in Charlotte's Web who has to decide whether to put Wilbur, the pig, to economic use or to spare the pig for aesthetic and moral reasons. We can value nature (1) for the pork chops it provides, or (2) as an object of knowledge and perception, or (3) with love and affection. "Maryland's former director of tidal fisheries, recognizing the benefits of genetic engineering, argued that the Chesapeake Bay 'should be run more like a farm than a wilderness'" (p. 35). In such a mariculture, people might want to engineer fish that can stand the pollution and still be edible rather than remove the pollution. This might be more cost effective. A rockfish, already perfected, that does not migrate into toxic areas illustrates the possibilities. Also, fishery biologists have developed an acid tolerant trout that does well in acidified lakes. But, in environmental ethics, "the grand diversity of life, particularly the existence of rare and exotic species, presents a profound moral obligation for civilization, which is to share the earth peaceably with other species" (p. 38). Sagoff is director of the Institute for Philosophy and Public Policy, College Park, Maryland.

Sagoff, Mark, "Has Nature a Good of Its Own?" Pages 57-71 in Robert Costanza, Bryan G. Norton, and Benjamin D. Haskell, eds., Ecosystem Health: New Goals for Environmental Management. Washington, DC: Island press, 1992. If we are to accept the idea that ecosystems may be objects not only of use but also of aesthetic appreciation and moral attention, then we must accept the possibility that these systems

have a good of their own we ought to respect and therefore protect. ... Concepts of ecological health and integrity ... make the most sense in relation to the intrinsic--the moral and aesthetic value of ecological communities and systems. Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland. (v5,#4)

Sagoff, Mark, "Four Dogmas of Environmental Economics," Environmental Values 3 (1994): 285-310. Four dogmas have shaped modern neoclassical economics. The first proposes that markets may fail to allocate resources efficiently, that is, to those willing to pay the most for them. The second asserts that choices, particularly within markets, reveal preferences. The third is the assumption that people always make the choices they expect will benefit them or enhance their welfare. The fourth dogma holds that perfectly competitive markets will allocate resources to their most beneficial uses. This is the doctrine of "the invisible hand." Sagoff argues that these dogmas of applied welfare economics should be abandoned. One consequence of doing so will be an increased interest in the institutional context of production. A second will be a turn toward empiricism. (v5,#4)

Sagoff, Mark, "A Noneconomic View of the Value of Biodiversity," in Gary Meffe and C. Ron Carroll, Principles of Conservation Biology (Sunderland, MA: Sinaur Associates, 1997). A box essay. (v8,#2)

Sagoff, Mark, "Population, Nature, and the Environment," Report from the Institute for Philosophy and Public Policy, vol. 13, no. 4, Fall 1993, a special issue on "Ethics and Global Population." While local populations can nibble around the edges of rain forests, it takes enormous capital investments to deforest on a major scale. Nations without the wealth to purchase technology from abroad or to develop it themselves may confront overwhelming difficulties in coping with population growth. In view of the doubling of world population, we must look to changes in policy and more benign technologies if we are to keep any remnants of nature intact for future generations. Sagoff is Director of the Institute. Other papers in this issue on population policy. (v4,#4)

Sagoff, Mark, "Should Preference Count?" Land Economics, 70 (May 1994): 127-44. (v5,#4)

Sagoff, Mark, "Four Dogmas of Environmental Economics." Environmental Values 3(1994):285-310. Four dogmas have shaped modern neoclassical economics. The first proposes that markets may fail to allocate resources efficiently, that is, to those willing to pay the most for them. The second asserts that choices, particularly within markets, reveal preferences. The third is the assumption that people always make the choices they expect will benefit them or enhance their welfare. The fourth dogma holds that perfectly competitive markets will allocate resources to their most beneficial uses. This is the doctrine of the invisible hand. I argue that these dogmas of applied welfare economics should be abandoned. One consequence of doing so will be an increased interest in the institutional context of production. A second will be a turn toward empiricism. KEYWORDS: Choices, externalities, market efficiency, preferences, welfare economics. Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland. (EV)

Sagoff, Mark, "Why Exotic Species Are Not as Bad as We Fear," Chronicle of Higher Education, Vol. 46, Number 42 June 23, 2000. (v.12,#4)

Sagoff, Mark, "The Greening of the Blue Collars," The Report from the Institute for Philosophy and Public Policy, vol. 10, no.3/4, Summer/Fall 1990. (v2,#2)

Sagoff, Mark, "On the Value of Endangered and Other Species," Environmental Management 20(no. 6, 1996):897-911. Two frameworks--utilitarian and Kantian--are used by society to make decisions concerning environmental management, and, in particular, species protection. The utilitarian framework emphasizes the consequences of choices for prior preferences. A perfectly competitive market, on this

model, correctly values environmental resources. The Kantian approach identifies rules appropriate to recognized situations given the identity of the decision maker. It relies on democratic political processes and institutions to provide the means by which citizens determine the identity of their community--its moral character and aspirations--and match appropriate rules to recognized situations. Markets do not fail in any general way in measuring the economic value of plants and animals. Market prices, in general, correctly represent the marginal or exchange value of species. If society legislates against extinction, this must be understood as an exercise in Kantian decision making in view of the moral value of species, not as an attempt to "correct" a market failure or to promote social welfare or utility. Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland. (v8,#2)

Sagoff, Mark, "Genetic Engineering and the Concept of the Natural," Philosophy and Public Policy Quarterly 21(no. 2/3, Spring/Summer 2001):2-10. The food industry in its advertising conspicuously appeals to the image of nature and insists that all its products are natural. This has made it difficult for the industry to embrace, as it wishes, the efficiencies of genetic engineering. (v.13,#1)

Sagoff, Mark, "Muddle or Muddle Through? Takings Jurisprudence Meets the Endangered Species Act" William and Mary Law Review 38 (no. 3, March 1997):825-993. The long article takes up the entire issue and is book-length. "This Article proposes that the Supreme Court, rather than resolving controversies about the fundamental character of property, liberty, nature, ecology, and so on, appropriately limits itself to reigning in regulation at its own frontier. As long as the Court equally threatens opposing positions with utter and devastating defeat--fanning fears that it may vindicate either the libertarian or the environmentalist extreme--it may succeed in restraining the ambitions of both property owners and regulators, who then may recognize that they have more to lose from confrontation than from compromise and accommodation" (pp. 844-845). "This Article argues that no plausible scientific argument at present supports the claim that the extinction of species in the United States courts environmental disaster. It is far more plausible that rare and endangered species have become epiphenomena, affected by the environment but having little effect on it. Moral, aesthetic, and spiritual arguments amply may justify all that we do to protect every species, but an instrumental or economic rationale appears beyond reach" (p. 844). Sagoff is at the Institute of Philosophy and Public Policy at the University of Maryland, and is the former president of the International Society for Environmental Ethics. (v8,#3)

Sagoff, Mark, "Biodiversity and the Culture of Ecology," Bulletin of the Ecological Society of America 74 (no. 4, December, 1993:374-381). "What may worry us most in the disappearance of species is the prospect, then, of becoming ourselves strangers to the earth, of never quite settling into it, of losing touch with the places that help constitute the identity of our communities, of therefore being at home nowhere. For the sake of our own identities we must maintain the identities of the places where we live--and this entails maintaining its flora and fauna as well as larger landscapes. The motive for saving ecosystems may most fundamentally lie in our need to feel at home where we live--to attach ourselves to what becomes safe and secure because it retains its aesthetic and cultural characteristics in the midst of change." Sagoff is Director of the Institute for Philosophy and Public Policy, University of Maryland, and the newly elected president of ISEE. (v5,#1)

Sagoff, Mark, "Environmentalism vs. Value Subjectivism: Rejoinder to Anderson and Leal," Critical Review 8, no.3 (1994): 447-67. (v5,#4)

Sagoff, Mark, "Can We Put a Price on Nature's Services," Report from the Institute for Philosophy and Public Policy, 17 (no. 3, Summer 1997):7-12. An analysis of Costanza et al, "The Value of the World's Ecosystem Services and Natural Capital," Nature 387(no. 6230, May 15, 1997) and related articles. "The effort Costanza and colleagues undertake to 'estimate the "incremental" or "marginal" value of ecosystem services' should be seen as an aberration within the program of ecological economics. It can succeed only

in lowering the credibility of the discipline while increasing the legitimacy of the standard cost-benefit analysis policy framework most likely to defeat attempts to protect the natural environment" (p. 12). Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland, College Park. (v9,#1)

Sagoff, Mark, "Environmental Policy and Law," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 701-7. (v6,#2)

Sagoff, Mark, "On Teaching a Course on Ethics, Agriculture, and the Environment: Part 2", Journal of Agricultural Ethics 1(1988):87-100.

Sagoff, Mark, The Economy of the Earth: Philosophy, Law, and the Environment. Cambridge: Cambridge University Press, 1988. Pp. x, 271. Sagoff is currently Director of the Center for Philosophy and Public Policy at the University of Maryland. He concentrates on the interconnections between environmental policy, law, economics, and environmental ethics. This book is a substantially new work that draws upon many of his published articles from the period of 1974-1986. In my view, it is the single best introduction to environmental policy and environmental ethics, particularly for a sophisticated reader interested in the practical applications of scholarly philosophical thought. Sagoff provides a systematic attack on the basic assumptions of welfare economics and cost-benefit analysis as a basis for environmental policy. The idea that the aggregate of individual human preferences in the market place can serve as the basis for a just social policy is a "category mistake." Values are community based intersubjective goals which evolve throughout the history of the community, state, or nation; they cannot be reduced to consumer preferences. Contemporary policy analysts focus on a narrow model of rationality, as efficiency; but the fuller sense of rationality focuses on the virtue of deliberation, open-mindedness, and political discourse. The community-based rationality is the source of our values, ends, and goals of society; these form the basis of environmental policy. Environmental policies of preservation and conservation are not absolutes; rather they are the products of an open and rational process of community deliberation. "[E]nvironmental resources ought to be treated not as means to ends...but as ends in themselves. They are essential...to the process by which we create our values" (p. 90). For Sagoff, this process involves understanding our history as a democratic nation and our relationship with the American wilderness. This is an elegantly written book, filled with clear and precise arguments. No bibliography, but extensive notes. Reviewed in Environmental Ethics 10(1988):363-68. (Katz, Bibl # 2)

Sagoff, Mark, "Fact and Value in Ecological Science," Environmental Ethics 7(1985):99-116. An important look at the different roles that ecological science and ecologists can play in human interaction with the environment. Ecological science offers us the choice of managing the environment or preserving it. An increased awareness of ecological process will enable us to respect the integrity and value of the environment. (Katz, Bibl # 1)

Sagoff, Mark, "Animal liberation and environmental ethics: Bad marriage, quick divorce." Osgoode Hall Law Journal 22(1984):297-307.

Sagoff, Mark, "Settling America or the Concept of Place in Environmental Ethics," Journal of Energy, Natural Resources, and Environmental Law (University of Utah College of Law): 12 (no. 2, 1992):349-418. Some section titles: America on the Move; Place and Placelessness; Nature is Not a Place; The Environment is Not a Place; Protectionism; The Country vs. the City; Down on the Farm; Place as Res Publica; The Chesapeake; the North Sea; Have We a Place in Nature?; Nature as Human Habitat; The Great Environmental Awakening; Geography and History; Sustainability and Community; Environmentalism and the Dominant Social Paradigm. Sagoff is Director of the Institute for Philosophy and Public Policy, University of Maryland. Copies are available on request: School of Public Affairs, College Park, MD 20742. Phone 301/405-4753. Fax: 301/314-9346. (v4,#2)

Sagoff, Mark, "Is Big Beautiful?" Journal of Applied Philosophy vol. 1, no. 2 (1984):269-280. A discussion of the threat to democracy posed by large scale technologies and bureaucracies, focusing on public policy in environmental affairs of the United States. (Katz, Bibl # 1)

Sagoff, Mark, "Do We Consume Too Much?" The Atlantic Monthly 279 (No. 6, June, 1997):80-96. With vigorous reply: Ehrlich, Paul R., Daly, Gretchen C., Daly, Scott C., Myers, Norman, and Salzman, James, "No Middle Way on the Environment," 280 (No. 6, December, 1997):98-104. Also see Partridge, Ernest, "How Much is too Much?" listed separately. Sagoff: "It is simply wrong to believe that nature sets physical limits to economic growth. ... The idea that increasing consumption will inevitably lead to depletion and scarcity, as plausible as it may seem, is mistaken both in principle and in fact" (p. 83). Such beliefs come from mistaken beliefs that mineral resources are finite, that we are running out of food and timber, we are running out of energy, and that resource consumption by the wealthy north exploits the poorer nations of south. Although our present consumption patterns cannot be sustained, better technology will help us surmount natural limits without requiring substantial changes beyond what we are willing to adopt. Shades of Julian Simon!

But Sagoff does not advocate high levels of consumption. The more significant limits to resource use and consumption are inherent in our spiritual needs for affiliation with nature and not in nature itself. "An intimacy with nature ends our isolation in the world. We know where we belong, and we can find the way home" "The question before us is not whether we are going to run out of resources. It is whether economics is the appropriate context for thinking about environmental policy" (p. 96). Sagoff thinks not. He not only has great faith in technology, he has even more faith that a people who discover themselves to be unlimited by nature will voluntarily limit themselves for spiritual communion with nature. "We consume too much when consumption becomes an end in itself and makes us lose affection and reverence for the natural world" (p. 96).

Ehrlich, the Dalys, Myers, and Salzman respond that Sagoff "has done a disservice to the public by promoting once again the dangerous idea that technological fixes will solve the human predicament" (p. 98). Sagoff misperceives his own misperceptions. Resources are finite, nature's services are threatened by consumption, prices are not reliable signals of resource scarcity, technology is no magic solution, and wealthy nations do exploit poorer nations. Sagoff's claims run counter to a statement signed by 1,500 leading scientists, including more than half of all living Nobel laureates in the sciences, as well as another statement issued by fifty-eight scientific academies, representing the global scientific community and including the U.S. National Academy, the British Royal Society, the French, German, Swedish, Russian, and Indian Academies. "Thus the very people who would produce the technological fixes in which Sagoff places such faith do not share his complacency" (p. 99). Middle-ground statements are muddled and encourage the present trajectory. "The temptation to look for the truth 'somewhere in the middle' may be dangerous folly." (EE v.12,#1)

Sagoff, Mark, "Free-Market Versus Libertarian Environmentalism," Critical Review 6, no. 2-3 (1993): 211-30. (v5,#4)

Sagoff, Mark, "Some Problems with Environmental Economics," Environmental Ethics 10(1988):55-74. A comment on the notion of "willingness-to-pay" as a valid method of assessing the economic value of the environment. The argument is based on material from Sagoff's book, The Economy of the Earth. For Sagoff, rationality is not the maximization of utility preferences but the process of deliberation in an open society. Good analogy with the duties of juries: decisions in a court are not based on "willingness-to-pay" but rather on a careful review of the evidence. (Katz, Bibl # 2)

Sagoff, Mark, "Cows are Better than Condos, or How Economists Help Solve Environmental Problems," Environmental Values 12(2003): 449-470. This essay explores three case studies that illustrate the exemplary use of economic analysis in environmental decision-making. These include: 1) the creation of

a market in tradable grazing rights in the American West; 2) a cost analysis that facilitated a negotiated rulemaking at a power plant in Arizona; and 3) a conception of production-based pollution allowances that led to an agreement for regulating Intel microprocessor production plants. The paper argues that cost-benefit analysis may be less useful than other kinds of economic analysis that can guide and inform rather than judge and second-guess the outcome of negotiated and collaborative decision-making. (EV)

Sagoff, Mark, "Ethics, Ecology, and the Environment: Integrating Science and Law," Tennessee Law Review 56(1988):77-229. Book length article, including an excellent (and provocative) treatment of current theory and issues within ecological science, in what might first be thought an unlikely place, a law journal, but this is in anticipation of integrating ecoscience into environmental policy. A nonrealist view of environmental science. Environmental policy looks to ecosystem science for help, but theoretical mathematical ecology is seldom of any use in telling us what we need to know in the complex interactions of ecosystems. Their variability thwarts the application of theory to nature. Ecosystem science does not have the time, knowledge, or resources to learn all about ecosystems, and current science is seldom realist anyway. "Mathematical population ecology has relied on very idealized assumptions that have no real relationship to the phenomena of natural history" (p. 124). Empirical models of ecosystems can be quite useful, but they are not theoretical, and only map the aspects of ecosystems that we pragmatically or practically wish to manage, preserve, or conserve. "The science of ecology finds itself in the midst of an identity crisis" (p. 153).

Objective, absolute theory is impossible and what kind of ecosystem science ecologists get depends on the goals they choose; if ecologists accentuate utilitarian management they get one kind; if they choose to appreciate values in nature ecologists will orient their studies differently and learn other things. "When models, equations, and principles that suggest prudential reasons for environmental protection prove to be unfounded or spurious, those who support them are left with little to contribute to public debate, because they have abandoned the moral and aesthetic rationale which may have motivated the search for the prudential arguments in the first place. It might be better and more honest if ecologists candidly admit the ethical and aesthetic goals that guide their research, rather than hide them under dubious or conjectural prudential and economic arguments" (p. 181). "I argue that estuaries, forests, lakes, and other ecosystems may properly be said to have a life--a natural history--and a good of their own; moreover, they may be studied scientifically in these normative terms. In presenting the thesis that ecological communities have a good of their own, I mean to take a small step toward establishing a basis for an environmental ethic. It seems plausible to argue, at least, that ecosystems may be legitimate objects of moral attention or worth in themselves if they have an objective good of their own--that is, if terms such as 'health,' 'integrity,' 'thriving,' 'well being,' or their opposites can meaningfully be predicated of them" (pp. 191-192). Sagoff is at the Center for Philosophy and Public Policy, University of Maryland. (v1,#4)

Sagoff, Mark, "Process or Product? Environmental Priorities in Environmental Management," Environmental Ethics 8(1986):121-138. Sagoff tries to affect a balance between the criteria of efficiency in the market and of environmental quality. Environmental policymakers must be aware that their decisions involve a set of popular ideals and values which consider the natural environment as an object of love as well as an object of use. A good practical application of Sagoff's well-known theories of environmental ethics, law, and the market. (Katz, Bibl # 1)

Surplus--not simply scarcity--provides a reason to preserve the natural environment. Although advances in biotechnology have made it possible to manipulate, alter, and replace ecological and evolutionary processes in order vastly to increase the production of economically valuable commodities, e.g., seafood in estuaries, the huge surpluses likely to result threaten fishing communities with the same economic depression and social dislocation that farming communities have already experienced. In this context, protecting the biological status quo not only expresses an admirable affection and respect for nature, but also makes economic sense by taking unneeded resources out of production. Sagoff is at the Center for Philosophy and Public Policy and the Center for Environmental and Estuarine Studies, University of

Maryland, College Park, MD. (EE)

Sagoff, Mark, Price, Principle, and the Environment. Cambridge: Cambridge University Press, 2004. Economics is helpful in designing institutions and processes through which people can settle environmental disputes. However, economic analysis fails completely when it attempts to attach value to environmental goods. Environmental policy responds to principles best identified and applied through political processes. Sagoff is with the Institute for Philosophy and Public Policy, University of Maryland.

Sagoff, Mark, "Do Non-Native Species Threaten The Natural Environment?," Journal of Agricultural and Environmental Ethics 18(2005):215-236. Conservation biologists and other environmentalists confront five obstacles in building support for regulatory policies that seek to exclude or remove introduced plants and other non-native species that threaten to harm natural areas or the natural environment. First, the concept of harm to the natural environment is nebulous and undefined. Second, ecologists cannot predict how introduced species will behave in natural ecosystems. If biologists cannot define harm or predict the behavior of introduced species, they must target all non-native species as potentially harmful, an impossibly large regulatory task. Third, loss of species richness may constitute harm to an environment, but introduced organisms typically, generally, and significantly add to species richness in ecosystems. If species richness correlates with desirable ecosystem properties, moreover, such as stability and productivity, as some ecologists believe, then introduced organisms, by increasing species richness, would support those desirable properties. Fourth, one may plausibly argue that extinction constitutes environmental harm, but there is no evidence that non-native species, especially plants, are significant causes of extinction, except for predators in certain lakes and other small island-like environments. Fifth, while aesthetic, ethical, and spiritual values may provide a legitimate basis for invasive species policy, biologists often cite concepts such as biodiversity and ecosystem health or integrity to provide a scientific justification. To assert that non-native species threaten biodiversity or undermine ecosystem health, however, may be to draw conceptual entailments or consequences from definitions of biodiversity and integrity that arbitrarily exclude non-native species or make the presence of exotic species a per se indicator of decline. Keywords Biodiversity - ecosystems - invasive species - plant breeding. Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland, College Park, MD. A vigorous reply is: Simberloff, Daniel, "Non-native Species DO Threaten the Natural Environment!," Journal of Agricultural and Environmental Ethics 18(2005):595-607. (JAEE)

Sagoff, Mark, "Locke was Right: Nature Has Little Economic Value," Philosophy and Public Policy Quarterly 25(no. 3, summer 2005):2-11. Economic value is produced by labor; raw materials are of little economic value. If one resource runs out, technologists substitute another. "If optimists are correct--if technology will substitute between resource flows to keep prices low--then we are confronted with a dilemma: Either Nature provides so abundantly for our needs that no scarcity exists and thus no economic value is possible, or Nature provides inadequately and therefore technology develop to relieve scarcity and thus, again, Nature (economic services) has no economic value" (p. 6). Sagoff is at the Institute for Philosophy and Public Policy, University of Maryland.

Sagoff, Mark, "Intellectual Property and Products of Nature," American Journal of Bioethics 2(2002):12-13.

Sagoff, Mark, "On the Economic Value of Ecosystem Services," Environmental Values 17(2008):239-257. The productive services of nature, such as the ability of fertile soil to grow crops, receive low market prices not because markets fail but because many natural resources, such as good cropland, are abundant relative to effective demand. Even when one pays nothing for a service such as that the wind provides in pollinating crops, this is its 'correct' market price if the supply is adequate and free. The paper argues that ecological services are either too 'lumpy' to price in incremental units (for example, climatic systems), priced competitively, or too cheap to meter. The paper considers counter-examples and

objections.

Spash, Clive L., "How Much is that Ecosystem in the Window? The One with the Bio-diverse Trail," *Environmental Values* 17(2008):259-284. Ecosystems are increasingly characterised as goods and services to allow their valuation in monetary terms. This follows an orthodox economic approach to environmental values, but is also being undertaken by ecologists and conservation biologists. There then appears a lack of clarity and debate as to the model of human behaviour, specific values and decision process being adopted. Arguments for ecosystems service valuation are critically appraised and the case for a model leading to value pluralism is presented. The outcome is to identify the need for value articulating processes which involve open deliberative judgment rather than instantaneously stated preferences, concealed expert opinion and global cost-benefit analysis.

Sagoff, Mark, *The Economy of the Earth: Philosophy, Law, and the Environment*, 2nd ed. (Cambridge: Cambridge University Press, 2008). Reviewed by Dan Tarlock in *Journal of Agricultural and Environmental Ethics* 21(2008):499-501.

Sagoff, Mark. "Carrying Capacity and Ecological Economics." *Bioscience* 45, no. 9 (October 1995): 610-20. Reply by Herman E. Daly follows on pp. 621-26. (v6,#3)

Sagoff, Mark. Risk-Benefit Analysis in Decisions Concerning Public Safety and Health. Reviewed in *Environmental Ethics* 8(1986):277-85.

Sagoff, Mark. "Fact and Value in Ecological Science." *Environmental Ethics* 7(1985):99-116. Ecologists may apply their science either to manage ecosystems to increase the long-run benefits nature offers man or to protect ecosystems from anthropogenic insults and injuries. Popular reasons for supposing that these two tasks (management and protection) are complementary turn out not to be supported by the evidence. Nevertheless, society recognizes the protection of the "health" and "integrity" of ecosystems to be an important ethical and cultural goal even if it cannot be backed in detail by utilitarian or prudential arguments. It is a legitimate purpose of ecological science, moreover, to describe and help society preserve ecosystem "health" and "integrity," insofar as these are considered as privative qualities. Sagoff is at the Center for Philosophy and Public Policy and the Center for Environmental and Estuarine Studies, University of Maryland, College Park, MD. (EE)

Sagoff, Mark. "Population, Nature and the Environment." In Beyond the Numbers: A Reader on Population, Consumption and the Environment, ed. Laurie Ann Mazur. Washington, DC: Island Press, 1994. (v6,#1)

Sagoff, Mark. "Some Problems with Environmental Economics." *Environmental Ethics* 10(1988):55-74. I criticize the contingent valuation method in resource economics and the concepts of utility and efficiency upon which it is based. I consider an example of this method and argue that it cannot--as it pretends--substitute for public education and political deliberation. Sagoff is at the Center for Philosophy and Public Policy and the Center for Environmental and Estuarine Studies, University of Maryland, College Park. MD. (EE)

Sagoff, Mark. Review of Property Rights and Eminent Domain. By Ellen Frankel Paul. *Environmental Ethics* 11(1989):179-89.

Sagoff, Mark. "Do We Need a Land Use Ethic?" *Environmental Ethics* 3(1981):293-308. I criticize what many economists recommend: namely, that land use regulations should simulate what markets would do were all resources fully owned and freely exchanged. I argue that this "efficiency" approach, even if balanced with equity considerations, will result in commercial sprawl, an environment that consumers pay for, but one that appalls ethical judgment and aesthetic taste. I show that economic strategies

intended to avoid this result are inadequate, and conclude that ethical and aesthetic as well as economic principles are needed to guide policies governing the use of land. Sagoff is at the Center for Philosophy and Public Policy and the Center for Environmental and Estuarine Studies, University of Maryland, College Park, MD. (EE)

Sagoff, Mark. Review of Private Property and the Constitution. By Bruce Ackerman. Environmental Ethics 1(1979):89-96.

Sagoff, Mark. *The Economy of the Earth: Philosophy, Law, and the Environment*, 2nd edition. Cambridge: Cambridge University Press, 2008. This revised edition of Sagoff's book that was first published in 1988 contains the following table of contents: (1) "Introduction," (2) "At the Shrine of Our Lady of Fatima or Why Political Questions Are Not All Economic," (3) "The Allocation and Distribution of Resources," (4) "Values and Preferences," (5) "Can We Put a Price on Nature's Services?," (6) "Do We Consume Too Much?," (7) "Is an Environmental Ethic Compatible with Biological Science?," (8) "Settling America or the Concept of Place in Environmental Ethics," (9) "Natural and National History," and (10) "Environmentalism: Death and Resurrection."

Sagoff, Mark. "Environmentalism: Death and Resurrection." *Philosophy and Public Policy Quarterly* Vol. 27, no. 3/4 (Summer/Fall 2007): 2-9. "Because it is now caught up in a debate among environmental scientists, environmentalism has slipped from a popular spiritual or cultural cause and has become an academic research program.... The belief that ecosystems exhibit a hidden design... unites theoretical ecology with the tradition of 'Great Chain of Being' cosmology associated with philosophers of nature from neo-Platonic mystics to 'deep ecologists today.... More recently, however, many ecologists have come to question whether the concept 'ecosystem' or 'ecological community' refers to anything that has any general design ecologists can study.... The environmental movement is dying because it expects science to maintain our faith in the rightness of nature and wrongness of humanity." Nevertheless, Sagoff expects a resurrection when environmentalists reach out to the populist constituencies who gave them support decades ago: birders, hunters, anglers, backpackers, and religious persons who recognize a religious duty to care for creation.

Sagoff, Mark. "Environmentalism: Death and Resurrection." *Philosophy and Public Policy Quarterly* Vol. 27, no. 3/4 (2007): 2-9. "Environmentalism has slipped from a popular spiritual or cultural cause and has become an academic research program." "But the spirit of environmentalism ... might rise again." Sagoff is at the Institute for Philosophy and Public Policy at the University of Maryland.

Sagoff, Mark. "Can Environmentalists Keep Two Ideas in Mind and Still Function?" *Philosophy and Public Policy Quarterly* Vol. 27, no. 1/2 (Winter/Spring 2007): 2-7. "An intelligent society can hold two opposed ideas of nature ... in mind ... without trying to make them commensurable or reducing or collapsing either into the other." One idea is nature as creation, sacred, and a source of meaning; the other idea is nature as resources to be developed for human benefit. Sagoff essentially recreates the debate between Muir and Pinchot. Sagoff is at the Institute for Philosophy and Public Policy at the University of Maryland.

Saha, D., Sen, H.S., Saha, A. 2004. Integral and Differential Analysis of Bioethics in Understanding Agro-environmental Altruism. In *Challenges of Bioethics in Asia* (Ed. Darryl Macer) Eubios Ethics Institute, Japan, pp 450-456

Saha, D., Sen, H.S., Saha, A., 2003. Integrative Human Idea Mapping should include Food, Agriculture and Environment. *Eubios Journal of Asian and International Bioethics*, Japan & New Zealand. 13(2): 43-44. One of the Base Paper for the Global Mental Mapping Programme, Japan.

Saha, D., Sen, H.S., Sinha, M.K. 2004. Bioethics in Intricate Consonance with Biosafety, IPR and Biotechnology : Abstacting Towards mental Mapping. Proceedings of Fifth International Conference on Plant Tissue Culture and Biotechnology, Kluwer Academic Publishers.

Saha,D, Hazra, C.R and Macer, Darryl 2000. Bioethics and Ecosustainability. Eubios Journal of Asian and International Bioethics, Japan & New Zealand. 10(6):181-183.

Saha,D; Sen, H.S. and Saha, A. 2004. Integral and Differential Mapping of Human Idea: Structural and Functional Aspects of Altruism and Agroecology in Decision Theory . Eubios Journal of Asian and International Bioethics, Japan & New Zealand. 14(1): 81-85. One of the base papers for the Global Mental Mapping Programme, Japan.

Sahn, Jennifer. "Knowledge That Binds: The Orion Society," Wild Earth 6(1996):26. (v8,#1)

Sahni, Pragati. *Environmental Ethics in Buddhism: A Virtues Approach*. New York: Routledge, 2007. Sahni discusses the metaphysical and ethical dimensions of early Buddhist literature to show that early Buddhism can best be understood as an environmental virtue ethics.

Saikku, Mikko, "The Extinction of the Carolina Parakeet," Environmental History Review 14(# 3, Fall 1990):1-18. (v1,#4)

Saint Scolastica's College, "Lifestyle: The Women and Ecology Wholeness Farm: A Progress Report," Ecotheology Vol 7 (No. 1, July 2002):91-94.

Sairinen, R., "The Politics of Regulatory Reform: 'New' Environmental Policy Instruments in Finland," Environmental Politics 12(no. 1, 2003): 73-92. (v 14, #3)

Saito, Yuriko. "Ecological Design: Promises and Challenges." In recent decades, designers, architects, and landscape architects concerned with their contribution to today's ecological problems started formulating a new way of designing and creating artifacts. Called "ecological design" and promoted as a corrective alternative to conventional practice, its basic tenet is to draw from nature a guidance for design, rather than imposing our design on nature. This new approach signifies a welcome change, first by calling attention to the ecological implications of artifacts, a subject matter generally neglected in environmental ethics, and, second, by providing useful, specific suggestions regarding the ecologically responsible way of designing artifacts. However, the conceptual basis and resultant implications of ecological design deserve and need critical analyses. I argue that the basic premise of ecological design—that nature should act as the authority—is problematic by examining analogous strategies from social, political, moral, and aesthetic realms, as well as by exploring its specific application in the promotion of "native" plants in gardens. I end with another issue often neglected in the practice of ecological design: our aesthetic response to the created objects. Environmental Ethics 24(2002):243-261. (EE)

Saito, Yuriko. "Appreciating Nature on Its Own Terms." Environmental Ethics 20(1998):135-49. I propose that the appropriate appreciation of nature must include the moral capacity for acknowledging the reality of nature apart from humans and the sensitivity for listening to its own story. I argue that appreciating nature exclusively as design is inappropriate to the extent that we impose upon nature a preconceived artistic standard as well as appreciation based upon historical/cultural/literary associations insofar as we treat nature as a background of our own story. In contrast, aesthetic appreciation informed by our attempt to make sense of nature, such as science, mythology, and folklore, is appropriate because it guides our experience toward understanding nature's own story embodied in its sensuous surface. Saito is at the Rhode Island School of Design, Providence, RI. (EE)

Salz, A. V., "Review of: Jorge Riechmann, Un Mundo Vulnerable. Ensayos Sobre Ecología, Ética Y Tecnociencia," Environmental Politics 12(no. 2, 2003): 173.

Salafsky, N., Cauley, H., Balachander, G., Cordes, B., Parks, J., Margoluis, C., Bhatt, S., Encarnacion, C., Russell, D. and Margoluis, R., "A Systematic Test of an Enterprise Strategy for Community-Based Biodiversity Conservation," Conservation Biology 15(no.6, 2001): 1585-95. (v.13,#2)

Salafsky, N; Margoluis, R, "What Conservation Can Learn from Other Fields about Monitoring and Evaluation", Bioscience 53(no.2, 2003):120-123.

Salazar, Debra J., "Environmental Justice and a People's Forestry," Journal of Forestry 94(Nov., # 11, 1996):32-36. The environmental justice movement asks about the quality of the environment in the underprivileged, especially in cities. Urban forestry has an important role to play in any such quality of life. Salazar is in political science, Western Washington University, Bellingham. (v9,#1)

Salazar, Debra J., Moulds, Lisa A. "Toward an Integrated Politics of Social Justice and Environment: African American Leaders in Seattle", Society & Natural Resources 9(no.6, 1996):617. (v7,#4)

Salazar, Debra J., Hewitt, John Jr. "Think Globally, Secure the Borders: The Oregon Environmental Movement and the Population/Immigration Debate", Organization and Environment 14 (No. 3, September 2001) pp.290-310. The authors examine the debate about the role of population and immigration in the environmental agenda as represented within the Oregon environmental movement, focusing on the role of race in shaping perspectives on immigration. Environmentalist immigration reformers in Oregon have framed the analysis in color-blind terms, but have been dogged by accusations of racism. The authors argue that these accusations can best be understood by examining (a) the broader context of immigration politics, (b) the limitations of color-blind discourse, (c) the incongruity of drawing on a discourse of ecology to make arguments focused on national borders, and (d) immigration reformers' political economic analysis. Salazar is professor of political science at Western Washington University, where Hewitt received his BA in political economy. (v.13,#2)

Salazar, Joanna Gail, "Damming the Child of the Ocean: The Three Gorges Project," The Journal of Environment and Development 9 (No. 2, 2000 June 01): 160- . (v.11,#4)

Sale, Kirkpatrick, "There's no place like home," The Ecologist 31(no.2, MAR 01 2001):40-. What is 'bioregionalism', and could it be the answer to the world problems? Kirkpatrick Sale puts forward his case. (v.12,#4)

Sale, Kirkpatrick, The Ecologist 30 (No. 4, 2000 Jun 01): 52- . A conspiracy is afoot - to deny the native Americans their legacy as stewards of the Earth. It must be resisted. (v.11,#4)

Sale, Kirkpatrick, "Ban Cloning? Not a Chance" New York Times (3/7/97): A35. See under: Kolata, Gina, "With Cloning of a Sheep, the Ethical Ground Shifts," New York Times (2/24/97): A1. (v8,#1)

Sale, Kirkpatrick. "Lessons From The Luddites." The Ecologist 29(No. 5, August 1999):314- . Kirkpatrick Sale recounts the history of the original Luddites, and explains what the modern environmental movement can learn from their stand against destructive "progress". (v10,#4)

Sale, Kirkpatrick. Human Scale. Reviewed in Environmental Ethics 6(1984):181-84.

Salinas, Alfonso. Review of O'Neill, The Market: Ethics, Knowledge and Politics. Environmental Values 9(2000):111

Salisbury, J. E., The beast within: Animals in the middle ages. New York: Routledge, 1994.

Salleh, Ariel, 2001 "Ecofeminism" in V. Taylor and C. Winqvist (eds.), The Postmodern Encyclopaedia. London: Routledge, 2001.

Salleh, Ariel, Review of Merchant, Carolyn, Earthcare: Women and the Environment. (New York: Routledge, 1995). Environmental Values 6(1997):372-373. (EV)

Salleh, Ariel, "In Defence of Deep Ecology." Pages 107-124 in E. Katz and A. Light (eds.), Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology. Boston: MIT Press. 2000.

Salleh, Ariel, "A Green Questionnaire" in J. Birkeland, Design for Sustainability, London: Earthscan, 2002.

Salleh, Ariel, "Global Alternatives and the Meta-Industrial Class", in R. Albritton et al (eds.), New Socialisms: Futures Beyond Globalization. London: Routledge, 2004.

Salleh, Ariel, "Ecofeminism as Sociology," Capitalism, Nature, Socialism 14(2003):61-74.

Salleh, Ariel Kay, "Deeper than Deep Ecology: The Eco-feminist Connection," Environmental Ethics 6(1984):339-345. The first article to appear in this journal on the subject of ecofeminism. Salleh criticizes Deep Ecology for not being radical enough in its attack on the dominant Western attitudes regarding nature; it is grounded in antifeminist patriarchal modes of thought. This is a provocative and interesting idea, as later articles by other authors will show (see Environmental Ethics 1985-87). But Salleh's tone is too stringent and her argument too incomplete to be convincing. (Katz, Bibl # 1)

Salleh, Ariel K., "Epistemology and the Metaphors of Production: An Eco-Feminist Reading of Critical Theory." Studies in the Humanities 15 (1988): 130-139. Examination of the connections between the forces of production, the domination of women, and the ecological crisis. Patriarchal production of objects is, in part, the result of the inability to "reproduce"---this inability leads to an instrumental rationality destructive of the natural world. (Katz, Bibl # 2)

Salleh, Ariel Kay. "The Ecofeminism/Deep Ecology Debate." Environmental Ethics 14(1992):195-216. I discuss conceptual confusions shared by deep ecologists over such questions as gender, essentialism, normative dualism, and eco-centrism. I conclude that deep ecologists have failed to grasp both the epistemological challenge offered by ecofeminism and the practical labor involved in bringing about social change. While convergencies between deep ecology and ecofeminism promise to be fruitful, these are celebrated in false consciousness, unless remedial work is done. Salleh is an ecofeminist activist and theorist in New South Wales, Australia. (EE)

Salleh, Ariel Kay. "Deeper than Deep Ecology: The Eco-Feminist Connection." Environmental Ethics 6(1984):339-45. I offer a feminist critique of deep ecology as presented in the seminal papers of Naess and Devall. I outline the fundamental premises involved and analyze their internal coherence. Not only are there problems on logical grounds, but the tacit methodological approach of the two papers are inconsistent with the deep ecologists' own substantive comments. I discuss these shortcomings in terms of a broader feminist critique of patriarchal culture and point out some practical and theoretical contributions which eco-feminism can make to a genuinely deep ecology problematic. Salleh is an ecofeminist activist and theorist in New South Wales, Australia. (EE)

Salleh, Ariel Kay. "Class, Race and Gender Discourse in the Ecofeminism/Deep Ecology Debate."

Environmental Ethics 15(1993):225-44. While both ecofeminism and deep ecology share a commitment to overcoming the conventional division between humanity and nature, a major difference between the two is that deep ecology brings little social analysis to its environmental ethic. I argue that there are ideological reasons for this difference. Applying a sociology of knowledge and discourse analysis to deep ecological texts to uncover these reasons, I conclude that deep ecology is constrained by political attitudes meaningful to white-male, middle-class professionals whose thought is not grounded in the labor of daily maintenance and survival. At a micro-political level, this masculinist orientation is revealed by an armory of defensive discursive strategies and techniques used in deep ecological responses to ecofeminist criticism. Salleh is an ecofeminist activist and theorist in New South Wales, Australia. (EE)

Salleh, Ariel. Review of Mette Bryld & Nina Lykke, "Cosmodolphins: Feminist Cultural Studies of Technology, Animals and the Sacred", Organization and Environment 14 (No. 1, March 2002) pp.94-7. Salleh is associate professor in social ecology at the University of Western Sydney, and author of numerous papers on ecopolitical thought. (v.13,#2)

Salleh, Ariel. Review of Ecofeminist Philosophy: A Western Perspective on What It Is and Why It Matters. By Karen J. Warren. Environmental Ethics 24(2002):325-330. (EE)

Salleh, Ariel. "Social Ecology and 'The Man Question.'" Environmental Politics 5(no.2, 1996):258. (v7,#4)

Salleh, Ariel. Review of Joni Seager. Earth Follies: Feminism, Politics and the Environment: (London: Earthscan, 1993). (EV)

Salleh, Ariel. Review of Maria Mies and Vandana Shiva. Ecofeminism: (London: Zed Books, 1993). (EV)

Salleh, Ariel. Ecofeminism as Politics: Nature, Marx and the Postmodern. Reviewed in Environmental Ethics 21(1999):437-440.

Salleh, Ariel. Ecofeminism as Politics: Nature, Marx and the Postmodern. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1996. Exploring the philosophical and political challenge of ecofeminism, Salleh shows how the ecology movement has been held back by conceptual confusion over the implications of gender difference, while much that passes in the name of feminism is actually an obstacle to ecological change and global democracy. (v7,#1)

Sallis, John, "Force of Imagination: The Sense of the Elemental," Philosophy and Geography 4 (No. 2, 2001): 248-250. Book reviewed by Linck, Matthew. (P&G)

Salopek, Paul E., "Gorillas and Humans: An Uneasy Truce," National Geographic 188 (no. 4, October, 1995):72-83. Conservationists fear that Rwanda's instability could endanger the gorillas' survival. Others ask: How should the plight of the world's rarest ape be measured against more than half a million human dead? But so far only one of an estimated 300 gorillas has been confirmed killed in the fighting; both sides have pledged to save the gorillas. (v6,#4)

Salt, Henry S. Animals' rights considered in relation to social progress. 1894, rev. ed., 1922. Various other editions. Clarks Summit, PA: Society for Animal Rights, 1980. The latter edition with a preface by Peter Singer.

Salter, Liora, Mandated Science: Science and Scientists in the Making of Standards, Kluwer Academic Press. (v9,#2)

Salthe, Stanley N., and Barbara M. Salthe. "Ecosystem Moral Considerability: A Reply to Cahen." Environmental Ethics 11(1989):355-61. Appeals to science as a help in constructing policy on complex issues often assume that science has relatively clear-cut, univocal answers. That is not so today in the environmentally crucial fields of ecology and evolutionary biology. The social role of science has been as a source of information to be used in the prediction and domination of nature. Its perspectives are finely honed for such purposes. However, other more conscientious perspectives are now appearing within science, and we provide an example here in rebuttal to the claim that there is no warrant from within ecology for ecosystem moral considerability. S. Salthe is at the Biology department, Brooklyn College, Brooklyn, NY. (EE)

Salthe, Stanly N. and Barbara M. Salthe, "Ecosystem Moral Considerability: A Reply to Cahen," Environmental Ethics 11(1989):355-361. This article is a criticism of Harley Cahen, "Against the Moral Considerability of Ecosystems," Environmental Ethics 10 (1988):195-216. Cahen uses only one perspective in ecological theory, the reductionist community school. The authors argue that systems ecology can provide a model for ecosystemic considerability. (Katz, Bibl # 2)

Saltz, David, "Wildlife Management," Encyclopedia of Biodiversity 5: 823-830. Wildlife management is the science of manipulating wild populations to achieve a specific goal. Five major goals of wildlife management can be recognized: 1. Maximizing harvest/yield over time. 2. Preventing extinction and increasing survival probability. 3. Maintaining and managing the integrity of ecosystems and landscapes of which wildlife populations are a part. 4. Controlling wildlife to minimize damage to human crops and assets caused by wild populations. 5. Managing wildlife to return the ecosystem to some predetermined state. (v.11,#4)

Salvo, Mark Kerr, Andy, "Congress Designates First Livestock-free Wilderness Area," Wild Earth 10(no.4, Wint 2000):55-. (v.12,#4)

Salwasser, Hal, MacCleery, Douglas W., Snellgrove, Thomas A. "The Pollyannas vs. the Chicken Littles--Enough Already!," Conservation Biology 11(no.1, 1997):283. (v8,#2)

Salyers, Abigail. "Genetically Engineered Plants Are Safe-and Necessary." The Christian Science Monitor, vol. 89, 28 Jan. 1997, p. 18.

Salzman, J, "Seattle's Legal Legacy and Environmental Reviews of Trade Agreements," Environmental Law 31(no. 3, 2001):501-548. (v.13,#1)

Salzman, James. "Sustainable Consumption and the Law," Environmental Law 27(no.4, 1997):1243- . (v9,#2)

Sam, Corinne, "World Trade Organization Caught in the Middle: Are TEDs the Only Way Out." Environmental Law 29(no. 1, 1999):185- . Ms. Sam discusses the United States implementation of section 609 of the Endangered Species Act and its effect on international trade. She analyzes the dispute before the World Trade Organization involving the United States and several Asian nations, noting that the World Trade Organization has a prime opportunity to reconcile the common goals of environmental conservation and free international trade. (v.11,#1)

Sample, V. A. and Miller, C., "A Transformative Place: Grey Towers and the Evolution of American Conservationism," Journal of Forestry 103(no. 5, July/August 2005): 237-240.

Samson, F. B. and Knopf, F. L., "Archaic Agencies, Muddled Missions, and Conservation in the 21st

Century," Bioscience 51(no.10, 2001): 869-73. (v.13,#2)

Samson, Fred B., and Knopf, Fritz L., eds., Prairie Conservation: Preserving North America's Most Endangered Landscape. Washington, DC: Island Press, 1996. (v.10,#3)

Samson, Fred B., and Knopf, Fritz L., eds. Prairie Conservation: Preserving North America's Endangered Ecosystem. Washington, D.C.: Island Press, 1996. 432 pages. \$50 cloth, \$25 paper. A comprehensive examination of the history, ecology, and current status of North American grasslands. The historical, economic, and cultural significance of prairies, their natural history and ecology, threats, and conservation and restoration programs currently underway. (v7, #3)

Samways, David, Ecological Wisdom and the Noble Savage: Assessing the Foundations of Eco-fundamentalism, 1996, University of Essex, UK, Ph.D. thesis in philosophy. 799 pages. Eco-fundamentalism attempts to establish incontestable foundations to environmental ethics, for example mobilizing a conception of human nature as the ultimate ground to ethical discourse. Such thinkers oppose the "ecological wisdom" of primitive peoples and the environmental degradation of civilization, with its anthropocentric orientation. But the simple equation of a certain orientation toward nature and consequent action is naive. Anthropocentrism has not been uniformly despotic, and it represents an unlikely candidate for the root cause of environmental degradation. Further, the ecological harmony of primitive peoples is a myth that owes more to Rousseauian speculation about the Noble Savage than any thoroughgoing anthropology or palaeo-anthropology. The ecological degradation caused by "developed" societies compared to primitive societies is quantitative rather than qualitative. Environmental ethics ultimately are no more than the beliefs and preferences of environmentalists. A pragmatist morality with a "medium strength anthropocentrism" can provide radical environmental ethics. (v.10,#1)

Samways, Michael J., "Bioempathy and Feng Shui Conservation," Environmental Conservation 16(1989):357-60. With attention to the intrinsic value and conservation of insects, also the compatibility of land use with insect conservation. See also his "Insect Conservation and Landscape Ecology: A Case-history of Bush Crickets (Tettigoniidae) in Southern France," Environmental Conservation 16(1989):217-226. Samways is professor of entomology at the University of Natal, Pietermaritzburg, South Africa (v2,#1)

Samways, Michael J., "The Art of Unintelligent Tinkering," Conservation Biology 10(1996):1307. Will the new self-manipulating human genome slow the natural evolution of biodiversity? Genetic engineering is likely to have unanticipated consequences, whether we are tinkering with other genomes or with our own. "Perhaps the looming issue is how to build into our new genome an environmental ethic." Samways is in zoology at the University of Natal, South Africa, and has written on the ethics of insect conservation. (v8,#1)

Samways, Michael J., "A conceptual model of ecosystem restoration triage based on experiences from three remote oceanic islands," Biology and Conservation 9(2000):1073-1083. Abstract. A conceptual model, that illustrates restoration, ecological landscaping, rehabilitation and greening, is developed. It considers biocentric, historical, aesthetic and engineering aspects. The term, ecosystem restoration triage is used because the first step is to decide whether to 'do nothing' (because, on the one hand, the system is too degraded to warrant restoration, or, on the other, because biological integrity is relatively intact and therefore either none, or minimal, restoration is required) or to 'do something' (because restoration is worthwhile, urgent and feasible). This approach hinges on the definition that restoration in the strictest sense is a biocentric activity that returns the 'original' compositional, structural and functional diversity, along with its dynamics and natural evolutionary potential. 'Original' is a difficult qualifier as it depends on just how far back in time we go. Where human values are involved, this is not restoration in the pure sense of restoring ecological integrity, but is ecological landscaping, rehabilitation or greening.

Experience from three remote oceanic islands [Easter Island, Cousine Island (Seychelles), Marion Island (Sub-Antarctic)] and which represent near extremes of this model are used to illustrate it. Key words: conceptual model, ecosystem restoration triage, oceanic islands. Samways is at the Invertebrate Conservation Research Centre, School of Botany and Zoology, University of Natal, Pietermaritzburg, South Africa. (v.13,#1)

Samways, Michael J., Insect Conservation Biology. London: Chapman and Hall, 1994. 358 pages. Global variation in insect variety; historical trends; the development of insect conservation biology; levels of analysis; nature reserves and global warming; the fragmented landscape; the disturbed landscape; rarity; individual insect species and their conservation; insect pest control and insect conservation, with a concluding section on "insect conservation ethics" (intrinsic value of the individual insect and the species; insect utilitarian value; value of the landscape/ecosystem; the land ethic and the entomologist; priority systems). "Concern for landscape is concern for all life and its processes. This landscape approach also creates an awareness and an ethic that all landscapes are linked by biogeocycles. Insects are major interactors in the whole terrestrial biosphere and are therefore party to Gaia maintenance" (pp. 230-231). Samways is at the Invertebrate Conservation Research Centre, Department of Zoology and Entomology, University of Natal, Pietermaritzburg, South Africa. (v7,#1)

Samways, Michael J. "The Art of Unintelligent Tinkering", Conservation Biology 10(no.5,1996):1307. Will the new self-manipulating human genome slow the natural evolution of biodiversity? Samways is in zoology and invertebrate conservation at the University of Natal, South Africa. (v7,#4)

Samways, Michael J. "A Conceptual Model of Ecosystem Restoration Triage Based on Experiences from Three Remote Oceanic Islands," Biodiversity and Conservation 9(no. 8, 2000):1073-1083. Abstract. A conceptual model, that illustrates restoration, ecological landscaping, rehabilitation and greening, is developed. It considers biocentric, historical, aesthetic and engineering aspects. The term ecosystem restoration triage is used because the first step is to decide whether to "do nothing" (because, on the one hand, the system is too degraded to warrant restoration, or, on the other, because biological integrity is relatively intact and therefore either none, or minimal, restoration is required) or to "do something" (because restoration is worthwhile, urgent and feasible). This approach hinges on the definition that restoration in the strictest sense is a biocentric activity that returns the "original" compositional, structural and functional diversity, along with its dynamics and natural evolutionary potential. "Original" is a difficult qualifier as it depends on just how far back in time we go. Where human values are involved, this is not restoration in the pure sense of restoring ecological integrity, but is ecological landscaping, rehabilitation or greening. Experience from three remote oceanic islands [Easter Island, Cousine Island (Seychelles), Marion Island (Sub-Antarctic)] and which represent near extremes of this model are used to illustrate it. Key words: conceptual model, ecosystem restoration triage, oceanic islands.

Sanchez, R., "From Rio to Johannesburg: The Transition Towards Sustainable Development. Perspectives from Latin America and the Caribbean," Journal of Environment and Development 11(no.3, 2002): 313-15. (v.13,#4)

Sánchez, Vincente, and Calestous Juma, eds., Biodiplomacy: Genetic Resources and International Relations. Nairobi: African Center for Technology Studies (ACTS), 1994. ISBN 9966-41-077-5. 16 articles. 371 pages. The Convention on Biodiversity balances conservation of genetic resources, technological development, regulated access to genetic resources, and international equity. But the issue is how to implement the Convention. Sanchez is a Kenyan diplomat; Juma is director of ACTS. \$ 22 from ACTS. (v6,#3)

Sanchez-Azofeifa, G. Arturo, Quesada-Mateo, Carlos, and Bawa, Kamaljit S., "Protected Areas and Conservation of Biodiversity in the Tropics," Conservation Biology 13(No.2, 1999):407-. (v.10,#2)

Sanchez-Zapata, JA; Anadon, JD; Carrete, M; Gimenez, A; Navarro, J; Villacorta, C; Botella, F, "Breeding waterbirds in relation to artificial pond attributes: implications for the design of irrigation facilities," Biodiversity and Conservation 14 (no. 7, June 2005): 1627-1639.

SanchezZapata, JA; Carrete, M; Grivilov, A; Sklyarenko, S; Ceballos, O; Donazar, JA; Hiraldo, F, "Land use changes and raptor conservation in steppe habitats of Eastern Kazakhstan," Biological Conservation 111(no.1, 2003): 71-77.

Sand, Peter H., ed. The Effectiveness of International Environmental Agreements: A Survey of Existing International Instruments. New York: Cambridge University Press 1992. 548 pages. \$150 cloth, \$69.95 paper. Brings together thirteen major research papers commissioned for the United Nations Conference on Environment and Development, Rio de Janeiro, June 1992, providing an authoritative and detailed survey and analysis of the effectiveness of 124 existing international agreements and instruments to protect the environment. (v7, #3)

Sandel, Michael. *The Case against Perfection*. Cambridge, MA: Harvard University Press, 2007. Sandel provides a critique of gene enhancement in humans.

Sanders, Eli, "Renaming `Squaw' Sites Proves Touchy in Oregon," New York Times, December 11, 2004, p. A10. Under complaint from Native Americans the Oregon State Legislature in 2001 passed a law that all 170 places in Oregon that use the word "squaw" must be re-named, to avoid offense to the Native Americans. "Squaw" originally meant "woman" in Algonquin, and only later came to have pejorative meanings. But Native Americans cannot agree on the new names; there are 42 new names proposed for a Squaw Creek, some of them difficult to pronounce, some with sounds that do not exist in English. One tribal spokesman says that ease of pronunciation for English speakers is "not one of our criteria." A simple solution might be to return to original Native American names. But the Native Americans often do not remember what these were. In other cases, different tribes claim different names, and disagree about which tribe controlled the area in pre-European times. (v.14, #4)

Sanderson, EW; Redford, KH; Chetkiewicz, CLB; Medellin, RA; Rabinowitz, AR; Robinson, JG; Taber, AB, "Planning to Save a Species: the Jaguar as a Model," Conservation Biology 16(no.1, 2002):58-72. (v.13, #3)

Sanderson, EW; Jaiteh, M; Levy, MA; Redford, KH; Wannebo, AV; Woolmer, G, "The Human Footprint and the Last of the Wild," Bioscience 52(no.10, 2002): 891-904.

Sanderson, F, "Bio-diversity and Ecological Economics: Participation, Values and Resource Management," Biological Conservation 107(no.2, 2002):259-260. (v.13, #3)

Sanderson, Steven E., "Keynote Address: Yellowstone Biennial Science Conference," Yellowstone Science 12 (no. 1, Winter 2004):5-12. Conference theme and this address compares conservation in Greater Yellowstone Ecosystem and the Serengeti in Africa, with lessons from and for other areas. Sanderson is bleak, especially about Africa. The World Parks Congress in 2003 in Durban, South Africa was "a difficult and troubling exercise, in which conservation was hardly invoked with pride." Formerly effective conservationists have sold out to a policy that insists on "no negative impact on local peoples." Poverty eradication has radically undermined conservation goals of the UN and the World Bank, although the record of such projects is dismal. "Wild nature in our time has been converted into a contested area that is debated, not in terms of nature itself, but purely in terms of economic potential." Conservation is blamed for "keeping people out and keeping people poor" although the supposed "integrated development" programs that follow solve none of the deeper problems." Sanders is President and CEO of

the Wildlife Conservation Society, associated with the Bronx Zoo. See also "The Future of Conservation," Foreign Affairs, September 2002.

Sandilands, Catriona, "Lesbian Separatist Communities and the Experience of Nature: Toward a Queer Ecology", Organization and Environment, 15, (No. 2, 2002): 131-63. Queer ecology is a cultural, political and social analysis that interrogates the relations between the social organization of sexuality and ecology. As a part of this analysis, this article explores the ideas and practices of lesbian separatist communities in southern Oregon. It considers that separatists have, since 1974, developed a distinct political-ecological culture to challenge the heterosexual, patriarchal and capitalist organization of rural North America. Although lesbian separatism was founded on essentialist constructions of gender and nature, the Oregon communities have developed, over time, a blend of lesbian principles and local environmental knowledge. This has produced a complex tradition of lesbian eco-political resistance. Organizing threads of this tradition include opening access to land and transforming relations of rural ownership, withdrawing land from patriarchal-capitalist production and reproduction, feminizing the landscape ideologically and physically, developing a gender-bending physical experience of nature, experiencing nature as an erotic partner, and politicizing rurality and rural lesbian identity. Sandilands is an associate professor in the Faculty of Environmental Studies at York University, Toronto.

Sandilands, Catriona Alison Hayward, The Good Natured Feminist: On the Subject of Ecofeminism and the Quest for Democracy, 1995, York University (Canada), Ph.D. thesis in sociology and women's studies. Ecofeminism embodies both considerable promise and numerous problems, notably its tendency to reduce feminist-ecological collaboration to "identity." This focus causes a number of difficulties, including the reduction of women and nature to their supposed "difference" from male culture. Identity politics, including ecofeminism, are understood as embodying a democratic desire; in light of the critique of identity offered by Laclau and Mouffe, it also becomes possible to retrieve that desire into a more "radical" democratic politics. Ecofeminism has a potential ability to construct a series of democratic conversations about nature, in which identities are seen as performative and potentially subversive. At the core of this democratic possibility lies a Lacanian "ethics of the Real," in which ecofeminism recognizes the unspeakability of nature; this "lack" is not only what keeps radical democratic politics from "getting it right" (thus preserving a desirable openness), but suggests an environmental ethics of human humility toward a partially-enigmatic nature. The advisor was Karen Anderson. (v.10,#1)

Sandilands, Catriona. Review of Undomesticated Ground: Recasting Nature as Feminist Space. By Stacy Alaimo. Environmental Ethics 24(2002):333-334. (EE)

Sandilands, Catriona. The Good-Natured Feminist: Ecofeminism and the Quest for Democracy. Reviewed by Melissa Clarke. Environmental Ethics 22(2000):439-440.

Sandilands, Catriona. Review of Ecocritique: Contesting the Politics of Nature, Economy, and Culture. By Timothy Luke. Environmental Ethics 21(1999):209-211.

Sandilands, Catriona. "Lavender's Green? Some Thoughts on Queer(y)ing Environmental Politics." Undercurrents, May 1994, pp. 20-24. (v7, #3)

Sandilands, Catriona. "Desiring Nature, Queering Ethics: Adventures in Erotogenic Environments." Environmental Ethics 23(2001):169-188. The meaning of sustainability is the subject of intense debate among environmental and resource economists. Perhaps no other issue separates more clearly the traditional economic view from the views of most natural scientists. The debate currently focuses on the substitutability between the economy and the environment or between "natural capital" and "manufactured capital" a debate captured in terms of weak versus strong sustainability. In this article, we examine the various interpretations of these concepts. We conclude that natural science and economic

perspectives on sustainability are inconsistent. The market-based Hartwick-Solow "weak sustainability" approach is far removed from both the ecosystem-based "Holling sustainability" and the "strong sustainability" approach of Daly and others. Each of these sustainability criteria implies a specific valuation approach, and thus an ethical position, to support monetary indicators of sustainability such as a green or sustainable Gross Domestic Product (GDP). The conflict between "weak sustainability" and "strong sustainability" is more evident in the context of centralized than decentralized decision making. In particular, firms selling "services" instead of material goods and regarding the latter as "capital" leads to decisions more or less consistent with either type of sustainability. Finally, we discuss the implications of global sustainability for such open systems as regions and countries. Open systems have not been dealt with systematically for any of the sustainability criteria. (EE)

Sandilands, Catriona. "From Natural Identity to Radical Democracy." Environmental Ethics 17(1995):75-91. Environmentalism is traversed by a dilemma between a movement toward identity politics and the impossibility of a speaking natural subject; this dilemma calls into question both the relevance of identity politics for ecological struggle and dominant classical constructions of the subject itself. Using Lacanian-inspired insights on subjectivity, and the works of Ernesto Laclau and Chantal Mouffe on radical democracy, I investigate the alternative versions of the subject implicit in ecological discourses and suggest that it is through these alternatives that environmentalism can forge necessary alliances with other movements oriented toward human liberation. In particular, the very impossibility of a natural speaking subject suggests that the ecological project of redefining humanity's relationships to nonhuman nature(s) is always contingent on reorienting human subjectivity itself; this fact highlights the centrality of political coalition between ecological and other social movements. Sandilands is in environmental studies, York University, Ontario. (EE)

Sandin, Per, "The Precautionary Principle and the Concept of Precaution," Environmental Values 13(2004):461-475. The precautionary principle is frequently invoked in environmental law and policy, and the debate around the principle indicates that there is little agreement on what 'taking precautions' means. The purpose of the present paper is to provide an improved conceptual foundation for this debate in the form of an explication of the concept of precaution. Distinctions between precaution and two related concepts, prevention and pessimism, are briefly discussed. The concept of precaution is analysed in terms of precautionary actions. It is argued that precautionary actions are implicitly assumed to be precautionary with respect to something, and that this assumption should be made explicit. A definition of a precautionary action involving three necessary and jointly sufficient conditions (intentionality, uncertainty and reasonableness) is proposed, and the implications of this analysis for the debate on the precautionary principle are discussed. Sandlin is in philosophy, Royal Institute of Technology, Stockholm. (EV)

Sandin, Per. Review of *Laws of Fear: Beyond the Precautionary Principle*. By Cass R. Sunstein. Environmental Ethics 29(2007):107-110. (EE)

Sandin, Per. "Naturalness and de minimis Risk." Environmental Ethics 27 (2005):191-200. In risk management, de minimis risk is the idea that risks that are sufficiently small, in terms of probabilities, ought to be disregarded. In the context of the distinction between disregarding a risk and accepting it, this paper examines one suggested way of determining how small risks ought to be disregarded, specifically, the natural-occurrence view of de minimis, which has been proposed by Alvin M. Weinberg, among others. It is based on the idea that "natural" background levels of risk should be used as benchmarks and de minimis levels should be derived from those levels. This approach fails even if the doubtful distinction between what is natural and what is not can be upheld. (EE)

Sandler, Ronald, "Culture and the Specification of Environmental Virtue," Philosophy in the Contemporary World 10 (no. 2, 2003):63-68.

Sandler, Ronald, Review of: Westra, Laura and Lawson, Bill E., eds., Faces of Environmental Racism: Confronting Issues of Global Injustice. 2nd ed. Totowa, NJ: Roman and Littlefield, 2001. Environmental Values 12(2003):543-546. (EV)

Sandler, Ronald, "Towards an Adequate Environmental Virtue Ethic," Environmental Values 13(2004):477-495. In this article I consider four concerns regarding the possibility of an environmental virtue ethic functioning as an alternative - rather than a supplement - to more conventional approaches to environmental ethics. The concerns are: (1) it is not possible to provide an objective specification of environmental virtue, (2) an environmental virtue ethic will lack the resources to provide critique of obtaining cultural practices and policies, (3) an environmental virtue ethic will not provide sufficient action-guidance, (4) an environmental virtue ethic cannot ground constraints on human activities regarding the natural environment. Each of these concerns makes a claim about the poverty of normative resources at the disposal of environmental virtue ethics. I defend a conception of environmental virtue - as a character virtue with the same normative standing as the conventional personal and interpersonal virtues - that enables an environmental virtue ethic with the wherewithal to address each of the concerns. Sandler is in philosophy and religion, Northeastern University, Boston. (EV)

Sandler, Ronald, Review of: Vexing Nature? On the Ethical Case Against Agricultural Biotechnology, by Gary Comstock." Environmental Values 12 (no. 3, 2003):403-405.

Sandler, Ronald, and W.D. Kay. "The GMO-Nanotech (Dis)Analogy?" *Bulletin of Science, Technology, and Society* Vol. 26, no. 1 (2006): 57-62.

Sandler, Ronald, and Judith Crane, "On the Moral Considerability of Homo sapiens and Other Species," Environmental Values 15(2006): 69-84. It is sometimes claimed that as members of the species Homo sapiens we have a responsibility to promote the good of Homo sapiens itself (distinct from the good of its individual members). Lawrence Johnson has recently defended this claim as part of his approach to resolving the problem of future generations. We show that there are several difficulties with Johnson's argument, many of which are likely to attend any attempt to establish the moral considerability of Homo sapiens or species generally. Further, even if Homo sapiens were morally considerable, this would not ground an adequate response to the problem of future generations. The sort of moral considerability that would be appropriate to Homo sapiens, or species generally, would not be as robust nor have the implications that many have supposed. (EV)

Sandler, Ronald, and Emily Volkert, Review of: J. Claude Evans, With Respect for Nature: Living as Part of the Natural World, Environmental Values 15(2006):536-538.

Sandler, Ronald, Review of: Philip Cafaro, Thoreau's Living Ethics: Walden and the Pursuit of Virtue, Environmental Values 15(2006):135-138.

Sandler, Ronald, and Philip Cafaro, eds., Environmental Virtue Ethics, New York and Oxford: Rowman & Littlefield, 2005. Reviewed by Christopher Freiman. Ethics and the Environment 11(2006):133-138. (Eth&Env)

Sandler, Ronald, and Philip Cafaro (eds), Environmental Virtue Ethics, Reviewed by Patrick R. Frierson, Environmental Values 15(2006):258-261.

Sandler, Ronald and Philip Cafaro (eds.). Environmental Virtue Ethics. Lanham, MD: Rowman and Littlefield, 2005. A collection of ten original and four reprinted essays discussing environmental virtue

ethics—the first anthology on this topic. Essays discuss the role that virtue and character have traditionally played in environmental discourse and reflect upon the role that it should play in the future. With sections on environmental virtue ethics theory, particular environmental virtues and vices, and applying environmental virtue ethics to particular environmental issues. Contributors include: Philip Cafaro, Geoffrey Frasz, Thomas Hill Jr., Holmes Rolston III, Ronald Sandler, David Schmidtz, Bill Shaw, Charles Taliaferro, Louke van Wensveen, Peter Wenz, Laura Westra and Matt Zwolinski.

Sandler, Ronald, Review of Paul B. Thompson, *Food Biotechnology in Ethical Perspective*, *Environmental Values* 16(2007):544-547.

Sandler, Ronald, and Phaedra C. Pezzullo, eds. *Environmental Justice and Environmentalism: The Social Justice Challenge to the Environmental Movement*. Cambridge, MA: The MIT Press, 2007. Although the environmental movement and the environmental justice movement would seem to be natural allies, their relationship over the years has often been characterized by conflict and division. The environmental justice movement has charged the mainstream environmental movement with racism and elitism and has criticized its activist agenda on the grounds that it values wilderness over people. Environmental justice advocates have called upon environmental organizations to act on environmental injustice and address racism and classism in their own hiring and organizational practices, lobbying agenda, and political platforms. This book examines the current relationship between the two movements in both conceptual and practical terms and explores the possibilities for future collaboration.

Sandler, Ronald L., *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics* (New York: Columbia University Press, 2007). Reviewed by Philip Cafaro, in *Journal of Agricultural and Environmental Ethics* 21(2008):389-393.

Sandler, Ronald. "Introduction: Environmental Virtue Ethics." In Ronald Sandler and Philip Cafaro (eds.), *Environmental Virtue Ethics* (Lanham, MD: Rowman and Littlefield, 2005).

Sandler, Ronald. "The External Goods Approach to Environmental Virtue Ethics." *Environmental Ethics* 25(2003):279-293. If virtue ethics are to provide a legitimate alternative for reasoning about environmental issues, they must meet the same conditions of adequacy as any other environmental ethic. One such condition that most environmental ethicists insist upon is that an adequate environmental ethic provides a theoretical platform for consistent and justified critique of environmentally unsustainable practices and policies. The external goods approach seeks to establish that any genuinely virtuous agent will be disposed to promote ecosystem sustainability on the grounds that ecosystem sustainability is a necessary external good for cultivating the virtues and/or human flourishing. At most the external goods approach is able to provide an environmental ethic that in most contexts will require that any genuinely virtuous agent will have the goal of promoting a weak environmental sustainability. A better approach may be the substantive approach, which incorporates environmental concern and practice into the substance of the virtues, rather than as a boundary condition for any prospective virtue. (EE)

Sandler, Ronald. "On 'Aristotle and the Environment.'" *Environmental Ethics* 26(2004):223-224. (EE)

Sandler, Ronald. "A Virtue Ethics Perspective on Genetically Modified Crops." In Ronald Sandler and Philip Cafaro (eds.), *Environmental Virtue Ethics* (Lanham, MD: Rowman and Littlefield, 2005).

Sandler, Ronald. *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics*. New York: Columbia University Press, 2007. Virtue ethics is now widely recognized as an alternative to Kantian and consequentialist ethical theories, but moral philosophers have been slow to bring virtue ethics to bear on topics in applied ethics. Although environmental ethicists often employ virtue-oriented evaluation and appeal to role models for guidance, environmental ethics has not been well informed by

contemporary work on virtue ethics. Sandler attempts to remedy these deficiencies by bringing together contemporary work on virtue ethics with contemporary work on environmental ethics. He demonstrates the many ways that any ethic of character can and should be informed by environmental considerations. He also develops a pluralistic virtue-oriented environmental ethic that accommodates the richness and complexity of our relationship with the natural environment and provides effective and nuanced guidance on environmental issues. These projects have implications not only for environmental ethics and virtue ethics but also for moral philosophy more broadly.

Sandler, Ronald. Review of: Comstock, Gary, Vexing Nature: On the Ethical Case Against Agricultural Biotechnology. Environmental Values 12(2003):403-405. (EV)

Sandler, Ronald. "A Theory of Environmental Virtue." Environmental Ethics 28(2006):247-264. If claims about which character traits are environmental virtues are to be more than rhetoric, there must be some basis or standard for evaluation. This naturalistic, teleological, pluralistic, and inclusive account of what makes a character trait an environmental virtue can be such a standard. It is naturalistic because it is consistent with and motivated by scientific naturalism. It is teleological because character traits are evaluated according to how well they promote certain ends. It is pluralistic because those ends are both agent-relative and agent-independent. It is inclusive because it counts environmentally justified, environmentally responsive and environmentally productive virtues as environmental virtues. This theory of environmental virtue provides the basis for the development of a typology of environmental virtue that includes virtues of sustainability, virtues of communion with nature, virtues of respect for nature, virtues of environmental activism, and virtues of environmental stewardship. (EE)

Sando, Svein. "Should We Consent To an Increase of Non-Fatal Health Hazards If That Reduces Other Risks of Fatality?" Pages 23-27 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Sandoe, P., Holtug, N., Simonsen, H.B. "Ethical Limits to Domestication," Journal of Agricultural and Environmental Ethics 9(1996):114-122. Through the process of domestication the genetic make-up of farm animals can be changed by means of either selective breeding or genetic engineering. This paper is about the ethical limits to such genetic changes. It is suggested that the ethical significance of domestication has become clear recently in the light of genetic engineering, but that the problem has been there all along. Two ethical approaches to domestication are presented, genetic integrity and animal welfare. It is argued that the welfare approach is superior. Finally, five ethical hypotheses based on the welfare approach are presented. Keywords: ethics, domestication, animal welfare, genetic engineering. Sandoe and Holtug teach in the Department of Education, Philosophy, & Rhetoric at the University of Copenhagen. Simonsen teaches at the Royal Veterinary and Agricultural University, Denmark. (JAEE)

Sandoe, Peter, Roger Crisp, Nils Holtug, "Animal Ethics," Copenhagen, Denmark: University of Copenhagen, Department of Education, Philosophy, and Rhetorics, 1996. Also forthcoming in Mike Appleby and Barry Hughes, eds., Animal Welfare (Wallingford, Oxfordshire, U.K: C.A.B. International). Views concerning how humans ought to treat animals. The view that animals do not have moral standing is examined, and four different views of the ways that animals may have moral standing: utilitarianism, the animal rights view, the species-integrity view, and the agent-centered view. Sandhoe and Holtug are with the Bioethical Research Group, University of Copenhagen. Crisp is at St. Anne's College, Oxford University. Copies from: Bioethical Research Group, University of Copenhagen, Department of Education, Philosophy, and Rhetorics, Njalsgate 80, DK-2300, Copenhagen S., Denmark. Fax 45 5370 3573. (v7,#2)

Sands, Roger, Forestry in a Global Context. New York: Oxford University Press, 2005. Sands is at the University of Canterbury, UK.

Sandvik, Hanno, "On Human Population Growth, Natural Selection, and the Tragedy of the Commons," Conservation Biology 13(No.2, 1999):447-. (v.10,#2)

Saner, Marc A., Environmental Ethics and Biotechnology: A Test of Norton's Convergence Hypothesis, M. A. thesis in philosophy, Carleton University, Ottawa, Ont. May, 1999. Bryan Norton's convergence hypothesis asserts that environmentalists "of all stripes" can achieve consensus over environmental policy if only minimal constraints are applied to the dialogue. Norton challenges that his proposition has not been falsified as yet (as of 1997). I test the hypothesis against the dialogue over the environmental use of biotechnology (genetic engineering). I discuss the environmental ethical issues raised by biotechnology and show that the convergence hypothesis is either unreasonable--applying its constraints to a environmental policy dialogue is too restrictive for environmental radicals, or can be falsified --applying its constraints does not lessen the divergence between positions in the dialogue over biotech policy. The convergence hypothesis is an over-generalization: the global claim of "unity among environmentalists of all stripes" cannot be upheld. I discuss practical consequences of this observation--how it affects risk management (and the risk/ethics boundary), biotech risk communication, the comprehensiveness of the ecosystem health concept, and the application to international agreements. The advisor was Jay Drydyk. Marc Saner, Department of Philosophy, DT 2127, Carleton University, Ottawa, Ont. K1S 5B6. Tel: (613) 520-3824, Fax: (613) 520-3962, Tel: (613) 725-5156 [home office]. E-mail: saner@magma.ca (v.10,#2)

Saner, Marc A. "Biotechnology, the Limits of Norton's Convergence Hypothesis, and Implications for an Inclusive Concept of Health." Ethics and the Environment 5(2000):229-242. ABSTRACT: Bryan Norton proposes a "convergence hypothesis stating that anthropocentrists and nonanthropocentrists can arrive (it common environmental policy goals if certain constraints are applied. Within his theory he does not, however, address the consideration of nonconsequentialist issues, and, therefore does not provide an argument for the convergence between consequentialist and nonconsequentialist ethical positions. In the case of biotechnology. nonconsequentialist issues can dominate the debate in both the fields of environmental ethics and bioethics. I argue that, the convergence hypothesis must be rejected when tested against the case of biotechnology, and this limitation of convergence applies to any theory. of reconciliation within the "health" concept because the achievement and preservation of "health" emphasizes a consequentialist outlook. I conclude that an inclusive ethics for ecosystem and human health should be explicit about this limitation. (E&E)

Sanford, Melissa, "For Falcons as for People, Life in the Big City Has Its Risks as Well as Its Rewards," New York Times, June 28, 2004, p. A12. Peregrine falcons live in city canyons, as well as wild ones. After all, another name is pigeon hawk, so there is a good food supply. New York City has 15 nests; there are nests in Los Angeles. In Salt Lake City they nest near the Mormon Tabernacle. The week when the fledglings are learning to fly ("Hell Week" for falcons) is especially tough, and volunteer bird-watchers take great care to protect errant fledglings from traffic. (v. 15, # 3)

Santas, Aristotelis, "A Pragmatic Theory of Intrinsic Value," lecture at the Environmental Ethics Certificate Program, University of Georgia, March 12, 1966. An ecosystem is a dynamic, ever-changing process of interactions where parts are not passive recipients, but constantly interact. Individuals of an ecosystem can be instrumental to its growth, but never merely instrumental to the whole, only to the parts. The value of the whole must be seen as inseparable from the value of its constituent parts. No overall value sets a standard to measure all other values. It is absurd to claim, for example, that a salt marsh exists purely for the benefit of the resident crabs any more than it does for the benefit of humans; an ecosystem's value is not relative to its individual parts any more than it should be relative to the demands of a real estate contractor.

John Dewey's concept of value does not destroy intrinsic value. Not until we give up the idea that

value can exist outside of all context can we really have intrinsic value. Value is contextual; it exists as a functional relationship. Although understanding those relationships may necessitate a relational look at value, at the same time, value is independent of human existence. For example, fish have value to alligators and the salt marsh has value to the larger environment for its functions. There is no need to appeal to humans for value to exist; whether rational or sensory, value is there. Santas is professor of philosophy and environmental ethics and Coordinator of the Center for Professional and Applied Ethics at Valdosta State University, Valdosta, Georgia. (v7,#1)

Santelmann M.V.; White D.; Freemark K.; Nassauer J.I.; Eilers J.M.; Vache K.B.; Danielson B.J.; Corry R.C.; Clark M.E.; Polasky S.; Cruse R.M.; Sifneos J.; Rustigian H.; Coiner C.; Wu J.; Debinski D., "Assessing alternative futures for agriculture in Iowa, U.S.A.," Landscape Ecology 19(no.4, 2004):357-374(18). (v. 15, # 3)

Santmire, H. Paul, Brother Earth: Nature, God, and Ecology in Time of Crisis. New York: Thomas Nelson, 1970.

Santmire, H. Paul, Nature Reborn: The Ecological and Cosmic Promise of Christian Theology. Minneapolis: Fortress Press, 2000. A re-envisioning of the classic Christian story to identify and celebrate its ecological promise. 1. Revising the Classical Christian Story: The Theological Challenge before us. 2. Reclaiming the Story Historically: Beyond the Ecological Critique. 3. Rediscovering the Story Biblically: Beyond Anthropocentric Interpretation. 4. Retelling the Story Narratively: Beyond Evolutionary Anthropocentrism. 5. Reenvisioning the Story Interpersonally: Beyond Anthropocentric Personalism. 6. Reenacting the Story Ritually: Beyond the Milieu of the Gothic Spirit. 7. Reexperiencing the Story Spiritually: Beyond the Ecology of Death. 8. Reliving the Story Ethically: A Personal Testament of Nature Reborn. Santmire is pastor of Trinity Lutheran Church, Akron, Ohio, with several earlier books in the field. (v.11,#3)

Santmire, H. Paul, Creation and Nature: A Study of the Doctrine of Nature with Special Attention to Karl Barth's Doctrine of Creation. Ph.D. thesis, Harvard University, 1966.

Santmire, H. Paul, The Travail of Nature: The Ambiguous Promise of Christian Theology. Minneapolis: Fortress Press, 1985.

Santmire, H. Paul, "Farming for God: A Religion of the Soil," Christian Century 120 (no. 26, December 26, 2003):23-25. Combined review of: Wirzba, Norman, The Paradise of God: Renewing Religion in an Ecological Age. New York: Oxford University Press, 2003; Hiebert, Theodore, The Yahwist's Landscape: Nature and Religion in Early Israel. New York: Oxford University Press, 1996; and Brown, William P., The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible. Grand Rapids, MI: Eerdmans, 1999.

Santmire, H. Paul, "Eco-economics," Review of McFague, Sallie, Life Abundant: Rethinking Theology and Economy for a Planet in Peril. Christian Century, Sept. 26-Oct. 3, 2001, pages 33-36. (v.12,#4)

Santos, T., Telleria, J. L. and Carbonell, R., "Bird Conservation in Fragmented Mediterranean Forests of Spain: Effects of Geographical Location, Habitat and Landscape Degradation," Biological Conservation 105(no.ER1, 2002): 113-25. (v.13,#2)

Sapontzis, S. F., Morals, Reason, and Animals. Philadelphia: Temple University Press, 1987.

Sapontzis, S.F., "Animal Liberation and Vegetarianism", Journal of Agricultural Ethics 1(1988):139-154.

Sapontzis, Steve F., Finsen, Susan, Bekoff, Marc. "Perspectives: Predator-Reintroduction Programs," The

Animals' Agenda 15, no. 4 (Sept. 1995): 28- . Are there noble experiments in restitution or affirmative action programs that favor some species over others? Animal rights philosophers Steve F. Sapontzis and Susan Finsen, and scientist Marc Bekoff, debate the question. (v6,#4)

Sapontzis, Steve F. "The Moral Significance of Interests." Environmental Ethics 4(1982):345-58. Several philosophers opposed to animal rights have recently sought to justify their opposition by arguing that the epistemic differences between human and animal interests (often referred to as "taking an interest" vs. "having an interest") constitute a morally significant difference. I first detail the various forms of having an interest and of taking an interest. I then evaluate the moral significance of these differences from both utilitarian and deontological viewpoints. The conclusion of this analysis is that the epistemic differences between human and animal interests are not morally significant. Sapontzis is in the philosophy department, California State University, Hayward, CA. (EE)

Sapontzis, Steve F., "We Should Not Manipulate the Genome of Domestic Hogs", Journal of Agricultural and Environmental Ethics 4(1991):177-185. In a debate: Question: Should we manipulate the genome of domestic hogs?

Sapontzis, Steve F., "Predation." Ethics and Animals, Vol. 5, no. 2 (June 1984): 27-38. The reductio ad absurdum of the animal rights position, especially as applied to environmental issues. Sapontzis argues that the prevention of predation is not in itself an "absurd" position. But most of his discussion centers on the meaning of the words "absurd" or "avoidable" or "impractical"--not on the substantive issues. A good lesson in what is wrong with analytical philosophy. (Katz, Bibl # 1)

Sapontzis, Steve F. "We Should Not Allow Dissection of Animals." Journal of Agricultural and Environmental Ethics 8(1995):181-189. This essay argues against routine dissection exercises on animals under three headings. First, attaining goals of general scientific education does not require dissection. The training of specialists, in whose vocations dissection skills are essential, could then be accomplished without killing animals specifically for the purpose of acquiring those skills. Second, killing and dissecting animals for unnecessary exercises teaches students bad attitudes toward animal life. Third, moral principles cannot justify killing and dissecting animals but not humans; consequently, such treatment of animals is prejudiced exploitation of the weak by the strong. (JAEE)

Sapontzis, Steve F. (ed.), Food for Thought: The Debate over Eating Meat, Reviewed by Michael Allen Fox, Environmental Values 15(2006):264-267.

Sapontzis, Steve, *Food for Thought: The Debate over Eating Meat*. Amherst, NY: Prometheus Books, 2004. Reviewed by Richard P. Haynes in *Journal of Agricultural and Environmental Ethics* 21(2008):99-105.

Sapontzis, Steven F. "Reply to Weir: Unnecessary Fear, Nutrition, and Vegetarianism," Between the Species 7, no. 1 (Winter 1991): 27-32. (v8,#1)

Sarewitz, Daniel, Frontiers of Illusion: Science, Technology and the Politics of Progress. Philadelphia: Temple University Press, 1996. 235 pages. Paper, \$ 19.95. An effort to draw science back into social accountability, deflating five myths (pp. 10-11):

- (1) the myth of infinite benefits, that more science and more technology will lead to more public good;
- (2) the myth of unfettered research, that any scientifically reasonable line of research into fundamental natural processes is as likely to yield societal benefit as any other;
- (3) the myth of accountability, that peer review, reproducibility of results, and other controls on the quality of scientific research embody the principal ethical responsibilities of the research system;
- (4) the myth of authoritativeness, that scientific information provides an objective basis for resolving

political disputes;

(5) the myth of the endless frontier, that new knowledge generated at the frontiers of science is autonomous from its moral and practical consequences in society.

The new paradigm Sarewitz proposes is sustainability, which, despite its flaws, has "conceptual malleability" as "an alternative to the mentality of infinite growth" (p. 193).

Sarewitz, Daniel, "Science and Environmental Policy: An Excess of Objectivity." Pages 79-98 in Frodeman, Robert, eds., Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community. Upper Saddle River, NJ: Prentice-Hall, 2000. Scientists and decision makers alike tend to view the role of science in environmental policy as prescriptive. The goal is to create objective information that can cut through the morass of politics and enable wise decisions. Sarewitz claims that in the real world this happy result rarely emerges. What one finds instead are politicians using science to back their political positions. But rather than seeing this as a problem caused by politicians distorting the scientific facts for partisan purposes, Sarewitz suggests another possibility: that nature itself resists unitary characterization. The appeal to science to resolve our environmental questions thus presents us with an "excess of objectivity." Science can better serve to help us reach solutions we have set adjudicating social goals prior to the science. Sarewitz is with the Center for Science, Policy, and Outcomes, Columbia University, and long worked for the U.S. Congress in science policy. (v.12,#3)

Sarkar, Sahotra, "Thinking of Biology: Ecological Theory and Anuran Declines", Bioscience, 46(No.3, 1996):199- . (v7,#1)

Sarkar, Sahotra, Biodiversity and Environmental Philosophy. Cambridge: Cambridge University Press, 2005. Sarkar criticizes attempts to attribute intrinsic value to nature and defends an anthropocentric position on biodiversity conservation based on untraditional concepts of transformative value. As much concerned with epistemological issues as with environmental ethics. Sarkar is at the University of Texas, Austin.

Sarkar, Sahotra, "Wilderness Preservation and Biodiversity Conservation--Keeping Divergent Goals Distinct," BioScience 49(no. 5, May 1999):405-412. "In some instances, the tasks of biodiversity conservation and wilderness preservation converge, but at least as often they do not." Wilderness excludes or minimizes people on the landscape; biodiversity conservation need not. Biodiversity conservation can bring local benefits to third world peoples; wilderness seldom does. Biodiversity conservation is politically easier than is wilderness preservation. Wilderness preservation can make biodiversity conservation more difficult on non-wilderness lands. "Wilderness preservation cannot be used as a surrogate for biodiversity conservation. Indeed, wilderness preservation and biodiversity conservation may be in conflict. Biodiversity conservation can avoid contentious political issues while simultaneously promoting long-term conservation by maintaining independence and distance from wilderness preservation." With a reply letter by Philip Cafaro and Warren Platts, forthcoming in BioScience.

Sarkar is in philosophy, University of Texas, Austin. (v.10,#2)

Sarkar, Sahotra. *Biodiversity and Environmental Philosophy: An Introduction*. New York and Cambridge: Cambridge University Press, 2005. "Attempts to present a coherent anthropocentric position that nevertheless emphasizes biodiversity conservation" (p. xiii). Sarkar doubts that preservation of biodiversity can be justified economically. But biodiversity provides both aesthetic and intellectual benefits to human beings. This "transformative value" best justifies its protection. Sarkar develops a model for systematic conservation planning, with enthusiasm for "hands on" management and disdain for wilderness protection.

Sarpong, Daniel Bruce. Growth in Ghana: A Macroeconomic Model Simulation Integrating Agriculture.

Brookfield, VT: Ashgate, 1997. Why the Ghanaian economy has failed to achieve sustained high economic growth, and changes needed for the future. (v9,#2)

Sarr D.; Puettmann K.; Pabst R.; Cornett M.; Arguello L., "Restoration Ecology: New Perspectives and Opportunities for Forestry," Journal of Forestry 102(no.5, July/August 2004):20-24(5). (v. 15, # 3)

Sarre, Philip. "Towards Global Environmental Values: Lessons from Western and Eastern Experience." Environmental Values 4(1995):115-127. New environmental values are needed as the advanced industrial economy becomes global. Reviewing a range of values from hunter-gatherer, agricultural and industrial societies, the paper suggests that environmental value systems should ideally satisfy three criteria. They should be consistent with scientific understanding of natural systems, they should lead to practical ethical and political proposals and, crucially, they should inspire aesthetic responses of pleasure and awe. Current global value systems fall short of this ideal: Gaia has the potential to combine science and awe, but lacks humane decision criteria, while sustainable development is pragmatic but environmentally minimalist and lacks aesthetic inspiration. The short term need is to integrate different strands of current positions as Hinduism combined pre-existing views. A sequence of priorities is suggested: eliminating irreversible environmental change; stabilising population change through more equitable trade; and reconsidering the boundaries, practical and aesthetic, between society and nature. KEYWORDS: Environment, values, globalisation, sustainability, development. Sarre is in social sciences, The Open University, Milton Keynes. UK. (EV)

Sassen, Saskia, Globalization and Its Discontents: Essays on the New Mobility of People and Money. New York: New Press, 1998. 288 pages. \$ 25. Although money and people are more mobile than ever in the globalized economy, the money is really gathered in a rather few cities around the world, and the people who migrate are from developing countries in which rich countries have invested or which with they have had colonial or military dealings. These immigrants, legal and undocumented, commonly enter casual, low-skilled jobs in the U.S., Europe, or Japan in such cities, keeping wages low and providing services to the global cities, feeding a pattern of inequitable income distribution. The process of high-income "gentrification" in such global cities has been made possible by the ready supply of low income workers, especially female workers. Globalization erodes the power of national governments to regulate such developments, but this is too passively accepted. National governments may have more power than they think when they recognize how attached the transnational corporations are to a relatively few cities, where taxes and regulations may be easier to administer, and corporations have less power than supposed to flee somewhere else. (v.10,#1)

Satchell, Michael, "Save the Elephants: Start Shooting Them," U.S. News and World Report 121(no. 21, Nov. 25, 1996):51-53. Animal lovers hail the ivory ban. Many African nations hate it, and say it hurts wildlife. (v7,#4)

Satchell, Michael, "A New Day for Earth Lovers," U.S. News and World Report, April 24, 1995. Republican party efforts to kill environmental laws have galvanized the struggling green movement.

Satchell, Michael, "Any Color but Green," U.S. News and World Report, October 21, 1991, pp. 74-76. The "wise-use" alliance rising to battle the environmental movement, now organized as a coalition, and said by some to be the most serious challenge to environmentalism in two decades. The wise-use movement regards "wilderness, wetlands, and endangered species as an unholy trinity responsible for most of its gut worries." Charles Cushman, a spokesman, says, "The preservationists are like a new pagan religion, worshipping trees and animals and sacrificing people. It's a holy war between fundamentally different religions." (v2,#4)

Satin, Morton , *Death in the Pot: The Impact of Food Poisoning on History* (Amherst, NY: Prometheus

Books, 2007). Reviewed by Richard P. Haynes in *Journal of Agricultural and Environmental Ethics* 21(2008):395-400.

Satterfield, Terre, Anatomy of a Conflict: Identity, Knowledge and Emotion in Old-Growth Forests. Vancouver: University of British Columbia, 2002. Reviewed by Kay Milton, Environmental Values 13(2004):118-119. (EV)

Satterfield, Terre, and Scott Slovic, eds., What's Nature Worth? Narrative Expressions of Environmental Values. Salt Lake City: University of Utah Press, 2004. Environmental writers as "lay ethicists" (p. 2).

Satterfield, Terre, "Emotional Agency and Contentious Practice: Activist Disputes in Old-Growth Forests," Ethos (American Anthropological Association) 32 (no. 2, 2004):233-256. Drawing on theories of identity and agency, emotions, and environmental ethics, this article demonstrates the culturally productive dimensions of emotional agency as it played out in disputes over old-growth logging. This reveals a "hot spot" where new imaginations of the future are creatively generated and explored. The morally persuasive use of emotional language and bodily practice (chaining oneself to a bulldozer) are thrown into relief as changing-inducing discourse that promotes new moral practices. Satterfield is at the Institute for Resources and Environmental Sustainability, University of British Columbia, Vancouver.

Satterfield, Theresa. "In Search of Value Literacy: Suggestions for the Elicitation of Environmental Values," Environmental Values 10(2001):331-360. This paper recognises the many contributions to work on environmental values while arguing that some reconsideration of elicitation practices is warranted. It argues that speaking and thinking about certain environmental values, particularly ethical expressions, are ill-matched with the affectively neutral, direct question-answer formats standard to willingness-to-pay and survey methods. Several indirect, narrated, and affectively resonant elicitation tasks were used to provide study participants with new opportunities to express their values. Coded results demonstrate that morally resonant, image-based, and narrative-style elicitation tasks help respondents articulate a broader range of noncost and nonutilitarian environmental values. However, it was found that elicitations of this kind are most useful when presented in a affectively subtle and noncontroversial form. Several suggestions for synthesising these methods with more structured forms (e.g., surveys, constructed preferences, etc.) are offered. Keywords: Environmental ethics and values, emotion and value, value deliberation, value elicitation methods, noneconomic value, narrative valuation, public participation. Theresa Satterfield is in Decision Research Eugene, OR. (EV)

Sauer, JB, "Renewing a Conversation on Science and Values: Is Science Value Free?" review article, Hugh Lacey, Values and Scientific Understanding, Research in Philosophy and Technology 21(no., 2001): 337-346.

Sauer, Peter, ed., Finding Home: Writings on Nature and Culture from Orion Magazine. Boston: Beacon Press, 1992. \$ 15.00. 293 pages. Essays by Barry Lopez, David Ehrenfeld, David Abram, Gary Nabhan, Terry Tempest Williams, Charles Bergman, and others--all on humans placed in the larger field of natural history. (v3,#3)

Saunders, D. A., A. J. M. Hopkins, R. A. Hau, eds., Australian Ecosystems: 200 Years of Utilization, Degradation, and Reconstruction. 1990, Proceedings of the Ecological Society of Australia. Chipping Norton, N.S.W.: Surrey Beatty and Sons, 1990.

Saunders, DL; Meeuwig, JJ; Vincent, ACJ, "Freshwater Protected Areas: Strategies for Conservation," Conservation Biology 16(no.1, 2002):30-41. (v.13, #3)

Saunders, S. C., Mislivets, M. R., Chen, J. and Cleland, D. T., "Effects of Roads on Landscape Structure

within Nested Ecological Units of the Northern Great Lakes Region, USA," Biological Conservation 103(no.ER2, 2002): 209-25. (v.13,#2)

Saunders, Todd. "Ecology and Community Design: Lessons from Northern European Ecological Communities." Alternatives 22, no.2 (1996): 24. Ten recommendations for community designers and others wishing to translate ecological community theory into practice. (v7, #3)

Saurin, J., "Global Environmental Crisis as the 'Disaster Triumphant': The Private Capture of Public Goods," Environmental Politics 10(no.4, 2001): 63-84. (v.13,#2)

Savage-Rumbaugh, Sue, Shanker, Stuart G., and Taylor, Talbot J., Kanzi: The Ape at the Brink of the Human Mind. New York: Oxford University Press, 1998. A summary is Dreifus, Claudia, "She Talks to Apes and, According to Her, They Talk Back," New York Times, April 14, 1998, B10. At a research facility at Georgia State University, Decatur, bonobos (a kind of chimpanzee) point to printed symbols on a keyboard, and converse about dogs, television that they watch, and pretend gorillas in a game they play. (v9,#2)

Savedge, Jenn. *The Green Parent: A Kid-Friendly Guide to Environmentally-Friendly Living*. Seattle: Kedzie Press, 2008. Savedge's book contains chapters on how parents can teach their children to green a variety of things, such as clothes, gifts, home remodeling, parties, pets, schools, shopping, transportation, workplaces, and vacations.

Savile, Anthony, The Test of Time: An Essay in Philosophical Aesthetics. Oxford: Clarendon Press, 1982. Natural objects should be perceived as though they were works of art (Chapter 8, Sections VI, VII).

Sawyer, Andrew H. "Hydropower Relicensing in the Post Dam-Building Era", Natural Resources & Environment 11(no.2, 1996):12.

Sax, Dov F., John J. Stachowicz, and Steven D. Gaines, eds., Species Invasions: Insights into Ecology, Evolution, and Biogeography. Sunderland, MA: Sinauer Associates, 2005. Sax and Gaines are in biology and ecology, University of California, Santa Barbara. Stachowicz is in ecology, University of California, Davis.

Sax, J. L., "Comment on John Harte's Paper, 'Land Use, Biodiversity, and Ecosystem Integrity: The Challenge of Preserving Earth's Life-Support System'," Ecology Law Quarterly 27(no.4, 2000):1003-1014. (v.12,#4)

Sax, Joseph L. "Takings Legislation: Where It Stands and What Is Next." Ecology Law Quarterly 23, no.3 (1996): 509. (v7, #3)

Sax, Joseph L. Mountains without Handrails: Reflections on the National Parks. Reviewed in Environmental Ethics 4(1982):369-71.

Saxe, Dianne, "The Fiduciary Duty of Corporate Directors to Protect the Environment for Future Generations." Environmental Values Vol.1 No.3(1992):243-252. ABSTRACT: The 'business judgement rule' requires corporate directors only to act with honesty and reasonable care in the interest of shareholders. A stronger 'fiduciary' duty is required where one party requires protection from another. This paper argues that where corporations take risks with the environment, directors are fiduciaries. Stakeholders are in that case the general public, future generations and other species, which have not voluntarily accepted risk and cannot limit liability. Recognition of fiduciary duty in such cases is

consistent with recent trends in the law of equity. It would require all economic activities to move from open to closed (sustainable) systems. KEYWORDS: Corporate responsibilities, fiduciary duties, future generations. 248 Russell Hill Road, Toronto, Ontario, Canada, M4V 2T2.

Say, A., "Review of: Charles Warren, Managing Scotland's Environment (Edinburgh: Edinburgh University Press, 2002)," Biological Conservation 114(no. 1, 2003): 154-155.

Sayen, Jamie. "Limitations of Conservation Easements." Wild Earth 6, no.1 (1996): 77. (v7, #3)

Sayen, Jamie. "A Second Chance for the Northern Forests," Wild Earth 5, no. 4 (Winter 1995): 37- . (v6,#4)

Sayer, Jeffrey A., Caroline S. Harcourt, and N. Mark Collins, eds., The Conservation Atlas of Tropic Forests: Africa. By the World Conservation Union (IUCN). New York: Simon and Schuster, 1991. 256 pages, 62 maps. \$ 95.00. (v3,#4)

Sayre, K. M. et al. Regulation, Values and the Public Interest. Reviewed in Environmental Ethics 6(1984):271-74.

Sayre, Kenneth. "Morality, Energy, and the Environment." Environmental Ethics 3(1981):5-18. Our crises of energy and of social values are causally interrelated. Our energy problems have contributed substantially to our contemporary value problems, as evident, for example, by the institution of the private automobile, which has begun to erode the very values it initially served. That our energy crisis has resulted from problems of value is illustrated by setting up a simple model of producer-consumer interaction, with egoism and hedonism as dominant principles of duty and of good respectively, and by showing that an energy crisis like the one we are currently experiencing is practically inevitable. These discussions lead to an assessment of the possible roles moral philosophy might play in confronting these two crises. Sayre is in the department of philosophy, University of Notre Dame, IN. (EE)

Sayre, Kenneth. "An Alternative View of Environmental Ethics." Environmental Ethics 13(1991):195-213. Environmental ethics continues to be dominated by an inferential view of ethical theory, according to which moral prescriptions and proscriptions are deduced from general principles, which in turn are arrived at intuitively or by some form of induction. I argue that the inferential approach contributes little to the pressing need which environmental philosophers have been attempting to address in recent decades--the need for a set of normative values actually in place within industrial society that will help preserve the environment from human destruction. I propose an alternative view according to which the aim of environmental ethics is (1) a clear understanding of how moral norms actually come to be instituted in a given society, (2) the analysis of the practical effect of such norms from an environmental perspective, and (3) an examination of the relative desirability of alternative norms in light of their environmental effects. In pursuing this aim, environmental ethics should join forces with anthropology, economics, and other areas of social science in hopes of generating a basis for empirical information about how moral norms actually operate. Such information might help persuade society at large of the importance of being guided by an environmentally sound set of normative values. Sayre is in the department of philosophy, University of Notre Dame, IN. (EE)

Sayre, NF, "Ecological and geographical scale: parallels and potential for integration," Progress in Human Geography 29 (no. 3, June 2005): 276-290.

Scanlan, David, "An Environmental Test Case: New Costa Rican Government to Rule on Building of Chip Mill in Rain Forest," The Christian Science Monitor 86 (26 July 1994): 11. (v5,#3)

Scarce, Rik, Eco-Warriors: Understanding the Radical Environmental Movement (Chicago: Noble Press, 1990). \$ 11.95. 291 pages. (v2,#1)

Scarff, James E. "Ethical Issues in Whale and Small Cetacean Management." Environmental Ethics 2(1980):241-79. Three main ethical issues involved in the management of whales and small cetaceans are examined: ethical values concerning extinction and their implications for consumptive management regimes, the humaneness of current and feasible future harvesting techniques, and the ethical propriety of killing cetaceans for various uses. I argue that objections to human-caused extinction are primarily ethical, and that the ethical discussion must be expanded to include greater consideration of acceptable risks and problems associated with extinction due to human-caused genetic selection. Whaling methods are objectively described including death times for whales. I show that the debate on humaneness is not about the facts of the hunt, but about the appropriate standard for judging whether or not a technique is humane. Economic and ecological arguments which attempt to preempt the ethical questions are discussed and dismissed as specious. Arguments which attempt to distinguish ethically human relations with cetaceans from relations with other wildlife species are reviewed critically. Scarff is an attorney with the Whale Center, Oakland, CA. (EE)

Scatterwaite, David; Hart, Roger; Levy, Caren; Mitlin, Diana; Ross, David; Smit, Jac; Stephens, Carolyn. Published in association with UNICEF. The Environment for Children: The Environmental Hazards that Threaten Children and Their Parents. London: Earthscan Publications Ltd., 1996. 192pp. £12.95 paper, £29.95 cloth. Focusing on urban environments, this book analyses the health hazards threatening children and the range of impacts they can have, and explains what can be done to provide safe and healthy environments for children. The book looks at conditions in a range of cities in the developing world, as well as pollutants and other health problems affecting children in the North. (v8,#1)

Schabel, Hans G., Palmer, Siegfried L., "The Dauerwald: Its Role in the Restoration of Natural Forests," Journal of Forestry 97(no. 11, Nov 01 1999):20- . A dramatic shift in silvicultural emphasis is sweeping Europe at the end of more than 200 years of forestry evolution. (v.11,#1)

Schaefer, Jame, Ethical Implications of Applying Aquinas' Notions of the Unity and Diversity of Creation to Human Functioning in Ecosystems. Ph.D. dissertation at Marquette University, 1994. Aquinas' ideas about the need for a diversity among creatures and how they interact to form a unity have affinity with some ecologists' perception of the makeup and functioning of ecosystems. There is an orderly and hierarchically structured dynamic whole. All creatures, including humans, are both interconnected and related to God as their creator, sustainer, and ultimate end. They are good and ought to be valued for the roles they play; ecosystems are sacramental signs of God's presence; humans ought to use creation virtuously; the misuse of ecosystems is sinful and from this humans need to be redeemed. Aquinas can help Roman Catholics in their search for an environmental ethic. Michael Duffey was the thesis director. Jame Schaefer, 3741 Koehler Drive, Sheboygan, WI 53083. (v6,#1)

Schaefer, Jame, "Appreciating the Beauty of Earth," Theological Studies 62 (March 2001):23-52. Categories used by contemporary environmental philosophers to explore esthetic appreciation for the beauty of the physical world have parallels in reflections by patristic and medieval theologians on the beauty of God's creation. A sampling of the theologians' notions yields a promising foundation for ecological ethics from a theistic perspective, especially when understood from their world view at the time the text was written, reformulated to reflect broad scientific findings about the world today, and worked creatively to identify norms for human behavior. Schaefer is in theology, Marquette University. (v.12,#4)

Schaefer, Jame, "Intrinsic-Instrumental Valuing of Earth: A Theological Framework for Environmental Ethics," Theological Studies 66(no. 4, 2005):783-814. Philosophers have struggled with value theory as one of the most recalcitrant problems for environmental ethics. Theologians can benefit from their efforts

when retrieving and reworking notions about the goodness of creation in patristic and medieval texts, particularly those by Augustine, John Chrysostom, and Thomas Aquinas. This process yields a religiously motivated rationale for intrinsic-instrumental valuing of the physical world's constituents for themselves, their relationships to one another, and their common good that can be relevant, meaningful, and helpful for responding to ecological valuation. Schaefer is in theology and directs an interdisciplinary minor in environmental ethics at Marquette University, Milwaukee.

Schaefer, Jame, "Acting Reverently in God's Sacramental World." Pages 37-90 in Eigo, Francis A., ed., Ethical Dilemmas in the New Millennium II. Villanova, Pennsylvania: Villanova University Press, 2001. (v.12,#4)

Schaefer, Jame. "The Virtuous Cooperator: Modeling the Human in an Ecologically Endangered Age," Worldviews: Environment, Culture, Religion 7.1-2 (2003): 171-195. Modeling the human in an age of ecological degradation requires at least four criteria for people who profess a religious faith. The model should be (1) rooted in religious faith tradition, (2) consistent with broad scientific findings, (3) positively relational to other beings and physical systems, and (4) descriptive about the kind of behavior that is needed. Among the works of Thomas Aquinas are various notions about the cooperation of creatures and God and teachings about the chief moral virtues of prudence, temperance, justice and fortitude that provide a starting point for developing a model of the human as a virtuous cooperator. When informed by broad contemporary scientific findings, the virtuous cooperator meets the criteria for modeling the human during our time by offering a realistic way of thinking about our species in relation to the more-than-human others that constitute our planet, a framework for acting responsibly, and the teleological motivation for making this behavior habitual. (v 14, #3)

Schaefer, Jame. "Grateful Cooperation: Cistercian Inspiration for Ecological Ethics," Cistercian Studies Quarterly 37.2 (2002): 187-203. A 12th century text that describes the site and surroundings of the Cistercian Abbey at Clairvaux conveys the observer's appreciation, respect and gratitude for the cooperative interactivity of the monks, other biota, and abiota that constitute the area. Parallel thinking can be found in contemporary philosophical discourse in which the human is considered a highly specialized, integral and responsible actor within the ecological system. When the human-in-ecosystem approach proceeds from deep faith in God, who empowers the emergence and interactivity of ecosystem interactors, the ethics of grateful cooperation inspired by the medieval text can guide humans to seek the health and well-being of their shared system as a way of cooperating with God. (v 14, #3)

Schaefer, Mark, D. James Baker, John H. Gibbons, Charles G. Groat, Donald Kennedy, Charles F. Kennel, and David Rejeski. "An Earth Systems Service Agency." *Science* Vol. 321, no. 5885 (4 July 2008): 44-45. Already two US federal agencies have missions solely directed to Earth sciences—the National Oceanic and Atmospheric Administration (NOAA) and the US Geological Survey (USGS). The National Aeronautics and Space Administration (NASA) also has many Earth observing systems. These agencies ought to merge to establish an independent Earth Systems Science Agency, which could better address serious environmental and economic challenges facing the United States.

Schaeffer, Francis A. Pollution and the Death of Man: The Christian View of Ecology. Wheaton: Tyndale House, 1970. Refutes the charges of Lynn White, Jr. in "The Historical Roots of our Ecologic Crisis."

Schafer, G. Bioregionalism and Contextual Discourse: Towards a Postmodern Environmentalism in South Africa. M.Phil. thesis, at the University of Stellenbosch, 1998. Promotor: Johan P. Hattingh. (v.10,#1)

Schafer, R. Murray, The Soundscape: Our Sonic Environment and the Tuning of the World. Reviewed by Anthony Weston. Environmental Ethics 18(1996):331-333. (EE)

Schäfer, Lothar, Das Bacon-Projekt; Von der Erkenntnis, Nutzung und Schonung der Natur [in German: The Bacon-project; on the knowledge, use and saving of nature], Frankfurt a.M.: Suhrkamp, 1993. (v.11,#1)

Schaller, George B., "Gentle Gorillas, Turbulent Times," National Geographic 188 (no. 4, October, 1995):65-68. (v6,#4)

Schaller, George B., The Last Panda. Chicago: University of Chicago Press, 1993. 291 pages. \$ 24.95 hardbound. About 1,000 pandas survive. A live panda is worth \$ 112,000 on the black market, a pelt is worth \$ 10,000. Zoos pay millions to rent pandas. Schaller tracks the panda in the wild and wonders if it can survive its popularity. Good intentions go desperately wrong, and greed and poverty prevent conservation. Panda conservation is often a sham. Schaller is with World Wildlife Conservational International, New York. (v4,#2)

Schalow, Frank, Review of John Barry, *Environment and Social Theory*, *Environmental Values* 16(2007):406-408.

Schalow, Frank. Review of: Brown, Charles S., and Ted Toadvine, eds., Eco-Phenomenology: Back to the Earth Itself. Ethics and the Environment 13(2004):269-271. (EV)

Schalow, Frank. "Who Speaks for the Animals? Heidegger and the Question of Animal Welfare." Environmental Ethics 22(2000):259-271. I address the ethical treatment of animals from a Heideggerian perspective. My argument proceeds in two stages. First, it is necessary to develop a nonanthropocentric concept of freedom which extends beyond the sphere of human interests. Second, it is essential to show that our capacity to speak must serve the diverse ends of "dwelling," and hence can be properly exercised only by balancing the interests of animals with those of our own. Rather than point to naturalistic similarities between humans and animals (e.g., the capacity to feel pain), or even ontological ones (e.g., the shared dimension of "care" [Sorge]), the better strategy lies in expanding the scope of moral agency in a way which allows the differences between humans and animals to suggest guidelines as to why the former should exhibit benevolence toward the latter. In this way, I show that the basic percepts of Heidegger's philosophy support an ethic which can attend to, and speak in behalf of, the welfare of animals. (EE)

Schalow, Frank. *The Incarnality of Being: The Earth, Animals, and the Body in Heidegger's Thought*. Albany: State University of New York Press, 2006. Schalow examines Heidegger's concern for the materiality of the world to explore the ecological dimensions of Heidegger's thought in terms of kinship between humans and animals and the mutual interests that humans and animals have for preserving the environment.

Schama, Simon. Landscape and Memory. New York: Alfred A. Knopf, 1995. 652 pages. "How much more elaborately wrought is the framework through which our adult eyes survey the landscape. For although we are accustomed to separate nature and human perception into two realms, they are, in fact, indivisible. Before it can ever be a repose for the senses, landscape is the work of the mind. Its scenery is built up as much from strata of memory as from layers of rock. Objectively, of course, the various ecosystems that sustain life on the planet proceed independently of human agency, just as they operated before the ascendancy of Homo sapiens. But it is also difficult to think of a single such natural system that has not, for better or worse, been substantially modified by human culture. Nor is this the work of the industrial centuries. It has been happening since the days of ancient Mesopotamia. ... And it is this irreversibly modified world, from the polar caps to the equatorial forests, that is all the nature we have. ... Even the landscapes that we suppose to be most free of our culture may turn out, on closer inspection, to

be its product. And it is the argument of Landscape and Memory that this is a cause not for guilt and sorrow but for celebration" (pp 7-9). This work was once lectures at Princeton, also at Cambridge, and has been made into a BBC television series. "The best work I am familiar with describing the cultural role of nature, or the impact of 'place' on the development of a culture" -- William Hoover, Forestry, Purdue. Schama is a historian. (v6,#3)

Scharlemann, Jörn P. W., and William F. Laurance. "How Green Are Biofuels?" *Science* Vol. 319, no. 5859 (4 January 2008): 43-44. Many biofuels are associated with lower greenhouse gas emissions but have greater aggregate environmental costs than gasoline.

Scharper, Stephen Bede, A Political Theology of the Environment. New York: Continuum, 1997. Christian theological responses to the ecological crisis. The Gaia hypothesis. Process theology. Ecofeminism. Liberation theology. Contouring a political theology of the environment.

Scharper, Stephen B. and Hilary Cunningham, eds., The Green Bible. Maryknoll, NY: Orbis, 1993. 114 pages. Paper. God's word for people on a planet with dwindling resources. Hebrew and Christian scriptures, religious and political leaders, scientists, environmentalists. (v4,#4)

Schatzki, T., "Options, Uncertainty and Sunk Costs," Journal of Environmental Economics and Management 46(no. 1, 2003): 86-105. (v 14, #3)

Scheffer, Victor B., The Shaping of Environmentalism in America (Seattle: University of Washington Press, 1991), 240 pages. \$ 19.95. A history of the formative years of recent American environmentalism, 1960-1980, with an epilogue highlighting events from 1981-1989. Scheffer has a career in biological research, university teaching, and natural science writing. (v2,#1). Reviewed in Environmental Ethics 13(1991):371-74.

Scheffer, Victor B. "The Olympic Goat Controversy: A Perspective," Conservation Biology 7(no. 4, 1993):916-919. The argument between the Park Managers of Olympic National Park and the Fund for Animals concerning whether the goats should remain in the park, where they are causing soil erosion and changes in floral composition, or be removed.

Schelhas, J, "Race, Ethnicity, and Natural Resources in the United States: A Review", Natural Resources Journal 42(no.4, 2002):723-764.

Schelhas, John, and Max J. Pfeffer. *Saving Forests, Protecting People? Environmental Conservation in Central America*. Walnut Creek, CA: AltiMira Press, 2007. Tropical forest conservation is attracting widespread public interest and helping to shape the ways in which environmental scientists and other groups approach global environmental issues. Schelhas and Pfeffer show that globally-driven forest conservation efforts have had different results in different places, ranging from violent protest to the discovery of common ground among conservation programs and the various interests of local peoples. The authors examine the connections between local values, material needs, and environmental management regimes.

Schelhas, John, Jantzi, Terry, Thacher, Tom. "Costa Rica: Meeting Farmers' Needs through Forest Stewardship," Journal of Forestry 95(no.2, 1997):33. (v8,#1)

Schell, Jonathan. The Fate of the Earth. Reviewed in Environmental Ethics 6(1984):181-84.

Schemo, Diana Jean, "Brazil Says Amazon Burning Tripled in Recent Years," New York Times, January 27, 1998, A3. Amazon deforestation, earlier said to be declining, in the days of the Rio Summit, is not.

Rather deforestation is sharply up from the previous ten year average. (v9,#1)

Schennach, Susanne M., "The Economics of Pollution Permit Banking in the Context of Title IV of the 1990 Clean Air Act Amendments," Journal of Environmental Economics and Management 40(no. 3, Nov. 1, 2000):189- . (v.12,#2)

Scherer, Donald, ed., Upstream/Downstream: Issues in Environmental Ethics. Philadelphia: Temple University Press, 1990 (November). \$ 37.95. Original essays: Donald Scherer, "The Modeling of Norms and Environments"; Ernest Partridge, "On the Rights of Future Generations"; Dale Jamieson, "Managing the Future: Public Policy, Scientific Uncertainty, and Global Warming"; Kristin Shrader-Frechette, "Models, Scientific Method, and Environmental Ethics"; Daniel Barstow Magraw and James W. Nickel, "Can Today's International System Handle Transboundary Environmental Problems?"; Mark Sagoff, "Takings, Just Compensation, and the Environment"; Bart Gruzalski, "The Consequences of My Action, Your Action, and the Company's Action"; and Alan Gewirth, "Two Types of Cost-Benefit Analysis." Don Scherer is professor of philosophy at Bowling Green State University and co-edited, Ethics and the Environment, one of the first anthologies in this field. (v1,#2)

Scherer, Donald, "Sustainable Resources, Ethics," in Encyclopedia of Energy Technology and the Environment, a four volume set, pp. 2571-77. San Francisco: John Wiley, 1995. Sustainability of choice; sustainability of lifestyles; sustainability of resources; sustainability and substitutability; sustainability and justice; justice and the meaning of opportunity; sustainability and the well-being of ecosystems; the good of a person and the good of an ecosystem compared; ecosystemic goods as public goods; managing common resources; public goods and government involvement; proper resource pricing; justice, opportunity, and public goods; pollution: prevention versus clean-up; sustainability and reusability; reusability and ecosystem sustainability; distributing proven technologies; empowering individuals; reforming management; coping with congestion; the evaluation of sustainability; the ethics of sustainability; the ethics of sustainable energy; and more. A useful introduction, quite suitable for classroom use. Scherer is in philosophy at Bowling Green State University, Ohio, USA. (v6,#2)

Scherer, Donald, ed., Upstream/Downstream: Issues in Environmental Ethics. Philadelphia: Temple University Press, 1990. Pp. 242. This collection of original essays focuses on the combination of theoretical environmental ethics with practical policy issues. Scherer terms environmental problems "upstream/downstream" when they have direct effects on human beings and when current social organizations are unable to resolve value and policy conflicts. An examination of upstream/downstream problems leads to the development of an environmental theory of action rather than a mere theory of environmental value. The philosophers represented here thus discuss problems in the development of environmental policy theory: Ernest Partridge and Dale Jamieson investigate issues regarding future generations; Kristin Shrader-Frechette examines the use of models as a basis for policy; Daniel Barstow Magraw, James W. Nickel, and Mark Sagoff discuss issues in international and constitutional legal theory; and Bart Gruzalski and Alan Gewirth investigate notions of responsibility and assessment, particularly (in Gewirth's article) various kinds of cost-benefit analyses. "The common theme of these essays is that the environments in which we live...have outstripped older conceptions of responsible human living" (p. 18). (Katz, Bibl # 2)

Scherer Donald, and Thomas Attig, eds., Ethics and the Environment. Englewood Cliffs, N. J.: Prentice-Hall, 1983. Reviewed in Environmental Ethics 6(1984):277-82.

Scherer, Donald. "Evolution, Human Living, and the Practice of Ecological Restoration." Environmental Ethics 17(1995):359-379. Critiques of ecological restoration have rested on the human/natural distinction. In opposition to the difficulties involved in that distinction, I provide a sketch of an evolutionary account of human existence. The instability of environments-- beyond individual human control--conditions

human life and sets the dynamic for human action. Human interdependence makes human monitoring of human interaction central. I interpret Leopold as concerned about the divergence between ecosystemic and economic value. In the face of reiterative prisoners' dilemmas arising significantly from problems of scale, the moral imperative is the creation of practices that tolerate ecosystemic degradation minimally and those only in the face of threats to human existence. Against this background, I show that the value of ecological restoration is ambivalent. Scherer is in the department of philosophy, Bowling Green State University. (EE)

Scherer, Donald. "Anthropocentrism, Atomism, and Environmental Ethics." Environmental Ethics 4(1982):115-23. By attempting to divorce attributions of value from judgments of the interest of the attributor, developing the concept of a locus of value, exploring the interconnections between the goods of individuals and the goods of populations and species, and suggesting the reasonableness of the attributions of rights to certain sorts of individuals, I try to indicate the degree to which an environmental ethic can be atomistic without being anthropocentric. Scherer is in the philosophy department, Bowling Green State University, Bowling Green, OH. (EE)

Scherer, Donald. "Between Theory and Practice." Restoration and Management Notes 12 (no. 2, Winter 1994): 184-188. Popular views on exotics, intervention, and technology are obscuring important issues in restoration. Not all migrating plant species are exotics; seeds in nature stick to animals and migrate, and one such animal is Homo sapiens. Human intervention has conditioned the character of certain environments in which certain species are well adapted, there is nothing unique about human intervention. The fact that humans use technology is a difference of degree not of kind. Restoration need not be to some pristine ecosystem free of humans, but restoration can be to a world that humans inhabit. Scherer teaches philosophy at Bowling Green State University, Ohio. (v6,#1)

Scherer, Ron, "Recovering After Ban on DDT Use, Osprey Find Urban Waters Good Fishing," The Christian Science Monitor 86 (2 September 1994): 1, 4. (v5,#3)

Scherer, Ron. "Taking Stock in Tobacco: Fight Smolders at Big Pension Fund." The Christian Science Monitor, vol. 88, 23 Sept. 1996, p. 3.

Schwartz, David H. "Phoenix Uses Cleaning Power of Wetlands to Scrub Sewage." The Christian Science Monitor, vol. 89, 16 Jan. 1997. p. 3.

Scherff, Judith S., ed., The Mother Earth Handbook: What You Need to Know and do--at Home, in your Community, and Through Your Church to Help Heal Our Planet Now. Crossroad/Continuum, 1991. 352 pages. \$ 15.95 paper. Twenty-one contributors. (v1,#4) (v2,#3)

Scheuplein, Robert J. "Dioxin: How Much Risk?" Journal of Environmental Law & Practice 3(Mar.1996):48. (v7,#2)

Schicktanz, Silke, "Ethical Considerations of the HumanAnimal-Relationship Under Conditions of Asymmetry and Ambivalence," Journal of Agricultural and Environmental Ethics 19(2006):7-16. Ethical reflection deals not only with the moral standing and handling of animals, it should also include a critical analysis of the underlying relationship. Anthropological, psychological, and sociological aspects of the humananimal-relationship should be taken into account. Two conditions, asymmetry and ambivalence, are taken as the historical and empirical basis for reflections on the humananimal-relationship in late modern societies. These conditions explain the variety of moral practice, apart from paradoxes, and provide a framework to systematize animal ethical problems in a broader field. This allows the development of ideal relationships as moral orientation across anthropocentric or sentientistic ethical theories. These ideal relationships are called the patronage-model, the friendship-model and the partnership-model. The ethical problem of creating transgenic animals is discussed in the light of these

ideal relationships. Keywords: ambivalence - animal biotechnology - animal ethics - human animal-relationship. Silke Schicktanz is at the Institute for Ethics, History and Theory in Medicine, University of Muenster, Germany. (JAEE)

Schimmel, David, "Climate Change and Crop Yields: Beyond Cassandra," Science 312(30 June 2006):1889-90. An analysis of recent data from a wide variety of field experiments suggests that previous studies overestimated the positive effects of higher carbon dioxide concentrations on crop yields. Schimmel is at the National Center for Atmospheric Research, Boulder, CO.

Schindler, D. W., et al., "Effects of Climatic Warming on Lakes of the Central Boreal Forest," Science, 16 November 1990. A preview of the effects of increased greenhouse warming on boreal lakes. "The disappearance or warming and increased chemical concentrations of boreal freshwaters could cause the extirpation of cold water species assemblages that include some of the world's most valuable fisheries." (v1,#4)

Schindler, Joerg, Zittel, Werner: "Der Pardigmawechsel vom Oel zur Sonne" (in German: Paradigm change from fossil-fuels to solar), Natur und Kultur 1 (No. 1, 2000): 48-69. In this contribution we point out and illustrate with many examples that oil production in non-OPEC countries will soon peak and steadily decrease thereafter. This will give the OPEC countries a great chance to increase prices. But even their oil production will maybe peak within the next ten years. Together with the increasing challenge of climate change and the improvement of renewable energy technologies this will imply a big change of the energy supply structure with influence on the whole economy. (v.11,#2)

Schinkel, Anders, "Martha Nussbaum on Animal Rights." *Ethics and the Environment* 13(no. 1, 2008):41-69. There is quite a long-standing tradition according to which the morally proper treatment of animals does not rely on what we owe them, but on our benevolence. Nussbaum wishes to go beyond this tradition, because in her view we are dealing with issues of justice. Her capabilities approach secures basic entitlements for animals, on the basis of their fundamental capacities. At the same time Nussbaum wishes to retain the possibility of certain human uses of animals, and to see them as morally justifiable. This article shows that these things do not go together with her capabilities approach to animal rights. More specifically, they clash with the attitude towards animals that Nussbaum's approach intends to foster in human beings. Anders Schinkel currently works as a postdoctoral researcher in the philosophy section of the Faculty of Psychology and Education of the Vrije Universiteit in Amsterdam, The Netherlands.

Schlickeisen, Rodger. "Protecting Biodiversity for Future Generations: An Argument for a Constitutional Amendment." Tulane Environmental Law Journal 8 (1994): 181-212. Society's need and duty to protect living nature. The emergence of scientific consensus. Society's moral responsibility to future generations. Lawmaking prejudiced against the future. The limitations of the traditional legal system. A proposed U.S. constitutional amendment: "The living natural resources in the United States are the common property of all the people, including generations yet to come. All persons and their progeny have an inalienable, enforceable right to the benefits of those resources for themselves and their posterity. The United States and every State shall assure that use of those resources is sustainable and that they are conserved and maintained for the benefit of all the people." Constitutional provisions elsewhere. Does the proposed amendment go far enough? The amendment is needed because, to the extent that elected officeholders do enact statutes to protect biodiversity, unless supplemented by a constitutional amendment, enforcement will be slow, unwieldy, and unsuccessful, especially because judicial interpretation of standing and constitutional private property rights will defeat meaningful implementation and enforcement. A plausible case, and one where the author has done his philosophical and legal homework. Schlickeisen is president of the Defenders of Wildlife. (v6,#1)

Schlosberg, D., and Dryzek, J. S., "Political Strategies of American Environmentalism: Inclusion and

Beyond," Society and Natural Resources 15(no.8, 2002): 787-804. (v.13,#4)

Schlosberg, David, Environmental Justice and the New Pluralism: The Challenge of Difference for Environmentalism. Oxford: Oxford University Press, 1999. "Critical pluralism" in theory and practice. The environmental justice movement and new pluralist theories now represent a considerable challenge to both conventional pluralist thought and to the practices of the major groups in the U.S. environmental movement. The environmental justice movement, with its base in diversity, its networked structure, and its communicative practices and demands, exemplifies the attempt to design political practices beyond those one would expect from a standard interest group in the conventional pluralist model. Schlosberg is at Northern Arizona University. (v.11,#3)

Schlosberg, David. *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford: Oxford University Press, 2007. Schlosberg has two main tasks: (1) an exploration of how environmental justice movements define justice, and (2) an exploration of how to discuss justice across the species divide. His main argument is that a similar set of languages, tools, and concepts—including distributive, participatory, recognition, and capabilities approaches to justice—can be used for both environmental justice for people and ecological justice for nonhuman nature.

Schlosberg, David. *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford: Oxford University Press, 2007. Schlosberg has two main tasks: (1) an exploration of how environmental justice movements define justice, and (2) an exploration of how to discuss justice across the species divide. His main argument is that a similar set of languages, tools, and concepts—including distributive, participatory, recognition, and capabilities approaches to justice—can be used for both environmental justice for people and ecological justice for nonhuman nature.

Schlossberger, Eugene, "Environmental Virtue Ethics: An Aristotelian Approach," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 15-26. This paper articulates a framework, "E," for developing ethical claims about environmental issues. "E" is a general framework for constructing arguments and working out disputes, rather than a particular theory. "E" is anthropocentric in the sense that it begins with ideas about human excellence and human interests. Arguments employing "E" suggest that we, as human beings, have certain duties regarding the environment. Since it may also be true that various duties attach to being an organism of any stripe, that nature has intrinsic value, and so forth, arguments employing E can be seen as supplementing, rather than replacing, non-anthropocentric moral arguments. Moreover, "E" is anthropocentric in its methodology but not necessarily in its results. Some accounts of human excellence yield the sorts of obligations that biocentrists advocate. Schlossberger is at Purdue University Calumet, Hammond, Indiana. (v.13,#2)

Schlosser, Eric, Fast Food Nation. New York: Houghton Mifflin, 2001. How the McDonald brothers and Harlan Sanders applied the principles of the factory assembly line to the commercial kitchen, used overworked and underpaid teenagers, created factory farms where the potatoes, beef, and chickens are grown, bypassed most federal oversight of their meatpacking plants, served customers feces with their cholesterol, insinuated itself into all aspects of children's lives, at the same time making them prone to obesity and disease. As an added bonus, strip mall development from Southern California right across the United States. McDonalds is his main focus. Schlosser is a tough critic and, readers may ask, whether he in turn needs his critics. (v.12,#4)

Schlosser, K, "National Security Discourse and the Political Construction of the Arctic Nat'l Wildlife Refuge," Society and Natural Resources 19 (no. 1, January 2006): 3-18.

Schlotterbeck, J, "Preserving Biological Diversity with Wildlife Corridors: Amending the Guidelines to the California Environmental Quality Act", Ecology Law Quarterly 30 (no.4, 2003): 955-990.

Schmidheiny, Stephan, Changing Course: A Global Business Perspective on Development and the Environment. Cambridge, MA: MIT Press, 1992. 374 pages. Paper \$ 16.95, Business edition: hardcover plus executive summary, \$ 35.00. Swiss industrialist Schmidheiny gathered 50 board chairs and CEO's from around the world to work out a business perspective, serving as chief advisor for business and industry to Maurice Strong, planning for the UNCED conference. "The bottom line is that the human species is living more off the planet's capital and less off its interest." Business and sustainable development, pricing the environment, energy and the marketplace, capital markets and sustainable development, innovative technology, technology cooperation, agriculture and forestry, with dozens of case studies from a diverse array of areas. William Reilly, Director of the Environmental Protection Agency, has told his staff that if they read but one book a year in the field, it ought to be this one. If you haven't got time to read it, there is an executive summary, Changing Course: Executive Summary, also MIT Press, 46 pages, but sold only with the hardcover. Schmidheiny was chief advisor for business and industry to Maurice Strong, planning for the UNCED conference. (v3,#3) (v3,#2)

Schmidheiny, Stephan, Zorraquin, Federico J. L. Financing Change: The Financial Community, Eco-Efficiency, and Sustainable Development. Cambridge, MA: MIT Press, 1996. 232pp. \$20. Largely descriptive, rather than prescriptive, Financing Change is the first study to examine questions that will become increasingly important as populations escalate and the developing countries enter financial markets. These issues are examined in separate chapters covering the viewpoints of the financial market participants: company directors, investors and analysts, bankers, insurers, accountants, and raters. (v8,#1)

Schmidt, C., Review of Jacobs, Michael, The Green Economy. Environmental Values Vol.2 No.1(1993):77.

Schmidt, C., "On Economization and Ecologization as Civilizing Processes." Environmental Values Vol.2 No.1(1993):33-46. ABSTRACT: In this article the meaning and main phases of 'economization' as a civilizing process are outlined. It is argued that 'ecologization' of the current political-economic regime can in a certain sense be regarded as a continuation of this development. Due attention is given to social conditions which may be favourable or impedimental to an ecologization of 'the economy.' It is pleaded that environmental policies should use the so-called trickle-down effect to their advantage. KEYWORDS: Ecology, economy, historical-sociological aspects. Graduate School of Social Science, University of Amsterdam, Oude Hoogstraat 24, 1012 CE Amsterdam, The Netherlands.

Schmidt, J. C., et al. "Science and values in the Grand Canyon," BioScience 48(1998):735-748.

Schmidt, Karen F., "Green Education Under Fire," Science 274 (December 13, 1996):1828-30. Conservative critics contend that teachers and texts are feeding children biased and incomplete scientific information about the health of the planet, but advocates say the charges are overblown. Some complain about math texts with word problems about deforestation or fossil fuel use. Some complain the education is flaky: "Recycling is good for the planet." Some complain children are being fed doomsday visions. Some complain children are being made to feel guilty about the American lifestyle, with energy use for hot tubs compared with that in the third world. Environmental advocates reply that their materials are more balanced than the conservative ones, and that education needs to face up to the environmental crisis. The U. S. National Education Act of 1990 is up for renewal this year, and under debate. Short, provocative article could be used in class to stimulate discussion on teaching values and science and advocacy. (v8,#1)

Schmidt, Paul F. Review of Wilderness as Sacred Space. By Linda H. Graber. Environmental Ethics 1(1979):186-88.

Schmidt, Ralph, Berry, Joyce K., and Gordon, John C., eds., Forests to Fight Poverty. New Haven: Yale University Press, 1999. 200 pages. \$ 15.00 paper. The links between poverty and deforestation, and between sustainable forestry and the reduction of poverty. Successes and failures in agroforestry, developing and maintaining national parks, interactions between forests, rural poor, land ownership, and property rights. Schmidt is director of the Program on Forests, Sustainable Energy and Environment Division, United Nations Development Program. Berry is in natural resources at Colorado State University. Gordon is in forestry and environmental studies, Yale University. (v.9,#4)

Schmidt, Robert J., Jr. "International Negotiations Paralyzed by Domestic Politics: Two-Level Game Theory and the Problem of the Pacific Salmon Commission." Environmental Law 26, no.1 (1996): 95. An in-depth look at the failed negotiations between Canada and the United States over the harvesting of Pacific salmon. Relying upon models of two-level game theory in the arena of international negotiations, Schmidt provides insight into the "why" of the current impasse and the "how" of resolving it. Schmidt concludes that resolution of the salmon allocation dispute between the United States and Canada may depend on first resolving domestic disputes between the State of Alaska and the States of Oregon and Washington. (v7, #3)

Schmidtz, David and Willott, Elizabeth, eds., Environmental Ethics: What Really Matters, What Really Works. New York: Oxford University Press, 2001. Sixty two selections, addressing the principal areas of inquiry in the field. 624 pages, a big anthology. I. What Really Matters: Essays on Value in Nature. Animal Liberation and the Land Ethic, Extending the Realm of Rights, Species Equality and Respect for Nature, Environmental Holism, Wildness, Ecofeminism. II. What Really Works: Essays on Human Ecology. Human Population. Preserving Wilderness, Sustainable Use and Institutional Structure, Poverty as an Environmental Problem, Vanishing Resources, Cost-Benefit Analysis, Environmentalism in Practice. Both editors are at the University of Arizona. Adding this to Peter S. Wenz, Environmental Ethics Today, released last year, and Anthony Weston, An Invitation to Environmental Philosophy (1998), Oxford continues a strong tradition, over a decade, of substantial releases in environmental ethics and philosophy. (v.12,#4)

Schmidtz, David and Matt Zwolinski. "Virtue Ethics and Repugnant Conclusions." In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Schmidtz, David, "When Preservationism Doesn't Preserve," Environmental Values 6(1997):327-340. ABSTRACT: According to conservationism, scarce and precious resources should be conserved and used wisely. According to preservation ethics, we should not think of wilderness as merely a resource. Wilderness commands reverence in a way mere resources do not. Each philosophy, I argue, can fail by its own lights, because trying to put the principles of conservationism or preservationism into institutional practice can have results that are the opposite of what the respective philosophies tell us we ought to be trying to achieve. For example, if the wisest use of South American rainforests is no use at all, then in that case conservationism by its own lights defers to preservationism. Analogously, if, when deprived of the option of preserving elephants as a resource, Africans respond by not preserving elephants at all, then in that case preservationism by its own lights defers to conservationism. Philosophy Department, University of Arizona, Tucson, AZ, 85721-0027. schmidtz@u.arizona.edu

Schmidtz, David and Matt Zwolinski. Review of Dale Jamieson, ed. A Companion to Environmental Philosophy. Environmental Ethics 25(2003):99-104. (EE)

Schmidtz, David. Review of Nature's Interests? Interests, Animal Rights, and Environmental Ethics. By Gary E. Varner. Environmental Ethics 21(1999):433-436.

Schmidtz, David. "Natural Enemies: An Anatomy of Environmental Conflict." Environmental Ethics

22(2000):397-408. Sometimes people act contrary to environmentalist values because they reject those values. This is one kind of conflict: conflict in values. There is another kind of conflict in which people act contrary to environmentalist values even though they embrace those values: because they cannot afford to act in accordance with them. Conflict in priorities occurs not because people's values are in conflict, but rather because people's immediate needs are in conflict. Conflict in priorities is not only an environmental conflict, but also often an economic conflict, a conflict rooted in differing economic circumstance. Such a conflict cannot be resolved as an environmental conflict unless it is also resolved as an economic one. (EE)

Schmidtz, David. Review of Laura Westra. An Environmental Proposal for Ethics: the Principle of Integrity: (Lanham, Md.: Rowan and Littlefield, 1994). (EV)

Schmidz, David, "Are All Species Equal?" Journal of Applied Philosophy, 15(1998):57-67. (v.14, #4)

Schmitz, Oswald J. *Ecology and Ecosystem Conservation*. Washington, DC: Island Press, 2007. This is the second volume in the new Island Press series "Foundations of Contemporary Environmental Studies." Schmitz offers a short introduction to ecological science, with chapters on the science of ecology, climate and biodiversity, population size and carrying capacity, threatened species, biodiversity and habitat fragmentation, temporal and spatial dimensions of ecosystems, ecosystem services, protecting biodiversity and ecological function, and a science-based ecosystem conservation ethic.

Schmitz, Oswald J. "Effects of Predator Hunting Mode on Grassland Ecosystem Function." *Science* Vol. 319, no. 5865 (15 February 2008): 952-54. Predators, by affecting prey behavior, can change both plant diversity and productivity in an ecosystem. Greenness in a system with only plants is reduced by the herbivores, but carnivores restore the greenness by suppressing herbivores. Further, the degree to which carnivores roam or sit and wait for prey affects herbivore impacts on greenness. For commentary, see "Green with Complexity" by Shahid Naeem (*Science* Vol. 319, no. 5865 (15 February 2008): 913-14). Schmitz is in forestry at Yale University.

Schmitz, Oswald J. *Ecology and Ecosystem Conservation*. Washington, DC: Island Press, 2007. This is the second volume in the new Island Press series "Foundations of Contemporary Environmental Studies." Schmitz offers a short introduction to ecological science, with chapters on the science of ecology, climate and biodiversity, population size and carrying capacity, threatened species, biodiversity and habitat fragmentation, temporal and spatial dimensions of ecosystems, ecosystem services, protecting biodiversity and ecological function, and a science-based ecosystem conservation ethic.

Schmutz, Josef K. "Disciplinary Thinking in Conservation Biology." Conservation Biology 10, no.3 (1996): 698. (v7, #3)

Schneider, Ingrid E., Burnett, Wesley G. "Jordan: Arid-Land Forestry," Journal of Forestry 95(no.2, 1997):16. (v8,#1)

Schneider, Paul, "When a Whistle Blows in the Forest ..." Audubon, January/February 1992. A study of the fates of U. S. Forest Service employees who question the policies of their agency. There are service mandates to cut more trees, but such mandates often conflict with other mandates, in environmental legislation, for sustainable forestry, protection of endangered species, biodiversity, and ecosystem health. Employees who maintain they are obeying the law, or who maintain that they are doing what good scientific management requires, may find they have lost their jobs, or been transferred to harmless positions. The most celebrated such case is that of John Mumma, regional forester in charge of 15 national forests in Montana, northern Idaho, and parts of Washington and the Dakotas, who was forced to resign for his refusal to cut as much timber as was ordered. His resignation provoked a Congressional

investigation. "I am in shock at what's happening on the national forests," he told Congress. (v3,#3)

Schneider, Paul. The Adirondacks: A History of America's First Wilderness. New York: Henry Holt and Co., 1997. 365 pages. \$ 25 cloth. Bob Marshall's father, Louis Marshall, fought for the "forever wild" clause of New York State's constitution, the primary precedent for statutory protection of wilderness. A narrative history of the Adirondacks--the fur trade, the French and Indian Wars, land speculation schemes, mining, farming, logging, and the "forever wild" response. Schneider thinks New Yorkers are finally "mature" in their relationship to the Adirondacks. (v.9,#3)

Schneider, Stephen H., ed. Encyclopedia of Climate and Weather. New York: Oxford University Press, 1997. 960pp in two volumes. \$195. Accessible descriptions and illustrations of all of the essentials of meteorology. The many ecological and environmental issues that concern everyone on the planet. A picture of the past, present, and future of our global environment. (v8,#1)

Schneider, Stephen H., Global Warming: Are We Entering the Greenhouse Century? San Francisco: Sierra Club Books, 1989. \$18.95. (v3,#1)

Schneiderman, L. J., Fein, J. E. and Dubler, N., "The Limits of Dispute Resolution," Hastings Center Report 31(no.6, 2001): 10-11. (v.13,#2)

Schnell, Izhak, "Transformations in the Myth of the Inner Valleys as a Zionist Place," Philosophy and Geography 3 (1998): 97-118. Schnell is lecturer in the geography department at Tel Aviv University. (P&G)

Schnitzler, Annik, Jean-Claude Génot, Maurice Wintz and Brack W. Hale, "Naturalness and Conservation in France," *Journal of Agricultural and Environmental Ethics* 21(2008):423-436. This article discusses the ecological and cultural criteria underlying the management practices for protected areas in France. It examines the evolution of French conservation from its roots in the 19th century, when it focused on the protection of scenic landscapes, to current times when the focus is on the protection of biodiversity. However, biodiversity is often socially defined and may not represent an ecologically sound objective for conservation. In particular, we question the current approach to protecting a specific type of biodiversity that is at the basis of traditional landscape but does not value systems that are left to develop naturally (i.e., without significant human intervention). We present several examples of current attempts in France and Europe to managing traditional ecosystems and then discuss the values that exist in systems that develop naturally. We feel the latter systems often have much to offer in terms of biodiversity as well as providing important sites for the study of dynamic ecological communities in an ever-changing world. The lead author is at the Laboratory LIEBE-CNRS UMR 7146, UFR Sci F.A., University Paul Verlaine Metz, Rue du Général Delestraint, F-67070 Metz, France.

Schoeman, MJ 1990. Holisme: die herowering van 'n ou wysheid in 'n moderne konteks. *Hervormde Teologiese Studies* 46, 267-292. (Africa)

Schoen, D. J. and Brown, A. H. D., "The Conservation of Wild Plant Species in Seed Banks," Bioscience 51(no.11, 2001): 960-66. (v.13,#2)

Schoen, Deborah. "Primary Productivity: The Link to Global Health," Bioscience 47(no.8, 1997):477. A look at how terrestrial ecosystems will respond to changing climate. (v8,#3)

Schoenfarber, Jay, "Capitalizing on Environmental Disasters: Efficient Utilization of Green Capital", Tulane Environmental Law Journal, 9(No.1, 1995):147- . (v7,#1)

Schoenfeld, Gabriel, "The Soviet Union: Rad Storm Rising," Atlantic, December 1990. A ghastly tour of

a land of radioactive sausage, poisoned onions, and bald children. The accident at Chernobyl called world attention to the deficiencies of the Soviet Union's nuclear-energy problem, but few people are yet aware of just how contaminated by radioactivity the Soviet Union is. In several of at least ten major accidents at nuclear power stations there have been significant emissions of radioactivity. Much farmland and food is contaminated. In 1989 there were over 200 unplanned shutdowns or reductions of performance. Schoenfeld is a senior fellow at the Center for Strategic and International Studies, Washington, D.C. (v1,#4)

Schoenhoff, D. The Barefoot Expert: The Interface of Computerized Knowledge Systems and Indigenous Knowledge Systems. Connecticut: Greenwood Press, 1993. (v6,#4)

Schoennagel, Tania, Monica Turner, Daniel Kashian, and Andrew Fall. "Influence of fire regimes on lodgepole pine stand age and density across the Yellowstone National Park (USA) landscape." *Landscape Ecology* Vol. 21, no. 8 (2006): 1281-96.

Schoennagel, Tania; Veblen, Thomas T.; Romme, William H., "The Interaction of Fire, Fuels, and Climate across Rocky Mountain Forests," BioScience 54(no.7, 1 July 2004):661-676(16). (v. 15, # 3)

Schofield, Timothy, "The Environment as an Ideological Weapon: A Proposal to Criminalize Environmental Terrorism." Boston College Environmental Affairs Law Review 26(No. 3, Spring 1999):619- . Global ecosystems are emerging as both targets and conduits of terrorist activity. But available law is quite ineffective here. A new criminal law of ecocide would be more effective. (v10,#4)

Schoijet, Mauricio, "Limits to Growth and the Rise of Catastrophism," Environmental History 4 (No. 4, Oct 01 1999): 515- . (v.11,#2)

Schollmeier, Paul, "Why We Love the Land," Ethics and the Environment 2(1997):53-65. Philosophers today recognize that we love the land, but they do not explain satisfactorily why we do. Holmes Rolston, for example, argues that we find values in nature, but he does not explain why we love them. J. Baird Callicott explains why we love nature, but he does not argue that it has values in itself. I want to suggest that we feel love for the land because it is itself lovable. I agree with Rolston that an ecosystem has properties which are intrinsically valuable and inherent, but I wish to explain why we feel love for these properties. My approach rests on Aristotle's conception of friendship and its object. I argue that much as we love our friends for their sakes, so too we can love ecosystems for their sakes. A friend and an ecosystem can have qualities which are of a similar sort and make them both lovable. And, as we take a mental pleasure in seeing a friend fare well, so too we may take a mental pleasure in seeing an ecosystem function well. Schollmeier is in philosophy at the University of Nevada, Las Vegas. (E&E)

Scholtmeijer, M., Animal victims in modern fiction: From sanctity to sacrifice. Toronto: University of Toronto Press, 1993.

Scholtmeijer, Marian, Animal Victims in Modern Fiction: From Sanctity to Sacrifice. Toronto: University of Toronto Press, 1993. (v7,#1)

Schomberg, Ren von, ed., Contested Technology Ethics, Risk and Public Debate. Tilburg, The Netherlands: International Centre for Human and Public Affairs, 1996. 265 pages, index. ISBN 90-802139-2-6. Dfl 59,- (Dutch guilders). New discursive procedures for technology assessment are introduced and reflected within the framework offered by critical theories such as Ulrich Beck's analysis of the 'risk society,' Jurgen Habermas's theory of communicative action, and Anthony Giddens's approach to late modernity. The papers collected for this volume address the following themes: contested technology: the social-philosophical dimension; public debate and technological innovation, ethics of risk

assessment and implications for the legal system. Contributors include Wolfgang van den Daele, Fritz Gloede, Ruth McNally, and Peter Wheale. (v7, #3)

Schönherr, Hans-Martin, Technik und die Schwäche; Ökologie nach Nietzsche, Heidegger, und dem 'schwachen' Denken [in German, Technology and weakness; ecology after Nietzsche, Heidegger and weak thinking], Wien: Passagen 1989.

Schoonmaker, Peter K.; Hagen, Bettina von; and Wolf, Edward C., eds. The Rain Forests of Home: Profile of a North American Bioregion. Washington, D.C.: Island Press, 1996. 480 pages. \$50 cloth, \$27 paper. A diverse array of thinkers present a multilayered, multidimensional portrait of the coastal temperate rain forest and its people. Joining natural and social science perspectives, the authors provide readers with an understanding of the regions natural and human history, along with a vision of its future and strategies for realizing that vision. (v7, #3)

Schoonmaker, Peter, vonHagen, Bettina, Wolf, Edward, eds. The Rain Forest of Home. Covelo, CA: Island Press, 1997. 447 pp. \$50 cloth, \$27 paper. The characteristics, history, culture, economy, and ecology of the U. S. coastal temperate rain forest. (v8,#2)

Schramm, James and Robert Stivers, Christian Environmental Ethics: A Case Method Approach. Maryknoll, NY: Orbis Books, 2003. (v.14, #4)

Schreiner, Susan E., The Theater of His Glory: Nature and the Natural Order in the Thought of John Calvin. Durham, NC: Labyrinth Press, 1991. 164 pages. \$ 30.00. The concept of God's providence is a kind of arch that frames both the concept of nature and of grace in Calvin's thought. With sympathetic attention to Calvin's concept of natural law. (v3,#4)

Schreurs, MA, "Divergent Paths: Environmental Policy in Germany, the United States, and Japan," Environment 45(no.8, 2003):8-17. (v.14, #4)

Schreurs, Miranda A., "Japan's Changing Approach to Environmental Issues," Environmental Politics (Summer 1997):150-. (v.8,#4)

Schrock, John Richard, "Dissection," The Kansas School Naturalist vol 36, no. 3 (February 1990):3-15. "The loss of dissection, vivisection, and experimentation from public school science classes may pose a more serious threat to the intellectual and physical health of the human population than recent challenges to animal use in biomedical research. ... The absolute need for examination of real organisms in the classroom and in other science education settings is not self-evident. Indeed, a shallow and naive understanding of the learning process is used to purvey videotapes, models, computer simulations and stuffed animals as equivalent or superior to real laboratory experiences. The function of this issue of this issue of the Kansas School Naturalist is to clarify how the examination of real material is essential to all students' science literacy, and to help biology teachers 'hang tough.'" Schrock is in the Department of Biology at Emporia State University and directs the biology education program there. See also "Classroom Cut-Ups" under videotapes and item on dissection protested in issues, below. (v1,#4)

Schroeder, Christopher H., "Rights Against Risks," Columbia Law Review 86(1986):495-562. Through "Do no harm" is a basic duty, we permit technology that puts persons at risk, for example by environmental pollution. The realities of modern technology mean that we must permit some risky action, imposed on individuals who have not consented to it, and also unintentional in the objectives sought by the corporation involved, through action that raises the probability of harm for many and does in fact result in injuring, sometimes killing statistical persons. This can be consistent with a concept of

rights that places the utmost importance on the sanctity and autonomy of individuals. "A blunt lesson emerges from this analysis: certain risks can be imposed justifiably on others" (p. 553). "Some nonzero level of risk will almost certainly be taken to be acceptable because of the substantial adverse consequences attendant to any more severe levels of risk prevention" (p. 562). Schroeder is professor of law, Duke University. (v5,#4)

Schroeder, Doris, "Public Health, Ethics, and Functional Foods," *Journal of Agricultural and Environmental Ethics* 20(2007):247-259. Functional foods aim to provide a positive impact on health and well-being beyond their nutritive content. As such, they are likely candidates to enhance the public health official's tool kit. Or are they? Although a very small number of functional foods (e.g., phytosterol-enriched margarine) show such promise in improving individual health that Dutch health insurance companies reimburse their costs to consumers, one must not draw premature conclusions about functional foods as a group. A large number of questions about individual products' safety, efficacy, and affordability need to be answered before they might become an important part of the public health agenda. More importantly, though, the costs and benefits of functional foods relative to alternative mechanisms of public health improvement need to be ascertained. Alternative scenarios that warrant investigation are mainly the supply of nutraceutical ingredients in pill form targeting "at risk" groups and consumer education on diet and lifestyle. Schroeder is at the Centre for Professional Ethics, University of Central Lancashire, Preston, UK.

Schroeder, H., "Experiencing Nature in Special Places: Surveys in the North-Central Region," *Journal of Forestry* 100(no.5, 2002): 8-15. (v.13,#4)

Schroeder, Richard A., "Geographies of Environmental Intervention in Africa," *Progress in Human Geography* 23(no. 3, 1999):359- . (v.10,#3)

Schrom, D; Bradley, G, "Can We Use Science to Know Our Ends?", *BioScience* 54 (no.4, 2004): 284-285(2).

Schroyer, Trent, ed. *A World That Works: Building Blocks for a Just and Sustainable Society* (New York: Bootstrap Press, 1997). 368 pp. US \$ 19.50. Over thirty-five papers from The Other Economic Summit (TOES) held in June 1997 in Denver, CO. Since 1984, The Other Economic Summit (TOES) has convened to debate alternatives to the official agenda being addressed by the government leaders at the Group of 7 Economic Summit. Trent Schroyer is Director of the Institute for Environment Studies and Professor of Sociology-Philosophy at Ramapo College of New Jersey. (v8,#3)

Schroyer, Trent, *A World That Works: Building Blocks for a Just and Sustainable Society*. New York: Bootstrap Press, 1997. 368 pp., \$ 19.50. The Other Economic Summit (TOES) was held in June 1997 in Denver, CO, on the theme "Working Alternatives: A World That Works." The Other Summit debates alternatives to the official agenda being addressed by the government leaders at the Group-7 Economic Summit. The key messages from Denver have been compiled into this book, over thirty-five papers. It and several other TOES books are available from Bootstrap Press, 777 UN Plaza, Suite 3C, New York 10017 USA, Tel: 1-800-316-2739, Email: cipany@igc.apc.org. For more information about TOES, contact Betty Little, P.O. Box 292, Killington, VT 07920 USA, Email: BettyLittle.parti@ecunet.org; or Trent Schroyer, Professor of Sociology-Philosophy, Institute for Environmental Studies, Ramapo College of New Jersey, 505 Ramapo Valley Road, Mahwah, NJ 07430 USA, Tel: 201-529-7740, Fax: 201-529-7508, Email: tSchroye@ultrix.ramapo.edu. (v8,#3)

Schueler, Donald G., *Incident at Eagle Ranch: Predators as Prey in the American West* (Tucson: University of Arizona Press, 1991). \$ 17.95 paper. Shooting of eagles sets the stage for discussion of predator control versus endangered species protection. (v2,#2)

Schuetz, Joachim. "Sustainability, Systems and Meaning." Environmental Values 9(2000):373-382. ABSTRACT: Sustainability calls for the globe as a relevant unit of analysis, and systems thinking is an appropriate theoretical framework for this task. Yet systems thinking is employed in two contrary ways. The 'accommodating' systems approach is closely linked to the classical concept of science. It bases its credibility on the exclusion of values or any other subjective elements. The 'creative' way explicitly requires a subjectively recognised leading principle, according to which the system organises itself. Following the 'creative' approach, the paper argues that sustainability should be interpreted as a quest for conscious adoption of a global systems identity. It is this assigned system purpose that gives single actions and judgements within systems their meaning. Since subjective elements will always remain antagonistic in any classical approach, only a 'creative' approach offers possibilities for integrating cybernetic systems thinking, giving rise to a concept of systems guided by meaning. KEYWORDS: Sustainability, systems identity, meaning, artificial outside position. Schuetz resides at Obere Heslibachstr, 72, CH-8700 Kuesnacht, Switzerland. (EV)

Schull, Jonathan, "Are Species Intelligent?" Behavioral and Brain Sciences 13(1990):63-108. "Plant and animal species are information-processing entities of such complexity, integration, and adaptive competence that it may be scientifically fruitful to consider them intelligent. The possibility arises from the analogy between learning in organisms and evolution in species. Intentional and cognitive ability are now ascribed to animal, human, and artificial intelligence systems that process information adaptively, and that manifest problem-solving abilities. The structural and functional similarities between such systems and species are extensive. As biological entities, and as processors of information, plant and animal species are no less complicated than, say, monkeys. Their adaptive achievements (the brilliant design and exquisite production of biological organisms) are no less impressive, and certainly rival those of the animal and electronic systems to which the term 'intelligence' is routinely applied today. So perhaps we should recognize them as intelligent systems of considerable scope." This is a "target article," and open peer commentary follows by two dozen persons. Schull is in the Department of Psychology, Haverford College, Haverford, PA.

Schullery, Paul, Lewis and Clark Among the Grizzlies: Legend and Legacy in the American West. Helena, MT: Falcon Press, 2002. What Lewis and Clark's experiences revealed regarding the great bears and the men who encountered them. Schullery, a historian and a naturalist, well-known for his attention to Yellowstone National Park, examines the expedition's rich legacy of grizzly lore in the light of modern scientific knowledge and separates the legends from the still quite thrilling realities. "I suspect that in no other sphere were their perceptions more astute, their imaginations more challenged, and their dreams more vividly fulfilled, than in their dealings with the grizzly bear" (p. 9). (v.13,#4)

Schullery, Paul and Whittlesey, Lee, "Mountain Goats and the Greater Yellowstone Ecosystem: A Prehistoric and Historical Context," Western North American Naturalist 61(no. 3, 2001):289-307. Native mountain goats were near Yellowstone in the past but no authority has located them there previously. Some goats are now found in Yellowstone, presumably migrating from introduced populations in nearby Montana, though possibly from native populations in Idaho further away. Park policy does not welcome the goats. Both authors are with Yellowstone National Park, Yellowstone Center for Resources. (v.12,#3)

Schullery, Paul, Searching for Yellowstone: Ecology and Wonder in the Last Wilderness. Boston: Houghton Mifflin, 1997. An insightful history of trying to figure out the meaning of Yellowstone National Park. Yellowstone's "discovery" by whites followed 10,000 years of occupation and use by native Americans, and Schullery can both say that the native Americans were "very aggressive land managers" (p. 11) and, on the next page, that there is a sense in which "these Indians have left fewer enduring evidences of their occupancy than the beaver, badger, and other animals on which they

subsisted" (p. 12). A repeated theme throughout the book is that things are more complex than they seem, whether the biology, the politics, or the history. The park's founding became a creation myth for the conservation movement; the image was composed of equal parts of myth, hype, and rare glimpses of the incredible wonder of the place. Yellowstone's image as a peaceful, unchanging American wilderness is belied by a century of bitter debate over what its real purpose should be, as our continually changing relationship with nature has altered our perceptions about wild country. Now surpassing 100 million visitors, Yellowstone can become a global conscience, a barometer of the health of the planet. Schullery has served Yellowstone Park in several capacities, including park historian, chief of cultural resources, and senior editor in the Yellowstone Center for Resources. (v8,#3)

Schullery, Paul, Yellowstone's Ecological Holocaust: The Legacy of Market Hunting in the Park's First Decade," Montana: The Magazine of Western History 47(no. 3, Autumn, 1997):16-33. Elk may have always been abundant in Yellowstone National Park; competent authorities are divided over what the pre-European population was. Elk were decimated by first legal and later illegal hunting. Various management strategies have left a wildlife population that is only partially natural, yet also significantly natural, with continuing debate about how natural it is, and ought to be. Article adapted from Schullery, Searching for Yellowstone: Ecology and Wonder in the Last Wilderness, Houghton Mifflin. Schullery is with Yellowstone National Park.

Schullery, Paul, "Theodore Roosevelt: The Scandal of the Hunter as a Nature Lover." Manuscript paper, invited address at the Conference on Theodore Roosevelt and the Birth of Modern America, April 19-21, 1990, Hofstra University, Hempstead, NY. An attempt to evaluate Roosevelt's ethic and practice of hunting and to compare it with shifting attitudes toward hunting in America today. Contact Paul Schullery, Research Division, Yellowstone Park, WY 82190. Phone 307/344-7381, ext. 2110. (v1,#2)

Schullery, Paul, Real Alaska: Finding Our Way in the Wild Country. Mechanicsburg, PA: Stackpole Books, 2001. The long-time interpreter of Yellowstone National Park visits Alaska, mixes with tourists and bears, and salmon and trout, and tries to make sense of wilderness preservation and our deeply felt need to connect with something truly wild. The dilemmas inherent in managing national parks and wilderness areas. (v.12,#4)

Schullery, Paul, "What is Natural? Philosophical Analysis and Yellowstone Practice," Western North American Naturalist 61(no. 3, 2001):255-256. Introducing a series of articles on exotics in Yellowstone National Park, from the 5th Biennial Science Conference on the Greater Yellowstone Ecosystem. (v.12,#3)

Schullery, Paul, ed., The Yellowstone Wolf: A Guide and Sourcebook. Norman: University of Oklahoma Press, 2003. Wolves in Yellowstone, from prehistoric times, their elimination, and the recent struggle to restore them. What wolves have to offer the human spirit. Schullery is a Yellowstone Park historian. (v.14, #4)

Schultz, Robert C., and J. Donald Hughes, eds. Ecological Consciousness. Reviewed in Environmental Ethics 5(1983):355-59.

Schultz, Robert C., "Thoughts on Ecological Ethics," Illahee: Journal for the Northwest Environment 10(1994):119-122. "Environmental ethics begins with us. We urgently need to learn new ways of thinking, but these cannot be brought in and imposed on people from the outside. Implementing laws has something to do with public will, and public will has something to do with ethical consciousness. All of ethics has a kind of unfinished quality about it; environmental ethics has a not-yet-begun quality. No well ordered textbooks exist in which to seek the distilled truth of centuries. 'Nature as dead stuff' is our heritage from the modern era. Alternative visions presume the existence of intrinsic value independent of

human desires." Schultz is professor of philosophy in the Liberal Studies Program, University of Washington, Bothell. (v5,#3)

Schumacher, Sabine; et al., "Modeling the Impact of Climate and Vegetation on Fire Regimes in Mountain Landscapes," Landscape Ecology 21 (no.4, May 2006): 539-554.

Schumaker, John R., O'Laughlin, Jay, Freemuth, John C. "Why Don't Federal Employees Use Alternative Dispute Resolution More Often," Journal of Forestry 95(1997):20. (v8,#1)

Schupp, Jonathan. Environmental Guide to the Internet. Rockville, MD: Government Institutes (4 Research Place, Suite 200, Rockville, MD 20850), 1995. 200 pages. \$49. 94 listservs, 11 usenet news groups, 45 electronic journals, 29 bulletin board systems. (v6,#1)

Schuster, Ervin G., and Krista M. Gebert, "Property Tax Equivalency on Federal Resource Management Lands," Journal of Forestry 99(no.5, May 2001): 30-. A look at the relationship between federal land payments and the likely property taxes those lands would generate if taxed at the same rate as other lands. (v.12,#3)

Schutze, Christian. "The Political and Intellectual Influence of Hans Jonas." The Hastings Center Report 25(no.7, 1995):40. (v7,#1)

Schwab, Jim. Deeper Shades of Green: The Rise of Blue Collar and Minority Environmentalism in America. San Francisco: Sierra Club Room, 1994. 490 pages hardbound, \$30. Schwab, who is with the American Planning Association in Chicago, presents the case that people are fighting for the basic right to participate in decisions about their environment. (v6,#1)

Schwartz, Barry, The Paradox of Choices. San Francisco: HarperCollins, 2004. More options make us less happy, especially in American consumerism. The more choices we ponder or the more time we invest in making a choice, the worse we tend to feel about our decision. The typical supermarket has more than 30,000 items. The author found in the market where he shops: 85 varieties of crackers, 285 of cookies, 230 different soups, 120 pasta sauces and 175 kinds of salad dressing. At some point "choice no longer liberates. It might even begin to tyrannize." Schwartz recommends "satisficing" (following Herbert Simon), choosing any one that is good enough, and forgetting about the best, or the most, or any maximizing. (v. 15, # 3)

Schwartz, Daniel, "A Rabbi's Reply: In God's Green Earth We Trust." The Washington Post, December 1, 1996, p. C2. Reply to Gelernter, David, "In Rats We Trust: Making a Moral Case Against the Tryanny of Environmentalism." The Washington Post, November 17, 1996, p. C1, C5. "Religion and science alike agree that there is a profound integrity to the fabric of life--and when we tear at that fabric, we, in the end, endanger ourselves, especially, all too often, the poor and disenfranchised of the world. There is no escaping it--factually and morally, we are part of, not apart from nature." Schwartz is rabbi at Temple Shalom in Chevy Chase, Maryland, and associate director of the National Religious Partnership for the Environment. (v.7,#4)

Schwartz, Eilon. "Bal Tashchit: A Jewish Environmental Precept." Environmental Ethics 19(1997):355-374. The talmudic law bal tashchit ("do not destroy") is the predominant Jewish precept cited in contemporary Jewish writings on the environment. I provide an extensive survey of the roots and differing interpretations of the precept from within the tradition. The precept of bal tashchit has its roots in the biblical command not to destroy fruit-bearing trees while laying siege to a warring city. The rabbis expand this injunction into the general precept of bal tashchit, a ban on any wanton destruction. Such a precept was interpreted in differing ways, along a continuum whose poles I describe as the minimalist and maximalist positions. In the minimalist position, interpreters limit the application of bal tashchit to only

those situations in which natural resources and property are no longer viewed as having any economic or aesthetic worth. In the maximalist position, interpreters expand the application of bal tashchit to any situation in which nature and property are being destroyed for something other than basic human needs. Finally, I compare and contrast the substance and style of the discussion of bal tashchit from within the Jewish tradition with the contemporary discussion of environmental ethics. Schwartz is in the School of Education, Hebrew University, Jerusalem. (EE)

Schwartz, J, "The Impact of State Capacity on Enforcement of Environmental Policies: The Case of China", Journal of Environment and Development 12(no,1, 2003)50-81.

Schwartz, M. W., Jurjaveic, N. L., and O'Brien, J. M., "Conservation's Disenfranchised Urban Poor," Bioscience 52(no.7, 2002): 601-06. (v.13,#4)

Schwartz, Mark W., ed. Conservation In Highly Fragmented Landscapes. Washington, D.C.: Smithsonian Institution Press, 1997. 448 pp. \$49.95. The difficulties in making practical decisions regarding conservation when the habitat has been highly fragmented. Illinois as a case study since that state was settled heavily and early and had lost most of its natural habitat before the conservation movement began. (v8,#3)

Schwartz, O. Douglas, "Indian Rights and Deep Ecology: Changing Perspectives and A Modest Proposal," Environmental Ethics 9(1987):291-302. A discussion of the recent tensions between environmentalists and Native American Indians regarding the use of the natural environment, particularly the hunting of endangered species. (Katz, Bibl # 1)

Schwartz, Sandra, Chance, Graham W. "Children First." Alternatives 25(No.3, Summer 1999):20- . Environmental contaminant protection policy needs to be rewritten to reflect the needs of our most vulnerable citizens. (v10,#4)

Schwartz, Sheila. "The Humane Hypothesis: Fostering Nonviolence at Science Fairs," The Animals' Agenda 17(no.4, 1997):35. How the pursuit of science and compassionate values can come together. (v8,#3)

Schwarz, O. Douglas. "Indian Rights and Environmental Ethics." Environmental Ethics 9(1987):291-302. The American environmental movement has a longstanding tradition of respect for American Indians. Recently, however, there has been a noticeable erosion of that tradition. The most volatile issues in the Indian/environmentalist controversy at present are those involving the right of many Indians to hunt and fish unrestricted by state or federal conservation regulations. Especially where endangered species are involved, some environmentalists have been quick to recommend that this unique privilege accorded to Indians be curtailed. While I share a deep concern for the preservation of endangered species and ecosystems, I suggest that the environmental movement has so far been insensitive to the concerns of the American Indian community. Rather than simply seeking to take away rights to which Indians have been entitled for decades, environmentalists should be prepared to negotiate on such matters. As an example, I suggest that--in exchange for the Indians' voluntary surrender of some of their treaty rights--environmentalists might agree to seek legislation opening national forest lands to Indians who wish to live subsistence life styles, as some Alaskan wilderness lands are now open to the Inuit. Schwarz is an independent scholar in Concord, NH. (EE)

Schwarzchild, Steven S., "The Unnatural Jew," Environmental Ethics 6(1984):347-362. A highly controversial, and almost unreadable, essay that asserts that Jewish tradition presents a fundamental dichotomy between humanity and nature. Comments by David Ehrenfeld and Joan G. Ehrenfeld in Environmental Ethics 7 (1985): 93-95, and by Jeanne Kay, pp. 189-191. (Katz, Bibl # 1)

Schwarze, Reimund and Niles, John O., "The Long-Term Requirement for Clean Development Mechanism Forestry and Economic Liability," The Journal of Environment and Development 9(no.4, DEC 01 2000):384- . (EE v.12,#1)

Schwarzschild, Steven S. "The Unnatural Jew." Environmental Ethics 6(1984):347-62. I argue that Judaism and Jewish culture have paradigmatically and throughout history operated with a fundamental dichotomy between nature ("what is") and ethics (i.e., God and man--"what ought to be"). Pagan ontologism, on the other hand, and the Christian synthesis of biblical transcendentalism and Greek incarnationism result in human and historical submission to what are acclaimed as "natural forces." Although in the history of Jewish culture such a heretical, quasi-pantheistic tendency asserted itself, first in medieval kabbalism and then in modern Zionism, from a traditional Jewish standpoint nature remains subject to humanly enacted ends. Evidence for this general thesis can be found in biblical, Talmudic, medieval philosophic, and mystical literature, in modern religious, poetic, and Zionist literature, and in the history of general philosophy. For replies to this article, see: Ehrenfeld, David and Joan G. Ehrenfeld. "Some Thoughts on Nature and Judaism." Environmental Ethics 7(1985):93-95; and: Kay, Jeanne. "Comments on 'The Unnatural Jew.'" Environmental Ethics 7(1985):189-91. Schwarzschild is in the philosophy department, Washington University, St. Louis, MO. (EE)

Schweitzer, Lisa. Review of Road Ecology: Science and Solutions. By Richard T. T. Forman, Daniel Sperling, John A. Bissonette, Anthony P. Clevenger, Carol D. Cutsall, Virginia H. Dale, Lenore Fahrig, Robert France, Charles R. Goldman, Kevin Heanue, Julia A Jones, Frederick J. Swanson, Thomas Turrentine, and Thomas C. Winter.

Schwela, Dieter, Gary Haq, Cornie Huizenga, Wha-Jin Han, Herbert Fabian, and May Ajero. *Urban Air Pollution in Asian Cities: Status, Challenges and Management*. London: Earthscan, 2007. The authors discuss the effects of air pollution on the environment, human health, agriculture, and cultural heritage in twenty Asian cities.

Science, 21 July, 1995, contains fourteen articles on frontiers in ecology, under the theme "Big Questions for a Small Planet." (v6,#3)

Science, 25 July 1997 (vol. 277, no. 5325) is a theme issue on "Human-Dominated Ecosystems." Contains:

--Vitousek, Peter M., Harold A. Mooney, Jane Lubchenko, and Jerry M. Melillo, "Human Domination of Earth's Ecosystems," (pp. 494-499). Human alteration of Earth is substantial and growing. Between one-third and one-half of the land surface has been transformed by human action; the carbon dioxide concentration in the atmosphere has increased by nearly 30 percent since the beginning of the Industrial Revolution; more atmospheric nitrogen is fixed by humanity than by all natural sources combined; more than half of all accessible surface fresh water is put to use by humanity; and about one-quarter of the bird species on Earth have been driven to extinction. By these and other standards, it is clear that we live on a human dominated planet.

--Chapin, III, F. Stuart, et al., "Biotic Control over the Functioning of Ecosystems," (pp. 500-504). Changes in the abundance of species--especially those that influence water and nutrient dynamics, trophic interactions, or disturbance regime--affect the structure and functioning of ecosystems. Diversity is also functionally important, both because it increases the probability of including species that have strong ecosystem effects and because it can increase the efficiency of resource use. Differences in environmental sensitivity among functionally similar species give stability to ecosystem processes, whereas differences in sensitivity among functionally different species make ecosystems more vulnerable to change. Current global environmental changes that affect species composition and diversity are therefore profoundly altering the functioning of the biosphere.

--Matson, P. A., et al, "Agricultural Intensification and Ecosystem Properties," (pp. 504-509). Expansion and intensification of cultivation are among the predominant global changes of this century. Intensification of agriculture by use of high-yielding crop varieties, fertilization, irrigation, and pesticides has contributed substantially to the tremendous increases in food production over the past 50 years. Land conversion and intensification, however, also alter the biotic interactions and patterns of resource availability in ecosystems and can have serious local, regional, and global environmental consequences. The use of ecologically based management strategies can increase the sustainability of agricultural production while reducing off-site consequences.

--Botsford, Louis, et al., "The Management of Fisheries and Marine Ecosystems" (pp. 509-515). The global marine fish catch is approaching its upper limit. The number of overfished populations, as well as the indirect effects of fisheries of marine ecosystems, indicate that management has failed to achieve a principal goal, sustainability. This failure is primarily due to incessant sociopolitical pressure for greater harvests and the intrinsic uncertainty in predicting the harvest that will cause population collapse. A more holistic approach incorporating interspecific interactions and physical environmental influences would contribute to greater sustainability by reducing the uncertainty in predictions. However, transforming the management process to reduce the influence of pressure for greater harvest holds more immediate promise.

--Dobson, Andy P., et al., A. D. Bradshaw, and A.J.M. Baker, "Hopes for the Future: Restoration Ecology and Conservation Biology" (pp. 515-522). Conversion of natural habitats into agricultural and industrial landscapes, and ultimately into degraded land, is the major impact of humans on the natural environment, posing a great threat to biodiversity. The emerging discipline of restoration ecology provides a powerful suite of tools for speeding the recovery of degraded lands. In doing so, restoration ecology provides a crucial complement to the establishment of nature reserves as a way of increasing land for the preservation of biodiversity. An integrated understanding of how human population growth and changes in agricultural practice interact with natural recovery processes and restoration ecology provides some hope for the future of the environment.

--Noble, Ian R. and Rodolfo Dirzo, "Forests as Human-Dominated Ecosystems," (pp. 522-525). Forests are human-dominated ecosystems. Many of the seemingly lightly managed or unmanaged forests are actually in use for agroforestry or for hunting and gathering. Agroforestry does reduce biodiversity, but it can also act as an effective buffer to forest clearance and conversion to other land uses, which present the greatest threat to forested ecosystems. In forests used for logging, whole-landscape management is crucial. Here, emphasis is placed on areas of intensive use interspersed with areas for conservation and catchment purposes. Management strategies for sustainable forestry are being developed, but there is a need for further interaction among foresters, ecologists, community representatives, social scientists, and economists.

--Malakoff, David, "Extinction on the High Seas" (pp. 486-488). Biologists have long assumed that the oceans are too vast, and their habitats too prolific, for humans ever to extinguish any marine species. But now that assumption is under attack. At the same time, estimates of the number of marine species are escalating, with new discoveries. Only about 275,000 marine species have actually been described, and but estimates for coral reefs alone are at least a million species, and possibly up to 9 million, with another 10 million on the deep sea's expansive floor. (v8,#3)

Science and Engineering Ethics. An international quarterly launched in January 1995, exploring ethical issues confronting scientists and engineers. Papers are invited. Editors: Stephanie J. Bird, Massachusetts Institute of Technology, Room 12-187, 77 Massachusetts Ave., Cambridge, MA 02139; or Raymond Spier, School of Biological Sciences, University of Surrey, Guildford, Surrey, GU2 5XH, U.K. (v6,#1)

Science, June 25, 1993, is a special issue devoted to "Environment and the Economy." A lead editorial complains of the "pathological growth of [environmental] regulations." Carl Sagan and Edward O. Wilson protest against having (allegedly) been "blacklisted" by Science because their advocacy prejudices their scientific credibility. Articles: "Protecting the Environment with the Power of the Market," "Is

Environmental Technology a Key to a Healthy Economy?" "Can Sustainable Farming Win the Battle of the Bottom Line? Few Options for Third World Farmers," "How to Make the Forests of the World Pay Their Own Way," and "Wetlands Trading is a Loser's Game Say Ecologists: Bringing Vanished Wetlands to Life," (i.e. mitigation doesn't work). (v4,#2)

Science of the Total Environment, The, 184, Nos. 1-2 (17 May 1996) is a special issue on "Ethical and Philosophical Issues in Environmental Epidemiology" and was guest edited by Colin Soskolne and Roberto Bertolini. Philosophers with articles in the issue include: Holmes Rolston III, Laura Westra, Dale Jamieson, Earl R. Winkler, and Andrew Light. (v7, #3)

Scientific American. September 1989, vol. 261, no. 3, is a special issue devoted to "Managing Planet Earth." Eleven articles are on atmosphere, climate, water, biodiversity, population, agriculture, manufacturing, sustainable development, and a sustainable world. The issue can be ordered from Scientific American, Dept. MPE, 415 Madison Ave., New York, NY 10017, for \$ 6.00. Phone 212/754-0550. (v1,#1)

Scoones, I., "New Ecology and the Social Sciences: What Prospects for a Fruitful Engagement?" Annual Review of Anthropology 28(1999):279-507.

Scotland's Hills and Mountains: A Concordat on Access, with commentaries by Andrew Raven, A. R. Gillingham, and Nick Kempe. John Muir Trust Journal and News (Edinburgh), no. 21, July 1996, pp. 18-24. The rights and responsibilities of hillwalkers and climbers regarding access to the Scottish hills and mountains is addressed in this concordat, launched by the Scottish Agriculture and Environment Minister and signed last January by various parties. At issue is increasing pressure for public access to the often privately held Scottish lands, including whether current access without the explicit consent of the owner involves trespass under existing law. The Concordat comes in the face of commitment of the Labour Party in England and Wales to access legislation, where trespass laws are more harsh, and the question whether such legislation is necessary in Scotland or can be addressed by voluntary agreement. "Freedom of access is a moral right and freedom of movement is recognised by the United Nations as a fundamental human right: if it is to mean anything, in this overregulated and frantic society in which we live, it should include the freedom to enjoy the hills and mountains and not be restricted to use of public roads" (Nick Kempe, p. 24). Compare the "everyman's right" of the Scandinavian countries. (v7, #3)

Scott, Ann Tyson. "One Town's Battle With a Swollen River." The Christian Science Monitor, vol. 89, 10 March 1997, pp. 1,4.

Scott, Anthony, and Coustalin, Georgina. "The Evolution of Water Rights." Natural Resources Journal 35, no.4 (1995): 821. (v7, #3)

Scott, Dane, "The Magic Bullet Criticism of Agricultural Biotechnology," Journal of Agricultural and Environmental Ethics 18(2005):259-267. One common method of criticizing genetically modified organisms (GMOs) is to label them as "magic bullets." But this criticism is not very clear. What flaw is this pointing out in GM organisms? Is it some flaw that can be fixed? An analysis to advance deliberation over GM organisms. Scott is in philosophy and religion, Western Carolina University, Collowhee, NC. (JAEE)

Scott, David Clark. "Profiles of Mexicans: Life After NAFTA." The Christian Science Monitor, 17 May 1994, p. 11. (v5,#2)

Scott, J Michael, Janet Rachlow, Robert L. Lackey, Anna Pidgorna, Jocelyn Aycrigg, Gabrielle Feldman, Leona Svancara, David Rupp, David Stanish, and R. Kirk Steinhorst. "Policy Advocacy in Science:

Prevalence, Perspectives, and Implications for Conservation Biologists." *Conservation Biology* Vol. 21, no. 1 (2007): 29-35. "We believe that scientists and professional societies should strive to conduct policy-relevant science, to report it in value-neutral language, to state clearly the policy implications of the findings, and to be vigorous in their efforts to bring that information to the attention of decision makers and all interested parties."

Scott, Peter, "Types of Ecotheology," *Ecotheology* 4(1998):8-19. Provincialist (or confessional) ecotheologies draw heavily on Christian doctrinal resources. Secularist (or reconstructive) ecotheologies reinterpret Christianity in terms of new, worldly knowledge. Both can be either modernizing or anti-modernizing, yielding a four-fold typology. This typology can identify the doctrinal resources employed, the importance invested in the core doctrines of Christianity, the issue of "natural theology," the metaphysical issue of the relation between humanity and nature, and the hermeneutical significance of the context of modernity for the interpretation of nature. The typology is applied to various contemporary ecotheologists. Oelschlaeger's typology is found inadequate. Scott teaches theology at Cheltenham and Gloucester College of Higher Education, UK. (v.10,#1)

Scott Peter, "Types of Ecotheology," *Ecotheology* No 4 (Jan 1998):8-9.

Scott, Peter, "Blessing and Curse: 'The Natural' as a Theological Concept," *Modern Believing* 38 (no. 4, 1997):15-23. Liberal humanism has lost any sustained sense of human naturalness. Modernism tries to escape the limitations and context of our natural origins. Christianity has been accused of originating this escape from nature. In view of this Christians need, and liberal humanism needs, a recovery of the naturalness in human life. But theologically there are good reasons for both accepting and rejecting the natural as a theological concept. A recovery in theological method of our natural context is important as a part of the affirmation of human flourishing. The task of natural theology is to deny restrictive and false accounts of naturalness. But natural theology cannot succeed without Christology. A viable concept of the natural always begins from God's self-disclosure in Christ. Natural theology never escapes Christological control. Scott teaches theology at Cheltenham and Gloucester College of Higher Education, UK. (v.10,#1)

Scott, Peter, *A Political Theology of Nature*. Cambridge: Cambridge University Press, 2003. A Christian response to the environmental crisis, arguing that present day environmental problems can only be decisively addressed within a theological world view. A theological rationale for an ecological democracy. Scott is at the University of Gloucestershire, Cheltenham, UK. (v 14, #3)

Scotti, R, Book Review: *Traveling Light: New Paths for Ecotourism* by Lisa Mastny. *Journal of Environment and Development* 11(no.2, 2002):193-195. (v.13, #3)

Scoville, Judith N., "Cosmos, Creation and Cows: New Perspectives in a Theological Land Ethic," *CTNS (Center for Theology and the Natural Sciences) Bulletin* 18 (no. 2, 1999): 1-9. The interdisciplinary dialogue between science and theology has a critical role in developing a satisfactory doctrine of creation. Also especially helpful is sustainable agriculture's view of farming as cooperation--or conversation--with nature, rather than an attempt to conquer nature. Scoville holds the Hulings Distinguished Chair in Humanities at Northland College, Ashland, WI. (v.10,#1)

Scoville, Judith N., "Fitting Ethics to the Land: H. Richard Niebuhr's Ethic of Responsibility and Ecotheology," *Journal of Religious Ethics* 30(no. 2, 2002):207-229. Much of ecotheology and environmental philosophy has moved deductively from theological and ethical constructs to questions of how we should relate to the natural world. Such approaches are limited in their ability to guide us toward appropriate environmental action for they do not necessarily fit the way the natural world actually functions. Niebuhr's ethic of response, on the other hand, begins with the concrete situation and is

inherently ecological for it focuses on interrelationships in an on-going community. It is inductive in character and open to being informed by new findings in the natural and social sciences; thus it is exceptionally well suited to environmental problems, which involve complex scientific, social, and economic questions. Scoville is in religion and philosophy, Northland College, Ashland, WI.

Scoville, Judith N., "Leopold's Land Ethic and Ecotheology," Ecotheology No 8 (Jan 2000):58-70.

Scoville, Judith N. "Value Theory and Ecology in Environmental Ethics: A Comparison of Rolston and Niebuhr." Environmental Ethics 17(1995):115-133. The objective of Holmes Rolston, III's writings has been the development of an "ecologically formed" environmental ethics based both on environmental values and ecological description. I show how recasting Rolston's value theory in terms of H. Richard Niebuhr's relational value theory can clarify and strengthen this project. Niebuhr developed a theory of value in which value is found in relationships and value systems are constructed in relation to centers of value. Niebuhr's contextual method, with which Rolston's methodology has substantial affinity, is particularly open to the use of such sciences as ecology. I conclude that this recasting of Rolston's important work in terms of relational value and contextual method can clarify the use of ecology in ethics (including the is/ought dichotomy) and can contribute to ethical reflection on such difficult problems as the spotted owl controversy. Scoville is a Ph.D. student at the Graduate Theological Union, Berkeley, and lives in Minneapolis, MN. (EE)

Scrase, J. Ivan, and William R. Sheate, "Re-framing Flood Control in England and Wales," Environmental Values 14(2005): 113-137. Traditionally floods have been understood to be acts of God or nature, with localised impacts afflicting those who choose to live or to invest capital in lowland and coastal locations. This central idea of causation, located outside human agency, survives somewhat precariously today, but is reflected in the lack of any right to protection from flooding in England and Wales. However in 1930 new legislation institutionalised a social framing of the impact of floods as part of a wider national problem. This related the interests of lowland agriculture and land drainage to the national economic and military interest. Modernising and expanding agricultural production was a political priority from the 1930s to the 1980s. The cost of preventing flooding and draining land was transferred from the affected landowners to the nation as a whole. River and coastal engineering was central to the new policy, and by the early 1970s much of the riverine and coastal environment was radically altered by flood defence structures and associated land drainage. As a result of food over-production and conflicts with conservation interests in the early 1980s, the emphasis has shifted from drainage to flood defence, while risk reduction and environmentalist values have also been promoted. The institutional arrangements from 1930 largely survive, however, and a new coherent social framing has failed to emerge. It is argued that for a risk-oriented framing to succeed, new assumptions about causation and a new ethical outlook are now needed. Emphasis on flood 'control' rather than 'defence', and a shift in priorities from economic benefits towards human rights and intrinsic value in nature are proposed as key elements in such a re-framing. Both authors are in environmental science and technology, Imperial College, London. (EV)

Scribner, F. Scott, "A Green Marx?," Philosophy and Geography 5 (No. 1, 2002): 117-119. Book review of John Bellamy Foster's "Marx's Ecology: Materialism and Nature," New York: Monthly Review Press, 2000. (P&G)

Scriven, Tal, Wrongness, Wisdom, and Wilderness. Albany: State University of New York Press, 1997. 352 pages. \$ 20.95 paper. Defends a libertarian social ethic that can support welfare, reverse discrimination, and environmental preservation; biocentrism, Nietzschean utilitarianism, the social contract theory, and legal moralism--all at the same time. The principle of utility should be understood, in judging social policy, through the application of the principle of harm, or wrongness. With analysis of figures as varied as Plato, Hume, Rousseau, Kant, Mill, Schopenhauer, Nietzsche, and Dewey. Part III

deals with our relationship, as individuals and societies, to nature. Nothing logically prevents a well-constructed libertarianism from supporting environmental ethics positions at least as radical as biocentrism, though there are deep problems with going as far as ecocentrism and its postmodern variants. Scriven is in philosophy at California Polytechnic State University, San Luis Obispo. (v7,#4)

Reviewed by Jan Narveson, Dept. of Philosophy, University of Waterloo, Journal of Agricultural and Environmental Ethics 11(1998):58-61. Reviewed in Environmental Ethics 21(1999):105-108.

Scruton, Roger, "From a View to a Death: Culture, Nature and the Huntsman's Art," Environmental Values 6(1997):471-481. ABSTRACT: The division between the natural and the artificial is itself artificial. But we continue to yearn for a homecoming to our natural state which means, to the identity with our environment which was the condition of the hunter-gatherer. Totemism is the thought-process whereby the prey can be simultaneously consecrated as a species, and pursued to the death as an individual. This thought-process has an evident ecological function. The morality of hunting resides in the maintenance of this dual attitude. An anthropological explanation is offered of the perceived rituals of hunting, and of guiltless killing. Sunday Hill Farm, Brinkworth Wilts, SN15 5AS, UK. (EV)

Scudder, G. G. E. "Endangered Species Protection in Canada." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):963- . (v10,#4)

Scully, Matthew, Dominion: The Power of Man, the Suffering of Animals, and the Call to Mercy. New York: St. Martins, 2002. We humans may be "of" nature but we are not in it. For better or worse we have dominion over the Earth, and how we manage nature is a moral issue. In our relations to animals we have become insensitive tyrants rather than benign caretakers. It is wrong to be cruel to animals, and when our cruelty expands to the point where we no longer recognize the animals in a factory farm as living creatures capable of feeling pain, or when we insist on an inalienable right to shoot magnificent creatures like elephants for the thrill of it, we debase ourselves. We are called to treat them with kindness, not because they have rights or power or some claim to equality, but in a sense because they don't, because they stand unequal and powerless before us. Until we treat animals with more thoughtfulness, we forfeit the right to call ourselves Homo sapiens. Animals are more than ever a test of our character. Scully is a conservative Republican, one-time speech writer for George W. Bush. Reviewed by Natalie Angier in The New York Times, October 27, 2002. (v.13,#4)

Se Zhengrong, "The axiological foundation of environmental ethics", Science, Technology and Dialectics, 2002(4)

Se Zhengrong, The Explanation and Reconstruction of Chinese Traditions of Ecological Ethics, The People's Publishing House, 2002. Chapters: eco-cultural implication of the viewpoint of the unity of heaven(nature) and human; modern explanations of the Chinese traditions of ecological ethics; western views of the Chinese traditions of environmental ethics; comparisons of western and Chinese ecological ethical thoughts; rational reconstruction of Chinese traditions of ecological ethics; the Chinese paradigm of ecological ethics and the future of civilization. Professor Se is at the Guangdong Administrative Management College.

Sea Turtle's Warning, The, New York Times (4/10/98): A18. Unsigned editorial. World Trade Organization rules against law protecting sea turtles. The WTO has ruled that a U.S. law prohibiting shrimp imports from countries that fail to use turtle-excluder devices violates international trade agreements. The law was designed to protect the competitiveness of U.S. shrimpers who must use these devices in their nets to prevent drowning endangered sea turtles. If an appeal fails, the U.S. will have either to open its markets to turtle-destroying shrimpers, to pay a fine, or to suffer retaliatory restrictions on U.S. exports. The ruling could be a prelude to a broader assault on U.S. environmental laws that authorize economic sanctions to protect endangered species and to prevent overfishing. When the U.S.

joined the WTO in 1994, the Clinton Administration assured skeptics that measures to protect the environment were in place. The WTO is required by its charter to consider environmental values, but its central mission to promote free and fair trade appears to win when there is a conflict. (v9,#2)

Seager, Joni, The State of the Earth Atlas, New York: Touchstone Books, Simon and Schuster, 1990. A series of maps with interpretations. \$ 13.95. (v1,#4)

Seager, Joni, Earth Follies: Coming to Feminist Terms with the Global Environmental Crisis. London and New York: Routledge, 1993. 336 pages. \$ 27.50 cloth. Also published as Earth Follies: Feminism, Politics, and the Environment. London, Earthscan, 1993. The environmental crisis is not just a crisis of biophysical ecosystems. It is the product of the dominant culture and of the institutions that set cultural norms. These include, predominantly, the militaries, multinationals, and governments, all of which are the products of masculinist culture. Environmental relations are inextricable from the larger gender relations that shape modern life. A feminist analysis is absolutely crucial. (v4,#3)

Seager, Joni. Earth Follies: Feminism, Politics and the Environment: (London: Earthscan, 1993). Reviewed by Ariel Salleh in Environmental Values 4(1995):271-274. (EV)

Seamon, David and Robert Mugerauer, eds., Dwelling, Place and Environment: Towards a Phenomenology of Person and World. New York: Columbia University Press, 1989 edition of a book earlier published by Nijhoff. Reprinted by Krieger, 2000. Seventeen essays, an important collection in the resurgent literature on the sense of dwelling in place. Some sample essays: Michael E. Zimmerman, "The role of spiritual discipline in learning to dwell on earth"; Anne Buttimer, "Nature, water symbols and the human quest for wholeness"; Henri Bortoft, "Counterfeit and authentic wholes: Finding a means for dwelling in nature" Edward Relph, "Geographical experiences and being-in-the-world: The phenomenological origins of geography." (v1,#4)

Seamon, David, "Humanistic and Phenomenological Advances in Environmental Design," The Humanistic Psychologist 17 (no. 3, Autumn, 1989):280-293. The sense of place (genius loci) is receiving increasing academic and professional attention in the literature on environmental design and theory. One of the three leading components that structure a sense of place is the natural setting that establishes a specific physical and ecological context, the nature of which is partly atmospheric and intangible. Seamon is in the Department of Agriculture at Kansas State University. (v1,#4)

Seamon, David, ed., Dwelling, Seeing and Designing: Toward Phenomenological Ecology. Albany, NY: SUNY Press. \$ 19.95 paper, \$ 59.50 cloth. Thirteen essays by architects, philosophers, landscape architects, geographers, and others, who focus on ways that humans might see and understand the natural and built environments in a deeper, more receptive way. This is in a new monograph series, "Environmental and Architectural Phenomenology." Seamon is in architecture at Kansas State University. (v4,#1)

Seamon, David. Review of Rational Landscapes and Humanistic Geography. By Edward Relph. Environmental Ethics 5(1983):181-83.

Searles, Janis. "South Dakota v. Bourland: Another Supreme Court Move Away from Recognition of Tribal Sovereignty." Environmental Law 25 (no. 1, 1995): 209. This recent case continues the Supreme Court's trend of eroding Indian Sovereignty, but Searles suggests ways that the Army Corps of Engineers can protect tribal interests within its current statutory framework. (v6,#1)

Sears, R. R., Davalos, L. M. and Ferraz, G., "Missing the Forest for the Profits: The Role of Multinational Corporations in the International Forest Regime," Journal of Environment and Development 10(no.4,

2001): 345-64. (v.13,#2)

Seddon, George, Landprints: Reflections on Place and Landscape. Cambridge: Cambridge University Press, 1997. Essays. Examples: "The nature of Nature," "Sense of place," "The genius loci and the Australian landscape," "The rhetoric and ethics of the environmental protest movement," and "The perfectibility of nature (A review of John Passmore, Man's Responsibility for Nature)." His conclusion about "the nature of Nature": "Whether or not there is a world out there independent of our perceptions of it, we cannot escape the variability of those perceptions. The ways in which we perceive, imagine, conceptualise, image, verbalise, relate to, behave towards the natural world are the product of cultural conditioning and individual variation" (p. 13). A further conclusion: "Our ethical and our aesthetic pronouncements are probably the most suspect from our present point of view."

One wonders if this statement is self-referential when he also concludes, about environmental ethics: "The despoliation of land is wrong ... But why is it wrong? Surely because it is an infringement of the rights of later generations, and not because the land has some mystical rights of its own. We must take the custodial view. ... It is my feelings that matter, and if they are mean, it is I or my grandchildren who suffer" (p. 197). Seddon is an Australian academic and environmentalist who has variously worked in English, Philosophy, Geology, History, and Philosophy of Science. (v.10,#3)

Sedjo, RA, "Global Agreements and US Forestry: Genetically Modified Trees," Journal of Forestry 103 (no. 3, April/May 2005): 109-133.

Sedjo, Roger A. "Toward an Operational Approach to Public Forest Management." Journal of Forestry 94, no.8 (1996): 24. (v7, #3)

Sedjo, Roger, "The Ethics of Wood Consumption," Proceedings, Society of American Foresters, 2001 National Convention, Denver Colorado. (Bethesda, MD: Society of American Foresters, 2002), pages 242-246. "There is little evidence that current or likely future global consumption of industrial wood is excessive."

Sedjo, Roger A. "From Oilfields to Energy Farms: A Brief Look at the Environmental Consequences of Biofuels." Resources (Resources for the Future) Vol. 166 (Summer 2007): 16-19. Rising energy demand for corn has already created serious land-use conflicts in the United States, prompting farmers to shift production of other essential food commodities, like soybeans, to corn. Biofuel from grasses or wood may be less disruptive than from corn.

Sedrez, Lise. Review of Exporting Environmentalism: U.S. Multinational Chemical Corporations in Brazil and Mexico. By Ronie Garcia-Johnson. Environmental Ethics 24(2002):317-320. (EE)

See the README file that accompanies this bibliography.

Seed, John, Joanna Macy, Pat Fleming, and Arne Naess, Thinking Like a Mountain: Towards a Council of All Beings. Philadelphia: New Society Publishers, 1988. Pp. 122. This is a collection of poems, stories, personal reflections, and essays on themes in deep ecology. Seed is a deep ecologist, environmental activist, and Director of the Rainforest Information Centre, Australia. The volume is significant as an introduction to the spirit and methodology of practicing deep ecologists. It also contains a good summary essay by Arne Naess, "Self-Realization: An Ecological Approach to Being in the World," in which he emphasizes the ontological aspects of deep ecology. One disturbing entry in the collection is "Chief Seattle's Message," the alleged pro-environment speech by an American Indian in 1854, which was actually written by a film screenwriter in 1970, and which the authors acknowledge as a fabrication. Why include it? (Katz Bibl)

Seel, Kurt E., Barrett, Joshua M. "How Green Is Green? Partial Ownership Interests under Superfund Laws," Natural Resources & Environment 11(1997):49.

Seel, Martin, Eine Aesthetik der Natur [in German: An aesthetics of nature], Frankfurt: Suhrkamp 1996. An influential study in environmental aesthetics. (v.11,#1)

Seel, Martin Eine Ästhetik der Natur, Frankfurt am Mein: Suhrkamp, 1991.

Seeley, Thomas D., P. Kirk Visscher and Kevin M. Passino, "Group Decision Making in Honey Bee Swarms," American Scientist 94 (May-June 2006): 220-229. When 10,000 bees go house hunting, how do they cooperatively choose their new nesting site? Most of them cluster in a tree with the queen, while several hundred of them scout for a suitable new hollow tree. Over the course of several days, these scouts search and come back to do waggle dances to promote their finds. Scouts can be recruited from one site to a better one and start dancing for it instead. After some 15 or 20 of the scouts are wagging for the same new site, this is judged "a quorum." The rest of the scouts come around to supporting the same site, so a consensus is achieved before flight. Seeley is in neurobiology and behavior at Cornell University.

Seelye, Katharine, "Bush Proposing to Shift Burden of Toxic Cleanups to Taxpayer," New York Times (2/24/02) and Carol Browner, "Polluters Should Have to Pay," New York Times (3/1/02): editorial page. Giving up on Superfund's polluters pay doctrine. With dwindling resources in the once huge Superfund account, the Bush administration has decided to cut back on the number of sites designated for restoration and shift most of the costs of cleanup from industry to taxpayers. In 1995, Congress ended the corporate taxes that provided the substantial monies necessary to clean up "orphaned" toxic waste sites. In 1994, 20% of the cost of clean up was borne by the taxpayer. President Bush's budget proposal chooses not to try to reauthorize the taxes and proposes that taxpayers pay 50% of the cost in 1993 and 100% in 1994. In an editorial to the New York Times, former Environmental Protection Agency Administrator Carol Browner charges that Bush is abrogating a national promise made in the wake of Love Canal that toxic waste sites would be cleaned up and that "the polluters, not the American people, would pay." (v.13,#1)

Segerdahl, Pär, "Can natural behavior be cultivated? The farm as local human/animal culture," *Journal of Agricultural and Environmental Ethics* 20(2007):167-193. Although the notion of natural behavior occurs in many policy-making and legal documents on animal welfare, no consensus has been reached concerning its definition. This paper argues that one reason why the notion resists unanimously accepted definition is that natural behavior is not properly a biological concept, although it aspires to be one, but rather a philosophical tendency to perceive animal behavior in accordance with certain dichotomies between nature and culture, animal and human, original orders and invented artifacts. The paper scrutinizes the philosophy of natural behavior as it developed in the organic movement in response to a perceived contrast between industrialized and traditional agriculture. There are two reasons for focusing on the organic movement: (i) the emphasis on "the natural" is most accentuated there and has a long history, (ii) everyday life on organic farms presupposes human/animal interplay, which conflicts with the philosophical tendency to separate nature from culture. This mismatch between theory and practice helps us see why, and how, the philosophy of natural behavior needs to be reconsidered. The paper proposes that we understand farms as local human/animal cultures, and asks what we can mean by natural behavior in such contexts. Since domestic animals adapt to agricultural environments via interaction with caretakers, such interplay is analyzed as "hub" in these animals' natural behavior.

Keywords: animal caretaker - animal husbandry - animal welfare - domestication - double imprinting - human/animal culture - mutual adaptation - natural behavior - organic movement

Segerdahl is at Department of Public Health and Caring Sciences, Center for Bioethics at Karolinska Institutet and Uppsala University, Uppsala Science Park, Uppsala, Sweden.

Seegerstahl, Boris. "The Long Shadow of Soviet Plutonium Production," Environment 39(no. 1, 1997):12.

Even though Russia's Mayak facility is no longer being used to produce nuclear weapons, the problems it has caused will plague the country for years to come. (v8,#1)

Seidel, Amy L., and Paul A. Opler. "Uncompahgre Fritillary Butterfly Demographics: Response to Britten et al." Conservation Biology 8(1994):1156-1157. With response by Britten et al. This butterfly, an endangered species, came into controversy when studies showed that it was going extinct naturally, due to changing climate, and scientists recommended taking no heroic actions to save it, since it was a natural extinction. Seidel and Opler claim that the population is stable, since collection pressures have been removed. Britten et al respond that the data are more equivocal. Seidel is at Rocky Mountain Biological Laboratory, Crested Butte, CO; Opler is with the National Biological Survey, Fort Collins, CO. (v6,#1)

Seidensticker, J., Christie, S., and Jackson, P., eds., Riding the Tiger: Tiger Conservation in Human-Dominated Landscapes. Cambridge, UK: Cambridge University Press, 1999. (v.12,#4)

Seidler, Reinmar, "'Roads and the Land: Two Giants in Uneasy Embrace," Review of Forman, R.T., et al, Road Ecology: Science and Solutions.," Conservation Biology 18(no.3, 2004):850-852. (v. 15, # 3)

Seigfried, Charlene Haddock, Pragmatism and Feminism: Reweaving the Social Fabric. Reviewed by Jennifer G. Jesse. American Journal of Theology and Philosophy 18(no. 1, 1997):91-97.

Selcraig, Bruce, "Reading, `Riting, and Ravaging: The Three R's, Brought to You by Corporate America and the Far Right," Sierra, May-June 1998, pp. 6065, 86-92. A corporate backlash has developed against the U.S. National Environmental Education Act, which makes environmental education mandatory in public schools in about 30 states, and is up for reauthorization this year. In the culture war raging over environmental issues, the NEEA spends \$65 million a year to educate students environmentally, but a coalition of corporations and the religious right complain that this is anti-business and pro-environment. Corporations are eager to offer materials (often to cash-starved schools) that set the matter straight, such as an Exxon video now in 10,000 classrooms that describes gasoline as "a form of solar power hidden in decayed organic matter." (v,#2)

Self, Will, Great Apes. New York: Grove Press, 1997. 404 pages. \$ 24. A tale of a parallel universe where chimpanzees rather than humans evolve into the species with advanced culture. One of the chimpanzee psychologists undertakes to study a chimp with the delusion that humans were the species who evolved culture instead of the chimps. Reviewed in New York Times Book Review, Sept. 21, 1997. (v8,#3)

Seligman, Clive, "Environmental Ethics," Journal of Social Issues 45 (no. 1, 1989):169-184. The central question is on what ethical basis should we decide how to deal with nature. Is a human centered, utilitarian perspective sufficient to protect the environment? If not, what alternatives are possible? A key philosophical problem is to what extent inherent value can be ascribed to things that are not human: animals, vegetation, and even land. Philosophers do not agree among themselves on these issues. An environmental ethic should explicitly consider whether our behavior toward nature is consistent with our values, that is, consistent with our "best selves." A psychological theory of how humans value may provide some insights into the way we think about ethical dilemmas. As our personal values deepen, we will be increasingly inclined to do the right thing environmentally. Seligman is in psychology at the University of Western Ontario. (v5,#4)

Selin, S. and Pierskalla, C., "The Next Step: Strengthening the Social Science Voice in Environmental Governance," Society and Natural Resources 18(no. 10, November/December 2005): 933-936.

Sellars, Richard West, Preserving Nature in the National Parks: A History. New Haven: Yale University Press, 1997. 380 pages. The clash between traditional scenery-and-tourism management and emerging ecological concepts in the national parks. There has been "a persistent tension between national park management for aesthetic purposes and management for ecological purposes" (p. 5). Focusing on the decades after the U. S. National Park Service was established in 1916, Sellars reveals the dynamics of policy formulation and change, a Service tangled in conflicting visions, as landscape architects, foresters, wildlife biologists, and other Park Service professionals contended for dominance and shaped the attitudes and culture of the Service, and the attitudes and culture of Americans who visit the parks to see wild nature. Sellars is a historian with the U.S. National Park Service, Santa Fe, NM. (v.11,#1)

Sellars, Richard West, Preserving Nature in the National Parks: A History. New Haven: Yale University Press, 1997. 380 pages. The clash between traditional scenery-and-tourism management and emerging ecological concepts in the national parks. There has been "a persistent tension between national park management for aesthetic purposes and management for ecological purposes" (p. 5). Focusing on the decades after the U. S. National Park Service was established in 1916, Sellars reveals the dynamics of policy formulation and change, a Service tangled in conflicting visions, as landscape architects, foresters, wildlife biologists, and other Park Service professionals contended for dominance and shaped the attitudes and culture of the Service, and the attitudes and culture of Americans who visit the parks to see wild nature. Sellars is a historian with the U.S. National Park Service, Santa Fe, NM. (v10,#4)

Sellars, Richard West, "Creating Tradition: The Roots of National Park Management," Wild Earth 10(no. 2, Summer 2000):26- . (v.12,#2)

Sellers, C, "Review of: Adam Rome, The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism", Environmental History 8(no.1, 2003):141-143.

Sellers, Christopher, "Thoreau's Body: Towards and Embodied Environmental History," Environmental History 4 (No. 4, Oct 01 1999): 486- . (v.11,#2)

Sellman, James D., and Rolston, Holmes, III, "Environmental Ethics in Micronesia, Past and Present," Part I. "Living on the Edge: Traditional Micronesian Environmental Ethics." By James D. Sellmann, Philosophy, University of Guam, from a presentation at the Pacific Science Inter-Congress, June 2000. Part II. "Guam Today: Still 'on the Edge.' Colonial Legacy and American Presence, by Holmes Rolston, III, also at the Pacific Science Inter-Congress. ISEE Newsletter, vol. 12, no. 3, Fall 2001, pp. 11-14. (v.12,#3)

Semlitsch, RD; Bodie, JR, "Biological Criteria for Buffer Zones around Wetlands and Riparian Habitats for Amphibians and Reptiles," Conservation Biology 17(no.5, 2003):1219-1228. (v.14, #4)

Semple, Kirk, "In Adirondacks, Thirst and Preservation Clash," New York Times, October 5, 2004, p. A24. For villages in the Adirondack Park in New York, the surface water is now too polluted to drink and to expensive to purify. Drilling wells is one solution, but presently quite limited in order to preserve the forested areas where the wells must be placed. Also with unlimited well drilling and more abundant drinking water (over?) development would be encouraged. (v.14, #4)

Sen, Amartya, The Argumentative Indian: Writings on Indian History, Culture and Identity by Amartya Sen (London, UK. Allen Lane, 2005). Reviewed by Amitrajeet A. Journal of Agricultural and Environmental Ethics 19(2006):195-197. Batabyal is in the Department of Economics, Rochester Institute of Technology, Rochester, NY.

Sen, Amartya, "What to Do About Famine." Interview in Newsweek, November 2, 1998. Sen just won

the Nobel Prize in Economics. The Indian economist is widely regarded as the conscience of the profession, having devoted his career to "the downside of economics," while other economists analyze how to make a big profit. Sen analyzes the causes of famines and how to prevent them. "Famines have never occurred in democratic countries, even very poor ones, that have regular elections and a free media." Sen was long at Harvard but recently returned to become master of Trinity College at Cambridge, his alma mater. (v.9,#4)

Sen, Amartya. "Why We Should Preserve the Spotted Owl." *London Review of Books* Vol. 26, no. 5 (February 2004). "Our living standards are largely or completely unaffected by the presence or absence of spotted owls, but I strongly believe that we should not let them become extinct, for reasons that have nothing much to do with human living standards."

Senkowsky, S. "Strengthening Science at the Environmental Protection Agency, *Bioscience* 51(no. 9, 2001):708. (v.13,#1)

Senkowsky S., "A Tale of Two Commissions: Scientists Seek to Broaden Constituency for Changing US Ocean Policy," *BioScience* 54(no.6, 1 June 2004):. (v. 15, # 3)

Senkowsky, S., "A Burning Interest in Boreal Forests: Researchers in Alaska Link Fires with Climate Change," *Bioscience* 51(no.11, 2001): 916-21. (v.13,#2)

Seno, S. K. and Shaw, W. W., "Land Tenure Policies, Maasai Traditions, and Wildlife Conservation in Kenya," *Society and Natural Resources* 15(no.1, 2002): 79-88. (v.13,#2)

Sensible Species Protection. *The Christian Science Monitor*, July 6, 1995, p. 20. (v6,#2)

Sepänmaa, Yrjö, ed., *Real World Design: The Foundation and Practice of Environmental Aesthetics*. Helsinki: University of Helsinki, Lahti Research and Training Centre, 1997. Proceedings, XIII International Congress of Aesthetics, Lahti, Finland, August 1-5, 1995. 134 pages. ISBN 951-45-7646-2. In English and French, one article in German. Short articles. Contains, among many others:
--Park, Ynhui, "The Transfiguration of the World into an Artwork--A Philosophical Foundation of Environmental Aesthetics," pages 13-20.
--Paetzold, Heiz. "How to Fill the Gap Between the Philosophy of Art and the Aesthetics of Nature?", pages 21-25.
--Hepburn, Ronald W., "Aesthetic and Religious: Boundaries, Overlaps, and Intrusions," pages 42-48.
--Eaton, Marcia Muelder, "The Role of Aesthetics in Designing Sustainable Landscapes," pages 51-63.
--Kliver, Miroslav, "Ecological Aesthetics," pages 64-66.
And others. (v.9,#3)

Sepänmaa, Yrjö, ed., *Alligaattorin hymy: ympäristöestetiikan uusi aalto (The Alligator's Smile: New Waves in Environmental Aesthetics)*. Lahti: The University of Helsinki at Lahti, 1994. 208 pages. ISBN 0784-0640-24. The book takes its title from Paul Ziff's consideration of an alligator as an aesthetic object in "Anything Viewed" (1977), an article included in the anthology. Contains R. W. Hepburn's, "Contemporary Aesthetics and the Neglect of Natural Beauty," Allen Carlson's "Environmental Aesthetics," Arnold Berleant, selections from *The Aesthetics of Environment*, Cheryl Foster, "Aesthetic Disillusionment: Environment, Ethics, Art" (from *Environmental Values* 1(1992):205-215, and others. (v5,#2) (Finland)

Sepänmaa, Yrjö, Review of: Arnold Berleant, *The Aesthetics of Environment*, *Environmental Ethics* 16(1994):437-439.

Sepänmaa, Yrjö, "Experiences of the Bog," Form Function Finland no. 70, 2/1998, pages 32-37. This journal is published by the Finnish Society of Crafts and Design/Design Forum Finland, Unionkatu 14, FIN-00130 Helsinki, Finland. E-mail: form.function@designforum.fi Aesthetic aspects of Finnish boglands. An article in connection with the Third International Conference on Landscape Aesthetics, Aesthetics of Bogs and Peatlands, held in Ilomantsi, Finland, June 1998. (v.9,#4)

Sepänmaa, Yrjö, The Beauty of Environment: A General Model for Environmental Aesthetics. Helsinki: Suomalainen Tiedeakatemia, 1986. ISBN 951-41-0523-0. 184 pages. Reprinted in a slightly modified second edition by Environmental Ethics Books, Denton, Texas, 1993. ISBN 0-9626807-2-9. \$ 14.95. A first major section considers nature offered as a work of art. A second section considers nature as a whole, the environment as a system, and develops fourteen differences between works of art and aesthetic appreciation of nature. Ecology provides the norm for beauty in nature. A third section analyzes the language that criticizes, interprets, and appreciates natural beauty. Sepänmaa was for a number of years a research fellow with the Academy of Finland and held docent positions at University of Helsinki, also at Jyväskylä and Turku, and has recently taken a position at the University of Joensuu, Finland, in comparative literature and aesthetics. He was a Senior Fulbright Scholar at the University of Georgia and a Visiting Research Professor at the University of North Texas. (v5,#2) (Finland)

Sepänmaa, Yrjö. The Beauty of Environment. Reviewed in Environmental Ethics 10(1988):183-86.

Serafin, Rafal. "Noosphere, Gaia, and the Science of the Biosphere." Environmental Ethics 10(1988):121-37. Advances in analytical understanding of the biosphere's biogeochemical cycles have spawned concepts of Gaia and noosphere. Earlier in this century, in concert with the Jesuit paleontologist Pierre Teilhard de Chardin, the natural scientist Vladimir Vernadsky developed the notion of noosphere--an evolving collective human consciousness on Earth exerting an ever increasing influence on biogeochemical processes. More recently, the chemist James Lovelock postulated the Earth to be a self-regulating system made up of biota and their environment with the capacity to maintain a planetary steady state favorable to life. This is the Gaia hypothesis. To many, Gaia and noosphere represent contradictory interpretations of humanity's relation to planetary ecology. Noosphere emphasizes a free will and obligation to shape the destiny of humanity on Earth through technology and new kinds of social relations. In contrast, Gaia invokes mysterious mechanisms of planetary evolution that lie beyond human control and understanding. I argue that if brought together, noosphere and Gaia can provide a useful symbol for guiding human interventions in global ecology because the contradictions of a nature-centered view of Gaia and a human-centered view of noosphere are coming to be irrelevant with the emergence of an analytical science of the biosphere. Serafin is at the School of Urban and Regional Planning, University of Waterloo, Ontario, Canada. (EE)

Serageldin, Ismail and Andrew Steer, eds., Making Development Sustainable: From Concepts to Action. 1994, 1995. 39 pages. A paper of the World Bank, how it is increasingly supporting sustainable and environmentally sensitive development. With a selected bibliography on environmentally sustainable development projects. 1818 H Street, Washington, DC 20433. (v7,#2)

Serpell, J., In the Company of Animals: A Study of Human-Animal Relationships. Oxford: Basil Blackwell: Oxford, 1986, revised ed. 1996.

Serpell, James, Review of Mighetto, Lisa, Wild Animals and American Environmental Ethics. Environmental Values Vol.2 No.3(1993):276.

Serpell, James, In the Company of Animals: A Study of Human-Animal Relationships, Review by Keith Burgess-Jackson, Ethics and the Environment 3(1998):105-110.

Serrano-Barnett, Teresa, Ethics and Conservation, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Serrano-Barnett, Teresa, Ethics and Conservation, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Serres, Michel, The Natural Contract. Ann Arbor: University of Michigan Press, 1995. Originally published as: Le Contrat Naturel. Paris: Editions Françoia Bourin, 1992. Serres wants to insert ethics into the human relation to nature, and vice versa. Hitherto, human relations with other humans have been in the discourse of ethics and politics; human relations with nature in the discourse of science and technology. In an environmental crisis, humans are now racing toward a violent demise, on a course set by Cartesian philosophy, one that is "blind to nature," where nature has been "forgotten" and "lost." "At stake is the Earth in its totality, and humanity, collectively. Global history enters nature; global nature enters humanity; this is something utterly new in philosophy" (p. 4). This is "a time when the old social contract ought to be joined by a natural contract" (p. 20). "Back to nature, then! This means we must add to the exclusively social contract a natural contract of symbiosis and reciprocity in which our relationship to things would set aside mastery and possession in favor of admiring attention, reciprocity, contemplation, and respect; where knowledge would no longer imply property, nor action mastery" (p. 38). We need a natural contract, as much as a social contract. Mountain climbers are harnessed not only to each other but to the rock face. "The group finds itself bound and submitted not only to itself but to the objective world." That is a metaphor for humans bound both to each other and to the natural world. "A natural contract joins the social contract" (p. 104). We need a hermeneutic interlocking of nature and culture. If there is no attention to the natural contract, we will be like the two men in a painting by Goya who are locked in combat with each other, while neglecting the mud into which they are sinking and which can defeat them both (pp 1-2). Modern philosophy has supposed that humans form a social contract and leave the state of nature, as if the human race "casting off from the world, were no longer rooted in anything but its own history" (p. 34). Such philosophy is so humanistic that it becomes locked and lost within a realm of human consciousness and society, free-floating outside the realm of nature. It has the "weakness of thinking `only men,' or men alone. We have not yet set up a scale in which the world is taken into account in the final balance sheet" (p. 37). This will require the natural contract joined with the social contract. "In fact, the Earth speaks to us in terms of forces, bonds, and interactions, and that's enough to make a contract. Each of the partners in symbiosis thus owes, by rights, life to the other, on pain of death" (p. 39). Serres is especially impressed with the globalization of the environmental threat. "Now we must learn and and teach around us the love of the world, of our Earth, which we can henceforth contemplate as a whole" (p. 49). "Today the global power of our new tools is giving us the Earth as a partner, one whom we ceaselessly inform with our movements and energies, and who, in turn, informs us of its global change by the same means. ... We've been living contractually with the Earth for only a little while. A new revolution, in the Copernican sense, for our grandeur and our responsibilities. ... Curiously, it is only in this century that nature has been born, really, before our eyes, at the same time as a humanity bound in real solidarity" (pp. 109-111). "Cast off far enough from Earth, we can finally look at her whole. ... Here is a hazy ball surrounded by turbulence. Planet Earth as satellites photograph her. Whole. ... For the first time, philosophy can say man is transcendent: before his eyes, the whole world is objectifying itself, thrown before him, object, bond, gear, or craft ... the most beautiful sphere" (pp. 120-121). Often cryptic and difficult to read, but frequently insightful and always passionate. This book puts an end to the lament that there is no French environmental philosophy. Serres teaches philosophy at the Sorbonne, and at Stanford University. (v6,#4)

Serres, Michel. The Natural Contract. Review by Patrick Hayden, Environmental Ethics 20(1998):433-36.

Service, Robert F., "'Combat Biology' on the Klamath," Science 300(4 April 2003):36-39. Biologists

charged with protecting endangered species are caught in a battle over water rights; a critical National Academy of Sciences report has exposed them to heavy fire. The Klamath River basin is in southern Oregon and northern California. Issues about how much water is enough for endangered salmon. Also issues about which side to err on when the science is uncertain.

Service, Robert F., "Microbiologists Explore Life's Rich, Hidden Kingdoms," Science 275(21 March, 1997):1740-1742. Microbial biodiversity. Recent studies, using DNA analysis, have found that there is staggering diversity among the microbes, who seem to outdo the insects considerably in their numbers of species. Also microbes may be more endemic to particular areas and microhabitats than previously thought, and more disrupted by pollution and oilspills. (v8,#1)

Service, Robert F. "A Growing Threat Down on the Farm." *Science* Vol. 316, no. 5828 (25 May 2007): 1114-17. Farmers have become dependent on an herbicide called glyphosate (tradename "Roundup") and on crops engineered to resist itso-called "Roundup Ready crops." The herbicide kills all the weeds but the resistant crops grow unaffected by it. Over 50% of all soybeans and about 40% of all corn in the U.S. are modified as Roundup Ready crops. But their weeds are rapidly becoming resistant, and researchers are scrambling for new alternatives. Glyphosate is claimed to be environmentally friendly; it doesn't readily leach into water systems. Instead it latches tightly to soil particles and degrades within weeks into harmless byproducts. Also farmers who use it plow less, with less soil erosion.

Sessions, George, "Postmodernism, Environmental Justice, and the Demise of the Ecology Movement?" Wild Duck Review, Literature and Letters of Northern California, 5th Issue, June/July 1995. (v6,#2)

Sessions, George, "The Age of Ecology," in Resurgence, No. 161, 1993. Deep ecology provides a philosophical basis for the Green movement. (v4,#4)

Sessions, George, "Ecocentrism and the Anthropocentric Detour," Revision 13(1991):109-115. Sessions is preparing an anthology, Deep Ecology for the 21st Century (Boston: Shambala, 1994). Sessions teaches philosophy at Sierra College, Rocklin, California. (v4,#4)

Sessions, George, ed., Deep Ecology in the 21st Century (Boston: Shambhala Publications, 1994). 1994. appr 450 pp., \$20 pb. The anthology is divided into six parts: What Is Deep Ecology? Historical Roots of Deep Ecology; Arne Naess on Deep Ecology and Ecosophy; Deep Ecology and Ecofeminism, Social Ecology, the Greens, and the New Age; Wilderness, the Wild, and Conservation Biology; and Toward the 21st Century and Beyond: Social and Political Implications. Included are 39 articles by 21 authors and extensive bibliographies. This is a major new anthology interpreting deep ecology. Sessions teaches philosophy at Sierra College, Rocklin, CA. (v5,#3)

Sessions, George, "Reinventing Nature: The End of Wilderness? A Response to William Cronon's Uncommon Ground," Wild Duck Review vol. 2, no. 1, November 1995, pp. 13-14. (v6,#4) Also in The Trumpetr 13(no.1, Winter, 1996):33-38.

Sessions, George, ed., Deep Ecology for the 21st Century. Boston: Shambhala Publications, 1995. 488 pages. 39 selections, 13 by Arne Naess. Others: Gary Snyder, Fritjof Capra, Thomas Berry, Dave Foreman, Paul Shepard, John Rodman, Thomas Birch, Donald Worster, Stephan Bodian, Chellis Glendinning, Jack Turner, Delores LaChapelle, Andrew McLaughlin, Del Ivan Janik, Wayland Drew, Richard Langlais, Warwick Fox, Jerry Mander, Ed Grumbine, Wolfgang Sachs. Sessions teaches philosophy at Sierra College, Rocklin, CA, USA. (v6,#2)

Sessions, George, "The Deep Ecology Movement: A Review." Environmental Review 11 (1987):105-

125. As the title indicates, this is a "history" of the literature of the Deep Ecology movement. It is valuable mainly for the extensive notes which list hundreds of primary sources. (Katz, Bibl # 1)

Sessions, George and Bill Devall. "The Development of Natural Resources and the Integrity of Nature." Environmental Ethics 6(1984):293-322. During the twentieth century, John Muir's ideas of "righteous management" were eclipsed by Gifford Pinchot's anthropocentric scientific management ideas concerning the conservation and development of Nature as a human resource. Ecology as a subversive science, however, has now undercut the foundations of this resource conservation and development ideology. Using the philosophical principles of deep ecology, we explore a contemporary version of Muir's "righteous management" by developing the ideas of holistic management and ecosystem rehabilitation. Sessions is in the philosophy department, Sierra College, Rocklin, CA. Devall is in the sociology department, Humboldt University, Arcata, CA. (EE)

Sessions, George, "Deep Ecology in California." To appear in a special California issue of Dialectics and Humanism (Polish International Philosophical Journal), 1990-91. Sessions traces the distinctive development of deep ecology in California, acknowledging important roots outside California (Leopold, the Transcendentalists, Muir in Wisconsin, Naess in Norway, others in Australia). "It would be safe to say that the rebirth of radical ecology in the 1960's was largely a California phenomenon." He closes with California at crisis point. "The ultimate fate of California, in all likelihood, will be decided in the coming decade or two." Copies from George Sessions, Department of Philosophy, Sierra College, Rocklin, CA 95677-3397. (v1,#3)

Sessions, George, "Reply to Rothenberg's and Crowley's Replies to Quick's, Drengson's, Sessions's, and Devall's Replies to Crowley's Report on a Visit with Arne Naess," *Newsletter, International Society for Environmental Ethics*, vol 19, no. 2, Spring/Summer 2008, pp.39-50. "Arne Naess' Complex Legacy," a report on a visit with Arne Naess by Yale undergraduate student Thomas Crowley, was published in the Fall 2006 ISEE Newsletter. In the Winter 2006-2007 ISEE Newsletter, Tim Quick, Alan Drengson, George Sessions, and Bill Devall replied to Crowley's report. In the Fall 2007 ISEE Newsletter, David Rothenberg and Thomas Crowley replied to Quick's, Drengson's, Sessions's, and Devall's replies. The dialogue continues here with a further reply by George Sessions, Sierra College in Rocklin, California. Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

Sessions, George. Review of The Soul of the World. By Conrad Bonifazi. Environmental Ethics 3(1981):275-81.

Sessions, George. "Reinventing Nature? The End of Wilderness?," Wild Earth 6(1996)46. (v8,#1)

Sessions, George. Review of Eco-Philosophy: Designing New Tactics for Living. By Henryk Skolimowski. Environmental Ethics 6(1984):167-74.

Sessions, George. "Postmodernism, Environmental Justice, and the Demise of the Deep Ecology Movement?" Wild Duck Review: Literature and Letters of Northern California, vol. 1, no. 5, June/July 1995, pages 14-16. Sessions reviews some current trends, with particular attention to Michael Zimmerman, Contesting Earth's Future. Zimmerman, now rejecting the Heidegger he earlier followed, has gone too far in holding that all positions are power-positions "contesting Earth's future," each promoting its own interests; he cannot consistently say this and hold that nature in itself has intrinsic value or that the integrity of ecosystems should be preserved. The power position account erodes the intrinsic value account. Deep ecology is not one more power position, among others. Sessions teaches philosophy at Sierra College, Rocklin, CA. For copies, contact: Wild Duck Review, 419 Spring Street, Suite D, Nevada City, CA 95959 USA. (v6,#3)

Sessions, George. "Wildness, Cyborgs, and Our Ecological Future: Reassessing the Deep Ecology Movement," The Trumpeter 22,2, (2006): 121-182 (online) <http://trumpeter.athabascau.ca/>.

In light of the new environmental awakening over global warming and Al Gore's new video, in contrast with the world's scientists and religious leaders, Sessions asks where the new generation of post modernist environmental historians and ecophilosophers (the Neo-Pragmatists) are in this new awakening? In reassessing the deep ecology movement, he critiques John Clark's version of social ecology, the ecofeminism of Val Plumwood and Karen Warren, Baird Callicott's interpretation of Leopold, the deconstruction of wilderness from Guha to Cronon, and Michael Zimmerman's endorsement of Donna Haraway's postmodernist cyborgian technotopian future. He claims that the attempt to establish a cyborgian / nanotechnology / technotopia, as opposed to the protection of a wild Earth, will result in the final sealing of the fate of both humanity and the Earth. Sessions is philosophy emeritus, Sierra College, Rocklin, CA.

Sessions, George. "Political Correctness, Ecological Realities and the Future of the Ecology Movement." Wild Duck Review: Literature and Letters of Northern California, vol. 1, no. 6, September 1995, pp. 10-13. Sessions continues his review of current trends, with particular attention to Gregg Easterbrook, A Moment on the Earth. In his positive account of the environment, Easterbrook selects certain environmental indices that, while perhaps true, ignore other indices that are ecologically more significant. For copies, contact: Wild Duck Review, 419 Spring Street, Suite D, Nevada City, CA 95959 USA. (v6,#3)

Settle, Tom. "Farm Animals' Challenge to Ecological Thinking: Skepticism about the Prospects for an Inclusive Ethics of Health." Ethics and the Environment 5(2000):243-252. (E&E)

Seventeen, "Earth SOS," April 1991. Get ecological. How you can protect the planet. Green behavior for teens, all the way from environmentally safe cosmetics, to actors who support conservation, to a the famous Bentham quotation about animals, "Can they suffer?" (v2,#2)

Sexton, Sarah. "Transnational Corporations and Food," The Ecologist 26(no.6, 1996):256. (v8,#2)

Sexton, Sarah. "A Woman's Work is Never Done", The Ecologist (1979) 26(no. 4,1996):138.

Seyfang, Gill, "Cultivating Carrots and Community: Local Organic Food and Sustainable Consumption," Environmental Values 16(2007): 105-123. This paper examines the social implications of sustainable consumption through an empirical study of a local organic food initiative. It sets out an analytical framework based upon Douglas's Cultural Theory to categorise the range of competing value perspectives on sustainable consumption into 'hierarchical', 'individualistic' and 'egalitarian' worldviews, and considers how these various worldviews might each adopt locally-grown organic food as a sustainable consumption initiative. Tensions between the paradigms are evident when attention is turned to a case study of a local organic food producers' cooperative. Research with both producers and consumers reveals that the values embedded in its practice are both partisan and pluralistic, but are principally 'Egalitarian'. Its interactions with policy regimes and social and economic institutions are examined, to illustrate the value conflicts inherent, and understand the barriers it faces in operation and the institutional factors inhibiting the growth of grassroots 'bottom-up' sustainable food initiatives of this kind. In addition to addressing these barriers, the policy implications of these findings for sustainable consumption policy and practice are discussed. Seyfang is at the centre for Social and Economic Research on the Global Environment, University of East Anglia, Norwich, UK.

Seymour, Mike, "Partnerships to Support Sustainable Development and Conservation: the West-East Pipeline Project, China," Conservation Biology 18(no.3, 2004):613-615. (v. 15, # 3)

Shabecoff, Phillip, A Fierce Green Fire: The American Environmental Movement. New York: Hill and Wang, 1993. 352 pages. Shabecoff covered the environmental beat for the New York Times for 14 years. Historical figures as well as contemporary figures. Shabecoff projects an all inclusive environmentalism capable of achieving real power, primarily through electoral means. He wants to close the gap between the mainstream environmentalist organization and the grassroots groups "whose members comprise an army of millions ready to be mobilized in the war for political power." (v4,#1)

Shafer, Craig L., "The Northern Yellowstone Elk Debate: Policy, Hypothesis, and Implications," Natural Areas Journal 20(no. 4, 2000):342-359. Intervention versus non-intervention in management of the northern Yellowstone National Park elk herd. Historical facts reviewed and the value judgments with which such facts were discovered and interpreted. National park size influences the need for management intervention because of alteration of natural processes outside park boundaries. Is the need for intervention increasing as large spatial scale natural processes are progressively impeded outside the park? A mixture of intervention and nonintervention may be the best approach to keep the park most "natural." Shafer is with the George Wright Society, Hancock, MI. (v.13,#1)

Shafer, Craig L., "A Geography of Hope: Pursuing the Voluntary Preservation of America's National Heritage," Landscape and Urban Planning 66(no. 3, 2004):127-171. A review of the National Natural Landmarks program, administered by the National Park Service, and designed to encourage the voluntary preservation of nationally significant examples of various ecological and geological features. There are today 587 such areas on lands of every ownership category. But the program has suffered from being perceived as a threat to private landowner rights. To provide for significant increase in the program's effectiveness, private landowners should be offered substantial economic incentives for protecting their property's natural values. Shafer is with the George Wright Society, Hancock, MI.

Shafer, Elwood L. and James B. Davis, "Making Decisions about Environmental Management When Conventional Economic Analysis Cannot Be Used," Environmental Management, vol. 13, no. 2 (1989):189-197. A process is described for making comparative valuations of a wide range of environmental management activities when the combined social, economic, managerial, and political benefits of some (but not all) of these activities cannot be adequately described in economic terms and when budgetary constraints do not permit funding of all activities under consideration. The process accounts for subjective judgment and contains a formal rigorous decision strategy that takes the place of intuition when quantitative and qualitative values of environmental activities need to be evaluated. Shafer is in the Department of Recreation and Parks, Pennsylvania State University. Davis is at the Pacific Southwest Forest and Range Experiment Station, Riverside, CA. (v2,#2)

Shaffer, ML; Casey, F; Scott, JM, "Noah's Options: Initial Cost Estimates of a National System of Habitat Conservation Areas in the United States," Bioscience 52(no.5, 2002):439-443. (v.13, #3)

Shafqat, S, "Review of: Tussie, Diana, ed. The Environment and International Trade Negotiations: Developing Country," Society and Natural Resources 14(no.8, 2001): 732-33. (v.13,#2)

Shah, A.M., B.S. Baviskar and E.A. Ramaswamy, eds. Development and Ethnicity. Reviewed by Gisli Palsson. Environmental Values 8(1999):409. (EV)

Shah, Anup. Ecology and the Crisis of Over Population: Future Prospects for Global Sustainability. Cheltenham: Edward Elgar, 1998. Review by Carl McDaniel, Environmental Values 10(2001):265. (EV)

Shah, NJ, "Eradication of alien predators in the Seychelles: an example of conservation action on tropical islands," Biodiversity and Conservation 10(no. 7, 2001):1219-1220. (v.13,#1)

Shah, S., "Where Have All the Tigers Gone?," Ecologist 31(no.7, 2001): 52. (v.13,#2)

Shaikh, Sobia Shaheen, "Ideas," Environments 28(no.2, 2000): 77-. Conceptualizing Linked Social and Ecological Injustice. (v.12,#3)

Shaiko, Ronald G., "Religion, Politics, and Environmental Concern," Social Science Quarterly 68(1987):244-262. (v8,#3)

Shaltout, K.H., El-Halawany, E.F., El-Kady, H.F., "Consequences of Protection From Grazing on Diversity and Abundance of the Coastal Lowland Vegetation in Eastern Saudi Arabia", Biodiversity and Conservation 5(No.1, 1996):27- . (v7,#1)

Shand, Hope, "Terminator Seeds: Monsanto Moves to Tighten Its Grip on Global Agriculture," Multinational Monitor, November 1998, pp. 13-16. Seeds that work once and produce plants that produce only sterile seeds, forcing farmers worldwide to return to Monsanto to purchase new seeds each season. Critics call them terminator seeds; Monsanto says it is a "technology protection system." Such seeds are some time off but under development. Monsanto, now the world's largest seed company, says farmers will not buy such seeds unless it is to their advantage; they will just continue to use the old ones. Farmers have been saving seeds for next year for 12,000 years, selecting for better crops. Various hybrids have been in use for many decades that are sterile, although the hybrids have increased vigor and crop yield. Critics say the farmers will get hooked on the terminator seeds. Others worry about environmental spillover. Monsanto now advertises Monsanto's Law: The ability to identify and use genetic information is doubling every 12 to 24 months--analogously to Moore's law (predicted in 1965) that the computing power of computer chips would double every 18-24 months. (v.10,#1)

Shand, Hope, "There is a Conflict Between Intellectual Property Rights and the Rights of Farmers in Developing Countries", Journal of Agricultural and Environmental Ethics 4(1991):131-142. In a debate: Is there a conflict between intellectual property rights and the rights of farmers in developing countries?

Shaner David Edward, and R. Shannon Duval, "Conservation Ethics and the Japanese Intellectual Tradition," Environmental Ethics 11(1989):197-214. Well-documented article discussing the connections between American philosophy, Japanese philosophy, and a holistic environmental ethic. The crucial concept is the cultivation of a sensitivity to nature; this idea is traced through the Zen philosophy of Nishida Kitaro, the radical empiricism of William James, and the natural science methodology of Louis Agassiz. (Katz, Bibl # 2)

Shaner, David Edward, and R. Shannon Duval. "Conservation Ethics and the Japanese Intellectual Tradition." Environmental Ethics 11(1989):197-214. A systematic philosophy that presupposes an ecocentric world view, rather than a homocentric or egocentric world view, can be a viable resource for investigating issues in environmental philosophy and conservation ethics. Generally speaking, the Japanese philosophical and religious tradition represents a commitment to ecocentrism. This philosophical orientation is in concert with the world view of many naturalists. We explore one example of ecocentrism by unveiling the crosscultural connection between the naturalistic philosophy of Louis Agassiz, a nineteenth-century French-American biologist, and the early writings of Nishida Kitaro, a twentiethcentury Japanese philosopher. We suggest that the central player in understanding the ecocentric connection between Agassiz and Nishida is American philosopher/psychologist William James. James was once a student of Agassiz and his writings influenced Nishida's early work. Related issues concerning conservation ethics and the Japanese intellectual tradition are also addressed. Shaner is in the philosophy department, Furman University, Greenville, SC. Duval is a Dana Foundation Research and Teaching Assistant at Furman University, Greenville, SC. (EE)

Shanley, P., and L. Luz, "The Impacts of forest Degradation On Medicinal Plant Use and Implications for

Health Care in Eastern Amazonia," Bioscience 53(no. 6, 2003). (v 14, #3)

Shannon, Daniel E., "A Criticism of a False Idealism and Onward to Hegel: Objections to the Gaia Hypothesis," The Owl of Minerva 27(no. 1, Fall 1995):19-36. An argument against the Gaia hypothesis as formulated by James Lovelock, who offers a scientific explanation for it, and by Peter Russell, who offers an idealistic system in order to accommodate the theory (in The Awakening Earth: The Global Brain, Routledge, 1982). An argument for an alternative account, one which Hegel presented in his Philosophy of Nature, which Shannon calls the "ecological hypothesis." If the Gaia hypothesis is taken as the claim that the Earth is somehow alive, the answer is decidedly no. But a more modest proposal is still possible that views the Earth as a complexity of processes that engender life. Hegel supports a theory that offers such a proposal. These are fundamental claims about the planet, but in Hegel's system, they involved an essential insight into nature as a whole, showing how the Earth yields life, though it is not itself alive. Shannon is at Depauw University. (v7,#1)

Shantz, J, "Green Syndicalism: An Alternative Red-Green Vision," Environmental Politics 11(no.4, 2002): 21-41.

Shantz, J, "Solidarity in the Woods: Redwood Summer and Alliances Among Radical Ecology and Timber Workers", Environments 30(no.3, 2002):79-94.

Shaoul, Jean, "Mad Cow Disease: The Meat Industry is Out of Control," The Ecologist 27 (Sept. 1997):182-. Both the UK Conservative and the New Labour governments have been more concerned with defending the interests of a powerful and inherently unhealthy meat industry than with protecting the health of the British public. (v.8,#4)

Shapiro, J. A. (James A.), "A 21st Century View of Evolution," Journal of Biological Physics 28(2002):745-764. In contrast to the Darwinian view of evolution as a random walk, undirected mutations and contingent evolution, Shapiro and other complex systems theorists are now interpreting these processes as a form of natural genetic engineering. Genomes are hierarchically organized as systems assembled from DNA modules. There are various routines for re-arranging these genetic modules and using other mobile genetic elements, often in times of stress, that are better seen as natural genetic engineering than as a random walk. Many of the enzymes that geneticists now use to cut and splice and re-arrange genes were already doing this for millennia in the natural history of the genome. A similar article is James A. Shapiro: "A 21st Century View of Evolution: Genome System Architecture, Repetitive DNA, and Natural Genetic Engineering," Gene 345(2005):91-100. "These developments ... suggest some new ways of thinking about genomes as sophisticated informatic storage systems and about evolution as a systems engineering process" (Abstract, p. 91). Shapiro is in biochemistry and molecular biology, University of Chicago.

Shapland, Greg. 1997. Rivers of Discord: International Water Disputes in the Middle East. New York: St. Martin's Press, 1997. (v.9,#3)

Sharma, Narendra P., Managing the World's Forests: Looking for Balance between Conservation and Development. Kendall/Hunt Publishing Co., 1992. By distorting the true cost of forest resources, perverse public policies have encouraged short-term exploitation of forests. Sharma is an economist at the World Bank and an adjunct professor in the School of the Environment, Duke University. (v3,#3)

Sharma, Shalendra. "Building Effective International Environmental Regimes: The Case of the Global Environment Facility," The Journal of Environment and Development 5(no.1, 1996):73. (v8,#2)

Sharma, Subrat, Hem C. Rikhari, and Palni, Lok Man S. "Conservation of Natural Resources Through

Religion: A Case Study from Central Himalaya." Society & Natural Resources 12(No. 6, Sept. 1999):599- . (v10,#4)

Sharp, Liz, "Local Policy for the Global Environment: In Search of a New Perspective," Environmental Politics 8 (No. 4, 1999 Winter): 137- . (v.11,#4)

Sharpe, R., The cruel deception. Wellingborough, Northants, Thorsons, UK, 1988.

Sharpe Studies in Environmental Ethics is a new series of books published by M. E. Sharpe, and designed to provide contemporary introductions to classic problems, current developments, and emerging domains of inquiry. The series editor is James E. Huchingson, Dept. of Religious Studies, Florida International University, Miami, FL 33199. (v8,#1)

Sharpe, Virginia A., Norton, Bryan, Donnelley, Strachan. Wolves and Human Communities: Biology, Politics, and Ethics. 280 pages. Cloth \$65. Paper \$30. Contributors address the complex ethical, biological, legal, and political concerns surrounding wolf reintroduction. The social, cultural, and ecological values that come into play in the debate. (v.11,#4)

Sharpe, Virginia A., Bryan Norton, and Strachan Donnelley, eds. Wolves and Human Communities: Biology, Politics, and Ethics. Reviewed in Environmental Ethics 25(2003):207-210. (EE)

Shaver, Gaius R., Canadell, Josep, and Rustad, Lindsey, "Global Warming and Terrestrial Ecosystems: A Conceptual Framework for Analysis," Bioscience 50(no. 10, Oct. 1, 2000):871- .

Shaw, Bill. "A Virtue Ethics Approach to Aldo Leopold's Land Ethic." Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Shaw, Bill. "A Virtue Ethics Approach to Aldo Leopold's Land Ethic." Environmental Ethics 19(1997):53-67. I examine "The Land Ethic" by Aldo Leopold from a virtue ethics perspective. Following Leopold, I posit the "good" as the "integrity, stability, and beauty" of biotic communities and then develop "land virtues" that foster this good. I recommend and defend three land virtues: respect (or ecological sensitivity), prudence, and practical judgment. Shaw is in the Department of Management Science and Information Systems, University of Texas, Austin. (EE)

Shaw, Derek, Owning the Natural World, 1996, University of Colorado, Boulder, Ph.D. thesis in philosophy. 263 pages. Philosophical reflections on property explain how our property institutions enable us to achieve valued goals, such as maximizing satisfied preferences. Many philosophers assume that the normative conclusions of property theory are universally valid. This is mistaken. Liberal philosophical justifications of private property are based on values and intuitions that are created within the context of private property-based societies. Our relations to the natural world, which are often assumed to be only mediated by property, are in fact determined and limited by the "nature" of our property regime. The ownership conventions (and land rights) of many native peoples have been overlooked and/or destroyed. Property theory can never be used to justify the imposition of Western-style ownership conventions onto native societies. Broader perspectives on property result from investigating the phenomenology and genealogy of property. The advisor was James Nickel. (v.10,#1)

Shaw, J., "Review of: Robbins, William G., and Foster, James C., Land in the American West: Private Claims and the Common Good (Seattle: University of Washington Press, 2000)," Land Use Policy 20(no. 3, 2003): 291-292.

Shaw, J., "Irrigated Eden: The Making of an Agricultural Landscape in the American West," Land Use Policy 18(no.ER4, 2001): 365-66. (v.13,#2)

Shaw, Marvin C., Nature's Grace: Essays on H. N. Wieman's Finite Theism. Reviewed by Emanuel S. Goldsmith. American Journal of Theology and Philosophy 18(no. 1, 1997):97-100.

Shaw, R. Paul, "Warfare, National Sovereignty, and the Environment," Environmental Conservation 20 (no. 2, Summer 1993):113-121. A sobering article. Armed conflict does enormous damage to the environment, which may take decades and centuries to recover, if recovery is possible at all. Combined shooting and silent wars cripple the capacity of governments to raise funds for environmental investments and undercut prospects for sustainable development, especially in Third World countries. The enduring relationship between war proneness and nation-building shackles efforts by the international community to protect the global commons. Unfortunately, this runs deep in human nature. The evolutionary process produced, in the interests of ethnic self-defense, a human disposition to nationalism that is largely incompatible with protecting the global commons. For ninety-nine percent of our heritage, protecting the global environment was not a perceived problem. There is some hope, however, in the concept of a homeland, as distinct from that of a nation state, toward which humans do have an innate disposition to care. Perhaps we can come to see Earth as a homeland, or, more realistically, to see how global trends may affect our homelands adversely. This could help to enable diverse peoples to act in concert globally and to protect their environments regionally. Shaw is an economist with the World Bank. (v5,#4)

She, Zhengrong, "Tuoshan shengtai lunlixue di wenhua jing yu (Extend the Domain of Ecological Ethics)," Zi Ran Bian Lun Fa Yet Jiu (Studies in Dialectics of Nature) 15(no. 2, February, 1999):56-60. ISSN 1000-8934. (China). (v.10,#1)

She Zhengrong. "Moral Objects and Justice Orientation in Environmental Ethics" *Modern Philosophy* No. 4 (2003): 76-79.

She Zhengrong. *An Exploration and Reconstruction of the Chinese Tradition of Ecological Ethics*. Beijing: Renmin Press, 2002.

She Zhengrong. "Why Humans Have Duties to Nature." *Jiangnan Forum* No. 10 (2007): 42-44.

She Zhengrong. "How to Derive Environmental Ethics from Axiology." *Guangdong Social Sciences* No. 5. (2003): 24-28.

She Zhengyong, "Deepening the Cultural Dimension of Eco-ethics," Ziran Bianzhengfa Yanjiu (Studies in Dialectics of Nature) 2(1999):56-60. In Chinese. (v.11,#1)

Shea, Nancy Huffman, The Status of Ecophilosophy and the Ideology of Nature. Ph.D. thesis, University of Massachusetts, 1991. Ecophilosophy is an attempt to render a new philosophy of nature, generated by the need to liberate nature from the inherently domineering disposition of humankind. Although I am sympathetic to this effort, I believe that the current ambiguity of its content (who or what is to survive) carries with it the potentiality for new forms of oppression. I argue that ecophilosophy suffers from a kind of Habermasian self-deception, taking on a vague concept of nature that deceptively appears to do the philosophical work of healing the epistemological gap between nature and humans. My reconstruction unifies this loosely-defined vision along the lines of an equivocal use of two key concepts, the domination of nature and nature itself, revealing the potentially subversive character of its implicitly universalist philosophy of nature.

Ecophilosophers, rather than distinguishing themselves, fail to improve upon Francis Bacon's suggestion that attention to nature will liberate us. Their satisfaction with ecological solutions indicates that they miss the essential ideological consequence of the modern project: the domination by some

humans over others has been covered over by a self-deceptive belief in the liberating character of scientific methodology. By arguing for the emancipatory capacity of ecology, they get themselves into a Marcusean-like bind, advocating this new science while at the same time rejecting scientific rationality as a pivotal component of their notion of the domination of nature. Because of this they are forced to argue that ecology is qualitatively different, offering a new kind of rationality that contains the necessary ingredients for radically changing society.

Ecophilosophers must reconsider the epistemologically naive and ideologically negative repercussions of this position as I demonstrate with an analysis of the potentially repressive relationships that exist between fourth world cultures and the environmental community. I conclude by subjecting the Habermasian universalist framework to revision as indicated by the possibilities of a new eco-vision, emerging from the contextual episteme of a reworked ecofeminist perspective. The advisor was Robert Paul Wolff. Shea is now director of the Murie Center in Grand Teton National Park. (v10,#4)

Shea, William R. and Beat Sitter, eds., Scientists and their Responsibility. Canton, MA: Watson Publishing International, 1989. Hardbound. 348 pages. The first section is "Human Responsibility and the Natural Order," and includes (among others) the following papers:

Jürgen Mittelstrass, "Ethics of Nature" (mostly our responsibilities toward nature as a whole with reference to the dependence of future generations on an intact nature); Kristin Shrader-Frechette, "Ecological Theories and Ethical Imperatives: Can Ecology Provide a Scientific Justification for the Ethics of Environmental Protection?" (anticipating the argument of Shrader-Frechette and McCoy, Method in Ecology); Beat Sitter, "In Defence of Nonanthropocentrism in Environmental Ethics" (seven ways of using "anthropocentrism," five aspects of "nature"; four principles for environmental ethics; there is an obligation to respect all beings, with a reply to Shrader-Frechette). Shea is professor of history and philosophy of science at McGill University, Montreal. Beat Sitter (now Sitter-Liver) is Secretary General of the Swiss Academy of the Humanities and the Swiss Academy of Sciences. (v4,#4)

Shea, William R. and Beat Sitter, eds., Scientists and Their Responsibility. Canton, MA: Watson, 1989. This collection has several chapters dealing with environmental ethics. Kristin Shrader-Frechette, "Ecological Theories and Ethical Imperatives," pp. 73-104, argues that the science of ecology will not provide the necessary support for either a holistic environmental ethic nor a "balance of nature" environmental ethic. Beat Sitter, "In Defense of Nonanthropocentrism in Environmental Ethics," pp. 105-145, answers Shrader-Frechette in a wide-ranging defense of nonanthropocentrism, including the claim that the weakness of ecological science insures its ethical relevance (p. 126). Also chapters by Robert K. Colwell, "Natural and Unnatural History: Biological Diversity and Genetic Engineering," pp. 1-40, and Jürgen Mittelstrass, "Ethics of Nature," pp. 41-57. (Katz, Bibl # 2)

Sheaffer, J. R., Mullan, J. D. and Hinch, N. B., "Encouraging Wise Use of Floodplains with Market-Based Incentives," Environment 44(no.1, 2002): 32-43. (v.13,#2)

Sheail, John, "Ecology - A science put to use," Biology and Conservation 9(2000):1099-1113. Abstract. There is no lack of pretext for reviewing historically how ecologists have striven to gain the respect of scholars in their own and other fields, and to demonstrate the wider public-utility of their science. If self-serving, in terms of securing the scope and resources required to advance their studies in ecology, such activities have also been encouraged; and indeed commissioned, in the belief that a greater awareness and understanding of the natural world is essential for human wellbeing. Illustrative material is drawn from the British experience. Key words: government research, nature conservation, plant and animal ecology, research councils, United Kingdom. Sheail is at the Institute of Terrestrial Ecology, (Natural Environment Research Council), Huntingdon, Cambridgeshire, UK. (v.13,#1)

Sheail, John. "Ecology--A Science Put to Use," Biodiversity and Conservation 9(no. 8, 2000):1099-1113. Abstract. There is no lack of pretext for reviewing historically how ecologists have striven to gain the respect of scholars in their own and other fields, and to demonstrate the wider public-utility of their

science. If self-serving, in terms of securing the scope and resources required to advance their studies in ecology, such activities have also been encouraged, and indeed commissioned, in the belief that a greater awareness and understanding of the natural world is essential for human wellbeing. Illustrative material is drawn from the British experience. Key words: government research, nature conservation, plant and animal ecology, research councils, United Kingdom.

Sheard, Murray. "Sustainability and Property Rights in Environmental Resources." *Environmental Ethics* 29(2007):389-01. How do we weigh the claims of current and future people when current exercise of rights to property conflict with sustainability? Are property rights over these resources more limited due to the claims of posterity? Lockean property rights allow no right to degrade resources when doing so threatens the basic needs of future generations. A stewardship conception of property rights can be developed, providing a justification for sustainable management legislation even when such law conflicts with the rights an owner would have, were the resource under more full-blown ownership. A protection indicator can be developed that is sensitive to a range of empirical factors such as scarcity, renewability, importance of the resource, and seriousness and reversibility of potential harm. The stewardship conception of rights over environmental resources can be applied in policy settings, for example, in decisions over emissions limits and land-use patterns. Such harnessing of Lockean intuitions to argue for environmental protection is in sharp contrast to Locke's usual employment by those keen to show that such protection violates owners' rights. (EE)

Shearer, C. Russell H. "Protecting Audit Confidentiality", Natural Resources & Environment 11(no.2, 1996):50.

Shearman, Richard, "Can We Be 'Friends of the Earth'?" Environmental Values 14(2005): 503-512. Reasons for protecting biodiversity are usually defined in terms of its instrumentality. Although there may be a number of ways to seek an alternative non-anthropocentric approach, I have chosen to develop an Aristotelian response that draws upon his conception of friendship and self-love. In doing so, I argue that a person living according to moral virtue will recognise that the nonhuman world should be valued and thus protected (at least in part) for its own sake. Shearman is in science, technology, and society, Rochester Institute of Technology, Rochester, NY. (EV)

Shearman, Richard, "The Meaning and Ethics of Sustainability," Environmental Management 14(1990):1-8. Some have argued that the meaning of sustainability varies according to context. Shearman disputes this. It is not the meaning of sustainability that changes but our understanding of the context itself. Contradictions arise when conceiving each context in terms of sustainability. We should be concerned not with the meaning of sustainability but with the implications of sustainability as they affect the status quo. We must be prepared to answer the question: Why is sustainability desirable. This approach is applied to ecologically sustainable development. Shearman is in the program in Environmental Science, State University of New York, Syracuse. (v2,#1)

Sheasby, Walt Contreras. Extended book review essay on Joel Kovel, "The Enemy of Nature: The End of Capitalism or the End of the World", Organization and Environment, 15, (No. 4, 2002): 485-489. Sheasby is in sociology at the University of Phoenix, Southern California.

Sheehan, John F. "Acid Rain Still a Scourge in Adirondacks." Wild Earth 6, no.1 (1996): 34. (v7, #3)

Sheehan, Kathryn and Mary Waidner, Earth Child: Games, Stories, Activities, Experiments and Ideas About Living Lightly on Planet Earth. 328 pages. \$ 16.95. With an extensive bibliography of other sources. Council Oak Books, 1350 East 15th St., Tulsa, OK 74120. Phone: 800-247-8850. (v5,#3)

Shelden, K. E. W., De Master, D. P. , Rugh, D. J. and Olson, A. M., "Developing Classification Criteria under the U.S. Endangered Species Act: Bowhead Whales As," Conservation Biology 15(no.5, 2001):

1300-07. (v.13,#2)

Sheldon, J. Wood, Balick, M.J., Laird, S. Medicinal Plants: Can Utilization and Conservation Coexist? Bronx, NY: The New York Botanical Garden, 1997. \$12.95 paper. Several medicinal plant species, their value to traditional and contemporary medicine, and how over-harvesting of these plants impacts natural and human forest communities. An account of how the herbal and pharmaceutical industries have discovered and used medicinal plants the impact of this on forest communities. (v7,#4)

Sheldon, Joseph K., Rediscovery of Creation: A Bibliographical Study of the Church's Response to the Environmental Crisis. Metuchen, N. J., American Theological Library Association and Scarecrow Press, 1992. 300 pages. \$ 35.00. There are 1,700 references, dealing with religion and the environment, also ecofeminism, ecojustice, economics, wilderness, biotechnology. There is a long introductory essay, beginning with the 1967 attack by Lynn White and following the churches in their response. There are a number of typographical errors. (v3,#3)

Sheldrake, Rupert, The Rebirth of Nature: The Greening of Science and God (New York: Bantam Books, 1991). \$ 21.95. 260 pages. An iconoclastic scientist takes a look at the regenerative power of nature and offers his own controversial theory of a living Earth, Gaia, that is far from its end. Sheldrake also takes a religious turn. After several years in India, Sheldrake reports, "Much to my surprise, I found myself being drawn back to Christianity." Nor does he mind including many New Age ideas. Sheldrake is a maverick biochemist and cell biologist at Cambridge University and sometime philosophy student at Harvard University. (v2,#1)

Sheldrake, Rupert, The Rebirth of Nature: The Greening of Science and God. London: Rider, 1990, 1991. An imprint of Random Century Group, Ltd, 20 Vauxhall Bridge Road, London SW1V 2SA, and available in several other nations. Our earlier ancestors took it for granted that the world was "alive," but the official view of nature as a mechanistic, inanimate storehouse of riches and resources to be exploited for human gain has dominated for the past several hundred years and brought with it unprecedented abuse of the living world. Now there are new developments in science that make such a viewpoint no longer valid. We are on the threshold of a new understanding of nature in which traditional religious wisdom, personal experience, and scientific insight can be mutually enriching, and produce a society in which humans are in harmony with living nature. (v3,#3)

Shellenberger, Michael and Ted Nordhaus, "The Death of Environmentalism: Global Warming Politics in a Post-Environmental World." Breakthrough Institute, 2005. Online: <http://thebreakthrough.org/images/Death%5Fof%5FEnvironmentalism.pdf>. Claims vociferously that old-time environmentalism--a la Sierra Club, Wilderness Society, Audubon Society--is dead, because it became a special interest group, with narrow focus. Meanwhile issues have become global, comprehensive, with activities in government, society, commerce thoroughly merged with concerns about nature, best illustrated in global warming. Much of the booklet is based on interviews with 25 of the environmental communities' top leaders. "Modern environmentalism is no longer capable of dealing with the world's most serious ecological crisis." "Not one of America's environmental leaders is articulating a vision of the future commensurate with the magnitude of the crisis." (from the Introduction). Shellenberger is with the Breakthrough Institute. Nordhaus is with Evans McDonough Company.

Shen Litian, "From anthropocentrism to open environmental ethics", Science, Technology and Dialectics, 2001(5)

Shepard, Lyn. "Environmentalists 'Davids' Oppose Goliath Dam Projects." The Christian Science Monitor, vol. 89, 27 Feb. 1997, p. 7.

Shepard, Paul, and McKinley, Daniel, The Subversive Science: Essays Toward an Ecology of Man. Boston: Houghton Mifflin, 1969.

Shepard, Paul, The Tender Carnivore and the Sacred Game. New York: Scribners, 1973).

Shepard, Paul, Man in the Landscape: A Historic View of the Esthetics of Nature. College Station, TX: Texas A&M Press, 1991. 336 pages. \$ 24.50. 2nd edition. The first was in 1967. The traditions created from landscape painting, literature, gardening, and the notion of paradise, reconciled in an ecological perspective. "We may come to see the landscape as the story of our being. It represents the idea of a context once described as the ground of a gestalt in which being alive and being human is the figure. But that metaphor relies on a static contrast or opposition. New and better metaphors are emerging. To this creativity, Man in the Landscape is rededicated" (p. xxviii). (v6,#4)

Shepard, Paul (1925-1996), Nature and Madness, with foreword by C. I. Rawlins. The Tender Carnivore and the Sacred Game, with foreword by George Sessions. Thinking Animals: Animals and the Development of Human Intelligence, with foreword by Max Oelschlaeger. All reprinted in paperback, 1998, by the University of Georgia Press, Athens, GA. Shepard was professor of natural philosophy and human ecology at Claremont College, Claremont Graduate University, and Pitzer College for more than twenty years. (v9,#1)

Shepard, Paul, The Only World We've Got. San Francisco: Sierra Club Books, 1995. Shepard, who died in 1966, was a noted human ecologist who taught at Dartmouth University and at Pitzer College, Claremont, CA, where he held the Avery Chair in Human Ecology. A critical assessment of his work is Oelschlaeger, Max, ed., The Company of Others: Essays in Celebration of Paul Shepard (Durango, CO: Kivaki Press, 1995).

Shepard, Paul and McKinley, Daniel, Environ/mental: Essays on the Planet as a Home. Boston: Houghton Mifflin, 1971.

Shepard, Paul, Thinking Animals: Animals and the Development of Human Intelligence. New York: Viking Press, 1978.

Shepard, Paul, The Others: How Animals Made Us Human. Washington, DC: Island Press, 1995. 357 pages. \$ 24.95. "We are space-needing, wild-country, Pleistocene beings, trapped in overdense numbers in devastated, simplified ecosystems. We project our problems onto mythic forms of barbarism. Whereas the sanctity of nonhuman life was a normal part of small-scale societies for thousands of years, the 'world religions' with their messianic, human-centered, and otherworldly emphasis, trampled those traditions and now is beginning to realize what it lost: sensitivity to human membership in natural communities and affirmation of and compliance with the biological framework of life." Concerning the human relation with animals, neither "logic nor charity can deal with what is, beyond pets and chicken factories, a mystery and an ecology: the ambiguity of life living on death, the spiritual nature of nonhuman life, traditions of human membership in natural communities embedded in place and ancestry. Earth history places us among the animals, as one of them, in food chains and other symbioses which we do not invent, but inherit, and which set our limitations among the Others."

Shepard, Paul, and Sanders, Barry, The Sacred Paw: The Bear in Nature, Myth and Literature. New York: Viking Press, 1985.

Shepard, Paul. Nature and Madness. San Francisco: Sierra Club Books, 1982.

Shepard, Paul. Traces of an Omnivore. Washington, D.C.: Island Press, 1996. 307 pages. \$24.95 cloth.

Countering the relativist, the skeptic, and the cynic, Shepard argues for a deeper appreciation of "primitive life". (v7, #3)

Shepard, W. Bruce, "Seeing the Forest for the Trees: 'New Perspectives' in the Forest Service" Renewable Resources Journal, Summer 1990. The USDA Forest Service, in the face of mounting criticism from both without and within, has recently announced a "New Perspectives" program. Earlier, the Forest Service had believed that rational management and scientific expertise could replace politics but when asking how and for whom the forests ought to be managed "answers to those questions come not from science but from values and interests." "New perspectives" "goes against the grain of foresters who are comfortable with questions that can be answered on the basis of 'fact,' but who are uncomfortable with questions that can only be answered by reference to values and interests. (v1,#4)

Shepherdson, David J., Mellen, Jill D. Hutchins, Michael, eds. Second Nature: Environmental Enrichment for Captive Animals. Washington, D.C.: Smithsonian Institution Press, 1997. 336 pp. \$32.50. Moving beyond the usual studies of primates, contributors argue that whether an animal forages in the wild or plays computer games in captivity, the satisfaction its activity provides--rather than the activity itself--determines its level of physical and psychological well-being. (v8,#3)

Sheppard, Hale E., "Native Forest Protection in Chile: The Inadequacies of the Recent Environmental Framework Law and Relevant Multilateral Instruments," Journal of Environmental Law and Litigation 14 (No. 1, 1999): 225- . (v.11,#4)

Sheppard, James, Metropolitan Environmental Ethics: Toward Flourishing Human and Ecological Communities, Ph.D. thesis, Department of Philosophy, SUNY Binghamton, 2002. The dissertation is the first comprehensive argument for an environmental ethic extended to cover cities and urban areas. The thesis was directed by Andrew Light (Applied Philosophy, NYU) and the committee included Dale Jamieson (Environmental Studies and Philosophy, Carleton), Bill Lawson (Philosophy, Michigan State), and Max Pensky (Philosophy, Binghamton). Sheppard begins a new tenure track position as Assistant Professor of Philosophy at the University of Missouri at Kansas City in July 2002. (v.13,#1)

Sheppard, James W. "Overcoming Obstacles to Sustainability: Can Liberal Democracy Help?", Organization and Environment, 16, (No. 2, 2003): 248-54. An extended book review essay on John Barry and Marcel Wissenburg's edited essay compilation Sustaining Liberal Democracy: Ecological Challenges and Opportunities. Sheppard is assistant professor in philosophy at the University of Missouri-Kansas City, specialising in environmental ethics and policy, urban theory and pragmatism, as well as being a member of the University of Missouri-Kansas City's Centre for the City Urban Taskforce.

Sheppard S.R.J.; Achiam C.; DEon R.G., "Aesthetics: Are We Neglecting a Critical Issue in Certification for Sustainable Forest Management?," Journal of Forestry 102(no.5, July/August 2004):6-11(6). (v. 15, # 3)

Sherbinin, Alex. "Human Security and Fertility: The Case of Haiti," The Journal of Environment and Development 5(no.1, 1996):28. (v8,#2)

Sherkat, Darren E., and Christopher G. Ellison. "Structuring the Religion-Environment Connection: Identifying Religious Influences on Environmental Concern and Activism." *Journal for the Scientific Study of Religion* Vol. 46, no. 1 (2007): 71-85. Recent research on the connection between religion and environmental concern and activism has led to divergent conclusions, with some studies finding a negative effect of religious factors, and others finding no influence or a positive effect. Using a conceptual apparatus of structuration theory, we explain how these divergent findings might be reconciled. We examine data from the 1993 General Social Survey to elaborate how religious affiliation,

participation, and beliefs influence environmental concern and private and political environmental activism.

Sherlock, Kirsty, Review of: Kasemir, Bernd, Jull Jager, Carlo C. Jaeger and Matthew T. Gardners, eds., Public Participation in Sustainability Science: A Handbook. Environmental Values 13(2004):415-417. (EV)

Sherlock, Richard, and Morrey, John D., eds., Ethical Issues in Biotechnology. Lanham, MD: Rowman and Littlefield, 2002. With a general introduction to moral theory, the basics of genetics, and the science of biotechnology. Sections reviewing specific moral issues. Case studies. Readings by scientists, philosophers, government regulators, lawyers, and religious leaders. Sherlock is in philosophy, Morrey in animal, dairy, and veterinary sciences at Utah State University, and the two team teach an undergraduate course in ethical issues in biotechnology. (v.13,#4)

Sherman, Kenneth, Lewis M. Alexander, and Barry D. Gold, eds., Large Marine Ecosystems (Washington, DC: American Association for the Advancement of Science, 1990). 242 pages, \$ 39.95. Concepts in marine ecology, with implications for conservation. (v2,#1)

Sherman, Thomas Fairchild. A Place on the Glacial Till: Time, Land, and Nature Within an American Town. New York: Oxford University Press, 1996. 244pp. \$22. Sherman writes about the history of the life and land around his long-time home in Oberlin, Ohio, with the message that all time and nature abide within the rocks and soil, with connections, beauty, and meaning as deep as history and as broad as human understanding. (v8,#1)

Shermer, Steven D., "The Efficiency of Private Participation in Regulating and Enforcing the Federal Pollution Control Laws: A Model for Citizen Involvement," Journal of Environmental Law and Litigation 14(no.2, 1999):461- . (EE v.12,#1)

Sherry, C. J., Animal rights. Santa Barbara, CA: ABC-Clio, Inc., 1995.

Sherry, E; Myers, H, "Traditional Environmental Knowledge in Practice," Society and Natural Resources 15(no.4, 2002):345-358. (v.13, #3)

Sherry, Patrick, Spirit and Beauty: An Introduction to Theological Aesthetics. London, SCM Press, 2002 (originally published 1992). Includes but is not limited to beauty in nature. Sherry is in philosophical theology, Lancaster University, UK. (v.13,#2)

Shi Yuanbo. "The Basis of Being of Theory of Right of NatureAn Analysis of the View of Heidegger's Ecological Ethics." *The Northern Forum* No. 5 (2006): 32-35.

Shields, Deborah J., and E. T. Bartlett, "Applicability of Montreal Process Criterion 6 - Long-term Socio-economic benefits - to Rangeland Sustainability," International Journal of Sustainable Development and World Ecology 9(no 2, 2002):95-120. Following the UNCED Statement of Forest Principles and Agenda 21, there was formed an international effort, the Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temporal and Boreal Forests, known as the Montreal Process. Criterion 6 calls for the long-term sustainability of social and economic benefits. Shields and Bartlett apply this criterion to rangelands, in addition to forests. They develop some 19 indicators of rangeland condition and benefits--social, economic, ecological, cultural, and spiritual. They discuss measurement of these benefits, notice that some are more easily measured than others, but those that escape quantification may nonetheless be quite significant. Numerous concrete examples of a broad range of rangeland benefits, and suggestions for their conservation. Shields is at the Rocky Mountain

Research Station, USDA Forest Service, Fort Collins, CO. Bartlett is in Rangeland Ecosystem Science, Colorado State University, Fort Collins.

Shiell, L., "Equity and Efficiency in International Markets for Pollution Permits," Journal of Environmental Economics and Management 46(no. 1, 2003): 38-51. (v 14, #3)

Shifferd, KD, "Hal K. Rothman, Saving the Planet: The American Response to the Environment in the Twentieth Century," Environmental History 6(no.2, 2001):312- (v.12,#4)

Shillinger, Kurt. "Property Rights Becomes Hot Battle." The Christian Science Monitor, 2 March 1995, p. 4. Concerns "takings" and includes an interesting case, the John and Josephine Bronczyk Farm, in Minnesota. (v6,#1)

Shindler, Bruce, Steel, Brent, List, Peter. "Public Judgments of Adaptive Management: A Response from Forest Communities." Journal of Forestry 94(Jun.1996):4. (v7,#2)

Shindler, Bruce, Neburka, Julie. "Public Participation in Forest Planning: Eight Attributes of Success," Journal of Forestry 95(1997):17. (v8,#1)

Shine, C., N. Williams, et al., A Guide to Designing Legal and Institutional Frameworks on Alien Invasive Species. Gland, Switzerland: World Conservation Union (IUCN), 2000. (v. 15, # 3)

Shine, R.; Harlow, P. S.; and Keogh, J. S. "Commercial Harvesting of Giant Lizards: The Biology of Water Monitors Varanus Salvator in Southern Sumatra." Biological Conservation 77, no.2 (1996): 125. (v7, #3)

Shinn, Roger L. Forced Options: Social Decisions for the Twenty-First Century. 3rd ed. Cleveland: Pilgrim Press, 1991.

Shinn, Roger L., "The Mystery of the Self and the Enigma of Nature." pages 96-120 in Deborah A. Brown, ed., Christianity in the 21st Century (New York: Crossroad Publishing Co., 2000). "As Christians enter the third millennium, we find ourselves rethinking our relation to the realm of nature around us and within us. First, the discoveries of modern science demolish many traditional understandings of nature and confer on humanity new powers, benevolent or threatening. ... Second, ecological perils, some local and some planetary, warn us that our present ways of dealing with nature, while destroying much of what we call the environment, are also self-destructive, potentially on a grand scale." The effort to separate the self from nature "gets less and less persuasive."

"In this essay I resist two broad tendencies of our time: (1) those that neglect nature, depreciate it, or regard it as a warehouse of materials for human exploitation, and (2) those that cultivate pleasant illusions about nature or idealize it as a norm for human living. And I seek some 'theological pointers' as guides to responsible living" (pp. 97-97). Shinn is professor of ethics, emeritus, Union Theological Seminary in New York. (v.14, #4)

Shinn, Terry, Spaapen, Jack, Krishna, Venni, eds. Science and Technology in a Developing World. Hingham, MA: Kluwer Academic Publishers, 1997. 420 pp. \$190. By grasping the epistemologies held or fostered in the south toward science and technology, the actions of southern peoples and their dealings with the north acquire more intelligibility. (v8,#3)

Shippard, James W., Review of Gandy, Matthew, Concrete and Clay: Reworking Nature in New York City. Cambridge, MA: The MIT Press, 2002. Environmental Values 12(2003):397-400. (EV)

Shirk, Evelyn, "New Dimensions in Ethics: Ethics and the Environment." Journal of Value Inquiry 22 (1988): 77-85. According to the author, environmental ethics "is a discipline with few precedents and less history" (p. 85). Clearly the author has read nothing about environmental ethics or environmental history: her major insight is that environmental ethics involves consideration of the group, not the individual---but she means the human group! An article to be avoided. (Katz, Bibl # 2)

Shiva, V., "Self-Imposed Sanctions. India Wants More Market Controls, Not Fewer, If It Is to Survive," Ecologist 31(no.9, 2001): 53.

Shiva, Vandana and Ingunn Moser, eds. Biopolitics: An Ecofeminist Reader on Biotechnology. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1995. This reader assembles some of the most important work from feminists and environmentalists critical of the headlong rush into what is likely to prove a technological minefield. Contributors present frameworks for understanding and contextualizing the debates on biotechnological development. Shiva is director of the Research Foundation on Science and Technology, Dehradun. Moser is at the Centre for Technology and Culture, University of Oslo. (v7,#1)

Shiva, Vandana and Emmott, Bill, "Is 'Development' good for the Third World?," The Ecologist. 30 (No. 2, 2000 Apr 01): 22- . Environmentalist Vandana Shiva and Economist editor Bill Emmott go head to head. (v.11,#4)

Shiva, Vandana, "Stolen Harvest: The Hijacking of the Global Food Supply," Philosophy and Geography 4 (No. 1, 2001): 127-129. Book reviewed by Maskit, Jonathan. (P&G)

Shiva, Vandana, Stolen Harvest: The Hijacking of the Global Food Supply. Cambridge, MA: South End Press, 2000. The values of traditional agriculture are being undermined by the corporate interests behind the latest revolutions in agricultural technology. The interests of corporations are now starkly in contrast with the interests of the people who need to eat and of the farmers, especially the women farmers. "The notion of rights has been turned on its head. ... The right to produce for oneself or consume according to cultural priorities and safety concerns has been rendered illegal according to the new trade rules. The rights of corporations to force-feed citizens of the world with culturally inappropriate and hazardous foods has been made absolute. The right to food, the right to safety, the right to culture are all being treated as trade barriers that need to be dismantled" (p. 18) The Indian cow--integrated into the life of the people spiritually, physically, and emotionally--is better than the "mad cow," a cow fed on animal carcasses, an artifact of animal agriculture (p. 75). (v.13,#1)

Shiva, Vandana, The Violence of the Green Revolution: Third World Agriculture, Ecology, and Politics. Cloth and paper. 264 pages. London: Zed Books; Penang, Malaysia, Third World Network, 1991. An examination of the Green Revolution on the breadbasket of India. The quick fix promise of large gains in output pushed aside serious pursuit of an alternative agricultural strategy grounded in respect for the environmental wisdom of peasant systems and building an egalitarian, needs-oriented agriculture, consistent with the village-based, endogenous political traditions of Gandhism. There was destruction of genetic diversity and soil fertility, and the Green Revolution contributed to the acute social and political conflicts now tearing the Punjab apart. Shiva argues in critique of the privileged epistemological position alleged by modern science which allows it both to claim to provide technological solutions for social and political problems while at the same time disclaiming responsibility for the new problems that it creates in its wake. Further, there has been a continuing ripoff as the industrialists and geneticists of the First World have stolen Third World genetic resources. "The US ... has freely taken the biological diversity of the Third World to spin millions of dollars of profits, none of which have been shared with Third World Countries, the original owners of the germplasm" (p. 260). Shiva is a philosopher and feminist, and director of the Research Foundation for Science, Technology and Natural Resource Policy, Dehradun, India. (v3,#3)

Shiva, Vandana, "The Seed and the Earth: Women, Ecology, and Biotechnology," The Ecologist 22(no. 1, January/February 1992):4-7. Western society gives a high value to scientific creation and a correspondingly low value to natural procreation. It thus legitimates the encroachment of technological development into both the female body and the seed. Shiva is director of the Research Foundation for Science, Technology and Natural Resource Policy, Dehra Dun, India. (v5,#2)

Shiva, Vandana, Biopiracy: The Plunder of Nature and Knowledge. Boston: South End Press, 1997. (v.9,#3)

Shiva, Vandana, ed., Close to Home: Women Reconnect Ecology, Health and Development Worldwide. Philadelphia: New Society Publishers, 1994. \$ 12.95. Twelve essays by women working largely in Asia on the impact of industrial and agricultural development on women's lives. Experiences of women in Thailand, in the Philippines, as well as in the United States, show that what we do to the Earth, we do to our bodies. (v5,#3)

Shiva, Vandana. Monocultures of the Mind: Biodiversity, Biotechnology and 'Scientific' Agriculture. Atlantic Highlands, NJ: Humanities Press, Zed Books, 1993. Shiva examines the current threats to the planet's biodiversity and the environmental and human consequences of its erosion and replacement by monocultural production. Shiva is director of the Research Foundation on Science and Technology, Dehradun. (v7,#1)

Shiva, Vandana. "Reversing Globalisation: What Gandhi Can Teach Us." The Ecologist 29(no. 3, May 1999):224- . (v.11,#1)

Shiva, Vandana. "The Two Fascisms." The Ecologist 29(no. 3, May 1999):198- . (v.11,#1)

Shiva, Vandana. "Now Monsanto Is After Our Water." The Ecologist 29(No. 5, August 1999):297- . (v10,#4)

Shiva, Vandana. *Soil Not Oil: Environmental Justice in an Age of Climate Crisis*. Cambridge, MA: South End Press, 2008. Shiva condemns industrial agriculture because of its dependence on fossil fuels and globalization and its contribution to climate change. She uses the Himalayan organization Navdanya as a model for championing the small, independent farm that is biologically more diverse, puts more resources into the hands of the poor, and replaces corporate power and profits with community, self-organization, and community. Shiva argues that the solution to poverty is the solution to climate change.

Shivik, John A., "Tools for the Edge: What's New for Conserving Carnivores," BioScience 56 (no.3, March 2006): 253-259 (7). The loss of large carnivores at the edges of parks, preserves, and human habitations threatens the conservation of many species. Thus, effective predation management is a conservation issue, and tools to mitigate conflicts between humans and predators are required. Both disruptive-stimulus (e.g., fladry, Electronic Guards, radio-activated guards) and aversive-stimulus (e.g., electronic training collars, less-than-lethal ammunition) approaches are useful, and technological advances have led to many new, commercially available methods. Evaluating the biological and economic efficiency of these methods is important. However, social and psychological effects should also be considered.

Short, Frederick T., and Wyllie-Echeverria, Sandy. "Natural and Human-Induced Disturbance of Seagrasses." Environmental Conservation 23, no.1 (1996): 17. (v7, #3)

Short, John Rennie, Imagined Country: Environment, Culture, and Society. London: Routledge, 1991.

253 pages. What do we really mean when we use the term "environment"? What social values are embedded in environmental attitudes? How are environmental ideas expressed in literature, film, and painting? Societies invest the physical environment with cultural values. As cultural perception shifts, altered by location and time, its representations of the physical environment change. The social meanings of wilderness, countryside, and city. How and why they are used in the construction of national identity. The environmental myths used in American westerns, English novels, and Australian landscape painting. "My aim is simple, to identify and decode the major sets of ideas about the wilderness, country and city in the belief that there is nothing so social as our ideas about the physical environment" (p. xviii). Short teaches geography at Syracuse University. (v6,#4)

Shotwell, Thomas K., "An Essay on Beauty: Some Implications of Beauty in the Natural World," Zygon 27(1992):479-490. The beauty of the universe presented by modern science under the positivist approach is sufficiently great that human contemplative capabilities are exceeded. Our religious propensities need extensive rehabilitation and appreciation of the beauty revealed by the positivists is likely to result in a cosmic paradigm shift that could destabilize traditional views of human identity. Shotwell specializes in the development of medical products. (v4,#4)

Shrader-Frechette, Kristin S. Review of Unpopular Essays on Technological Progress. By Nicholas Rescher. Environmental Ethics 4(1982):363-67.

Shrader-Frechette, Kristin. "Throwing out the Bathwater of Positivism, Keeping the Baby of Objectivity: Relativism and Advocacy in Conservation Biology." Conservation Biology 10, no.3 (1996): 912. (v7, #3)

Shrader-Frechette, Kristin. "Ethical Dilemmas and Radioactive Waste." Environmental Ethics 13(1991):327-43. The accidents at Three Mile Island and Chernobyl have slowed the development of commercial nuclear fission in most industrialized countries, although nuclear proponents are trying to develop smaller, allegedly "fail-safe" reactors. Regardless of whether or not they succeed, we will face the problem of radioactive wastes for the next million years. After a brief, "revisionist" history of the radwaste problem, I survey some of the major epistemological and ethical difficulties with storing nuclear wastes and outline four ethical dilemmas common to many technological and environmental controversies. I suggest two solutions to these ethical dilemmas and show why they are also economical and realistic proposals. Shrader-Frechette is in the philosophy department, University of South Florida, Tampa, FL. (EE)

Shrader-Frechette, Kristin S. Review of Taking Sides: Clashing Views on Environmental Issues. Edited by Theodore Goldfarb. Environmental Ethics 8(1986):89-90.

Shrader-Frechette, Kristin S. Risk Analysis and Scientific Method. Reviewed in Environmental Ethics 8(1986):277-85.

Shrader-Frechette, Kristin. "Environmental Impact Assessment and the Fallacy of Unfinished Business." Environmental Ethics 4(1982):37-47. Nearly all current attempts at environmental impact analysis and technology assessment fall victim to an ethical and methodological assumption that Keniston termed "the fallacy of unfinished business." Related to one version of the naturalistic fallacy, this assumption is that technological and environmental problems have only technical, but not social, ethical, or political solutions. After using several impact analyses to illustrate the policy consequences of the fallacy of unfinished business, I suggest how it might be overcome. Next I present three standard arguments, repeatedly used in technology and environmental impact assessments, by those who subscribe to this "fallacy." I briefly examine the logical, consequentialist, and historical reasons for rejecting all three arguments in favor of this assumption. If my suggestions are correct, then environmental impact analysis is not only a matter of discovering how to finish our technological business, but also a question of

learning how to recognize the ethical and epistemological dimensions of our assessment tasks. Shrader-Frechette is in the philosophy department, University of Louisville, Louisville, KY. (EE)

Shrader-Frechette, Kristin, "Parfit, Risk Assessment, and Imperceptible Effects." Public Affairs Quarterly 2:4 (October 1988): 75-96. Second in a continuing dialogue between Shrader-Frechette and Derek Parfit on problems with the assessment of moral actions over long periods of time. The first paper was "Parfit and Mistakes in Moral Mathematics," Ethics 97 (1987): 50-60. Three of Parfit's arguments for not ignoring imperceptible effects are challenged, although Shrader-Frechette agrees with the conclusion. She suggests instead a framework of probabilistic risk assessment. (Katz, Bibl # 2)

Shrader-Frechette, Kristin and McCoy, Earl D. "Molecular Systematics, Ethics, and Biological Decision Making under Uncertainty." Conservation Biology : The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):1008- . (v10,#4)

Shrader-Frechette, Kristin S., and Earl D. McCoy, "Ecology and Environmental Problem-Solving," The Environmental Professional 16(1994):342-347. Contemporary community ecology has neither precise foundational concepts dealing with stability or community structure nor a developed general theory yielding precise predictive power. As a consequence, it has no exceptionless empirical laws useful to environmental problem-solving. Despite these deficiencies, ecology can provide a foundation for environmental policy by means of autecology, natural history, and detailed case studies. By focusing on less theoretical and more practical scientific work, ecologists have been able to guide conservation decisions in cases such as controlling the vampire bat and protecting the red-cockaded woodpecker. Shrader-Frechette is in philosophy and McCoy in biology at the University of South Florida. (v5,#4)

Shrader-Frechette, Kristin S. Review of Beyond Spaceship Earth. Edited by Eugene C. Hargrove. Environmental Ethics 10(1988):187-89.

Shrader-Frechette, Kristin S. Environmental Ethics. Pacific Grove, CA: Boxwood Press, 1981, 2nd edition, 1984. Reviewed in Environmental Ethics 6(1984):175-79.

Shrader-Frechette, Kristin S. Nuclear Power and Public Policy. Reviewed in Environmental Ethics 4(1982):261-71.

Shrader-Frechette, K. S. and McCoy, Earl D., "How the Tail Wags the Dog: How Value Judgments Determine Ecological Science." Environmental Values 3 (1994):107-120. Philosophers, policymakers and scientists have long asserted that ecological science - and especially notions of homeostasis, balance, or stability - help to determine environmental values and to supply imperatives for environmental ethics and policy. We argue that this assertion is questionable. Using examples related to preservation versus development, hunting versus animal rights, and controversies over pest control, we show that, because ecology is conceptually and theoretically underdetermined, environmental values often influence the practice of ecological science. KEYWORDS: animal rights, balance of nature, community, ecology ecosystem, pest control, science, stability, values. Shrader-Frechette is in philosophy at the University of South Florida. McCoy is in biology at the University of South Florida, Tampa. (EV)

Shrader-Frechette, Kristin, "Individualism, Holism, and Environmental Ethics," Ethics and the Environment 1(no.1, 1996):55-69. Neoclassical economists have been telling us for years that if we behave in egoistic, individualistic ways, the invisible hand of the market will guide us to efficient and sustainable futures. Many contemporary Greens also have been telling us that if we behave in holistic ways, the invisible hand of ecology will guide us to healthy and sustainable futures. In this essay, I argue that neither environmental individualism nor first-order environmental holism--to which many ecologists and environmentalists appear to subscribe--will provide environmental sustainability. There is no invisible hand, either in economics or in ecology. Humans have no guaranteed "tenure in the biosphere"

(Passmore 1974, 75-96). Likewise there is no philosophical "quick fix" for planetary problems, either through the environmental individualism of Feinberg, Frankena, and Regan, or through the first-order environmental holism of Callicott and Leopold. The correct path is more complex and tortuous than either of these ways. I argue that the most ethically defensible way to reach planetary protection and a sustainable environmental future probably is through a middle path that I describe as "hierarchical holism." Shrader-Frechette teaches philosophy at the University of South Florida, Tampa. (E&E)

Shrader-Frechette, Kristin and Earl McCoy, "What Ecology Can Do for Environmental Management," Journal of Environmental Management 41(1994). (v5,#3)

Shrader-Frechette, Kristin S. and Earl D. McCoy, Method in Ecology: Strategies for Conservation. Cambridge University Press, 1993. 350 pages. Hardcover \$ 69.95. Paper, \$ 29.95. Philosopher Shrader-Frechette and ecologist McCoy examine the practical contributions ecology can and cannot make to applied science and environmental problem solving. Section I. Conceptual problems that have often prevented the formulation and evaluation of powerful, precise, general theories; why island biogeography is still beset with controversy; and the ways that science is value laden. "We are unable to define 'natural' in a way free of categorical values. We are unable to define it in a way recognized as part of science. Yet, it is part of science" (p. 103).

Section II. How ecology can give specific answers to practical environmental questions posed in individual case studies, and a new way to look at scientific error. A case study using the Florida panther is examined. There is a bright future for the important, but relatively underdeveloped task of applying ecology to practical environmental problem solving. Both authors are at the University of South Florida. (v4,#4)

Shrader-Frechette, Kristin and Earl McCoy, "Theory Reduction and Explanation in Ecology," Oikos 58 (no. 1, 1990):109-114. How ecology could benefit from incorporating some formal tools of philosophy. The reduction of ecological theories is premature. Some nonfalsifiable ecological principles are not scientific laws, subject to testing. Statistical laws and stochastic processes might provide the best grounds for the scientific stature of ecology. (v2,#3)

Shrader-Frechette, Kristin, "Review of Callicott, In Defense of the Land Ethic," Between the Species 6, no. 4, (Fall 1990): 185-189. With reply by Callicott, pp. 193-195, and reply by Shrader-Frechette, pp. 195-196. Argument and counterargument about whether ecosystems are communities with enough definiteness to serve as the object of moral duty, whether moral norms can be derived from behaviors to which humans are disposed by evolutionary heritage, and whether the extent of change of historical time prevents considering the stability of an ecosystem as a norm in environmental ethics. (v2,#3)

Shrader-Frechette, Kristin, "Risky business: nuclear workers, ethics, and the market-efficiency argument," Ethics and the Environment 7(no. 1, 2002):1-23. Workers generally face higher levels of pollution and risk in their work-place than members of the public. Economists justify the double standard (for workplace versus public exposures to various pollutants) on the grounds of the compensating wage differential (CWD). The CWD, or hazard-pay premium, is the increment in wages, all things being equal, that workers in hazardous environments receive, as compared to other workers. Economists defend the CWD by asserting that workers willingly trade safety for extra money. This essay (1) examines the theory behind the CWD, (2) presents and evaluates economists' Market-Efficiency Argument for the CWD (3) offers several reasons for questioning the CWD, and (4) applies the Market-Efficiency Argument to a real-world case, that of U.S. nuclear workers. The essay concludes that this argument fails to justify the CWD, at least in the case of U.S. nuclear workers. (E&E)

Shrader-Frechette, Kristin S., Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste. Berkeley: University of California Press, 1993. 326 pages. \$ 15.00 paper. \$ 40.00 cloth.

Argues that the current U.S. government policy of burying radwastes is profoundly misguided on both scientific and ethical grounds, because we cannot trust the precision of 10,000 year predictions and promise containment of the waste, and because geological disposal ignores the rights of present and future generations to equal treatment, due process, and free informed consent. The argument is focused on the world's first proposed high-level radioactive waste facility at Yucca Mountain, Nevada. Shrader-Frechette is professor of philosophy at the University of South Florida. (v4,#4)

Shrader-Frechette, Kristin, Environmental Justice: Creating Equality, Reclaiming Democracy. New York: Oxford University Press, 2002. (v.14, #4)

Shrader-Frechette, Kristin, and Westra, L., eds. Technology and Values. Lanham, MD: Rowman & Littlefield, 1997. 356 pp. A collection of reprinted articles; intended as a textbook. (v8,#2)

Shrader-Frechette, Kristin, Environmental Justice: Creating Equality, Reclaiming Democracy. New York: Oxford University Press, 2002. Reviewed by Avner De-Shalit, Ethics and the Environment 9(no. 1, 2004):140-144. (E&E)

Shrader-Frechette, Kristin, Nuclear Energy and Ethics. Geneva: WCC Publications, 1991. 233 pp, paper. \$ 17.90. (v3,#2)

Shrader-Frechette, Kristin, Review of Brown, Jennifer, ed., Environmental Threats: Perception, Analysis and Management. Environmental Values Vol.2 No.4(1993):367.

Shrader-Frechette, Kristin, Review of Jeanes, Ike, Forecast and Solution: Grappling with the Nuclear. Journal of Agricultural and Environmental Ethics 10(1997):82-84. (JAEE)

Shrader-Frechette, Kristin, and Westra, Laura, eds., Technology and Values. Lanham, MD: Rowman and Littlefield, 1997. Includes Pimentel, David, "Assessment of Environmental and Economic Impacts of Pesticide Use." (v9,#2)

Shrader-Frechette, Kristin, "Organismic Biology and Ecosystem Ecology: Description or Explanation." In Current Issues in Teleology, ed., Nicholas Rescher (Lanham: University Press of America, 1986): 77-92. An examination of the controversy in ecological explanation between the "reductionistic paradigm" and holistic teleological paradigm. Since both seem to have problems, Shrader-Frechette urges a compromise, or at the very least, a reconsideration of the reductionist a priori rejection of holistic teleology. (Katz, Bibl # 1)

Shrader-Frechette, Kristin, Review of Beck, Ulrich, Risk Society: Towards a New Modernity. Environmental Values Vol.2 No.4(1993):367.

Shrader-Frechette, Kristin and Earl McCoy, "Biodiversity, Biological Uncertainty, and Setting Conservation Priorities," Biology and Philosophy 9(1994);167-195. Shrader-Frechette is in philosophy, McCoy in biology at the University of South Florida, Tampa. (v5,#3)

Shrader-Frechette, Kristin, "Equity and Nuclear Waste Disposal", Journal of Agricultural and Environmental Ethics 7(1994):133-156. The US Department of Energy has proposed Yucca Mountain, Nevada as the site for the world's first permanent repository for high-level nuclear waste. This essay argues that considerations of equity (safer for whom?) undercut the safety rationale. The article surveys some prima facie arguments for equity in the distribution of radwaste risks and then evaluates four objections that are based, respectively, on practicality, compensation for risks, skepticism about duties to future generations, and the uranium criterion. The conclusion is that, at least under existing regulations and policies, permanent waste disposal is highly questionable, in part, because it fails to distribute risk

equitably or to compensate, in full, for this inequity. Shrader-Frechette is in philosophy at the University of South Florida, Tampa.

Shrader-Frechette, Kristin S., "Environmental Risk and the Iron Triangle," Business Ethics Quarterly 5(1995):753-777. There appears to be an iron triangle of industry, government, and consultant/contractors promoting the siting of the first permanent geological repository of high-level nuclear waste and spent fuel proposed for Yucca Mountain, Nevada. The iron triangle has ignored important epistemological and ethical difficulties with the proposed facility.

Shrader-Frechette, Kristin, "Scientific Method, Anti-Foundationalism, and Public Decisionmaking," I RISK--Issues in Health and Safety 23(Winter, 1990):23-41. Examines the failure of foundationalist positivism, how the experts are often wrong, and what lessons are to be learned from the experts' errors. (v2,#3)

Shrader-Frechette, Kristin, "Hazardous Wastes and Toxic Substances," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 1026-32. (v6,#2)

Shrader-Frechette, Kristin and Earl D. McCoy, "Applied Ecology and the Logic of Case Studies," Philosophy of Science 61(1994)228-249. Because of the problems associated with ecological concepts, generalizations, and proposed general theories, applied ecology may require a new "logic" of explanation characterized neither by the traditional concepts of confirmation nor by the logic of discovery. Building on the works of Grünbaum, Kuhn, and Wittgenstein, the authors use detailed descriptions from research on conserving the Northern Spotted Owl, a case typical of problem solving in applied ecology, to (1) characterize the method of case studies; (2) survey its strengths; (3) summarize and respond to its shortcomings; and (4) investigate and defend its underlying "logic." Ecology is too complex to have many, or any, exceptionless laws, and there is no strict logic here, but there is a method of case study that makes sense of a situation, intelligently finding out such things as habitat characteristics required for nesting, owl population sizes able to withstand environmental fluctuations and genetic depression, and so forth. We can understand a local situation even though we cannot make scientific generalizations. Shrader-Frechette is in philosophy, McCoy in biology at the University of South Florida at Tampa. (v5,#2)

Shrader-Frechette, Kristin S., "Agriculture, Ethics, and Restrictions on Property Rights", Journal of Agricultural Ethics 1(1988):21-40. The argument is twofold. (1) Procedural justice requires, in particular cases, that we restrict property rights in natural resources, e.g., California agricultural land or Appalachian coal land. (2) Conditions imposed by Locke's political theory and by dense population require, in general, that we restrict property rights in finite or non-renewable natural resources such as land. If these arguments are right, then we have a moral imperative to use land-use controls in a far more radical way than has been done in the past. Shrader-Frechette is in philosophy at the University of South Florida, Tampa.

Shrader-Frechette, Kristin, Risk and Rationality: Philosophical Foundations for Populist Reforms (Berkeley: University of California Press, 1991). 272 pages. \$ 39.95 cloth. \$ 15.95 paper. Neither charges of irresponsible endangerment nor countercharges of scientific illiteracy in the public frame risk issues properly. Risk evaluation as a social process can be rational and objective, even though all risk-evaluation rules are value-laden. Shrader-Frechette defends "scientific proceduralism," a new paradigm for assessment when acceptance of public hazards is rational, recognizing that laypersons are often more rational in their evaluation of scientific risks than either experts or governments have acknowledged. Science need not preclude democracy. (v2,#3)

Shrader-Frechette, Kristin, Environmental Justice: Creating Equity, Reclaiming Democracy. New York:

Oxford University Press, 2002. Fundamental ethical concepts such as equality, property rights, procedural justice, free informed consent, intergenerational equity, and just compensation. How these core concepts have been compromised for a large segment of the global population, among them Appalachians, African-Americans, workers in hazardous jobs, and indigenous people in developing nations. Burdens like pollution and resource depletion need to be apportioned more equally, and there are compelling ethical grounds for remedying our environmental problems. Those affected by environmental problems must be included in the process of remedying those problems; all citizens have a duty to engage in activism on behalf of environmental justice. Shrader-Frechette is in philosophy, University of Notre Dame.

Shrader-Frechette, Kristin, "Ecological Explanation and the Population-Growth Thesis," PSA 94, ed. Peter Asquith. East Lansing, MI: Philosophy of Science Association, 1994. Many ecologists have dismissed alleged ecological laws as tautological, trivial, circular, or nontestable. This essay investigates the status of one of the most prominent such "laws," the population-growth thesis. The essay argues that some interpretations of the thesis are not obviously a priori, trivial, definitional, or tautological, although the thesis itself may be used in some context that are a priori. The essay closes with several observations about what the epistemological status of the population-growth thesis, as a schematic law, might tell us about explanation in ecology. Shrader-Frechette is in philosophy at the University of South Florida, Tampa. (v5,#3)

Shrader-Frechette, Kristin, Ethics of Scientific Research. Lanham, Md: Rowman and Littlefield, 1994. 208 pages. \$ 54.50 cloth; \$ 21.95 paper. Chapters: Importance of Research Ethics; The Duty to Do Research; Basic Principles of Research Ethics; Objectivity; Promoting the Public Good; Handling Conflicts; Research and Uncertainty; Uncertain Science in Controversial and Litigious Times. With three concluding chapters by other authors: Helen Longino, "Gender and Racial Biases in Scientific Research"; Carl Mitchem, "Engineering Design Research and the Public Good"; Carl Cranor, "Public Health Research and Uncertainty." Shrader-Frechette is in philosophy at the University of South Florida, Tampa. (v5,#3)

Shrader-Frechette, Kristin. Review of Laura Westra. An Environmental Proposal for Ethics: The Principle of Integrity (Lanham, Md.: Rowman and Littlefield, 1994). (EE)

Shrader-Frechette, Kristin. "Policy Forum: Science Versus Educated Guessing: Risk Assessment, Nuclear Waste, and Public Policy", Bioscience 46(no.7, 1996):488. (v7,#4)

Shrader-Frechette, Kristin. *Taking Action, Saving Lives: Our Duties to Protect Environmental and Public Health*. Oxford: Oxford University Press, 2007. Shrader-Frechette argues that the United States government has failed to protect its citizens from industrial and agricultural toxins that disproportionately poison children, the poor, and minorities because campaign contributors, lobbyists, and politicians and their power over advertising, media, and public relations, along with well-funded polluters and special interests that capture science and regulators themselves, have conspired to cover up environmental disease and death. She claims, however, that the blame for this should be placed upon ordinary citizens that in a democracy have duties to remain informed about and involved in public health and environmental decision-making and to help prevent avoidable environmental deaths. She calls for a new democratic revolution to accomplish this.

Shrader-Frechette (Shrader-Frechette), Kristin, "Ethical Theory Versus Unethical Practice: Radiation Protection and Future Generations," Ethics and the Environment 3(1998):177-195. The main international standard-setting agencies for ionizing radiation, the International Atomic Energy Agency (IAEA) and the International Commission on Radiological Protection (ICRP) both subscribe to principles which (they claim) lead to equitable protection for all generations exposed to radioactive pollution. Yet,

when one examines the practices both groups support, it is clear that these practices discriminate against future generations with respect to radioactive pollution. After showing (1) that the IAEA and ICRP rhetoric of equity does not match their policies and practices, the essay argues (2) that current people ought to try to treat members of future generations equitably with respect to protection from radioactive pollution. The essay also argues (3) that current policies of permanent disposal of high-level radioactive waste do not meet the second criterion, and therefore (4) that society ought to investigate whether another strategy for managing the waste would provide better equal protection among all generations. Shrader-Frechette is in philosophy, University of Notre Dame, Notre Dame, IN. (E&E)

Shreeve, James, "Machiavellian Monkeys," Discover, June 1991. A close look at our close relatives shows how important sneakiness and deceit have been in human evolution. Richard Byrne and Andrew Whitten, Scottish psychologists at the University of Saint Andrews, claim that nearly all primates practice tactical deception, some elaborately. Except for lemurs, the primate species are "a simian rogues' gallery of liars and frauds." "The sneakier the primate ... the bigger the brain." A conclusion is that the human brain evolved as an organ of deceit. With chimpanzees there are episodes where one chimpanzee uses deceit to expose the deceit of another. "Society, sneakiness, brain size, and intelligence are intimately bound up with one another." Deceptive episodes often involve hiding food or mating with females. Critics reply that the primates may be naturally selected for such behaviors, but that there is less intentionality than supposed by transference from apparently similar human behavior. (v2,#3)

Shrivastava, P., "The Role of Corporations in Achieving Ecological Sustainability," Academy of Management Review 20(no. 4, 1995):936-960.

Shrybman, Steven. "A Global Economic Constitution?" The Ecologist 29(no. 3, May 1999):160-

Shrybman, Steven. "The WTO and Agriculture." The Ecologist 29(no. 3, May 1999):185- .

Shugart, Herman H. Terrestrial Ecosystems in Changing Environments. _New York: Cambridge University Press, 1997._524pp. \$68. The fundamental ecological concepts, theoretical developments, and quantitative analyses involved in understanding the responses of natural systems to change. (v8,#3)

Shugart, Herman H., Terrestrial Ecosystems in Changing Environments. Cambridge: Cambridge University Press, 1998. Change is pervasive in ecosystems but difficult to predict in complex regional ecosystems, and all the more so with human-introduced changes, which may differ from naturally introduced changes. How far can key ecological concepts be used to predict how terrestrial ecosystems will respond to large-scale human-introduced changes? The ecosystem paradigm, niche theory, vegetation-climate relationships, landscape ecology, ecological modelling. Terrestrial landscapes and their feedback with their climatic settings. Shugart is in environmental sciences, University of Virginia. (v.14, #4)

Shulman, Seth. The Threat at Home: Confronting the Toxic Legacy of the U. S. Military. Boston: Beacon Press, 1992. 254 pages. (v6,#1)

Shultis, John, "Social and Ecological Manifestations in the Development of the Wilderness Area Concept in New Zealand," International Journal of Wilderness 3 (no. 3, 1997):12-16. As opposed to wilderness in the United States, Canada, and Australia, wilderness areas in New Zealand have become much more stringently defined: areas designated as such "will not have developments such as huts, tracks, bridges, signs, nor mechanized access." Shultis is recreation and tourism, University of Northern British Columbia. (v.8,#4)

Shultis, John. "The Duality of Wilderness: Comparing Popular and Political Conceptions of Wilderness

in New Zealand." Society & Natural Resources 12(no. 5, July 1999): 389- . (v.11,#1)

Shute, Sara. Review of Why the Green Nigger? By Elizabeth Dodson Gray. Environmental Ethics 2(1980):187-91.

Shutkin, William A., The Land that Could Be: Environmentalism and Democracy in the Twenty-first Century. Cambridge, MA: The MIT Press, 2000. (v.13,#1)

Shutte, Augustine, Philosophy for Africa. Milwaukee, WI: Marquette University Press, 1996. 184 pages. \$ 20. Published by arrangement with the University of Cape Town Press. Has philosophy anything of value to offer contemporary Africa? Has Africa anything of value to offer contemporary philosophy? The answer is yes, to both questions. Human freedom, liberation, the struggle to overcome the predicament that European colonialism and apartheid has left. Traditional African thought contains insights into the nature of persons and community that scientific and technological culture has lost, but which could be of the utmost importance in dealing with these issues. Shutte is in philosophy at the University of Cape Town. (v7,#2)

Shyamsundar, Priya. "Constraints on Socio-buffering Around the Mantadia National Park in Madagascar." Environmental Conservation 23, no.1 (1996): 67. (v7, #3)

Sibary, Scott and Jane Kerlinger, "Pollution Control and Free Trade," Illahee: Journal for the Northwest Environment 10 (no. 3, fall 1994):181-191. Excellent introduction to the issues of fairness in the free trade - environmental regulations debate. Free trade allows unfair competition, if one considers the distribution of harms resulting when national standards of environmental protection differ. A polluting business in a lesser regulated nation can shift the costs of its production onto other persons in that nation, not party to the business transaction, and gain relatively to businesses in regulated (often developed) countries that, owing to environmental regulation, do internalize the costs of pollution. Also, this is market inefficiency. With application to NAFTA and GATT, somewhat dismaying. The authors recommend a scheme of countervailing duties, but they realize the many complexities. A good article to introduce these issues to students, if not to yourself. Sibary is an attorney and professor of management at California State University, Chico. Kerlinger is an engineer in geosciences, also at Chico. (v5,#4)

Sibold, Jason S., Thomas T. Veblen, and Mauro E. González. "Spatial and Temporal Variation in Historic Fire Regimes in Subalpine Forests across the Colorado Front Range in Rocky Mountain National Park, Colorado, USA." Journal of Biogeography Vol. 32, no. 4 (2006): 631-47. The expected findings for lodgepole forests, stand replacement fires. Surface fires are unimportant. Perhaps unexpected is that fire suppression seems to have made no difference in fire frequency. The most unexpected finding is that in half the spruce-fir stands there is no evidence of fire occurrence at all during at least the last 600-800 years. Sibold is a Ph.D. candidate in geography, University of Colorado, Boulder.

Sidamon-Eirstoff, Constantine. "New York-New Jersey Harbor: A Dredging Dilemma." Journal of Environmental Law & Practice 4(1997):36. East Coast harbors must be dredged to allow use by modern container shipping. What do you do with the dredged material? (v8,#1)

Siddaway, Roger, Resolving Environmental Disputes, Reviewed by Tim O'Riordan, Environmental Values 15(2006):532-533.

Siddaway, Roger. Resolving Environmental Disputes: From Conflict to Consensus. London: Earthscan, 2005. Failures in the usual consultation processes, which often pay attention to the noisiest participants and overlook the silent, who lose faith in the process. Case studies in conflict resolution, with suggestions on how to build better consensus, reflecting more inclusive values.

Sider, Ronald J., Rich Christians in an Age of Hunger. Downer's Grove, IL: InterVarsity Press, 1984.

Sideris, Lisa, "Bodies of Knowledge: Fact-Facing and Humility in the Writings of Rachel Carson," Reflections 9 (Number 2, Spring, 2002):21-24. Explores "the subtleties and creative tensions" of Carson's environmental ethics. (v.13,#2)

Sideris, Lisa H., Environmental Ethics, Ecological Theology, and Natural Selection. New York: Columbia University Press, 2003. A searching critique of ecological theologies, particularly of their compatibility with Darwinian evolutionary natural history. Examines the works of such influential thinkers as James Gustafson, Sallie McFague, Rosemary Radford Ruether, John Cobb, Peter Singer, and Holmes Rolston. Sideris argues for a more realistic (and less romantic) ethic that combines evolutionary theory with theological insight. She engages an impressive array of contemporary thinkers, with a constructive agenda: to balance scientific, philosophical, and theological concerns. This book was featured in an "Author Meets Critics" session at APA, Pasadena, March 2004. Sideris is at the McGill School of Environment and the Faculty of Religious Studies, McGill University, Montreal. (v. 15, # 3)

Sideris, Lisa H., The Limits of Theodicy: Ecological Theology, Natural Selection, and the Problem of Suffering in Nature, Ph.D. dissertation, Department of Religious Studies, Indiana University, 2000. A critical examination of Christian environmental ethics. Much ecological theology has ignored natural science, particularly evolutionary perspectives. This neglect produces practical and theoretical problems, many of which revolve around the problem of suffering in nature, and whether it can and ought to be eradicated. Invoking an ecological model of nature that resembles pre-Darwinian and Romantic views, such ethicists issue an imperative to love and liberate nature from a suffering which is, in fact, integral to nature. Sideris proposes an alternative approach that incorporates elements of science and theology, arguing that it is possible to extend a qualified, less-interventionist, and more discriminating ethic of love to nature. The advisor was Richard B. Miller. (v.12,#3)

Sideris, Lisa H., and Kathleen Dean Moore, eds. *Rachel Carson: Legacy and Challenge*. Albany: State University of New York Press, 2008. Contents include: (1) "Introduction" by Lisa Sideris, (2) "One Patriot" by Terry Tempest Williams, (3) "Rachel Carson's Scientific and Ocean Legacies" by Jane Lubchenco, (4) "Rachel Carson and George J. Wallace: Why Public Environmental Scientists Should be Advocates for Nature" by Peter C. List, (5) "Rachel Carson's Environmental Ethics" by Philip Cafaro, (6) "Thinking Like a Mackerel: Rachel Carson's Under the Sea-Wind as a Source for a Trans-Ecotonal Sea Ethic" by Susan Power Bratton, (7) "The Conceptual Foundations of Rachel Carson's Sea Ethic" by J. Baird Callicott and Elyssa Back, (8) "Rachel Carson's The Sea Around Us, Ocean-Centrism, and a Nascent Ocean Ethic" by Gary Kroll, (9) "The Ecological Body: Rachel Carson, Silent Spring, and Breast Cancer" by Lisa H. Sideris, (10) "Science and Spirit: Struggles of the Early Rachel Carson" by Maril Hazlett, (11) "'Silence, Miss Carson!': Science, Gender, and the Reception of Silent Spring" by Michael Smith, (12) "After Silent Spring: Ecological Effects of Pesticides on Public Health and on Birds and Other Organisms" by David Pimentel, (13) "Contested Icons: Rachel Carson and DDT" by Steve Maguire, (14) "In Her Footsteps" by Christopher Merrill, (15) "Living Downstream of Silent Spring" by Sandra Steingraber, (16) "The Secular and Religious Sources of Rachel Carson's Sense of Wonder" by Lisa H. Sideris, (17) "How to Value a Flower: Locating Beauty in Toxic Landscapes" by Vera Norwood, and (18) "The Truth of the Barnacles: Rachel Carson and the Moral Significance of Wonder" by Kathleen Dean Moore.

Sidwell, Linda, An Examination of the Transformative Effects of New Social Movement Activity upon the Individual: A Qualitative Approach, Master's Thesis, Department of Philosophy, Lancaster University, September 1991.

Smith, F. Russell, The Value of Ferns and the Problem with Bracken, Master's Thesis, Department of

Philosophy, Lancaster University, September 1992.

Sidwell, Linda, An Examination of the Transformative Effects of New Social Movement Activity upon the Individual: A Qualitative Approach, Master's Thesis, Department of Philosophy, Lancaster University, September 1991.

Siebert, Charles, "An Elephant Crackup?" New York Times Magazine, October 8, 2006. Elephants have been showing more aggressive behavior not only against humans but against other animals. Some researchers think this shows signs of stress in the elephant populations, declining and with degrading habitat.

<http://www.nytimes.com/2006/10/08/magazine/08elephant.html?pagewanted=print>

Siegel, James J. "Subdivision versus Agriculture: From False Assumptions Come False Alternatives", Conservation Biology 10(no.5,1996):1473. (v7,#4)

Siegel, Paul B., Review of Rogers, Lesley J., The Development of Brain and Behaviour in the Chicken. Journal of Agricultural and Environmental Ethics 9(1996):88. (JAEE)

Sierra, March/April 1994 features an ecosystem approach to biological conservation, outlining twenty-one eco-regions in North America: Alaska Rainforest, American Southwest, Arctic, Atlantic Coast, Boreal Forest, Central Appalachia, Colorado Plateau, Great Basin/High Desert, Great Lakes, Great North American Prairie, Great Northern Forest, Hawaii, Hudson Bay/James Bay Watershed, Interior Highlands, Mississippi Basin, Pacific Coast, Pacific Northwest, Rocky Mountains, Sierra Nevada, Southern Appalachian Highlands, and Southwest Deserts. Introductory articles by notable authors on some, but not all of these. With a pull-out map that can be made into an overhead (at Kinko's), this can be useful for an introductory discussion of an ecosystem approach to living on the North American continent. (v5,#1)

Sierra, Rodrigo, and Stallings, Jody. "The Dynamics and Social Organization of Tropical Deforestation in Northwest Ecuador, 1983-1995," Human Ecology 26(no.1, Mar. 1998):135- . (v9,#2)

Sierra, vol. 81, no. 1, January/February 1996, contains four useful articles on endangered species legislation now pending in the U.S. Paul Rauber, "An End to Evolution: A Killer Asteroid Called Congress"; Ted Williams, "Defense of the Realm: The Thin Green Line Protecting Endangered Species"; Susan Middleton and David Littschwager, "Parting Shots? Formal Portraits of Species on the Brink"; Douglas Chadwick, "Strength in Humility: Something Has to Give, and This Time It Has to Be Us." Effective counters to many popular press objections: Sample: The poor Taiwanese immigrant farmer (Tang Lin) harassed by U. S. Fish and Wildlife when his tractor ran over a kangaroo rat, and whose treatment provoked a mass rally and much press coverage, had been warned repeatedly, was plowing his fields provocatively to make a point, shows bank deposits of \$ 2,670,400 in 1991, though he filed no tax return, and fled Taiwan after a 1989 scam in which he is accused of beguiling investors of some \$ 18 million. (v6,#4)

Sigman, Hilary, "Liability Funding and Superfund Clean-Up Remedies," Journal of Environmental Economics and Management 35(no.3, 1998), p. 205. (v.9,#4)

Siipi, H., Naturalness, Unnaturalness and Artifactuality in Bioethical Argumentation. Turku, Finland: University of Turku, 2005.

Siipi, Helena, Review of: Aitken, Gill, A New Approach to Conservation: The Importance of the Individual through Wildlife Rehabilitation. Aldershot: Ashgate, 2004. Environmental Values 14(2005):527-529.

Siipi, Helena, "Naturalness in Biological Conservation," *Journal of Agricultural and Environmental Ethics* 17(2004):457-477. Conservation scientists are arguing whether naturalness provides a reasonable "imperative" for conservation. To clarify this debate and the interpretation of the term "natural," I analyze three management strategies - ecosystem preservation, ecosystem restoration, and ecosystem engineering - with respect to the naturalness of their outcomes. This analysis consists in two parts. First, the ambiguous term "natural" is defined in a variety of ways, including (1) naturalness as that which is part of nature, (2) naturalness as a contrast to artifactuality, (3) naturalness as an historical independence from human actions, and (4) naturalness as possession of certain properties. After that, I analyze the different conceptions with respect to their implications for the three management strategies. The main conclusion is that there exists no single conception of naturalness that could distinguish between the outcomes of the three management methods. Therefore, as long as the outcomes of the different methods are regarded as being of a different value in conservation, we should either abandon the idea of naturalness as the guiding concept in conservation or use the term "natural" only in the ways that take both its historical and feature dependent meanings into consideration. Keywords: conservation, restoration, unnaturalness. Keywords: ecosystem engineering, naturalness, preservation. Siipi is in the Department of Philosophy, University of Turku, Finland. (JAEE)

Siipi, Helena, "Artefacts and Living Artefacts," *Environmental Values* 12(2003): 413-430. The concept of an artefact is central to several bioethical arguments. In this paper, I analyse this concept with respect to living and also non-living entities. It is shown that a close relationship between bringing an entity into existence and its intentional modification is necessary for its artefactuality. The criterion is further improved by analyses of the nature of intentionality in artefact production and the differences between artefacts and their side-effects. Further, in order to clarify the meaning of the term 'bring into existence', issues related to sortal terms and functions of artefacts are considered. As the result of these analyses, the criterion for being an artefact is founded on the following double condition: (1) An entity x is an artefact only if x has been intentionally brought into existence by intentionally causing the coming artefact x to have certain properties. (2) An entity x is an artefact only if causing x to have certain properties has led x to have some new functions - that is, functions that are not present in the raw materials of x. The double condition is used for clarifying the status of several biotic entities such as gardens, commercial fields, polluted natural areas, ecosystems including alien species, restored ecosystems and transgenic organisms. (EV)

Siipi, Helena, and Susanne Uusital, "Consumer Autonomy and Sufficiency of GMF Labeling," *Journal of Agricultural and Environmental Ethics* 21(2008):353-369. Individuals' food choices are intimately connected to their self-images and world views. Some dietary choices adopted by consumers pose restrictions on their use of genetically modified food (GMF). It is quite generally agreed that some kind of labeling is necessary for respecting consumers' autonomy of choice regarding GMF. In this paper, we ask whether the current practice of mandatory labeling of GMF products in the European Union is a sufficient administrative procedure for respecting consumers' autonomy. Three issues concerning this question are discussed. First, we argue that labeling needs to be accompanied by relevant and understandable information on genetic modification, genetically modified food, and the European practice of GMF labeling. Second, we claim that this type of informing makes it less likely that consumers start to avoid GMF products just because labels make them suspicious of the products. It is further noted that even though some consumers may react to labels this way, labels do not restrict their autonomy of choice. Third, a need for more precise labels indicating the source of the transferred gene is considered. It is found out that such labels are not morally necessary when also non-GMF products are available and no relevant differences (such as differences in price and healthiness) exist between them and GMF products. However, in some other cases more precise labels may be needed for respecting consumers' autonomy of choice. The authors are in the Department of Philosophy, University of Turku, Turku, Finland.

Siipi, Helena, "Dimensions of Naturalness," *Ethics and the Environment* 13(no. 1, 2008):71-103. This

paper presents a way of classifying different forms of naturalness and unnaturalness. Three main forms of (un)naturalness are found as the following: history-based (un)naturalness, property-based (un)naturalness and relation-based (un)naturalness. Numerous subforms (and some subforms of the subforms) of each are presented. The subforms differ with respect to the entities that are found (un)natural, with respect to their all-inclusiveness, and whether (un)naturalness is seen as all-or-nothing affair, or a continuous gradient. This kind of conceptual analysis is needed, first, because discussion concerning (un)naturalness is common in current bioethics and environmental ethics, and second, because the terms natural and unnatural are highly ambiguous. Thus, the lack of an exact definition of the type of (un)naturalness may lead into equivocation, other forms of bad argumentation, or at least vagueness. Helena Siipi earned her doctorate in philosophy in 2005. She now works as a researcher in University of Turku, Finland.

Siitonen, P., Tanskanen, A., and Lehtinen, A., "Method for Selection of Old-Forest Reserves," Conservation Biology 16(no.5, 2002): 1398-408. (v.13,#4)

Sikora, R. I. and Brian Berry, eds. Obligations to Future Generations. Reviewed in Environmental Ethics 1(1979):371-74.

Sikorski, Wade, "Building Wilderness." Pages 24-34 in Bennett, Jane, and Chaloupka, William, eds., In the Nature of Things. Minneapolis, MN: University of Minnesota Press, 1993. "The wilderness ... is not the opposite of civilization, as it has long been characterized in the Western tradition, virginal, unhandled, inhuman, untouched, but rather a building that we dwell in, that we have built because of what we, as earthly and mortal beings, are. ... In going into the wilderness, which is as easily found in the city as in the vast rain forest, we are going home because wilderness is the place where we recover the things that are most ourselves" (p. 29). Sikorski lives in Montana and is the author of Modernity and Technology: Harnessing the Earth to the Slavery of Man (University of Alabama Press, 1993).

Silbergeld, Ellen K. "The Risks of Comparing Risks," New York University Environmental Law Journal 3(no.2, 1995):405- . (v6,#4)

Silman, Janet and McKellar, Melody, "Aboriginal Ceremonies and Teachings: A Woman's Perspective," Ecotheology No 3 (July 1997):39-49.

Silori, Chandra Shekhar, "Socio-economic and ecological consequences of the ban on adventure tourism in Nanda Devi Biosphere Reserve, western Himalaya", Biodiversity and Conservation 13(no.12,November 2004):2237-2252(16).

Silva Matos, D. M., and Bovi, M. L., "Understanding the Threats to Biological Diversity in Southeastern Brazil," Biodiversity and Conservation 11(no.10, 2002): 1747-58. (v.13,#4)

Silva, Patricia and Sefano Pagiola. "A Review of the Valuation of Environmental Costs and Benefits in World Bank Projects." World Bank: World Bank Environmental Economics Series, 2003.

Silvard, Ruth Leger, World Military and Social Expenditures, 1996. 16th edition. Washington, DC: World Priorities (Box 25140, Washington, DC 20007), 1996. 50 pages. A slim book packed with statistics, graphs, documenting the lunacy of arms races. (v.9,#3)

Silver, Cheryl Simon and Ruth S. DeFries, One Earth, One Future: Our Changing Global Environment (Washington, DC: National Academy Press, 1990). \$14.95. 196 pages. Features the basic science behind global environmental problems and the policy implications of this science. A report from the National Academy of Sciences. (v2,#1)

Silver, Lee M., Challenging Nature: The Clash of Science and Spirituality at the New Frontiers of Life. New York: Ecco (Harper Collins), 2006. An unabashed sales pitch for our biotechnological future. "Human nature will remake all of Mother Nature. The ultimate question--the very asking of which strikes fear into the hearts of many people--is whether or not the human spirit or soul will stay the same or be remade in the process as well." Humans will increasingly have no need of original nature, since they have remade nature. There are no anthropocentric reasons for saving nature, but, interestingly, Silver does think there may be moral reasons. In fact, he holds, there is no defensible reason for the conservation of species except because we think species preservation is a moral imperative. Silver is in molecular biology at Princeton University. His field, he declares is, "compared with every other field of scholarship and science ... the least compatible with spiritual beliefs."

Silver, Lee M., Remaking Eden: Cloning and Beyond in a Brave New World. New York: Avon Books, 1997. Will there be a "homo supergeneticus." (v9,#2)

Silver, T., "Review of: John F. Reiger, American Sportsmen and the Origins of Conservation," Environmental History 7(no.3, 2002): 525. (v.13,#4)

Silverman, Victor, "Green Unions in a Grey World: Labor Environmentalism and International Institutions," Organization and Environment 19 (no. 2, June 2006): 191-209. International labor environmentalism, a significant innovation in global politics, centers on the role of the International Confederation of Free Trade Unions at the United Nations Commission on Sustainable Development and other bodies. Unions face multiple challenges in international institutions, for example, from partnerships that privatize government functions and from disagreements within unions, but this article nonetheless finds that environmentalism arising from the character of trade unions and the ideology of leaders has great potential. Silverman is associate professor of history at Pomona College, Claremont, California.

Silvertown, Jonathan, Demons in Eden: The Paradox of Plant Diversity. Chicago: University of Chicago Press, 2006. A survey of plant biodiversity and the reasons why. The paradox is that, on Darwinian natural selection, one might suppose that ever fewer plants (the "demons in eden") would get ever better at outcompeting the others and displace them. But that does not happen; rather the other way round: there is steady increase of biodiversity. Although plants may go through a demon phase, they have to cope with many factors, the costs of growth and reproduction, limited resources, competition from and dependence on others, predation, and the result is vast diversity.

Silvey, Rachel, "Power, difference and mobility: feminist advances in migration studies", Progress in Human Geography 28(no.4, 1 August 2004):490-506(17).

Silvius, John E.; Holtzman, Lynn T., "Leopold Appealed to Conscience," BioScience 56 (no.5, May 2006): 373-373 (1).

Simberloff, D, "A Rising Tide of Species and Literature: A Review of Some Recent Books on Biological Invasions", BioScience 54 (no.3, 2004): 247-254(8).

Simberloff, D., Stiling, P. "Risks of Species Introduced for Biological Control", Biological Conservation 78(no.1/2, 1996):185.

Simberloff, Daniel, Scmitz, Don C., Brown, Tom C., eds. Strangers in Paradise: Impact and Management of Nonindigenous Species in Florida. Covelo, CA: Island Press, 1997. 480 pp. \$50 cloth, \$29.95 paper. An examination of the Florida severe exotic species problems and of the ongoing efforts to eradicate or manage introduced species covering millions of acres of land and water. (v8,#2)

Simberloff, Daniel, "Biological Invasions--How Are They Affecting Us, and What Can We Do about Them?" Western North American Naturalist 61(no. 3, 2001):308-315. Nonindigenous species affect native ecosystems, communities, and populations in myriad ways, from plants (and a few animals) that overgrow entire communities, to plants and animals that hybridize individual native species to a sort of genetic extinction. Further, nonindigenous species sometimes interact to worsen each other's impact. These impacts are commonly seen in national parks throughout the United States.

The key policy change required to alleviate this threat is a shift from blacklists of prohibited species and a presumption of harmlessness to a combination of white and blacklists and a presumption that any species may be damaging. This new guiding philosophy must be inculcated at international and national levels, which will not be easy during a period when free trade is seen as an unmitigated blessing. Within the United States, enhanced cooperation and coordination will be required among all parties (i.e. federal, state, and local agencies as well as private entities) charged with managing invasions. Internationally, the key forum is the World Trade Organization.

Various management tools available to combat nonindigenous species have produced some striking successes, but new research could improve their effectiveness and reliability. There is a particular need for research on ecosystem management to control introduced species. In the face of the increasingly publicized onslaught of invaders, there is a widespread tendency to view increased biotic homogenization as inevitable. However, advances in both policy and technology could greatly slow this process and perhaps (in consort with restoration measures) even reverse it. The necessary pressure and resources to effect these changes must come from an increasingly alarmed and vocal public. Simberloff is in ecology and evolutionary biology, University of Tennessee, Knoxville. (v.12,#3)

Simberloff, Daniel, and Stiling, Peter, "Risks of Species Introduced for Biological Control," Biological Conservation 78(1996):185-192. Also: "How Risky is Biological Control?" Ecology 77(1996):1965-1974. Numerous biological control introductions have adversely affected non-target native species. Cost-benefit analysis for conservation are difficult because it is difficult to assign values to the various tradeoffs. Risk assessment is difficult because it is difficult to predict outcomes. Better consideration is needed to myriad factors that now often receive cursory attention. Simberloff is in biology, Florida State University, Tallahassee. Stiling is in biology, University of South Florida, Tampa. (EE v.12,#1)

Simberloff, Daniel and Betsy Von Holle, "Positive Interactions of Nonindigenous Species: Invasional Meltdown?," Biological Invasions 1(1999):21-32. There are many studies of interactions between invasive species and indigenous species, but few studies of interactions between invasive species themselves. In this study, invasive species are found seldom to compete with each other detrimentally and frequently to facilitate each other. "There is little evidence that interference among introduced species at levels currently observed significantly impedes further invasions, and synergistic interactions among invaders may well lead to accelerated impacts on native ecosystems - an invasional 'meltdown' process." The authors are in ecology, University of Tennessee, Knoxville.

Simberloff, Daniel, "Non-native Species DO Threaten the Natural Environment!," Journal of Agricultural and Environmental Ethics 18(2005):595-607. Sagoff [Journal of Agricultural and Environmental Ethics 18 (2005), 215-236] argues, against growing empirical evidence, that major environmental impacts of non-native species are unproven. However, many such impacts, including extinctions of both island and continental species, have both been demonstrated and judged by the public to be harmful. Although more public attention has been focused on non-native animals than non-native plants, the latter more often cause ecosystem-wide impacts. Increased regulation of introduction of non-native species is, therefore, warranted, and, contra Sagoff's assertions, invasion biologists have recently developed methods that greatly aid prediction of which introduced species will harm the environment and thus enable more efficient regulation. The fact that introduced species may increase local biodiversity in certain instances has not been shown to result in desired changes in ecosystem function. In other locales, they decrease biodiversity, as they do globally. Keywords biodiversity - ecosystem function - introduced species - invasion - non-native species - prediction - risk assessment - Sagoff. Simberloff is in the Department of

Ecology and Evolutionary Biology, University of Tennessee, Knoxville. (JAEE)

Simmons, Aaron. "A Critique of Mary Anne Warren's Weak Animal Rights View." *Environmental Ethics* 29(2007):267-278. In her book, *Moral Status*, Mary Anne Warren defends a comprehensive theory of the moral status of various entities. Under this theory, she argues that animals may have some moral rights but that their rights are much weaker in strength than the rights of humans, who have rights in the fullest, strongest sense. Subsequently, Warren believes that our duties to animals are far weaker than our duties to other humans. This weakness is especially evident from the fact that Warren believes that it is frequently permissible for humans to kill animals for food. Warren's argument for her view consists primarily in the belief that we have inevitable practical conflicts with animals that make it impossible to grant them equal rights without sacrificing basic human interests. However, her arguments fail to justify her conclusions. In particular, Warren fails to justify her beliefs that animals do not have an equal right to life and that it is permissible for humans to kill animals for food. (EE)

Simmons, I, "Review of: John Sheail, An Environmental History of Twentieth Century Britain", Environmental History 8(no.2, 2003):321.

Simmons, I. G. Interpreting Nature: Cultural Constructions of the Environment. London: Routledge, 1993. Simmons is in the Department of Geography, University of Durham, UK.

Simmons, I.G., "Bach's Butterfly Effect: Culture, Environment and History," Environmental Values 6(1997):483-497. ABSTRACT: The basic thesis that environmental values must spring from the economic relations of human societies is examined and it is suggested that although such connections are never absent, they do not account for the totality of values. Rather, they interact with other values in a kind of helical strand which is open-ended and self-organising. In such a context, sustainability, for example, becomes a rather time-limited idea. Our present ways of describing such evolution and interactions are also briefly examined. Department of Geography University of Durham, Science Labs, South Road, Durham DH1 3LE, UK. (EV)

Simmons, Pam, "'Women in Development': A Threat to Liberation," The Ecologist 22(no. 1, January/February 1992):16-21. The call to integrate women into development has been taken up by the international development institutions to suit their own purposes. Adopted, as it invariably has been, in a simplistic form, it is a dangerous slogan that threatens to reduce Third World Women to "resources" for the international economy. It also wrongly implies that women in industrialized countries are progressing to a position of equality. Simmons works with women's issues through NGO's in Australia and Thailand. Also Simmons in this issue reviews ten books on feminism, environment, development, and technology. (v5,#2)

Simmons, Steven I., "Toward Kinship `Respect for All Life is the Real Cure'", The Animals' Agenda 16(no.4, 1996):42. Why animal activists and AIDS activists belong on the same side of the picket line against mutual foes. When experimentation and exploitation go hand in hand, there are more victims than victors. Simmons is with People for the Ethical Treatment of Animals and an AIDS activist. (v7,#4)

Simms, A., "Think Small: As an Alternative to Ever Increased Globalisation." The case for a return to localisation," Ecologist 33(no. 5, 2003): 58-59. (v 14, #3)

Simon, Anne E., "Valuing Public Participation," Ecology Law Quarterly 25(No.4, 1999):757-. (v.10,#2)

Simon, David R. "Corporate Environmental Crimes and Social Inequality: New Directions for Environmental Justice Research," American Behavioral Scientist 43(No.4, 2000). (v.11,#1)

Simon, Julian L. Population Matters: People, Resources, Environment, and Immigration. New Brunswick,

NJ: Transaction Publishers, Rutgers, 1996. 591 pp. \$28.95 paper. Fifty-eight essays, on population, raw materials, energy, food supply, and pollution, by perhaps the worlds most optimistic developmentalist. (v7,#4)

Simon, Julian L. *Hoodwinking the Nation*. New Brunswick, NJ: Transaction Publishers, 2006. The now-late Julian Simon continues to make his case that population growth is not a problem, we are not running out of natural resources, and the environment is not becoming more polluted. His goal in this final book is to examine why the media reports so much false and bad environmental news. Simon argues that government reports are often the basis for doomsday analyses and environmental news scams, biologists tend to become falsely and overly alarmed about mythical environmental scares, and politicians misuse statistics in the service of their own political and policy goals. All of this is compounded by the facts that cultural and psychological mechanisms make people receptive to bad news instead of good news and that most people have too positive a view about the past and too negative a view about the future.

Simon, Noel, Nature in Danger: Threatened Habitats and Species. New York: Oxford University Press, 1996. Written in association with the World Conservation Monitoring Center. 240 pages. \$ 35.00 A detailed picture of the many threatened habitats--rain forests, wetlands, grasslands, mountain ranges, reefs and islands, deserts, Antarctica. (v7,#2)

Simon, Thomas W., "Varieties of Ecological Dialectics," Environmental Ethics 12(1990):211-231. One of the few articles to appear in this journal that uses Marxist analysis---dialectics---to understand environmental thought. Simon looks at Marxist, anarchist, and Native American approaches to solving the environmental crisis. He argues for a synthesis using the dialectical frameworks of politics, history, ethics, ecology, and spirituality. (Katz, Bibl # 2)

Simon, Thomas W. "Varieties of Ecological Dialectics." Environmental Ethics 12(1990):211-31. A hierarchical ordering of approaches afflicts environmental thinking. An ethics of individualism unjustly overrides social/political philosophy in environmental debates. Dialectics helps correct this imbalance. In dialectical fashion, a synthesis emerges between conflicting approaches to dialectics and to nature from: Marxism (Levins and Lewontin), anarchism (Bookchin), and Native Americanism (Black Elk). Conflicting (according to Marxists) and cooperative (according to anarchists) forces both operate in nature. Ethics (anarchist), political theory (Marxist), and spirituality (Native American) constitute the interconnected interpretative domains of a dialectically informed ecophilosophy. In a world painted too often in blacks and whites, ecological dialectics colors the picture a more realistic gray. Simon is in the philosophy department, University of Illinois at Urbana-Champaign, Urbana, IL. (EE)

Simon, Thomas W. Review of The Dialectical Biologist. By Richard Levins and Richard Lewontin. Environmental Ethics 10(1988):279-84.

Simonis, Udo Ernst, Beyond Growth: Elements of Sustainable Development. Published through the Science Centre, Berlin. They have a list of other publications available. Most, but not all, are in German. Their address is: Wissenschaftszentrum Berlin für Sozialforschung, gGmbH, D-1000, Berlin, Reichpietschstr. 50. Director: Dr. Bernard Glaeser. (v1,#3)

Simonis, Udo E. "Internationally Tradeable Emission Certificates: Efficiency and Equity Linking Environmental Protection with Economic Development." Ethics and the Environment 5(2000):61-76. Abstract: 1. THE IDEA AND ITS POLITICAL CONTEXT: With respect to the formulation and implementation of a global climate policy, the "Berlin Mandate," the most important concluding document of the first Conference of the Parties to the Framework Convention on Climate Change, adopted on 7 April 1995, says the following: The Parties should protect the climate system for the benefit of present and future generations of humankind. on the basis of equity and in accordance with their

common but differentiated responsibilities and respective capabilities ... The global nature of climate change calls for the widest possible cooperation by all countries ... ; developed countries [should] set quantified target limitation and reduction objectives within specified time frames, such as 2005, 2010, and 2020. Finally, it states that "the process should begin without delay" (Berlin Mandate 1995, italics added). As regards "joint implementation," an instrument which affects both industrialized and developing countries, the Conference of the Parties decided to establish a pilot phase for activities implemented jointly among Annex I Parties and, on a voluntary basis, with non-Annex I Parties that so request internationally tradeable emission certificates. During this pilot phase, a framework should be established "for reporting." (E&E)

Simonis, Udo E., Die Rousseau-Frage - ökologisch definiert. Berlin: Edition sigma, 2002. Eighteen essays in German selected in a prize competition from forty entries in a contest by Munich publishers C. H. Beck and the Heidelberg-based Günter-Altner Foundation to celebrate ten years of successful publication of the Jahrbuch Ökologie. Both arts and sciences. Many of the more important environmental thinkers in Germany are referenced. Much on aesthetics of nature. Sustainable development. Rousseau commonly serves as a starting point. Reviewed by Axel Goodbody, Environmental Values 13(2004):123-125. (EV)

Simonis, Udo E. "Global Governance and Sustainable Development," Environmental Values 10(2001):285-287. Nearly a decade has passed since the UN Conference on Environment and Development at Rio. This guest editorial takes stock of what has been achieved, and looks forward to the 2002 World Summit on Sustainable Development in Johannesburg. Keywords: UNCED, Millennium Declaration, Agenda 21, World Summit on Sustainable Development. Udo E. Simonis is at the Science Centre, Berlin. (EV)

Simonis, Udo E., Review of: Board on Sustainable Development, Our Common Journey: A Transition toward Sustainability, Environmental Values 11(2002):247-248.

Simonis, Udo E., Review of: Speth, James Gustave, Red Sky at Morning: America and the Crisis of the Global Environment. Environmental Values 13(2004):406-409. (EV)

Simonis, Udo E., Review of: Meadows, Donella, Jorgen Randers, and Dennis Meadows, Limits to Growth - The 30-Year Update. White River Junction, Vermont: Chelsea Green Publishing Co, 2004. Environmental Values 14(2005):274-276.

Simonis, Udo E., Review of: Geoffrey Murray and Ian G. Cook, Green China: Seeking Ecological Alternatives, Environmental Values 15(2006):127-129.

Simonis, Udo E., Review of: Claus Wepler, Europäische Umweltpolitik [European Environmental Policy], Environmental Values 11(2002):525-528.

Simonis, Udo E., Review of *Jared Diamond, Collapse: How Societies Choose to Fail or Succeed*, Environmental Values 16(2007):133-135.

Simonis, Udo, E. Review of Hinshaw, Robert, *Living within Nature's Extremes: The Life of Gilbert F. White* (Boulder, CO: Johnson Books, 2006), Environmental Values 17(2008):117-118.

Simonis, Udo. Review of Joachim Radkau, Natur und Macht: Eine Weltgeschichte der Umwelt [Nature and Power: A World History of the Environment], Munich: C.H. Beck Verlag, 2000, Environmental Values 10(2001):274. (EV)

Simonis, Udo. review of Norman Myers. Ultimate Security: (New York: W.W. Norton & Co., 1993). (EV)

Simons, John, "The Longest Revolution: Cultural Studies after Speciesism," Environmental Values 6(1997):483-497. ABSTRACT: This article is a provisional exploration of the field of cultural studies from a committed animal rights perspective. It argues that cultural studies will need to be reformed in response to increasing public concern about animal welfare issues and the growth of environmental consciousness. A number of critical readings of literary texts are employed to exemplify how this reformation might manifest itself in practice. It includes a review and critique of some current work in the field and suggests that cultural theory is presently unable to respond fully to the place of animals in cultural production. (EV)

Simonsen, Kenneth H. "The Value of Wildness." Environmental Ethics 3(1981):259-63. In his article, "The Nature and Possibility of an Environmental Ethics," Tom Regan says that the fitting attitude toward nature "is one of admiring respect." What follows is an attempt to discover what in nature should impel us to respond in this way. Ultimately I argue that the value of wild nature is found in the fact that it has emerged spontaneously, independent of human designs. Simonsen is in the department of philosophy, College of Lake Country, Grayslake, IL. (EE)

Simplicity; the simple life. A selection of recent books, often arguing that keeping it simple incorporates religious values. A website is:

www.sl.net.com (The Simple Living Network).

--Andrews, Cecile, The Circle of Simplicity: Return to the Good Life. New York: Harper Collins, 1998. 256 pages.

--Clapp, Rodney, ed., The Consuming Passion: Christianity and the Consumer Culture. Downer's Grove, IL: InterVarsity, 1998. 223 pages.

--Schor, Juliet B., The Overspent American: Upscaling, Downshifting and the New Consumer. New York: Harper Perennial, 1998. 253 pages.

--Shi, David E., The Simple Life: Plain Living and High Thinking in American Culture. New York: Oxford University Press, 1986. 322 pages.

--Luhrs, Janet, The Simple Living Guide. New York: Broadway Books, 1997. 444 pages.

--Saint James (St. James), Elaine, Simplify Your Life: 100 Ways to Slow Down and Enjoy the Things that Really Matter. New York: Hyperion, 1994. 256 pages.

--Schut, Michael, Simpler Living, Compassionate Life: A Christian Perspective. Ridgefield, CT: Morehouse Publishing, 1999. 256 pages. Includes Frederick Buechner, Henri Nouwen, John Cobb, Wendell Berry, and Richard Foster.

--Marty, Martin, and Marty, Micah, When True Simplicity is Gained: Finding Spiritual Clarity in a Complex World. Grand Rapids, MI: Eerdmans Publishing Co., 1998. 110 pages.

--Dominguez, Joseph R. and Robin, Vicki, Your Money or Your Life. New York: Penguin Books, 1993. 350 pages. (v.10,#2)

Simpson, Annie, "The Global Invasive Species Information Network: Whats in It for You?," BioScience 54(no.7, 1 July 2004):613-614(2). (v. 15, # 3)

Simpson, Juanita Mae, The Theoretical Foundations for an Environmental Ethic (Intrinsic Value), 1997, University of Arizona, Ph.D. thesis. 223 pages. An analysis of the concept of intrinsic value as a foundation for an environmental ethic. Distinguishes between a metaphysical conception of intrinsic value, having to do with its ontological status, and a normative conception which pertains solely to questions of normativity and moral obligation. There is a symmetry between certain earlier metaethical dialogues (Sidgwick and Moore) and the recent debates in environmental value theory. The latter-day Last Person thought experiment mirrors the challenge given by Sidgwick to which Moore responded with

his Beautiful World analysis. Theorists have conflated a requirement for a noninstrumentalist (intrinsic) value with the requirement for a strongly objectivist ontology for value. Hence, theorists believed that what was required was a nondispositionalist, internal notion of value, abstracted from any possible evaluative stance. This confusion is expressed in the contemporary environmental ethics. Quinn offers a revised theoretical framework for an environmental ethic. The advisor was Joel Feinberg. (v.10,#1)

Simpson, R. David, Roger A. Sedjo, and John W. Reid, "Valuing Biodiversity for Use in Pharmaceutical Research," Journal of Political Economy 104 (no. 1, February 1996):163-185. The expected value of a new species for pharmaceutical purposes is very low, so low as to make it unlikely that private firms will have much economic incentive to protect species. Also, the loss--measured in human illness or death--caused by the loss of a species is likely to be small. Even under the most optimistic assumptions, the economic value of saving one species is unlikely to be more than about \$ 10,000, and under typical assumptions the probability that a given species will yield useful discoveries drops its expected value to less than \$ 100. Issues of ecological, moral, or aesthetic values are not here considered. (v8,#3)

Simpson, R. David, "Biodiversity Prospecting: Shopping the Wilds Is Not the Key to Conservation," Resources (Resources for the Future), Winter, 1997, pp. 12-15. Studies show that losses in biological diversity have little bearing on whether the next miracle drug will be found. There are so many wild plants and animals that can be used by researchers that sources of useful products are either so common as to be redundant or so rare as to make discovery unlikely. The reasons for saving biodiversity can include such uses, but need to emphasize even more how biodiversity provides the basic life support system for society, and the aesthetic, ethical, and spiritual benefits. Simpson is an RFF fellow, writing a book in this area. (v8,#1)

Simpson, R. David, Sedjo, Roger A., and Reid, John W., "Valuing Biodiversity for Use in Pharmaceutical Research," Journal of Political Economy 104(1996):163-185. (v8,#1)

Simpson, Steven, "The Intrinsic Value of Minimum Impact," Journal of Experiential Education 16(no. 2, Summer, 1993):34-37. Why minimum impact camping is morally required. To view the practice solely as a way to keep primitive areas primitive is to ignore minimum impact's intrinsic worth. Simpson is currently on a Fulbright at National Taiwan University. (Thanks to Kevin Eddings, Harrison, NY.) (v4,#4)

Simsic, Wayne, Natural Prayer: Encountering God in Nature. Mystic, CT: Twenty-Third Publications, 1991. 101 pages. Wonder, reverence, and praise in encounter with the beauty of nature. (v3,#4)

Simus, Jason. "Environmental Art and Ecological Citizenship." *Environmental Ethics* 30(2008):21-36. Environmental artworks are not an aesthetic affront against nature because the aesthetic qualities of artworks are to some extent a function of other sorts of qualities, such as moral, social, or ecological qualities. By appealing to a new ecological paradigm, we can characterize environmental artworks as anthropogenic disturbances and evaluate them accordingly. Andrew Light's model of ecological citizenship emphasizes public participation in ecological restoration projects, which are very similar to environmental artworks. Participation in the creation, appreciation, and criticism of environmental art can count as a form of ecological citizenship when these practices provoke public deliberation about environmental and other community-regarding values.(EE)

Sinclair, A.R.E., Arcese, Peter, eds. Serengeti II: Dynamics, Management, and Conservation of an Ecosystem. Chicago: University of Chicago Press, 1995. 680 pp. \$90 cloth, \$34 paper. Follows a previous Serengeti, with twenty years of research by leading scientists and provides a sophisticated study of the Serengeti-Mara ecosystem in East Africa, home to one of the largest and most diverse populations of animals in the world. There are studies of the ecosystem at every level from the plants at the bottom of the visible food chain, to the many species of herbivores and predators, to the system as a whole. (v8,#2)

Sinclair, Patti K., E for Environment: An Annotated Bibliography of Children's Books with Environmental Themes. R. R. Bowker. 292 pages, \$ 39.95. Of special interest to elementary school teachers, environmental educators, librarians, parents, and those interested in teaching environmental ethics to children. Covers a wide range of material, from picture books that help instill in young readers a sense of wonder at the natural world, on through meatier nonfiction and fiction for older children. Author, title and subject indices, as well as a list of environmental classics for older students and adults. Harcourt Brace Jovanovich has launched a series of children's books dedicated to promoting ecological awareness: Gulliver Green Books. (v3,#4)

Sinclair, Peter R. "Perceptions of a Fishery in Crisis: Dragger Skippers on the Gulf of St. Lawrence Cod Moratorium." Society and Natural Resources 9, no.3 (1996): 267. (v7, #3)

Sindab, Jean. "Economics Justice for a Just World Order," Theology and Public Policy 4(no. 1, 1992).

Singer, Brent A., "An Extension of Rawls' Theory of Justice to Environmental Ethics," Environmental Ethics 10(1988):217-231. An attempt to use a Rawlsian theory of justice to develop specific moral duties of an environmental ethic---the protection of essential elements (such as air, water, and land), and the consideration of animal interests. The approach is highly anthropocentric, based on human interests and what humans would require for a good society. (Katz, Bibl # 2)

Singer, Brent A. "An Extension of Rawls' Theory of Justice to Environmental Ethics." Environmental Ethics 10(1988):217-31. By combining and augmenting recent arguments that have appeared in the literature, I show how a modified Rawlsian theory of justice generates a strong environmental and animal rights ethic. These modifications include significant changes in the conditions of the contract situation vis-a-vis A Theory of Justice, but I argue that these modifications are in fact more consistent with Rawls' basic assumptions about the functions of a veil of ignorance and a thin theory of the good. Singer is in the philosophy department, University of Maine, Orono, ME. (EE)

Singer, F. J., Zeigenfuss, L. C. and Spicer, L., "Role of Patch Size, Disease, and Movement in Rapid Extinction of Bighorn Sheep," Conservation Biology 15(no.5, 2001): 1347-54. (v.13,#2)

Singer, Peter, ed., A Companion to Ethics (Colchester, VT: Basil Blackwell, 1991). 560 pages. \$ 79.95 cloth. Contains sections on environmental ethics and animals. Forty seven entries by some distinguished philosophers. Another very expensive British book. (v2,#2)

Singer, Peter, "Heavy Petting," Review of Midas Dekkers, Dearest Pet: On Bestiality, in Nerve. Peter Singer on having sex with animals. Not natural, not normal, perhaps, but not undignified. In the online sex magazine Nerve, with the title "Heavy Petting," Singer reviews Dearest Pet: On Bestiality, by Midas Dekkers, a Dutch biologist, and suggests that the next taboo that should crumble is that against having sex with animals. He concludes: "This does not make sex across the species barrier normal, or natural, whatever those much-misused words may mean, but it does imply that it ceases to be an offense to our status and dignity as human beings." Consistent in his utilitarianism, what counts is pleasure or pain. Singer condemns sex with animals that pains them, for example copulating with a chicken, using the hen's cloaca and decapitating the hen. But then he doubts whether this is really worse (causing more suffering) than the routine practice of keeping hens in battery cages and eating them. Singer is in ethics at Princeton University. The review is online at:
<http://www.nerve.com/Opinions/Singer/heavyPetting/> A scathing criticism by Peter Berkowitz, "Puppy Love," is in The New Republic. Berkowitz is at George Mason University Law School. (v.12,#3)

Singer, Peter, One World: The Ethics of Globalization. New Haven: Yale University Press, 2002. "The

thesis of this book is that how well we come through the era of globalization (perhaps whether we come through it at all) will depend on how we respond ethically to the idea that we live in one world. For the rich nations not to take a global ethical viewpoint has long been seriously morally wrong. Now it is also, in the long term, a danger to their security" (p. 115). Reviewed by Philip Cafaro in Conservation Biology 18(2004):585-586. (v. 15, # 3)

Singer, Peter, Animal Liberation, 2nd ed., New York: New York Review of Books, 1990

Singer, Peter, One World: The Ethics of Globalization. New Haven: Yale University Press, 2002. For rich nations taking a global viewpoint is not only the moral thing to do; it is also a prudent security measure. Summary, "Navigating the Ethics of Globalization," Chronicle of Higher Education, Oct. 11, 2002, B7-B10. (v.13,#4)

Singer, Peter, ed., A Companion to Ethics. Oxford: Basil Blackwell, 1991. Contains two articles of relevance here:

--Elliot, Robert, "Environmental Ethics," pages 284-293.

--Gruen, Lori, "Animals, pages 343-353.

Both are short, introductory articles. (v.9,#4)

Singer, Peter, ed., In Defense of Animals. New York: Harper and Row, 1986.

Singer, Peter, ed., Ethics. Oxford: Oxford University Press, 1994. 415 pages. An anthology in the Oxford Readers series. This one, advertised as "not a conventional reader in moral philosophy," has a novel section, "Common Themes in Primate Ethics," with subsections on kinship, reciprocity, and sex, including such readings as Frans de Waal, "Chimpanzee Justice" and "The Social Rules of Chimpanzee Sex"; Jane Goodall, "Helping Kin in Chimpanzees"; Lorna Marshall, "Adultery among the !Kung"; Jesus on turning the other cheek, and Hillel on the whole Torah standing on one foot. Singer says, "In bringing together, as forms of 'primate ethics', observations of the social behaviour of human beings and nonhuman animals, I am suggesting that we abandon the assumption that ethics is uniquely human" (p. 6). Ninety readings, with Mary Midgley's, "Duties Concerning Islands," in conclusion, although environmental ethics is otherwise missing. Nothing seems morally considerable except us moral primates. Singer teaches philosophy at Monash University, Melbourne, Australia. (v5,#1)

Singer, Peter, "Equality for Animals?" (trans. by Yu Jing). Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no.1 (March 30, 2000). In Chinese. (EE v.12,#1)

Singer, Peter, One World: The Ethics of Globalization. New Haven, CT: Yale University Press. 2002. Changes are posing new ethical and organizational challenges that push moral thought and human institutions in unprecedented directions, involving the economy, the environment, international law, and community. Complex environmental questions are not confined to individual nations and cannot be addressed effectively within nation states. On the principle that "he who harms pays," "the United States and other rich nations should bear much more of the burden of reducing greenhouse gases than the poor nations--perhaps even the entire burden."

We need to "think about developing institutions or principles of international law that limit national sovereignty." The World Trade Organization is much to be faulted but something like a transformed version of it may be necessary. It is "possible to imagine a reformed WTO in which the overwhelming commitment to free trade is replaced by a commitment to more fundamental goals." Something like a democratic concept of a sovereign state has evolved: "the 'democratic concept of legitimate government' in which the concept of national sovereignty carries no weight if the government rests on force." "A global ethics should not stop at, or give great significance to, national boundaries. National sovereignty has no intrinsic moral weight." Singer is in ethics at Princeton University.

Singer, Peter, "Rights and Wrongs," interview by Erika Check, Nature 437(1 Sept. 2005):21, in a section "What the Chimp Means to Me," accompanying an issue announcing the sequencing of the chimpanzee genome. One of four who so reflect there. With half a dozen other related articles. Singer advocates (with the Great Ape Project) three "human" rights also to be granted to apes, the right to life, to liberty, and to protection from torture. (Singer, a utilitarian, seems to use "rights" language here more freely than elsewhere.) He also thinks that our human respect for life is not based on our genetic similarity with them. "I don't think that knowing which genes chimps share with us actually determines anything about their moral status in any meaningful way." Gary Marcus, in another interview, insists that there be great respect for chimps, but not under the pretense that they have language. "Chimpanzees may be many things, but linguists they are not."

Singer, Peter, "Ethics and Climate Change: A Commentary on MacCracken, Toman and Gardiner," Environmental Values 15(2006): 415-422. Climate change is an ethical issue, because it involves the distribution of a scarce resource - the capacity of the atmosphere to absorb our waste gases without producing consequences that no one wants. Various principles might be used to decide what distribution is just. This commentary argues that on any plausible principle, the industrialised nations should be doing much more than they are doing now, and much more than they are required to do by the Kyoto protocol, to reduce their greenhouse gas emissions. The commentary also responds specifically to some issues raised by MacCracken, Toman and Gardiner, including feasibility, the discount rate, and grounds for pessimism. (EV)

Singer, Peter. Practical Ethics. Reviewed in Environmental Ethics 4(1982):281-84.

Singer, Peter. "The Great Ape Project." The Animals' Agenda 16(Jul. 1996):12. (v7,#2)

Singer, Peter. Animal Liberation. (New York: New York Review of Books, 2nd ed., 1990). Reviewed in Environmental Ethics 1(1979):365-70.

Singer, Peter. The Expanding Circle: Ethics and Sociobiology. Reviewed in Environmental Ethics 6(1984):91-94.

Singer, Peter. The Singer Solution to World Poverty: A Contentious Ethicist Explains Why Your Taste for Foie Gras is Starving Children. New York Times Magazine. 6 September 1999. Reviewed by Richard A. Watson. Environmental Ethics 22(2000):327-328.

Singer, Peter. *Animal Liberation*. Translator: Zhu Shuxian. (Qingdao: Qingdao Press, 2004). (in Chinese)

Singer, S. Fred, ed., Global Climate Change: Human and Natural Influences. Paragon House/An ICUS Book, 1989. \$ 34.95. (v1,#2)

Singh, Billy Arjan, Watching India's Wildlife: The Anthology of a Lifetime. New York: Oxford University Press, 2004. (Oxford India Paperbacks). The problems afflicting efforts to create national parks in a developing country. Difficulties in implementing conservation measures.

Singh, Nandita, "Indigenous Water Management Systems: Interpreting Symbolic Dimensions in Common Property Resource Regimes," Society and Natural Resources 19 (no.4, Number 4/April 2006): 357-366 (10).

Singh, Rana P. B., ed., The Spirit and Power of Place: Human Environment and Sacrality. Varanasi, India: National Geographic Society of India, 1994. 352 pages. Indian Rs 500/-. US\$ 70.00. ISBN 81-86187-41-3. Simultaneously published as the National Geographic Journal of India, vol. 40, 1994 (ISSN

0027-9374). Over two dozen articles. Examples: J. Donald Hughes, "The Integrity of Nature and Respect for Place"; Amos Rapoport, "A Critical Look at the Concept of 'Place'"; O. F. G. Sitwell, "Sacred Space Reconsidered"; Amita Sinha, "Pilgrimage--Journey to the Sacred Landscape of Braj"; Alec Paul and Paul Simpson-Housley, "The Manitoba Landscape of Martha Ostenso's Wild Geese"; and many others. Inquiries to Dr. Rana P. B. Singh, Executive Editor, NGJI, No. B 29 / 12 A Lanka, Varanasi, UP 221005, India. (v5,#2)

Singh, Rana P. B., the executive editor of the National Geographical Journal of India, is producing a special volume of that journal, volume 39, Environmental Ethics and the Power of Place: Festschrift to Arne Naess, expected January 1994, and hoped to be presented to Arne Naess on his 82nd birthday, January 27, 1994. 440 pages. ISSN 0027-9374/1993/0905-0943. Rs. 600. U.S. \$80.00. There are thirty nine articles. Samples: J. Baird Callicott, "International Environmental Ethics"; Max Oelschlaeger, "Ecofeminist Discourse on Place"; Andrew Brennan, "Challenges in the Foundations of Environmental Policy"; Holmes Rolston, "Down to Earth: Persons in Place in Natural History"; John E. Carroll, "Ecology and Moral Choice: Bias, Prejudice, and Ecology"; William Vitek, "Cultural Context and Historicity. From Genesis to Garbage: The Conceptual Roots of our Solid Waste Crisis"; Erwin H. Zube, "Cross-Cultural Landscape Studies: Review and Assessment"; J. Hansford Vest, "The Wild and the Tame: Understanding Wilderness and Agriculture in Native America"; J. Donald Hughes, "The Integrity of Nature and Respect for Place"; and many more, with a fine distribution of authors from many nations. For a full description contact: Dr. Rana P. B. Singh, Executive Editor, NGJI, No. B 29/12 A Lanka, Varanasi, UP 221005, India. Place direct orders with the Secretary, National Geographical Society of India, Banaras Hindu University, Varanasi, UP 221005, India. (v4,#3)

Singh, Rana P.B., ed. The Spirit and Power of Place: Human Environment and Sacrality: Essays dedicated to Yi-Fu Tuan. Varanasi, India: National Geographical Society of India, 1994. 364 pages \$70, Rs. 500/-. A multidisciplinary perspective toward the idea of "environmental sensitivity"--searching and understanding the meanings with reference to human identity in the cosmos and human reflection on the earth. Samples: J. Donald Hughes (U.S.), "The Integrity of Nature and Respect for Place"; O. F. G. Sitwell (Canada), "Sacred Space Reconsidered"; Ramesh C. Dhuss, "Phenomenology of Place in Indian Culture--Case of Delhi." Contributors are from diverse disciplines and from diverse cultures. However, at some level there appears similarity in their approaches and expositions. (v6,#1)

Singh, Rana P. B., ed., Environmental Ethics: Discourses, and Cultural Traditions: A Festschrift to Arne Naess. Varanasi, India: The National Geographic Society of India, Banaras Hindu University, 1993. 256 pages, cloth. Rs. 500/-; US \$ 70.00. This volume is now published and available. All articles are in English. Also published as The National Geographic Journal of India, vol. 39, parts 1-4. Twenty articles by international authors and fourteen book reviews. Singh is Reader in Geography, Banaras Hindu University, Varanasi, UP 221005, India. See more details in Newsletter, vol. 4, no. 3. (v5,#1)

Singh, Satyajit, Taming the Waters: The Political Ecology of Large Dams in India. New York: Oxford University Press, 1998, 2002. Singh is at the University of Sussex, UK.

Singleton, S, "Collaborative Environmental Planning in the American West: The Good, the Bad and the Ugly," Environmental Politics 11(no.3, 2002): 54-75.

Singleton, Sara, "Co-operation or Capture? The Paradox of Co-management and Community Participation in Natural Resource Management and Environmental Policy-Making," Environmental Politics 9(no. 2, Summer 2000):1- . (v.12,#2)

Sinha, A and Brault, S, "Assessing Sustainability of Nontimber Forest Product Extractions: How Fire Affects Sustainability," Biodiversity and Conservation 14 (no. 14, December 2005): 3537-3563.

Sinha, Rajiv K., Margaret Greenway, Green Technologies for Environmental Management and Sustainable Development. New Delhi, Akhil Books, 2004. Website: www.akhilbooks.com E-mail: info@akhilbooks.com. Technologies of the 20th century promoted rapid socio-economic development and improved the quality of life of the people. But it was not without a price. All the basic life-support systems on earth-air, water and food-started getting poisoned in the wake of material development threatening our sustainability and survival. This called for a change in the strategy of development and the technologies applied. Sustainable human society on earth with "good quality of life for all" can be achieved either by persuading people to change their behaviour and attitude to life and give up the culture of consumerism or by promoting sustainable development programmes with appropriate environmental technologies. Rajiv K. Sinha is teaching environmental science/technology at the School of Environmental Engineering, Griffith University, Brisbane, Australia. He was formerly teaching similarly in India. Margaret Greenway is Associate Professor and an Ecological Engineer, School of Environmental Engineering at Griffith University, Australia.

Sinha, Rajiv K., "Embarking on the Second Green Revolution for Sustainable Agriculture in India: A Judicious Mix of Traditional Wisdom and Modern Knowledge in Ecological Farming," Journal of Agricultural and Environmental Ethics 10(1997/1998):183-197. ABSTRACT: The Green Revolution in India which was heralded in the 1960's was a mixed blessing. Ambitious use of agro-chemicals boosted food production but also destroyed the agricultural ecosystem. Of late Indian farmers and agricultural scientists have realized this and are anxious to find alternatives--perhaps a non-chemical agriculture--and have even revived their age-old traditional techniques of natural farming. Scientists are working to find economically cheaper and ecologically safer alternatives to agro-chemicals. BlueGreen Algae Biofertilizers, Earthworm Vermicomposts (Vermiculture), biological control of pests and herbal biopesticides are showing promise. Saline agriculture and sewage farming are also being promoted in India to augment food production in the face of water scarcity. There is a move to search for alternative foods, which are more nutritious, cheaper and have shorter harvest cycles. Farm and food policy in India has to change its outlook before there can be a second green revolution. KEY WORDS: BGA biofertilizer, vermicompost, biological pest control, saline agriculture, sewage farming, Spirulina algal food, traditional agriculture. (JAEE)

Sippola, Anna-Lisa, Pirho Alaraudanjoki, Bruce Forbes, and Ville Hallikainen, eds., Northern Wilderness Areas: Ecology, Sustainability, Values. Rovaniemi, Finland: Arctic Centre, University of Lapland (P. O. Box 122, 96101 Rovaniemi, Finland), 1995. 438 pages. \$ 30. One emphasis is that what seems a remote wilderness to outsiders was home to various aboriginal peoples and other residents. Such regions are now frequently under threat by development interests; the threats are unevenly distributed but the impact can be heavy. 44 authors. (v8,#2)

Sirico, Robert A., "The False Gods of Earth Day," Wall Street Journal, April 22, 1994. Environmentalism has become a religion, infecting the churches, and it worships false gods, with many followers in mainstream churches, also including Albert Gore, Vice-president of the United States. One result is to undermine the positive result that economic growth has played in achieving the goals of religious ethics and concern for persons, and the role of religion in reforming persons in these economic and political systems and keeping them moral. "To make Earth Day a religious holiday forgets the primary purpose of traditional faith: to avoid personal sin and to attain salvation. To do this, man must obey God's law, as found in the 10 Commandments. There is no commandment against littering, but there is a very straightforward one about worshipping false gods." A good discussion editorial for classes in religion and environment. Paulist Father Sirico is with the Study of Religion and Liberty, Grand Rapids, Michigan. (v5,#2)

Sirmon, Jeff M. "Facing Tomorrow: Brazil's Difficult Forestry Choices", Journal of Forestry 94(no. 10,

1996):9. (v7,#4)

Sisk, T. D., et al., "A Landscape Perspective for Forest Restoration," Journal of Forestry 103(no. 6, July/August 2005): 319-320.

Sitter, Beat, "The New Categorical Imperative: The Ethical Principle for a Technological Age." Pages 205-220 in William R. Shea, ed., Revolutions in Science: Their Meaning and Relevance. Canton, MA, Science History Publications, Watson Publishing International, 1988. "Act in such a way: That you can want the attitudes and rules that you follow to become a general law. That you always respect the inherent worth of everything affected by your actions (nonhumans no less than human beings) and consider it in a fair way. That you never regard and use anything in the world as a means only." (v4,#4)

Sitter-Liver, Beat: "Tiefen-Oekologie: Kontrapunkt im aktuellen Kulturgesehen" (in German: Deep Ecology. A Counterpoint in Today's Mainstream Culture), Natur und Kultur 1 (No. 1, 2000): 70-88. Deep ecology aims at a change of our self-consciousness, beyond technical environmentalism. We gain our self from interrelations with other beings. Therefore, the ruling exploitation of nature should give way to a moderate and fair dwelling in the world. The practical principle of dignity of all creatures asks for a cultural change that places market and profit ideas on a subordinate level. Knowing that we cannot exist without harming and consuming other beings, we still accept the challenge of promoting life, wherever possible. Culture stands for the constructive coping with this existential tension. (v.11,#2)

SitterLiver (Sitter-Liver), Beat and Beatrix Sitter-Liver, eds. Culture within Nature, Culture dans la Nature. Basel, Switzerland: Swiss Academy of Humanities and Social Sciences, 1995. ISBN 3-090164-22-6. Contributions from about twenty authors, about half in English, half in French, the text complemented with visual arts. This volume was produced with the assistance and co-operation of UNESCO. Sample chapters: Carmina Virgili, Paris, "L'Etre humain et la planète Terre"; Beat Sitter-Liver, "La nature - une cité. Vers une constitution politique de la nature"; Nicolas M. Sosa, Salamanca, "Ecological Ethics as an Ethics of Physical and Moral Survival. Towards Morality of All-Embracing Communication and Solidarity"; Peter Saladin, Berne, "L'aspect temporel de la protection de la nature. La dimension juridico-politique"; Juan Diez Nicolas, Madrid, "Postmaterialism and the Social Ecosystem." Beat Sitter-Liver is professor of philosophy, University of Fribourg and Secretary-General of the Swiss Academy of Humanities and Social Sciences, Berne. Beatrix Sitter-Liver is an artist. (v6,#3) Reviewed by Cathherine Larrère. Environmental Ethics 19(1997):433-435. (EE)

Sittler, Joseph. "Ecological Commitment as Theological Responsibility." Zygon 5 (June 1970): 172-181.

Siurua, Hanna, "Nature above People: Rolston and "Fortress" Conservation in the South," Ethics and the Environment 11(2006):71-96. Holmes Rolston III has argued that in some situations where the needs of starving people come into conflict with the protection of natural values, "we" ought to prioritize the latter. Focusing on the threat to pristine ecosystems and endangered species posed by overpopulation in developing countries, Rolston advocates the exclusion of human settlement and activity from the most fragile and valuable wild areas--a strategy sometimes termed "fortress conservation." This approach suffers from at least three serious faults. First, fortress conservation is regarded as an illegitimate imposition by many of the local people on whose cooperation the success of conservation initiatives depends, often leading to failure in terms of conservation objectives. Second, the assumption that conservation and the satisfaction of basic human needs are largely incompatible ignores evidence of widespread environmentally sustainable patterns of resource use. Finally, Rolston's appeal to "us," referring variously to concerned North Americans and to humanity as a whole, implicitly universalizes the preservationist value system of a Northern minority while excluding the values and voices of the people directly affected by the proposed conservation measures. Siurua is a graduate student in philosophy, Lancaster University, UK. (Eth&Env)

Sivaraksa, Sulak, "Development and Environment in Southeast Asia." Zygon 24 (1989): 429-436. Western-style development and modernization is destroying the environment of Southeast Asia. A convergence of core Asian traditions with a new non-mechanistic paradigm of science offers the best hope for a spiritual basis for development. (Katz, Bibl # 2)

Sivaramakrishnan, K., "Forest Co-management as Science and Democracy in West Bengal, India," Environmental Values 11(2002):277-302. This essay argues that important development and natural resource management initiatives that seek to expand meaningful participation by rural communities directly affected by such ventures can be usefully examined as democratic technologies. Drawing upon nearly two decades of experience designing, implementing, and researching forest co-management programs in India, the essay examines the analogous practices through which democracy and forest management science become contested regulatory ideals while creating the deliberative spaces in which post-Habermasian public spheres can be constructed. The analysis of disciplinary tendencies, bureaucratic transition, and emerging solidarities among historically marginalised groups responding to the performance of democracy and scientific forest management is used to offer revisions to the more sweeping critiques of technology as fundamentally anti-democratic. (EV)

Sivard, Ruth Leger, World Military and Social Expenditures, 15th, 1993 edition. 56 pages, a slim book with a lot of information in it. This document is produced annually by the independent research organization World Priorities, Inc., Box 25140, Washington, DC 2007. Published in translations in eight languages. Some findings: The developed countries spend as much on military power in a year as the poorest 2 billion people on Earth earn in total income. The developed countries in 1990 provided \$ 56 billion in economic aid to the poorer countries and sold \$ 36 billion worth of arms to them. At a cost of less than half their military expenditures, the developing countries could provide a package of basic health care services and clinical care that would save 10 million lives a year. World military spending in 1992 exceeded \$ 600 billion. U. S. military spending accounted for nearly half this amount, despite the fact that in the U.S. one person in seven lives below the poverty line and over 37 million people lack any form health care coverage. In his foreword, John Kenneth Galbraith writes, "With the end of the Cold War, military expenditure on the present scale is patently ridiculous." But, Garrett Hardin reminds us (see previous entry), it costs money to protect your lifeboat. And with all that money spent, there is precious little left for conservation. (v4,#4)

Sive, David, "Standing, Sprawl, and More Stringent Emissions Limitations via the Clean Air Act," Journal of Environmental Law & Practice 7 (No. 3, 2000 Winter): 6- . (v.11,#4)

Sixel, Freidrich W., in cooperation with Luther, Bladev R., Nature in Our Culture: A Study in the Anthropology and Sociology of Knowing. Lanham, MD: University Press of America, 2001. Environmental problems are not a consequence of incorrect science but of the history of Western society. The dominant culture that has developed in modernity serves, primarily, the dominance of that culture. An egoistic instrumentalism forces the modern individual to view everything in terms of its usefulness. Only a culture that resurrects in itself its own "Nature-ness" will rectify our present problematic Nature. With particular attention to Goethe. (v.12,#3)

Siy, E., L. Koziol, and D. Rollins, The State of the States: Assessing the Capacity of States to Achieve Sustainable Development through Green Planning. San Francisco: Resource Renewal Institute, 2001. (Fort Mason Center, Pier One, San Francisco, CA 94123). (v. 15, # 3)

Sizer, Nigel. Profit Without Plunder: Reaping Revenue From Guyana's Tropical Forests Without Destroying Them. Washington, D.C.: World Resource Institute, 1995. 46pp. \$14.95 paper. This report, developed at the request of Guyana's President, Dr. Cheddi Jagan, explains how the country can reap

revenue from its forests without destroying them. Identifying seven key steps Guyana can take for sustainable forestry management, author Nigel Sizer provides both concrete proposals for immediate and long-term action and a comprehensive analysis of the country's forestry programs to date. (v8,#1)

Sjöländer-Lindqvist (Sjöländer-Lindqvist), Annelie, "Conflicting Perspectives on Water in a Swedish Railway Tunnel Project," Environmental Values 14(2005):221-239. The building of a railway tunnel through the Hallandsås ridge in the southwest of Sweden resulted in sinking groundwater levels and a toxic spill for the local community. As a result, this highly technological project expanded from the addressing of technological and economic issues of rail traffic and tunnel building to include issues of environmental harm and how to assess and manage the geology of the ridge. A central concern for local residents as well as for the developer has been how to view and interpret the resource of groundwater. This article focuses on groundwater as a boundary object, bordering the domains of the technologists and the local community. In this situation, technological understanding and knowledge confronts an experience-based understanding and a symbolic interpretation of the water resource. Sjöländer-Lindqvist is at Göteborg University, Göteborg, Sweden. (EV)

Sjosted, Gunnar, Review of Pritchard, Roger, International Environmental Negotiation. Environmental Values 3(1994):183. (EV)

Skagen Ekeli, Kristian, "Environmental Risks, Uncertainty and Intergenerational Ethics," Environmental Values 13(2004):421-448. The way our decisions and actions can affect future generations is surrounded by uncertainty. This is evident in current discussions of environmental risks related to global climate change, biotechnology and the use and storage of nuclear energy. The aim of this paper is to consider more closely how uncertainty affects our moral responsibility to future generations, and to what extent moral agents can be held responsible for activities that inflict risks on future people. It is argued that our moral responsibility to posterity is limited because our ability to foresee how present decisions and activities will affect future people is limited. The reason for this is primarily that we are in a situation of ignorance regarding the pace and direction of future scientific and technological development. This ignorance reduces our responsibility in a temporal dimension because in most areas it is impossible to predict the interests and resource needs of future generations. In one area, however, we have fairly reliable knowledge about future people. It is reasonable to assume that future human beings will have the same basic physiological (physical and biological) needs as we have. On this basis, it is argued that we can be held responsible for activities causing avoidable damage to critical resources that are necessary to provide for future physiological needs. Furthermore, it is suggested that it is prima facie immoral to impose risks upon future generations in cases where the following conditions are fulfilled: (1) the risk poses a threat to the ability of future generations to meet their physiological needs, and (2) the risk assessment is supported by scientifically based harm scenarios. Ekeli is in philosophy, Norwegian University of Science and Technology, Trondheim, Norway. (EV)

Skakoon, Elizabeth. "Nature and Human Identity." *Environmental Ethics* 30(2008):37-49. In opposition to modernist conceptions of the "self," some environmental philosophers argue that human identity is first and foremost wild and natural because it is a product of an ontologically independent nature. They use evolutionary theory to create and maintain a division between our wild, natural human identity and our artificial culture. Their position is supported by a misunderstanding of both early hominid evolution and artifacts. Artifacts are not the neutral instruments of human will, but exist with us in "economies" that constantly create unintended consequences. In terms of recent work in the field of philosophical anthropology, a reexamination of the evolutionary evidence suggests that our identity is not natural but completely artificial. This artificial identity provides us with new ways of conceptualizing our present ecological problems. (EE)

Skelton, William H., ed., Wilderness Trails of Cherokee National Forest. Knoxville: University of Tennessee Press, 1992. 323 pages. Over a hundred trails in this 625,000 acre national forest, along the

Tennessee-North Carolina State line, accessible within a day's drive by most of the Eastern United States and surrounding the Great Smoky Mountains National Park, one of the most visited parks in the world. This is a fine example of a University Press contributing to local environmental appreciation and conservation. Skelton is a Knoxville, Tennessee attorney. (v4,#3)

Skinner, M. W., Kuhn, R. G. and Joseph, A. E., "Agricultural Land Protection in China: A Case Study of Local Governance in Zhejiang Province," Land Use Policy 18(no.ER4, 2001): 329-40. (v.13,#2)

Skirbekk, Gunnar, Manuscripts on Rationality (Bergen: Ariadne Forlag, 1992). (in English) Paper, 241 pages. ISBN 82-90477-22-8. Includes: "Technological Expertise and Global Ethics in an Age of Scientization and Ecological Crisis"; "The Beauty and the Beast: Ethical Reflections on the Borderline between Humankind and Beasthood"; "Property and Interdependence: Remarks on the Notion of Ownership in the Borderline between Economy and Ecology" (asking "To what extent is man entitled to treat nature as his private property; what can and cannot be owned?"; and "Ethical Gradualism." The last essay presents arguments in favor of an ethical gradualism between humans and other mammals and between humans and nature. Humans do have a paradigmatically different identity owing to their social nature and to their discursive rationality; nevertheless "there is no sharp borderline between man and higher mammals and some ethical gradualism is therefore called for." Extending this to plants, species, and ecosystems is more problematic. (Norway)

Skirbekk, Gunnar, Eco-Philosophical Manuscripts (Bergen: Ariadne forlag, 1992) (in English). 98 pages. Paper. ISBN 82-90477-27-9. Six essays: "Ecological Crisis and Technological Expertise"; "Science and Ethics"; "A Crisis in the Humanities"; "Political Culture"; "Eco-Crisis and the Welfare State"; "A Pragmatic Notion of Nature." The last is "an essay on the Norwegian way of life, in regard to the rapport between nature and national identity." "Norwegians are not very exciting, except for their relation to nature." Unlike most Europeans, further south, that relation is neither one of domination nor of aesthetic appreciation. Norwegian children grow up with more exposure to nature than most; there is a long history of a close relation between people and nature. "Thus nature, together with history and peasantry, became the foundation of national consciousness. This is a rapport to nature which is not grasped in terms of resources for material exploitation, or as an object for aesthetic contemplation. This is nature as the foundation for self-respect and self-understanding." "The Norwegian ideology of open-air life is ... saturated by caution and piety toward nature by some sort of eco-philosophic reverence for life." "This way of understanding nature, and of living with it, transcends the ethical dimension and points towards the dimension of metaphysics." There is a similar essay in his Rationality and Modernity (forthcoming). (Norway)

Skirbekk, Gunnar, ed., The Notion of Sustainability and its Normative Implications. Oslo: Scandinavian University Press, 1994. 193 pages. Six articles, all in English: Michael Ruse (Philosophy, University of Guelph), "Sustainability"; Jorgen Randers (Economics, Norwegian School of Management, Oslo), "The Quest for a Sustainable SocietyA Global Perspective"; Peter B. Sloep (Biology, Dutch Open University at Heerlen), "The Impact of 'Sustainability' on the Field of Environmental Science"; Kristin Shrader-Frechette (Philosophy, University of South Florida), "Sustainability and Environmental Ethics"; Gunnar Skirbekk, "Ethical Gradualism, beyond Anthropocentrism and Biocentrism?"; Georgios Anagnostopoulos (Philosophy, University of California, San Diego), "Sustainability and Ways of Achieving It." The authors claim to defend a "reasonable radicalism," avoiding the Scylla of soft eco-holism and the Charybdis of shortsighted scientism. Skirbekk is in philosophy at the University of Bergen. (v5,#4)

Skjaereth, JB; Wettestad, J, "Understanding the Effectiveness of EU Environmental Policy: How Can Regime Analysis Contribute?," Environmental Politics 11(no.3, 2002): 99-120.

Sklar, Holly. "Scapegoating and Slander: Blaming the Poor for Poverty", The Ecologist 26(no.

4,1996):187. To deflect blame from the economic policies which are creating poverty and unemployment, many local and national leaders are scapegoating those most impoverished by such policies: principally single mothers, ethnic minorities, and the poor themselves. Such scapegoating is being used to divide and rule opposition to globalization: instead of working together across racial lines and gender divides to transform society, people are being turned against each other. (v7,#4)

Skoch, Edwin A., "Personal Injury Liability Coverage for Environmental Contamination under the Comprehensive General Liability Policy: Is Migrating Pollution A `Wrongful Entry or Eviction or Other Invasion of the Right of Private Occupancy", Tulane Environmental Law Journal, 9(No.1, 1995):37- . (v7,#1)

Skog, Kenneth E. and Ince, Peter J., "Industrial Ecology and Sustainable Forestry," Journal of Forestry 98(no.10, OCT 01 2000):20- . Tracing the flow of materials through production and consumption is a useful but limited approach to determine the most effective ways to conserve forests and their benefits. (EE v.12,#1)

Skogen, K., "Adapting Adaptive Management to a Cultural Understanding of Land Use Conflicts," Society and Natural Resources 16(no. 5, 2003): 435-450. (v 14, #3)

Skolimowski, Henryk, "Ecology and the Sanctity of Life." 1992. Publication no. 7. Available from Eco-Philosophy Centre, 1002 Granger, Ann Arbor, MI 48104. (v6,#4)

Skolimowski, Henryk, The Participatory Mind: A New Theory of Knowledge and of the Universe. Reviewed by Noel Charlton. Environmental Values 5(1996):183-186. (EV)

Skolimowski, Henryk. Eco-Philosophy: Designing New Tactics for Living. Reviewed in Environmental Ethics 6(1984):167-74.

Skolimowski, Henryk. "In Defence of Sustainable Development." Environmental Values 4(1995):69-70. Wilfred Beckerman, of Balliol College, Oxford has written a crisp essay attempting to undermine the meaning of the concept of `Sustainable Development'. As I read his first arguments, I couldn't agree with him more that the concept is excessively stretched, that there is a lot of sloppy usage, and indeed that a spurious intellectual industry has been created in manufacturing various by-products of Sustainable Development. But ... Skolimowski is in ecological philosophy in Poland. (EV)

Skolimowski, Henryk. "The Dogma of Anti-Anthropocentrism and Ecophilosophy." Environmental Ethics 6(1984):283-88.

Skolnikoff, Eugene B. The Elusive Transformation: Science, Technology, and the Evolution of International Politics. Princeton University Press, 1993. 320 pages. \$39.50. A professor of political science at MIT and White House advisor under several administrations, Skolnikoff argues that the most powerful and persistent forces in societal change are science and technology. Included are TV, nuclear weapons, global warming, and the green revolution. This book is the first comprehensive attempt to show the interrelationship of international political systems and science and technology. Based on extensive research and the author's accumulated experience. "... a tour de force" --Ted Greenwood, Sloan Foundation. (v5,#2)

Skorupinski, Barbara, et al., "Consensus Conferences - A Case Study: Publiforum in Switzerland with Special Respect to the Role of Lay Persons and Ethics," Journal of Agricultural and Environmental Ethics 20(2007):37-52. This paper focuses on experiences from a case study dealing with the Swiss type of a consensus conference called "PubliForum" concerning "Genetic Technology and Nutrition" (1999).

Societal and ethical aspects of genetically modified food meanwhile can be seen as prototypes of topics depending on the involvement of the public through a participatory process. The important role of the lay perspective in this field seems to be accepted in practice. Nevertheless, there is still some theoretical controversy about the necessity and democratic legitimacy of participatory processes in general, and especially about those dealing with technological or environmental problems (sustainable development) concerning society. From an ethical point of view, a lot of heterogeneous problems concerning contents and procedures of public participation can be pointed out, not only on the theoretical level but also in practice, e.g., concerning the communication process between laypersons and experts. The intention of our paper is to give hints and to clarify criteria that support the communication process leading to a dialog of autonomous citizens and which especially consider ethical aspects in the field. One important result is that there must be an orientation for all members of a consensus conference having clear rules and knowing their different roles that support transparency, credibility, and fairness of the whole procedure and a "good product": a substantial final document or citizens' report. This paper presents results of the project Ethical Bio-TA Tools as funded by the European Commission, DG Research, under FP5, Quality of Life Programme.

Keywords: autonomy - consensus conferences - GM food - lay persons - publiForum. Skorupinski is in the Unit für Ethics in Biosciences, University of Basel, Switzerland.

Skorupinski, Barbara, "Putting Precaution to Debate - about the Precautionary Principle and Participatory Technology Assessment," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):87-102. Technology assessment (TA) as an institution was introduced nearly thirty years ago as an instrument to render possible the making of responsible decisions concerning new technological options. Another recent development however has been the introduction of participatory technology assessment (pTA), mainly connected to the growing insight that the evaluation of technological options with respect to their risks and benefits, is not--only--a scientific question. This paper will focus on the questions, to what degree the ideas of technology assessment and the Precautionary Principle are connected and how. Without naming it explicitly, the Precautionary Principle is put to debate in the "TA-arrangement on the cultivation of transgenic herbicide resistant crops," organized by the Science Centre, Berlin. From the perspective of ethical clarification, some unique features concerning the conceptualization of the discursive procedure and reconstruction of the argumentation process in order to come to results have to be analyzed. Finally the performance and results of the pTA-arrangement are reflected in the light of the Precautionary Principle and conclusions are drawn. KEY WORDS: discourse, participatory technology assessment, precautionary principle, risk assessment, transgenic plants. Skorupinski is with the Institute für Social Ethics, Zurich, Switzerland. (JAEE)

Slattery, D, "Resistance to Development at Wilsons Promontory National Park (Victoria, Australia)," Society and Natural Resources 15(no.7, 2002): 563-80. (v.13,#4)

Slesser, Malcolm, King, Jane, and Crane, David C., The Management of Greed: A Bio-Physical Appraisal of Environmental and Economic Potential. Edinburgh: RUI Publishing Co., 1997. (12, Findhorn Place, Edinburgh Scotland, EH9 2JP) ISBN 1-872579-07-8. 327 pages. £ 12.00. Greed is not entirely bad. It is a motivating force for creativity. It is a spur to endeavor. But where greed becomes an obsession with material acquisition, it can become a cancer. Unconstrained and thoughtless consumption is driving our humanly designed economy and society into an unsustainable state because it is overtaking nature's ability to cope. We humans need to defend nature, not just for her sake, but for ours as well. Nature is infinitely more durable than the human race. Greed is but a fact of the life force. In the management of greed towards positive ends hope can be found. (v.8,#4)

Slicer, Deborah, Review of: Greta Gaard, ed., Ecofeminism: Women, Animals, Nature, Environmental Ethics 16(1994):315-319.

Slicer, Deborah. "Is There an Ecofeminism Deep Ecology 'Debate'?" Environmental Ethics 17(1995):151-169. I discuss six problems with Warwick Fox's "The Deep Ecology-Ecofeminism Debate and Its Parallels" and conclude that until Fox and some other deep ecologists take the time to study feminism and ecofeminist analyses, only disputes--not genuine debate--will occur between these two parties. An understanding of the six issues that I discuss is a precondition for such a debate. Slicer is in the philosophy department, University of Montana. (EE)

Slicer, Deborah. Review of The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory. By Carol J. Adams. Environmental Ethics 14(1992):365-69.

Slicer, Deborah. "Obligations to Animals Are Not Necessarily Based on Rights." Journal of Agricultural and Environmental Ethics 8(1995):161-170. I offer a very qualified argument to the effect that rights are grounded in a certain sort of prejudice that privileges individualistic and perhaps masculinist ways of thinking about moral life. I also propose that we look carefully at other conceptions of social ontology and moral life, including the much discussed care conception. (JAEE)

Sloan, D., "A Postmodern Vision of Education for a Living Planet." In D. R. Griffen and R. Falk, ed., Postmodern Politics for a Planet in Crisis. Albany: State University of New York Press, 1993. (v6,#2)

Sloan, Gail L., and Welton, Bill, "Haskell Indian Nations University: Holistic Education in the Natural Resources," Journal of Forestry 95(Nov. 1997):37-. (v.8,#4)

Sloan, NA, "History and Application of the Wilderness Concept in Marine Conservation," Conservation Biology 16(no.2, 2002):294-305. (v.13, #3)

Sloan, Phillip R., ed. Controlling Our Destinies. Notre Dame: University of Notre Dame Press, 1997. 400pp. \$28.95 cloth, \$16 paper. Contributors have taken seriously the mandate, as expressed when the U.S. Congress approved funding for the Human Genome Project, to conduct an ongoing assessment of the ethical, legal and social implications of this scientific enterprise. Their essays include discussions of the historical background of the project, issues behind the concepts of "code" and "genes", the implicit reductionism in contemporary human genetics, and an examination of the nagging issues surrounding potential new forms of positive "eugenics". (v7,#4)

Slobodkin, Lawrence B., A Citizens Guide to Ecology. New York: Oxford University Press, 2003. Slobodkin is at SUNY, Stony Brook.

Slocombe, D. Scott, ed. Tools for Sustainability: Explorations and Prospects, proceedings of a workshop held at Wilfred Laurier University, October 1991 (Waterloo, Ontario: Wilfrid Laurier University Cold Regions Research Centre, 1991), 156 pages. Also Working Paper No. 2 of the Commission on Environmental Strategy and Planning of the International Union for Conservation of Nature and Natural Resources (IUCN). Fifteen papers: sample topics: bioregionalism, adaptive management in the Canadian north, information technology as an enabling tool, sustainability in indigenous systems, integrating populations and nature conservation. Canadian \$ 10, plus \$ 2 shipping, from Cold Regions Research Centre, address above. (v4,#1)

Slocombe, D. Scott, Julia K. Roelof, Lirondel C. Cheyne, Susan Noalani Terry, and Suzanne den Ouden, eds., What Works: An Annotated Bibliography of Case Studies of Sustainable Development. Sacramento: International Center for the Environmental and Public Policy, 1993. (v5,#1)

Slocombe, D. Scott, Ecosystem Approaches: An Annotated Multidisciplinary Bibliography (Waterloo, Ontario: Wilfred Laurier University Cold Regions Research Centre, 1991), 58 pages. Also Working

Paper No. 1 of the Commission on Environmental Strategy and Planning of the International Union for Conservation of Nature and Natural Resources (IUCN). A bibliography for ecosystem approaches to environmental planning and management, with a keyword index. 207 annotated items, selected as the key references in the field. Slocombe is a geographer at Wilfred Laurier University. Canadian \$ 5 plus \$ 2 shipping, from Cold Regions Research Centre, Wilfred Laurier University, Waterloo, Ont. N2L 3C5, Canada. Phone: 519/884-1970. (v4,#1)

Slovic, Scott H. and Terrell H. Dixon, eds., Being in the World: An Environmental Reader for Writers. New York: Macmillan, 1993. 704 pages. Eighty-five selections, with a wide diversity. Includes multiple selections by ten noted writers. A general introduction to environmental writing, for use in nature writing courses. Discussion topics and writing assignments designed to encourage students to explore their own relationship to nature as a way of strengthening their writing. Readings are grouped thematically moving from detached observation of nature into direct contact to familiarity and internalization. Sample sections: Encounters with the Otherness of Nature; Fecundity and Mortality; Walking: On the Trail and Off; Water: Water Narratives; Birds and Beasts; Nearby Nature; Climbing: Mountain Narratives; A Sense of Place; Spiritual and Aesthetic Responses to Nature; Visual Representations of Nature (with four color prints); Nature and the Mind. Slovic is at Southwest Texas State University, Dixon is at the University of Houston. (v4,#1)

Smail, J. Kenneth, "Beyond Population Stabilization: The Case for Dramatically Reducing Global Human Numbers," Politics and the Life Sciences 16(1997):183-192. There is a growing tension between two apparently irreconcilable trends: (1) demographic projections that world population size will reach 10 to 11 billion by the middle of the next century; and (2) scientific estimates that the Earth's long-term sustainable carrying capacity (at an "adequate to comfortable" standard of living) may not be much greater than 2 to 3 billion. It is past time to develop internationally coordinated sociopolitical initiatives that go beyond slowing the growth or stabilizing global human numbers. After "inescapable realities" that humans must soon confront, and notwithstanding the considerable difficulties involved in establishing "global population optimums," I conclude with several suggestions how best to bring about a very significant reduction in global population over the next two to three centuries (to perhaps 75 percent of the present population). Smail is an anthropologist at Kenyon College, Gambier, Ohio. With commentaries by 16 critics, including Norman Myers, "The Population/Environment Problem: Even more Urgent than Supposed; Timothy F. Flannery, "Australia: Overpopulated or Last Frontier?"; Charles F. Westoff, "Population Growth: Large Problem, Low Visibility; and others.

Smale, M., ed., Valuing Crop Biodiversity: On-Farm Genetic Resources and Economic Exchange, New York: Oxford University Press, 2006. Challenges involved in maintaining local crop biodiversity within a rapidly changing global food system. Policy debates related to the Convention on Biological Diversity. Smale is with the International Food Policy Research Institute, Washington, DC.

Small, Bruce H., and Mark W. Fisher, "Measuring Biotechnology Employees Ethical Attitudes towards a Controversial Transgenic Cattle Project: The Ethical Valence Matrix," Journal of Agricultural and Environmental Ethics 18(2005):495-508. Employees of a New Zealand company, AgResearch Ltd., were surveyed regarding a project to create transgenic cattle containing a synthetic copy of the human myelin basic protein gene (hMBP). They were generally: in favor of the project, believed that it should be allowed to proceed to completion, and that it is acceptable to use transgenic cattle to produce medicines for humans. Scales were developed to measure respondents beliefs about the moral outcomes of the project for identified stakeholders in terms of the four principles of common morality (benefit, non-harm, justice, and autonomy). We propose that the Ethical Valence Matrix may be used as a tool to measure ethical attitudes towards controversial issues, Key words attitudes - autonomy - benefit - ethical valence - genetic engineering - harm - justice - principles - research - stakeholders. The authors are in the Social Research Unit, Ruakura Research Centre, AgResearch Ltd, Hamilton, New Zealand. (JAEE)

Smeloff, Ed, and Asmus, Peter. Reinventing Electric Utilities. Washington, D.C.: Island Press, 1996. 165 pages. \$34.95 cloth, \$16.95 paper. Through an in-depth case study of the Sacramento Municipal Utility District, a once troubled utility that is now widely regarded as a model for energy efficiency and renewable energy development, the authors explore the changes that have occurred in the utility industry, and the implications of those changes for the future. (v7, #3)

Smil, Vaclav, The Bad Earth: Environmental Degradation in China. Armonk, NY: M. E. Sharpe, Inc. and London: ZED Press, 1984. 245 pages. Extensive account of serious environmental degradation and highly critical of the Maoist government and massive, bumbling Chinese bureaucracy. Deforestation and resulting erosion and flooding is China's most serious environmental problem. Much of this results from Marxist idealism about growing grain in unsuitable areas. The land use mistakes, when coupled with population, growth, have China on a disaster course. The silting of the Huang (Yellow) River is one of the most intractable environmental problems on Earth. The most fundamental problem is not population size, or relative poverty, or political instability; it is a staggering mistreatment of the environment, which will prove the most serious check on China's reach toward prosperity. Smil is a geographer at the University of Manitoba. (China)

Smil, Vaclav, Global Ecology: Environmental Change and Social Flexibility. New York: Routledge, 1993. 256 pages. Paper, £ 13.99. The magnitude and rapidity of global environmental change threatens the perpetuation of life on Earth, yet we avoid the underlying challenge of a rapidly deteriorating ecological system. The breadth and complexity of responses demanded require a flexible social response. Smil is at the University of Manitoba. (v5,#1)

Smil, Vaclav, Feeding the World: A Challenge for the Twenty-First Century. Cambridge, MA: The MIT Press, 2000. Neither the catastrophic view that widespread starvation is imminent, nor the cornucopian view that welcomes more population confident that human inventiveness can feed them. Rather, if we increase farming efficiency, reduce waste, and transform our diets, prospects are not as bright as we would like, but the outlook is not disheartening. (v.12,#4)

Smil, Vaclav, Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production. Cambridge, MA: MIT Press, 2001. The industrial synthesis of ammonia from atmospheric nitrogen and hydrogen, making possible large amounts of nitrogen rich fertilizer, has been of greater fundamental significance to the modern world than the invention of the airplane, nuclear energy, space flight, or television. The expansion of the world's population from 1.6 billion in 1900 to today's six billion would not have been possible without the synthesis of ammonia and the resulting fertilizer. One is left wondering whether any comparable technologies might be forthcoming. (v.11,#4)

Smil, Vaclav, China's Environmental Crisis: An Inquiry into the Limits of National Development. London and Armonk, NY: M. E. Sharpe, 1993. ISBN 0-87332-819-0 cloth. 1-56324-041-6 paper. A fine analysis, and a good reality check for those who think that environmental ethics or environmental legislation is a priority in China. By a long-term China scholar, at the University of Manitoba.

Smil, Vaclav, "China Shoulders the Cost of Environmental Change" Environment 39 (no. 6, 1997):6-9, 33-37. As demographic growth and industrial expansion continue to transform the world's most populous nation, the price China will pay for degrading its air, water, and land grows. Although complete data are difficult to obtain, there can be no doubt that recent environmental changes in China already carry economic costs roughly an order of magnitude higher than the country's annual spending on environmental protection. Even if the government tripled or quadrupled its outlays, they could easily meet the strictest benefit-cost criteria. Smil teaches geography at the University of Manitoba, Winnipeg. See also a similar item in "Issues." (v8,#3)

Smil, Vaclav. *Energy in Nature and Society: General Energetics of Complex Systems*. Cambridge, MA: The MIT Press, 2008. Smil uses fundamental unifying metrics to analyze the study of natural and anthropogenic energy flows and their transformations from hunter-gatherer and agricultural societies through modern-day industrial civilization. Topics include heterotrophic conversions, traditional agriculture, preindustrial complexification, fossil fuels, fossil-fueled civilization, the energetics of food, and the implications of energetics for the environment.

Smil, Vaclav. *Global Catastrophes and Trends: The Next Fifty Years*. Cambridge, MA: The MIT Press, 2008. Smil examines rare, cataclysmic events (natural and anthropogenic) and trends of global importance including the transition from fossil fuels to other energy sources, political and demographic shifts, battles for global primacy, and growing social and economic inequality. He argues that relying upon long-term historical perspectives of change can help us reverse negative trends and minimize the risk of catastrophe.

Smith, A., "Review of: Clark A. Miller and Paul N. Edwards (Eds.), Changing The Atmosphere: Expert Knowledge and Environmental Governance," Environmental Politics 12(no. 1, 2003): 257-258. (v 14, #3)

Smith, A., "Review of: Brian Doherty, Ideas and Actions in the Green Movement," Environmental Politics 12(no. 2, 2003): 161.

Smith, Adrian. Integrated Pollution Control: Change and Continuity in the UK Industrial Pollution Policy Network. Brookfield, VT: Ashgate, 1997. 264 pp. \$68.95. Policy network analysis is used to explain why the Integrated Pollution Control came about in 1990, and how its implementation has failed to meet initial aspirations.

Smith, Adrian. Integrated Pollution Control: Change and Continuity in the UK Industrial Pollution Policy Network. Brookfield, VT: Ashgate, 1997. 264 pp. \$68.95. Policy network analysis is used to explain why the Integrated Pollution Control came about in 1990, and how its implementation has failed to meet initial aspirations.

Smith, and H. Gene Blocker, eds., Applied Social and Political Philosophy. Englewood Cliffs, NJ: Prentice-Hall, 1994. 608 pages. Paper. A new text in applied philosophy. Contains Henry Shue, "Basic Rights. The Rights and Welfare of the Environment, Animals, and Future Generations"; David G. Ritchie, "Why Animals Do Not have Rights"; Joel Feinberg, "The Rights of Animals and Unborn Generations"; Tom Regan, "The Moral Basis of Vegetarianism"; Christopher D. Stone, "Earth and Other Ethics." Both authors are in philosophy at Ohio University. (v4,#4)

Smith, Andrew A., Moote, Margaret A. and Schwalbe, Cecil R., "The Endangered Species Act at Twenty: An Analytical Survey of Federal Endangered Species Protection," Natural Resources Journal 33(1993):1027-1075. The Endangered Species Act of 1973 is both praised and criticized for its efforts to protect species from extinction. Its stringent provisions spark controversies pitting species preservation against economic and other concerns. An analysis of issues central to debate of the ESA as it faces congressional reauthorization. Questions focus on measures that form the basis for species preservation under the ESA, federal government's role in its implementation, funding problems, conflicts with private property rights, and the ESA's basic approach to conservation. Preservation policy must evolve with societal and scientific change, shifting its focus toward implementing ecosystem management techniques. The authors are at the School of Renewable Natural Resources, University of Arizona, Tucson. (v.10,#1)

Smith, April A., Campus Ecology: A Guide to Assessing Environmental Quality and Creating Strategies for Change. Los Angeles: Living Planet Press, 1993. 130 pages. \$ 17.95. Waste reduction, energy

efficiency, water conservation, environmental justice, transportation alternatives, recycling, green investment strategies, environmental education and careers. April Smith is an environmental planner based in Los Angeles. (v4,#1)

Smith, Bruce D. "The Ultimate Ecosystem Engineers." *Science* Vol. 315, no. 5820 (30 March 2007): 1797-98. "Ecosystems engineers" has become a buzzword for animals that behave in ways that result in changes in their surrounding environment, such as beavers and their ponds. Here humans are called the ultimate ecosystem engineers, due to their management of wild plants sowing, burning, weeding, irrigation, transplanting, mulching, and also their use of dogs. But the word "ultimate" is a considerable overstatement, since humans often modified landscapes only locally, often failed, often did not realize the results of that they were doing, and often had to abandon landscapes they had modified and degraded. Also, it is difficult for landscapes to recover from the remaining effects of human modification in the remote past.

Smith, C., "Revisiting Solar Power's Past." *Technology Review* 98 (no. 5, 1995), 38-47. (v7,#4)

Smith, C., Review of *Shattering: Food, Politics and the Loss of Genetic Diversity*, by Gary Fowler and Pat Mooney, *Journal of Agricultural and Environmental Ethics* 6(1993):216.

Smith, Craig S., "Rain on Sahara's Fringe Is Lovely Weather for Locusts," *New York Times*, July 21, 2004. The western Sahara, long in the midst of a drought, is as green as it has been for sixty years, and this has brought locust hordes, the worst infestation since the 1980's. Locusts can ride fifty miles a day in the winds, in hordes that can be seen from satellites. They devastate crops. A serious part of the problem is a contested border, 20-30 miles wide, long claimed by both Morocco and Algeria, and which neither side wishes to enter to treat for fear of hostilities. This has become an unintended breeding ground for locusts. (v. 15, # 3)

Smith, D., "Garden Game: Shifting Cultivation, Indigenous Hunting and Wildlife Ecology in Western Panama," *Human Ecology* 33(no. 4, August 2005): 505-537.

Smith, Daniel S. and Paul Cawood Hellmund, eds., *Ecology of Greenways: Design and Function of Linear Conservation Areas*. 308 pages. hardbound, \$ 39.95. Minneapolis: University of Minnesota Press, 1993. Greenways are naturally vegetated corridors to maintain biological diversity on otherwise fragmented landscape ecosystems, as well as to provide recreational and other benefits. (v4,#2)

Smith, David M., "American Chestnut: Ill-fated Monarch of the Eastern Hardwood Forest," *Journal Of Forestry* 98 (No. 2, Feb 01 2000): 12- . Among the most prolific and important of eastern hardwood species at the dawn of the 20th century, the blighted American chestnut now persists mostly as understory saplings and poles. (v.11,#2)

Smith, David M., "Moral progress in human geography: transcending the place of good fortune," *Progress In Human Geography* 24 (No. 1, 2000): 1- . (v.11,#2)

Smith, David M., "Geography and Ethics: Progress, or More of the Same?," *Progress In Human Geography* 25(no.2, 2001): 261-. (v.12,#3)

Smith, DW; Peterson, RO; Houston, DB, "Yellowstone after Wolves", *Bioscience* 53(no.4, 2003):330-340.

Smith, Elizabeth; McKinnis, Peter; Tran, Liem; O'Neill, Robert, "The Effects of Uncertainty on Estimating the Relative Environmental Quality of Watersheds Across a Region," *Landscape Ecology* 21

(no.2, February 2006): 225-231 (7).

Smith, Eric R.A.N. and Marquez, Marisela, "The Other Side of the NIMBY Syndrome," Society & Natural Resources 13 (No. 3, Apr 01 2000): 273- . (v.11,#2)

Smith, F. Russell, The Value of Ferns and the Problem with Bracken, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Smith, G, "Review of: Felix Dodds (ed.) (with Toby Middleton), Earth Summit 2002: A New Deal," Environmental Politics 11(no.4, 2002): 139.

Smith, G., "Review of: John Barry and E. Gene Frankland (Eds.), International Encyclopedia of Environmental Politics," Environmental Politics 12(no. 2, 2003): 157.

Smith, Graham Martin, Pluralism, Deliberative Democracy and Environmental Values, 1997, University of Southampton (United Kingdom), Ph.D. thesis in political science. 532 pages. How contemporary democratic decision making processes might more adequately attend to environmental values, connecting environmental politics and ethics. Humans value the nonhuman world in diverse ways. Value pluralism challenges moral philosophy and environmental ethics where the aim is to develop a monistic ethical theory. Decision making techniques such as cost-benefit analysis are insensitive to such value pluralism and misrepresent the values we associate with the nonhuman world. Liberal theory and liberal representative institutions fail to attend to environmental value pluralism. Two potential models of deliberative institutions are investigated--citizen panels and mediation--which might increase the ecological quality of political decisions. (v.10,#1)

Smith, Graham. "Towards Local Sustainability," Environmental Politics 4(no.3, Fall 1995):492- . (v6,#4)

Smith, Gregory A. Education and the Environment: Learning to Live with Limits: (Albany: State University of New York Press, 1992). Reviewed by John F. Disinger in Environmental Ethics 17(1995):107-108. (EE)

Smith, Herbert F. Review of Speaking for Nature. By Paul Brooks. Environmental Ethics 3(1981):371-73.

Smith, J. A., and Boyd, K. M., eds., Lives in the balance: The ethics of using animals in biomedical research. New York: Oxford University Press, 1991.

Smith, J. Brian. "Western Wetlands: The Backwater of Wetlands Regulation." Natural Resources Journal 39(No. 2, Spring 1999):357- . (v10,#4)

Smith, J. Andy, III. "Corporate Public Accountability and the Environment: Approaches and Guidelines," Theology and Public Policy 5(no. 1, 1993).

Smith, Jesse, Stone, Richard, and Fahrenkamp-Uppenbrink, Julia, "Trouble in Polar Paradise," Science 297(30 August 2002):1489. With an accompanying set of articles on science at both poles revealing troubles at the poles, disintegrating ice shelves, melting sea ice, glaciers, which affect both wildlife and ecosystems there, such as seabird populations and bears, and also will affect conditions over the globe. (v.13,#4)

Smith, Jo, Review of Lipietz, Alain, Towards a New Economic Order: Postfordism, Ecology, and Democracy (Cambridge, Polity Press, 1993) 2nd ed.; Beck, Ulrich, Ecological Politics in an Age of Risk

(Cambridge: Polity Press, 1995); Hayward, Tim, Ecological Thought: An Introduction (Cambridge: Polity Press, 1995); Goldblatt, David, Social Theory and the Environment (Cambridge: Polity Press, 1996). Environmental Values 6(1997):239-241. (EV)

Smith, Jonathan M. and Light, Andrew and Roberts, David, "Philosophies and Geographies of Place," Philosophy and Geography 3 (1998): 1-19. Smith is associate professor of geography at Texas A&M University. Light is in the Applied Philosophy Group at New York University. Roberts is a Ph.D. student in the department of philosophy at the University of Alberta. (P&G)

Smith, Joseph Wayne, The Australia That Can Say "No!". The Multifunction Polis Project, Asia-Pacific Millenarianism and the Tyranny of Technology. 1990. A criticism of the idea of constructing in Australia a joint Japanese-Australian high technology city, which will be a prototype of 21st century cities. Analysis of the concepts of society and nature that inspire the project. Analysis of environmental impact of such a city. Joseph Wayne Smith is Research Fellow, School of Humanities, The Flinders University of South Australia, Bedford Park, 5042, Australia. (v1,#2)

Smith, Joseph M. "The Lost World," The Animals' Agenda 17(no.4, 1997):29. Smith points out how some of the film's deeper messages relate to animal rights. (v8,#3)

Smith, Kimberly K., "Natural Subjects: Nature and Political Community," Environmental Values 15(2006):343-353. Environmental political theory poses new challenges to our received political concepts and values. Increasingly, we are reconceptualising nature as a subject rather than solely an object of politics. On one front, we are being challenged to think of natural entities as subjects of justice - as bearers of rights or interests that the political system should accommodate. On a second front, we are being challenged to see nature as a subject of power, constructed and ordered through scientific and political practice. These reconceptualisations have significant implications for our political practices and institutions. (EV)

Smith, Kimberly K. "What is Africa to Me? Wilderness in Black Thought, 1860–1930." Environmental Ethics 27 (2005):279-297. The concept of wilderness found in the black American intellectual tradition poses a provocative alternative to the preservationist concept. For black writers, the wilderness is not radically separate from human society but has an important historical and social dimension. Nor is it merely a feature of the external landscape; there is also a wilderness within, a vital energy that derives from and connects one to the external wilderness. Wilderness is the origin and foundation of culture; preserving it means preserving not merely the physical landscape but our collective memory of it. But black writers also highlight the racial essentialism that infuses both their own and traditional American concepts of the wild, giving us greater insight into why the wilderness celebrated by preservationists can be a problematic value for racial minorities. (EE)

Smith, Kimberly K. *African American Environmental Thought: Foundations*. Lawrence: University of Kansas Press, 2007. Beginning with environmental critiques of slave agriculture in the early nineteenth century and evolving through critical engagements with scientific racism, artistic primitivism, pragmatism, and twentieth-century urban reform, Smith highlights the continuity of twentieth-century black politics with earlier efforts by slaves and freedmen to possess the land. Her analysis focuses on the importance of freedom in humans' relationship with nature. According to black theorists, the denial of freedom can distort one's relationship to the natural world, impairing stewardship and alienating one from the land. Smith links the early conservation movement to black history, black agrarianism, and scientific racism. She offers a normative environmental theory grounded in pragmatism and aimed at identifying the social conditions for environmental virtue.

Smith, Kimberly K. Review of *To Love the Wind and the Rain: African Americans and Environmental*

History. Edited by Dianne D. Glave and Mark Stoll. *Environmental Ethics* 29(2007):317-318. (EE)

Smith, Kimberly K. "Animals and the Social Contract: A Reply to Nussbaum." *Environmental Ethics* 30(2008)195-207. In *The Frontiers of Justice*, Martha Nussbaum argues that social contract theory cannot accommodate political duties to animals because it requires the parties to the contract to enjoy rough physical and mental equality. Her interpretation of the social contract tradition is unpersuasive; social contract theory requires only that the parties be equally free and deserving of moral consideration. Moreover, social contract theory is superior to her capabilities approach in that it allows us to limit the scope of the community of justice to animals we are capable of recognizing as subjects of justice and with whom we have a political relationship. (EE)

Smith, Kimberly. "Black Agrarianism and the Foundations of Black Environmental Thought." *Environmental Ethics* 26(2004):267-286. Beginning with the nineteenth-century critiques of slave agriculture, African American writers have been centrally concerned with their relationship to the American landscape. Drawing on and responding to the dominant ideology of democratic agrarianism, nineteenth-century black writers developed an agrarian critique of slavery and racial oppression. This black agrarianism focuses on property rights, the status of labor, and the exploitation of workers, exploring how racial oppression can prevent a community from establishing a responsible relationship to the land. Black agrarianism serves as an important starting point for understanding black environmental thought as it developed in the twentieth century, and for illuminating the connections between social justice and environmental stewardship. (EE)

Smith, M, "Review of: Allen Carlson, *Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture*," *Environmental Politics* 11(no.4, 2002): 132.

Smith, M, "Environmental Policy and Political Economy," *Environmental Politics* 12(no.3, 2003):155-159. (v.14, #4)

Smith, M., "Negotiating Nature: Social Theory at Its Limits?," *Environmental Politics* 11(no.2, 2002): 181-86. Review essay of Blühdorn, Ingolfur. *Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm*; Brulle, Robert J., *Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective*; and Hornberg, Alf and Pálsson, Gísli, eds., *Culture, Power, and Environmental Argument*. (v.13,#4)

Smith, M., "Bioregional Visions," *Environmental Politics* 10(no. 2, 2001):140-144. (v.13,#1)

Smith, M. Estellie. "Chaos, Consensus and Common Sense," *The Ecologist* 25(no.2/3, Mar. 1995):80- . Fishery scientists and fishermen often hold radically different view of nature, and hence, radically different approaches to management policies; the unpredictability of fish stocks; local knowledge versus expert knowledge. (v6,#4)

Smith, Mark J., *Ecologism: Towards Ecological Citizenship*. Milton Keynes, UK: The Open University Press, 1998.

Smith, Mark J., ed., *Thinking through the Environment: A Reader*. London: Routledge, 1999. Anthology initially prepared for a course, "Ecology, Social Justice and Citizenship" at The Open University, based at Milton Keynes, UK. Fifty contributors, familiar names in classical environmental ethics and philosophy, but in the concluding parts the emphasis is on political ecology, or ecological citizenship. Smith is in social sciences at The Open University.

Smith, Maureen. *The U.S. Paper Industry and Sustainable Production: An Argument for Restructuring*.

Cambridge, MA: MIT Press, 1997. 300 pp. \$30. Smith shows how industrial and environmental analysis can be synthesized to clarify and produce solutions to the complex problems recyclers face with wastepaper connected to the issues addressed by forest advocates, as well as to the difficulties confronted by those involved with industrial pollution from the paper industry. (v8,#1)

Smith, Maureen. The U.S. Paper Industry and Sustainable Production: An Argument for Restructuring. Cambridge, MA: MIT Press, 1997. 300 pp. \$30. Smith outlines the basic structural characteristics of the U.S. pulp and paper industry and its relationship to the larger forest products sector, as well as its patterns of domestic and global fiber resource use. She reviews core technologies employed in virgin pulp production. She then reveals structural barriers within the industry that have impeded positive change and shows how these barriers are reinforced by the traditional isolation of environmental policy domains. (v.9,#4)

Smith, MB, "Review of: Andrew Jamison, The Making of Green Knowledge: Environmental Politics and Cultural Transformation", Environmental History 8(no.2, 2003):335-336.

Smith, Michael, "Environmentalism: Spiritual, Ethical, Political," Environmental Values 15(2006): 355-363. The normative foundations of the environmental movement can be thought of in a range of different ways. The present paper is a commentary on very interesting papers by Thomas Dunlap, Thomas Hill and Kimberly Smith, who take up the spiritual, ethical and political perspectives respectively. Their accounts are described and evaluated. (EV)

Smith, Mick, Review of Political Theory and the Ecological Challenge. Edited by Andrew Dobson and Robyn Eckersley. *Environmental Ethics* 30(2008):93-96 (EE)

Smith, Mick, An Ethics of Place: Radical Ecology, Postmodernity, and Social Theory. Albany: State University of New York Press, 2001. Reviewed by Brook, Isis, Environmental Values 12(2003):542-543. (EV)

Smith, Mick, An Ethics of Place: Radical Ecology, Postmodernity, and Social Theory. Albany, SUNY, State University of New York Press, 2001. The ecological self and an environmental ethos--an ethics of place--as a way to re-engage the moral concerns of radical ecological theories. Current debates about the status of moral values and theories, the social construction of nature, deep ecology. Smith is in sociology at the University of Albertay, Dundee, Scotland. (v.12,#2)

Smith, Mick, "The State of Nature: The Political Philosophy of Primitivism and the Culture of Contamination," Environmental Values 11(2002):407-425. The "state of nature" could be understood in two senses; both in terms of its nature's current (sorry) condition and of that unmediated and pre-contractual relation between humanity and the environment posited by political philosophers like Locke and Rousseau and now championed by anarcho-primitivism. Primitivism is easily dismissed as an extreme, naive and impractical form of radical environmentalism but its emergence signifies contemporary disaffection with the ideology of "progress" so central to modernity and capitalism. This paper offers an ethico-political interpretation of primitivism's critical relation to modernity in terms of the dialectic between amorality (innocence) and immorality (guilt) within what is characterized as modernity's "culture of contamination". (EV)

Smith, Mick, Review of Johnson, Lawrence, A Morally Deep World. Environmental Values Vol.1 No.1(1992):88.

Smith, Mick, "What's Natural? The Socio-political (De)construction of Nature," Environmental Politics (Summer 1997):164-168. Critical review of Dickens, Peter, Reconstructing Nature: Alienation,

Emancipation and the Division of Labour (London: Routledge, 1996) and Eder, Klaus, The Social Construction of Nature: A Sociology of Ecological Enlightenment (London: Sage, 1996). Smith is at the University of Abertay Dundee, U.K. (v.8,#4)

Smith, Mick, "Citizens, Denizens and the Res Publica: Environmental Ethics, Structures of Feeling and Political Expression," Environmental Values 14(2005): 145-162. Environmental ethics should be understood as a radical project that challenges the limits of contemporary ethical and political expression, a limit historically defined by the concept of the citizen. This dominant model of public being, frequently justified in terms of a formal or procedural rationality, facilitates an exclusionary ethos that fails to properly represent our concerns for the non-human world. It tends to regard emotionally mediated concerns for others as a source of irrational and subjective distortions in an otherwise rationally ordered ethico-political community. In doing so it underestimates the important role played by "structures of feeling," those culturally variable patterns of emotionally mediated responses, that provide the (shifting) grounds for all ethical experience, motivation, communication and interpretation. An alternative model of political expression more suitable to an environmental ethic, the denizen, is suggested. Smith is in environmental studies, Queen's University, Kingston, Ontario. (EV)

Smith, Mick. "Cheney and the Myth of Postmodernism." Environmental Ethics 15(1993):3-17. I draw critical parallels between Jim Cheney's work and various aspects of modernism, which he ignores or misrepresents. I argue, first, that Cheney's history of ideas is appallingly crude. He amalgamates all past Western philosophical traditions, irrespective of their disparate backgrounds and complex interrelationships, under the single heading, modern. Then he posits a radical epistemological break between a deluded modernism--characterized as foundationalist, essentialist, colonizing, and totalizing--and a contextual postmodernism. He seems unaware both of the complex genealogy of postmodernism and of those aspects of modern traditions that prefigure his own thesis. Second, Cheney's account of primitive peoples is both ethnocentric (though positively so) and inaccurate. Third, Cheney reduces context or place to a concept of bioregionality. In this way, he reinstates a privileged foundationalism which, by his own definitions, makes his philosophy modernist. I develop these criticisms in order to suggest a less restricted contextual approach to environmental values. Smith is in the philosophy department, University of Stirling, Scotland. (EE)

Smith, Mick. "Terra Nova: Nature and Culture." Environmental Politics 7(no.1, Spring 1998):237-240. A review essay of the contents of the journal Terra Nova, edited by David Rothenberg. Terra Nova claims to be the journal to dissolve the "polarity" between nature and culture. "Terra Nova could be seen as expression of the need for a green poetics, a psycho-social alchemy, which might escape the all too narrow confines of normal academic journals. It tries to be 'extra' rather than 'inter' disciplinary and for that reason often seems extra-ordinary. ... Not long ago a journal like Environmental Ethics was regarded by serious (that is to say 'staid') philosophers as a wacky irrelevance. Today not least due to the efforts of the editors of Environmental Ethics, environmental issues have begun to enter the philosophical mainstream and the journal's primogeniture carries with it a certain academic cachet." The mantle of the marginal has passed to Terra Nova, the only journal that can put Wordsworth together with Wittgenstein. Smith is at the University of Abertay, Dundee, Scotland. (v10,#4)

Smith, Mick. "To Speak of Trees: Social Constructivism, Environmental Values, and the Future of Deep Ecology." Environmental Ethics 21(1999):359-376. The power and the promise of deep ecology is seen, by its supporters and detractors alike, to lie in its claims to speak on behalf of a natural world threatened by human excesses. Yet, to speak of trees as trees or nature as something worthy of respect in itself has appeared increasingly difficult in the light of social constructivist accounts of "nature." Deep ecology has been loath to take constructivism's insights seriously, retreating into forms of biological objectivism and reductionism. Yet, deep ecology actually has much in common with, and much to gain from, some varieties of constructivism and can add a new dimension to constructivism's own critique of current

ideologies. (EE)

Smith, Mick. "Environmental Anamnesis: Walter Benjamin and the Ethics of Extinction." Environmental Ethics 23(2001):359-376. Environmentalists often recount tales of recent extinctions in the form of an allegory of human moral failings. But such allegories install an instrumental relation to the past's inhabitants, using them to carry moralistic messages. Taking the passenger pigeon as a case in point, I argue for a different, ethical relation to the past's inhabitants that conserves something of the wonder and "strangeness of the Other." What Walter Benjamin refers to as the "redemptive moment" sparks a recognition of the Other that allows us to engage in heartfelt mourning for them, rather than falling into the repetitive self-absorption characteristic of Freudian melancholy. This redemptive moment changes forever our relations to the world around us. (EE)

Smith, Mick. "Avalanches and Snowballs: A Reply to Arne Naess." Environmental Ethics 23(2001):223-224. (EE)

Smith, Mick. "Worldly (In)Difference and Ecological Ethics: Iris Murdoch and Emmanuel Levinas." Environmental Ethics 29(2007):23-41. The natural world's myriad differences from human beings, and its apparent indifference to human purposes and ends, are often regarded as problems an environmental ethics must overcome. Perhaps, though, ecological ethics might instead be re-envisioned as a form of other-directed concern that responds to just this situation. That is, the recognition of worldly (in)difference might actually be regarded as a precondition for, and opening on, any contemporary ethics, whether human or ecological. What is more, the task of ethics might be regarded as one of conserving (at least some) such differences. The work of Iris Murdoch and the "difference ethics" of Emmanuel Levinas seem to offer possible ways to express such understandings. However, their ecological potential and theoretical limits, especially in terms of their metaphysical presuppositions, remain relatively under-explored. A closer examination of their work is presented in order to illustrate some of the possibilities and difficulties facing an ecological form of difference ethics. (EE)

Smith, Mick. "Environmental Antinomianism: The Moral World Turned Upside Down?" Ethics and the Environment 5(2000):125-139. ABSTRACT: In rejecting the ethical authority of those social institutions that attempt to define and impose norms of belief and behavior, radical environmentalism has many parallels with past antinomian protests. It is characterized by a 'hermeneutics of suspicion' directed towards the establishment in all its forms and extending to all its attempts to 'lay down the law.' Those nomothetic models which represent environmentalists as (a) seeking to extend current legal/bureaucratic frameworks to 'nature', or (b) drawing moral conclusions from 'natural laws' are guilty of ignoring radical environmentalism's antinomian ethos. (E&E)

Smith, Mick. "Against the Enclosure of the Ethical Commons: Radical Environmentalism as an 'Ethics of Place.'" Environmental Ethics 19(1997):339-353. Inspired by recent anti-roads protests in Britain, I attempt to articulate a radical environmental ethos and, at the same time, to produce a cogent moral analysis of the dialectic between environmental destruction and protection. In this analysis, voiced in terms of a spatial metaphoric, an "ethics of place," I seek to subvert the hegemony of modernity's formal systematization and codification of values while still conserving something of modernity's critical heritage: to reconstitute ethics in order to counter the current enclosure of the moral field within economic and legal bureaucratic frameworks and institutions. Smith is in sociology, University of Abertay Dundee, Scotland. (EE)

Smith, Mick. "Lost for Words? Gadamer and Benjamin on the Nature of Language and the 'Language' of Nature," Environmental Values 10(2001):59-75. Language is commonly regarded as an exclusively human attribute and the possession of the word (logos) has long served to demarcate culture from nature. This is often taken to imply that nature is incapable of meaningful expression, that any meaning it

acquires is merely bestowed upon it by humanity. This anthropic logocentrism seriously undermines those forms of "environmental advocacy" which claim to find and speak of the meaning and value of nature per se. However, shorn of their own anthropocentric presuppositions, the expressivist hermeneutics of Hans-Georg Gadamer and Walter Benjamin might offer an alternative understanding of the nature of language and the language of nature. Keywords: Expressionism, Gadamer, hermeneutics, nature, language. Mick Smith is at the University of Abertay, Dundee, Scotland. (EV)

Smith, Mick. An Ethics of Place: Radical Ecology, Postmodernity, and Social Theory. Reviewed in Environmental Ethics 25(2003):417-420. (EE)

Smith, Mick. "Environmental Risks and Ethical Responsibilities: Arendt, Beck, and the Politics of Acting into Nature." Environmental Ethics 28(2006):227-246. The question of environmental responsibility is addressed through comparisons between Hannah Arendt's and Ulrich Beck's accounts of the emergent and globally threatening risks associated with acting into nature. Both theorists have been extraordinarily influential in their respective fields but their insights, pointing toward the politicization of nature through human intervention, are rarely brought into conjunction. Important differences stem from Beck's treatment of risks as systemic and unavoidable side effects of late modernity. Arendt, however, retains a more restrictive anthropogenic view of political action which, while recognizing its unpredictable consequences for human (and nonhuman) others, includes a direct link between individually initiated acts and the taking of ethical responsibility. This latter account best explains the ethical motivations behind much environmental activism. (EE)

Smith, Neil, "Antinomies of Space and Nature in Henri Lefebvre's *The Production of Space*," Philosophy and Geography 2 (1998): 49-69. Smith is a professor in the Department of Geography and acting director of the Center for the Critical Analysis of Contemporary Culture at Rutgers University, New Brunswick. (P&G)

Smith, Neil, "Ashes and aftermath," Philosophy and Geography 5 (No. 1, 2002): 9-12. Contribution to a symposium on the events of September 11, 2001 in New York City. Smith is Director of the Center for Place, Culture and Politics at City University of New York Graduate Center. (P&G)

Smith, P., B. Chhetri and B. Regmi, "Meeting the Needs of Nepal's Poor: Creating Local Criteria and Indicators of Community Forestry," Journal of Forestry 101(no. 5, 2003): 24-30. (v 14, #3)

Smith, Pamela A., Aquinas and Today's Environmental Ethics: An Exploration of How the Vision and the Virtue Ethic of "Ecothomism" Might Inform a Viable Eco-Ethic. Ph.D. Dissertation, Duquesne University, 1995.

Smith, Pamela A., "The Ecotheology of Annie Dillard: A Study in Ambivalence," Cross Currents 45(1995):341-358.

Smith, Pamela, What Are They Saying About Environmental Ethics? Mahwah, NJ: Paulist Press, 1997. 122 pages. \$ 10.00 paper. Chapters: 1. Deep Ecology and Its Radical Vision. 2. The Ethics of Ecofeminism. 3. Animal "Rights" and Questions of Human Behavior. 4. The "Naturalists" and Leopoldian Ethics. 5. Liberation Ecotheology. 6. Eco-Ethics and the World's Religions. 7. Eco-Ethics and the Catholic Magisterium. "An ethic of respect, if not of widespread 'rights,' seems to be arising from a conviction that some sort of 'intrinsic value' can be posited for all sorts of lifeforms and their support systems. The basis for claiming such 'intrinsic value' may be a religious one--a sense that creation, in all its diversity, is revelatory, bearing a 'trace of the Trinity' (St. Thomas Aquinas) or God's 'insignia,' the 'marks of his glory' (John Calvin). Or it may be an intuition of a kind of 'spirit' or sacrality present in living creatures beyond the human. In a more philosophical vein, 'intrinsic value' can be

claimed on the basis of the directionality, the impetus to survival and continuation and proliferation which is observed among a wide array of living beings. Perception of 'kinship' among the diversity of beings and of 'interrelatedness' implicit in ecosystemic processes lend support to more evolutionary and cosmogenetic theories of 'intrinsic value' (p. 98). Smith teaches systematic theology at SS. Cyril and Methodius Seminary in Orchard Lake, Michigan. (v9,#2)

Smith, Patrick D. McDonough, Maureen H, "Beyond Public Participation: Fairness in Natural Resource Decision Making," Society & Natural Resources 14(no.3, MAR 01 2001):239-. (v.12,#4)

Smith, Patrick D., Maureen H. McDonough, and Mang, Michael T. "Ecosystem Management and Public Participation: Lessons from the Field." Journal of Forestry 97(No. 10, Oct. 1999):32- . Although ecosystem management has opened the door for greater public participation, a study of professional and public perceptions highlights remaining barriers. (v10,#4)

Smith, Philip M. and Richard A. Watson. "New Wilderness Boundaries." Environmental Ethics 1(1979):61-64. Wilderness is not a simple geographic concept and the boundaries of wilderness can never be simple geographic lines. Wilderness boundaries depend on attitudes and appearances as much as on the physical environment. Many areas and forms of wilderness should be protected and included within the National Wilderness Preservation System with specialized designations in terms of wilderness experience. Watson is in the philosophy department, Washington University, St. Louis, MO. Smith was formerly with the Office of Science and Technology Policy, Executive Office of the President, Washington, DC. (EE)

Smith, R. B. W. and Shogren, J. F., "Voluntary Incentive Design for Endangered Species Protection," Journal of Environmental Economics and Management 43(no.2, 2002): 169-87. (v.13,#2)

Smith, R. G. B., Nichols, J. D. and Vanclay, J. K., "Dynamics of Tree Diversity in Undisturbed and Logged Subtropical Rainforest in Australia," Biodiversity and Conservation 14(no. 10, October 2005): 2447-2463.

Smith, Raymond C., Ainley, David, and Domack, Eugene, "Marine Ecosystem Sensitivity to Climate Change," Bioscience 49(No.5, 1999):393-. Historical observations and paleoecological records reveal ecological transitions in the Antarctic Peninsula region. (v.10,#2)

Smith, Richard, "Getting Rich is Glorious." The Ecologist 25 no. 1 (January 1, 1995): 14-). China's market economy has increased insecurity and environmental degradation. (v6,#2)

Smith, Rob Roy, "Standing on Their Own Four Legs: The Future of Animal Welfare Litigation After Animal Legal Defense Fund, Inc. v. Glickman," Environmental Law 29 (No. 4, 1999): 989- . Government action regulating the lives of animals and determining the experience of people who view them was unchallengeable for decades. With sweeping legal and political ramifications, Animal Legal Defense Fund v. Glickman revolutionized standing doctrine to allow animal welfare plaintiffs their first access to the courts. Mr. Smith argues that this case is no aberration; rather, it represents the culmination of years of struggle to achieve standing on behalf of animals and fashions a precedent to allow just that. (v.11,#2)

Smith, S; Jacob, S; Jepson, M; Israel, G, "After the Florida Net Ban: The Impacts on Commercial Fishing Families," Society and Natural Resources 16(no.1, 2003): 39-60.

Smith, SC; Yates, AJ, "Optimal pollution permit endowments in markets with endogenous emissions," Journal of Environmental Economics and Management 46(no.3, 2003):425-445. (v.14, #4)

Smith, Steven G., "Sympathy, Scruple, and Piety: The Moral and Religious Valuation of Nonhumans," *Journal of Religious Ethics* 21 (no. 2, 1993):319-342. Our moral valuation of nonhuman and human beings alike may arise in sympathy, the realization in feeling of a significant commonality between self and others; in scrupulous observance of policy, the affirmation in practical consistency of a system of relations with others; and in piety, the attitude of boundless appreciation and absolute scruple with respect to objects as sacred that is, as valued for the sake of adequate valuation of the holy. Differences between the moral status of humans and that of nonhumans are to be explained not by any single criterion such as the capacity to suffer or to make contracts, but rather by finding the relative position of humans and nonhumans on continua of feelable commonality, policy considerateness, and sacredness. Investigation of these differences must take into account the way basic religious apprehensions (or the absence thereof) organize these frames of reference. Smith is in religious studies at Millsaps College, Jackson, MS. (v5,#4)

Smith, Ted, David A. Sonnenfeld, and David Naguib Pellow, eds. *Challenging the Chip: Labor Rights and Environmental Justice in the Global Electronics Industry*. Philadelphia: Temple University Press, 2006. Contents include: (1) "The Quest for Sustainability and Justice in a High-Tech World" by Ted Smith, David A. Sonnenfeld, and David N. Pellow, (2) "The Changing Map of Global Electronics: Networks of Mass Production in the New Economy" by Boy Lüthje, (3) "Occupational Health in the Semiconductor Industry" by Joseph LaDaou, (4) "Double Jeopardy: Gender and Migration in Electronics Manufacturing" by Anibel Ferus-Comelo, (5) "'Made in China': Electronics Workers in the World's Fastest Growing Economy" by Apo Leong and Sanjiv Pandita, (6) "Corporate Social Responsibility in Thailand's Electronics Industry" by Tira Foran and David A. Sonnenfeld, (7) "Electronics Workers in India" by Sanjiv Pandita, (8) "Out of the Shadows and into the Gloom? Worker and Community Health in and around Central and Eastern Europe's Semiconductor Plants" by Andrew Watterson, (9) "From Grassroots to Global: The Silicon Valley Toxics Coalition's Milestones in Building a Movement for Corporate Accountability and Sustainability in the High-Tech Industry" by Leslie A. Byster and Ted Smith, (10) "The Struggle for Occupational Health in Silicon Valley: A Conversation with Amanda Hawes" by Amanda Hawes and David N. Pellow, (11) "Immigrant Workers in Two Eras: Struggles and Successes in Silicon Valley" by David N. Pellow and Glenna Matthews, (12) "Worker Health at National Semiconductor, Greenock (Scotland): Freedom to Kill?" by James McCourt, (13) "Community-Based Organizing for Labor Rights, Health, and the Environment: Television Manufacturing on the Mexico-U.S. Border" by Connie Garcia and Amelia Simpson, (14) "Labor Rights and Occupational Health in Jalisco's Electronics Industry (Mexico)" by Raquel E. Partrida Rocha, (15) "Breaking the Silicon Silence: Voicing Health and Environmental Impacts within Taiwan's Hsinchu Science Park" by Shenglin Chang, Hua-Mei Chiu, and Wen-Ling Tu, (16) "Human Lives Valued Less Than Dirt: Former RCA Workers Contaminated by Pollution Fighting Worldwide for Justice (Taiwan)" by Yu-Ling Ku, (17) "Unionizing Electronics: The Need for New Strategies" by Robert Steiert, (18) "The Electronics Production Life Cycle. From Toxics to Sustainability: Getting Off the Toxic Treadmill" by Leslie A. Byster and Ted Smith, (19) "High-Tech Pollution in Japan: Growing Problems, Alternative Solutions" by Fumikazu Yoshida, (20) "High-Tech's Dirty Little Secret: The Economics and Ethics of Electronic Waste Trade" by Jim Puckett, (21) "Hi-Tech Heaps, Forsaken Lives: E-Waste in Delhi" by Ravi Agarwal and Kishore Wankhade, (22) "Importing Extended Producer Responsibility for Electronic Equipment into the United States" by Chad Raphael and Ted Smith, (23) "International Environmental Agreements and the Information Technology Industry" by Ken Geiser and Joel Tickner, (24) "Design Change in Electrical and Electronic Equipment: Impacts of Extended Producer Responsibility Legislation in Sweden and Japan" by Naoko Tojo, and (25) "ToxicDude.com: The Dell Campaign" by David Wood and Robin Schneider.

Smith, Ted, David A. Sonnenfeld, and David Naguib Pellow, eds. *Challenging the Chip: Labor Rights and Environmental Justice in the Global Electronics Industry*. Philadelphia: Temple University Press, 2006. Contents include: (1) "The Quest for Sustainability and Justice in a High-Tech World" by Ted

Smith, David A. Sonnenfeld, and David N. Pellow, (2) "The Changing Map of Global Electronics: Networks of Mass Production in the New Economy" by Boy L uthje, (3) "Occupational Health in the Semiconductor Industry" by Joseph LaDaou, (4) "Double Jeopardy: Gender and Migration in Electronics Manufacturing" by Anibel Ferus-Comelo, (5) "'Made in China': Electronics Workers in the World's Fastest Growing Economy" by Apo Leong and Sanjiv Pandita, (6) "Corporate Social Responsibility in Thailand's Electronics Industry" by Tira Foran and David A. Sonnenfeld, (7) "Electronics Workers in India" by Sanjiv Pandita, (8) "Out of the Shadows and into the Gloom? Worker and Community Health in and around Central and Eastern Europe's Semiconductor Plants" by Andrew Watterson, (9) "From Grassroots to Global: The Silicon Valley Toxics Coalition's Milestones in Building a Movement for Corporate Accountability and Sustainability in the High-Tech Industry" by Leslie A. Byster and Ted Smith, (10) "The Struggle for Occupational Health in Silicon Valley: A Conversation with Amanda Hawes" by Amanda Hawes and David N. Pellow, (11) "Immigrant Workers in Two Eras: Struggles and Successes in Silicon Valley" by David N. Pellow and Glenna Matthews, (12) "Worker Health at National Semiconductor, Greenock (Scotland): Freedom to Kill?" by James McCourt, (13) "Community-Based Organizing for Labor Rights, Health, and the Environment: Television Manufacturing on the Mexico-U.S. Border" by Connie Garcia and Amelia Simpson, (14) "Labor Rights and Occupational Health in Jalisco's Electronics Industry (Mexico)" by Raquel E. Partrida Rocha, (15) "Breaking the Silicon Silence: Voicing Health and Environmental Impacts within Taiwan's Hsinchu Science Park" by Shenglin Chang, Hua-Mei Chiu, and Wen-Ling Tu, (16) "Human Lives Valued Less Than Dirt: Former RCA Workers Contaminated by Pollution Fighting Worldwide for Justice (Taiwan)" by Yu-Ling Ku, (17) "Unionizing Electronics: The Need for New Strategies" by Robert Steiert, (18) "The Electronics Production Life Cycle. From Toxics to Sustainability: Getting Off the Toxic Treadmill" by Leslie A. Byster and Ted Smith, (19) "High-Tech Pollution in Japan: Growing Problems, Alternative Solutions" by Fumikazu Yoshida, (20) "High-Tech's Dirty Little Secret: The Economics and Ethics of Electronic Waste Trade" by Jim Puckett, (21) "Hi-Tech Heaps, Forsaken Lives: E-Waste in Delhi" by Ravi Agarwal and Kishore Wankhade, (22) "Importing Extended Producer Responsibility for Electronic Equipment into the United States" by Chad Raphael and Ted Smith, (23) "International Environmental Agreements and the Information Technology Industry" by Ken Geiser and Joel Tickner, (24) "Design Change in Electrical and Electronic Equipment: Impacts of Extended Producer Responsibility Legislation in Sweden and Japan" by Naoko Tojo, and (25) "ToxicDude.com: The Dell Campaign" by David Wood and Robin Schneider.

Smith, Tony. "The Case Against Free Market Environmentalism." Journal of Agricultural and Environmental Ethics 8(1995):126-144. Free market environmentalists believe that the extension of private property rights and market transactions is sufficient to address environmental difficulties. But there is no invisible hand operating in markets that ensures that environmentally sound practices will be employed just because property rights are in private hands. Also, liability laws and the court systems cannot be relied upon to force polluters to internalize the social costs of pollution. Third, market prices do not provide an "objective measure" of environmental matters. Finally, there is a right to a livable environment that justifies regulations protecting the public from unreasonable environmental risks. (JAEE)

Smith, Tony. "Biotechnology and Global Justice," Journal of Agricultural and Environmental Ethics 11(1999):219-242. I explore two questions regarding agricultural biotechnology, one descriptive and one evaluative. What role is agricultural biotechnology likely to play in globalization? And is the diffusion of agricultural biotech likely to move us closer to a just global order? Before we can consider such questions, however, we must come to an understanding and assessment of globalization. Unfortunately, this too is an immensely complicated and controversial topic. In order to make things a bit more manageable I shall drastically oversimplify matters, restricting the debate to just two competing accounts of globalization. The first of these accounts, termed "neoliberalism," is familiar, consisting of a set of ideas circulating constantly in the business press, trade publications, the popular media, and mainstream

academic discourse. Its main conclusion in the present context is reassuring: social mechanisms are in place to ensure that global justice is more or less automatically furthered by the diffusion of agricultural biotechnology. The second perspective, which I shall term the "heterodox" or "critical" perspective, is in contrast relatively unfamiliar. It leads to the disturbing conclusion that under present circumstances the rational development of biotechnology may contribute to results that are irrational from a social and ethical perspective. (JAEE)

Smith, Tony. Response to Jan Narveson. Journal of Agricultural and Environmental Ethics 8(1995):157-158. (JAEE)

Smith, V. Kerry, Estimating Economic Values for Nature: Methods for Non-Market Valuation. Brookfield, VT: Edward Elgar Publishing Co., 1996. 640 pages. \$ 98.00! A collection of Smith's papers over 25 years. Indirect methods as detective work. Travel cost recreational demand models. Hedonic models--property and labor markets. Household production models. Contingent valuation methods. (v7,#2)

Smithers, J; Furman, M, "Environmental farm planning in Ontario: exploring participation and the endurance of change," Land Use Policy 20(no.4, 2003):343-356. (v.14, #4)

Smithsonian, April 1990, vol. 21, no. 1, is a special issue devoted to the environment. Articles on conservation history, current successes in conversation, clean water, endangered raptors, nature artists, alternative agriculture, rails-to-trails, garbage, trees in cities, urban wildlife, the glare of wasted light on the night sky, and radical environmentalists (principally Dave Foreman and Earth First, but also citing George Sessions and Bill Devall). (v1,#2)

Smolin, Lee, The Life of the Cosmos. New York: Oxford University Press, 1997. Claims that the universe, cosmology, is to be understood more as a living system than a mechanism. The world is a network of self-organizing relations. Natural selection needs to be extended beyond biology to the universe as a whole. (Such natural selection is the selection of the stablest systems. Smolin does not seem to realize that "the stablest survive" is even more subject to the charge of being a tautology than "the fittest survive." Also, concepts analogous to genetic information transfer and cumulation, over which natural selection can operate, are difficult to extrapolate to astronomical systems.)

Smolková, Eva, "K Problému Vztahu Hodnotenia a Poznania v Environmentálnom-myslení (Towards the Relationship between Evaluation and Knowledge in Environmental Thinking)," Filozofia 55(no. 7, 2000):545-556. In Czech. This paper examines the importance of the relationship between evaluation and knowledge in environmental thinking. It focuses on the impact of scientific knowledge on value structures, as well as on the process of creating acceptance of values, especially those having existential meaning and ontological status. The author sheds light also on the separation of facts from values and on the distinction between knowledge and evaluation as taking place in modern culture. She analyses particularly the impact of these processes on creating and accepting values in environmental issues. Smolková is in philosophy, Slovak Academy of Science, Bratislava, Slovakia.

Smolková, Eva, "K otázke limitov environmentálnej etiky (Limits of Environmental Ethics)" Filozofia 54(no. 8, 1999):569-579. In Czech. Why some problems in environmental ethics remain unresolved. Limits of our ethical thinking as well as the possibility of a new ethics. Ways of making anthropocentric and environmental values equal. Presuppositions of the practical acceptance of environmental values. The possibility of an applied ethics offered by the concept of sustainable development. Smolková is in philosophy, Slovak Academy of Science, Bratislava, Slovakia.

Smolková, Eva, "K Otázke Vystavby Hodnotových Systémov V Environmentálnej Etike (Problems of

Value Hierarchies in Environmental Ethics)," Filozofia 52(no. 2, 1997):73-80. In Slovakian. How traditional value hierarchies are altered in constructing environmental ethics. The ethical status of such revised moral systems and their impact on societies. With attention to the English language literature. Smolkova is in philosophy, Slovak Academy of Sciences, Bratislava, Slovakia. (v.13,#2)

Smyth, A. V., "Foresters and the Land: The Evolution of SAF's (Society of American Foresters') Land Ethic," Journal of Forestry 93(no. 9, 1995):22-25. (v.12,#3)

Smyth, Frank, "A New Game: The Clinton Administration on Africa," World Policy Journal 15(no.2, 1998), p.82. (v.9,#4)

Snarey, John, "The Natural Environment's Impact upon Religious Ethics: A Cross-Cultural Study." Journal for the Scientific Study of Religion 35 (no. 2, 1996):85-96.

Sneath, David, "State Policy and Pasture Degradation in Inner Asia," Science 281(1998):1147-1148. Much of inner Asia is rolling grassland, used since ancient times for raising livestock. Over 6% of the world's grassland is here. Compared to massive degradation (50% - 75%) of arable land in northern China, Inner Mongolia, and southern Siberia, there is relatively little pasture degradation in the independent state of Mongolia (about 9%). These dramatic differences result from very different state policies. Sneath is in social anthropology, Cambridge University. (v.9,#3)

Snedden, Simon. Review of Dragun and Jakobsson, Sustainability and Global Environmental Policy: New Perspectives. Environmental Values 9(2000):256.

Sneddon, C., Harris, L., Dimitrov, R., and Ozesmi, U., "Contested Waters: Conflict, Scale, and Sustainability in Aquatic Socioecological Systems," Society and Natural Resources 15(no.8, 2002): 663-76. (v.13,#4)

Sneddon, Christopher, "'Sustainability' in ecological economics, ecology and livelihoods: a review," Progress in human geography 24(no.4, 2000):521- . (EE v.12,#1)

Sneddon, Simon. Review of Gauci, Oil Pollution at Sea: Civil Liability and Compensation for Damages. Environmental Values 9(2000):252.

Sneddon, Simon. Review of Robert V. Percival and Dorothy C. Alevizatos, eds., Law and the Environment: A Multidisciplinary Reader; Prue Taylor, An Ecological Approach to International Law: Responding to Challenges of Climate Change; and Emmanuel Agius, and Salvino Busuttill, eds. Future Generations & International Law, London: Earthscan, 1998. In Environmental Values 10(2001):127. (EV)

Sneddon, Simon. Review of Robert V. Percival and Dorothy Alevizatos. Law and the Environment: A Multidisciplinary Reader, Philadelphia, PA: Temple University Press 1997, Simon Sneddon, Environmental Values 10(2001):127. (EV)

Sneider, Daniel, "Saving Siberia's Unique Lake Baikal Region," The Christian Science Monitor 86 (2 August 1994): 12. (v5,#3)

Sneider, Daniel. "A Soggy California Examines Its Flood-Control Performance." The Christian Science Monitor, vol. 89, 7 Jan. 1997, p. 3.

Sneider, Daniel. "On a Nebraska Cornfield, Birdwatchers Respond to the Call of the Cranes." Christian

Science Monitor 89 (31 July 1997): 10-11. Excellent story on the crane sanctuaries on the Platte River in Nebraska. Impact of dams and irrigation has caused birds to concentrate in two small stretches of the river. (v8,#3)

Sneider, Daniel. "Where Meetings on Recycling Can Last Until 3 A.M." The Christian Science Monitor, vol. 89, 12 Feb. 1997, p. 4.

Sneider, Daniel. "Behind 'Christmas Rush' to Cut West's Scrap Trees." The Christian Science Monitor, vol. 89, 27 Dec. 1996, p. 4.

Sneider, Daniel. "Tale of Fur Seals and an Island Croft." The Christian Science Monitor, vol. 88, 10 Oct. 1996, p. 1, 14.

Sneider, Daniel. "Species Act Survives Challenge-For Now." The Christian Science Monitor, vol. 89, 21 Feb. 1997. p. 3.

Sneider, Daniel. "\$11.5 Million Big Sur View May be a Bargain." The Christian Science Monitor, vol. 89. 13, Dec. 1996, p. 1-9.

Sneider, Daniel. "Smaller Congregation for 'Temple of Nature.'" The Christian Science Monitor 89.75 (14 March 1997): 1.

Sneider, Daniel. "Deal to Save Redwood Forest Raises Hopes--and Doubts." The Christian Science Monitor, vol. 88, 30 Sept. 1996, p. 3.

Snell, Marilyn Berlin. "Bulldozers and Blasphemy: In Latin America, Catholics Are Standing Up to those who Covet their Gold and Timber." *Sierra* Vol. 92 (October 2007): 36-43, 63, 76. Latin American rural peoples and villagers are being displaced by large mines, often operated by Canadian firms and sometimes by U.S. firms. Latin American governments may be as interested in the tax and other income from the mines as they are the welfare of local peoples. But there is a "liberation ecology" movement, similar to the liberation theology movement. A growing number of Catholic clergy throughout Latin America have come to see protection of the land and water as God's work, their duty to the region's 500 million Catholics. They are often quite effective in organizing protests, so much so that one priest in Honduras requires bodyguards.

Snider, Daniel. "Blueprint for a Green Compromise: Forest Gumption." Christian Science Monitor 89 (18 July 1997): 1, 8. (v8,#3)

Snider, Gary, P.J. Daugherty, and D. Wood. "The Irrationality of Continued Fire Suppression: An Avoided Cost Analysis of Fire Hazard Reduction Treatments Versus No Treatment." *Journal of Forestry* Vol. 104 (2006): 431-37.

Snoeyenbos, Milton H. "A Critique of Ehrenfeld's Views on Humanism and the Environment." Environmental Ethics 3(1981):231-35. David Ehrenfeld argues that humanism emphasizes reason at the expense of emotion, and that its narrow focus on the use of reason to serve human interests leads to a dichotomy between man and nature in which ecological factors are subordinated to the satisfaction of human wants. In response, I argue that: (1) humanists stress employment of reflective reason and reason's interrelations with other aspects of the human personality, (2) humanism's typical commitment to naturalism locates man as part of nature and does not entail an exclusive focus on human interests, and (3) humanism's commitment to the legitimate sphere of human interests does not entail indifference to nonhuman nature, for a healthy environment is necessary for the long-term satisfaction of human

interests. Snoeyenbos is in the philosophy department, Georgia State University, Atlanta, GA. (EE)

Snow, Allison A., Palma, Pedro Moran. "Commercialization of Transgenic Plants: Potential Ecological Risks," Bioscience 47(no.2, 1997):86. Will evolutionary effects of engineered crops exacerbate weed and pest problems? (v8,#1)

Snow, Donald, Inside the Environmental Movement: Meeting the Leadership Challenge. Covelo, CA: Island Press, January, 1992. 260 pages. \$ 34.95. \$ 19.95 paper. Leadership development needs among U. S. conservation groups. Some findings: budgetary concerns distance leaders from their members, mainstream conservation-environmental groups fail to work effectively with people of color, the rural poor, and other disenfranchised groups, leaders do not allow enough time for long-range planning. The next century will demand leadership of a kind seldom seen so far in the American conservation community. (v2,#3)

Snow, Donald, ed., Voices from the Environmental Movement: Perspectives for a New Era. Covelo, CA: Island Press, 1991. \$ 34.95 cloth, \$ 19.95 paper. Nine articles on conservation as a political force, the role of women and minorities, conservation in academia, volunteerism, and international leadership. (v2,#3)

Snyder, B., "Book Review: Desert Puma: Evolutionary Ecology and Conservation of an Enduring Carnivore by Kenneth A. Logan & Linda L. Sweanor," Natural Resources Journal 42(no.1, 2002): 226-29. (v.13,#4)

Snyder, Gary, A Place in Space. Reviewed by J. Baird Callicott. Environmental Ethics 18(1996):321-326. (EE)

Snyder, Gary, The Practice of the Wild. San Francisco: North Point Press, 1990. The important lessons nature teaches along with a sense of larger themes rising out of the Earth. (v1,#4) Reviewed in Environmental Ethics 14(1992):185-90.

Snyder, Gary, Dimensions of a Life, edited by John Halper. San Francisco: Sierra Club Books, 1991. 464 pages. \$ 17.00 paper. Memories of Snyder by friends and colleagues, on the occasion of his sixtieth birthday. (v2,#3)

Snyder, Gary. "Nature As Seen from Kitkitdizze Is No 'Social Construction,'" Wild Earth 6(1996):8. (v8,#1)

Snyder, Gary. Mountains and Rivers Without End. Washington: Counterpoint, 1996. 176 pages. \$ 20.00. A volume by the most celebrated environmental poet. Think of the earth turning under our feet as we walk, of arriving at mountains and rivers, so opposite from each other, never staying the same, ever before us. "I came to see the yogic implications of 'mountains' and 'rivers,'" writes Snyder in an afterword, "as a play between the tough spirit of willed self-discipline and the generous and loving spirit of concern for all beings: a dyad presented in Buddhist iconography as the wisdom-sword-wielding Manjurshi, embodying transcendent insight, and his partner, Tara, the embodiment of compassion, holding a lotus or a vase. I could imagine this dyad as paralleled in the dynamics of mountain uplift, subduction, erosion, and the planetary water cycle." (v8,#1)

Snyder, Howard A. Liberating the Church: The Ecology of Church and Kingdom. Downers Grove, IL: InterVarsity Press, 1983.

Snyder, Howard A. Earth Currents: the Struggle For the World's Soul. Nashville: Abingdon Press, 1995. 334 pages, hardbound, \$19. Global culture, world economy, the feminist revolution, the environment at

risk, western decline, Gaia, God in the shadows, determinism revisited, postmodernism, the ecology of meaning: story, history, and truth. Snyder lives in Dayton, Ohio. (v6,#1)

Snyder, Katherine A. "Agrarian Change and Land-Use Strategies Among Iraqw Farmers in Northern Tanzania." Human Ecology 24, no.3 (1996): 315. (v7, #3)

Snyder, Robert A., ed., Environmental Aesthetics, theme issue of Essays in Philosophy, Vol 3, No 1, online journal at: <http://www.humboldt.edu/~essays/>

For further information contact Michael Goodman, journal editor. E-mail: mfg1@humboldt.edu. Contents:

--Brady-Haapala, Emily, "Interpreting Environments",

--Matthews, Steve, "A Hybrid Theory of Environmentalism",

--Heyd, Thomas, "Nature Restoration Without Dissimulation: Learning from Japanese Gardens and Earthworks",

--Saito, Yuriko, "Scenic National Landscapes: Common Themes in Japan and the United States".

--Cussen, Ken, "Aesthetics and Environmental Argument",

Thanks to Ned Hettinger. (v.13,#1)

Soares Filho, B. S., Assuncao, R. M. and Pantuzzo, A. E, "Modeling the Spatial Transition Probabilities of Landscape Dynamics in an Amazonian Colonization Frontier," Bioscience 51(no.12, 2001): 1059-68. (v.13,#2)

Sobel, David, Review of: Kahn, Peter and Stephen Kellert, Children and Nature: Psychological, Sociocultural and Evolutionary Investigations. Environmental Values 13(2004):409-412,

Sobel, David, *Beyond Ecophobia: Reclaiming the Heart in Nature Education*. Great Barrington, MA: Orion Society and Myrin Institute, 1996. In a Nature Literacy Series. School children learn a debilitating fear for the future of the planet (ecophobia) from what they hear in the media. Meanwhile they learn little about the joys to be had in the forests and meadows just outside the classroom door. The remedy for environmental despair is as close as the front door. Leave no child inside. Sobel codirects Center for Place-Based Education at the Antioch New England Institute.

Sober, Elliott, and Wilson, David Sloan, Unto Others: The Evolution and Psychology of Unselfish Behavior. Cambridge, MA: Harvard University Press, 1998. A pioneering and highly readable analysis of the evolution and psychology of cooperation, understood from an evolutionary perspective. Part I of the book argues that group selection is important in evolution, and has been unjustifiably dismissed by evolutionary theorists, blinded by their insistence on selection at the individual level. In group selection, animals can evolve behaviors that are for the good of the group, though to the detriment of the individual (without any reference to intentions and without moral import). Part II argues that group selection in humans can lead to genuinely altruistic behavior, and examines the psychological evidence for such behavior. People (and perhaps other species) evolved the capacity to care for others as a goal in itself. Sober is in philosophy at the University of Wisconsin, Madison, and a well-known philosopher of biology. Wilson is in biology, Binghamton University, State University of New York. (v.10,#1)

Social Learning Group, Learning to Manage Global Environmental Risks. Volume 1: A Comparative History of Social Responses to Climate Change, Ozone Depletion, and Acid Rain. Volume 2: A Functional Analysis of Social Responses to Climate Change, Ozone Depletion, and Acid Rain. Cambridge, MA: The MIT Press, 2001. A team of 37 scholars from ten different countries argues that we need to develop a long-term comparative perspective on the evolution of social responses to global environmental risks, and especially the role of learning in that evolution. Decision-making on transnational environmental issues can and ought improve through reasoned dialogue and the increasing inter-dependency between countries. It is legitimate to frame engagement with global environmental

problems in terms of risk management rather than in terms of global governance or environmental politics.

Society and Natural Resources is an international journal for the conservation, preservation, and management of natural resources. Some forthcoming article titles: Robert D. Bullard and Beverly H. Wright, "The Quest for Environmental Equity: Mobilizing the African-American Community for Social Change"; Keith Hollinshead, "The Ethics of Ennoblement: A Review of Leopold on Leisure and of Callicott on Leopold"; John Wargo, "Science, Values, Control, and Equity: Foundations of Multiple Use Resource Policy"; Bill Devall, "Deep Ecology and Radical Environmentalism." Vol. 4, no. 1 is a special issue on "Women and Natural Resources in Developing Countries," Nancy Lee Peluso, guest editor.

Society and Natural Resources, Vol. 15, No. 3, 2002 is a theme issue on environmental sociology, with particular focus on the sociology of natural resources, wondering about the differences between rural sociology, natural resource sociology, and environmental sociology. (v.13,#2)

Society for the Protection of Nature in Israel. The Role of Non-Governmental Organizations in Protecting the Environment: Proceedings. Tel Aviv, Israel: Society for the Protection of Nature in Israel (SPNI), 1995. 215 pages. Proceedings from their 40th anniversary Conference, March 1994 at Eilat. A section on "Ethics and Ideology," contains: Andrew Brennan (University of Western Australia), "Placing Ourselves in Nature: Philosophy, Public Policy, and the Environment"; Eitan Tchernov (Hebrew University, Jerusalem), "Increase in Complexity, Exploitation of the Environment and Human Responsibility"; Luke Ivuru Agwe and Alfred A. R. Latigo (African Biodiversity Institute, Nairobi), "Ethical and Ideological Foundation for Environmental Conservation: A Pragmatic Approach for Africa"; Edgar Roy Ramirez (University of Costa Rica), "Ethical Principles for Ecodevelopment: A Concrete Case (the TEPROCA farmers of Costa Rica)." Another paper is Sara Parkin (former chair of the UK Green Party), "The Role of Politics and NGOs in Environmental Protection." (Israel)

Society for the Protection of New Hampshire Forests. The Careful Harvest. \$10. A video guide to Logging Aesthetics.

Society of American Foresters, "Conservation Easements: Permanent Shields against Sprawl," Journal of Forestry 100(no.3, 2002):8-12. Extracts from a position paper of the SAF on conservation easements. Online at:
www.safnet.org/policy/psst/conservation.html(v.13, #3)

Society of American Foresters, The Land Ethic: Meeting Human Needs for the Land and its Resources. No editor listed. Bethesda, MD: Society of American Foresters, 1998. About fifteen reprints, largely from the Journal of Forestry, dealing with the land ethic. Leopold and his critics. J. Baird Callicott and his critics. Laura Westra on integrity. James Coufal. Jack Ward Thomas. And others. (v.12,#3)

Socolow, R., C. Andrews, F. Berkhout, and V. Thomas, eds., Industrial Ecology and Global Change. Cambridge, UK: Cambridge University Press, 1994. 532 pages. £35.00. How can the Earth become fully industrialized without overwhelming natural systems? Recycling, solar energy, chemicals in agriculture, industrial innovation, international cooperation. About three dozen contributors. Berkhout is at the University of Sussex, the other editors are at Princeton University. (v6,#4)

Soden, Dennis L., ed., At the Nexus: Science Policy, Nova Science Publisher's, Inc. (v9,#2)

Soderbaum, Peter, "Economics, Ethics, and Environmental Problems," Journal of Interdisciplinary Economics 1(1986):139-153 (Great Britain). Peter Soderbaum is at the Swedish University of Agricultural Sciences, Uppsala. (v1,#2)

Soderbaum, Peter. Review of Loehman, Kilgour, eds., Designing Institutions for Environmental and Resource Management. Environmental Values 9(2000):538.

Lowe, Philip and Ward, Stephen, eds. British Environmental Policy and Europe: Politics and Policy in Transition. London, Routledge, 1998, 326pp. Reviewed by Mikael Skou Andersen. Environmental Values 9(2000):258.

Soderholm (Söderholm), Patrick, and Thomas Sundqvist, "Pricing Environmental Externalities in the Power Sector: Ethical Limits and Implications for Social Choice," Ecological Economics 46(no. 3, 2003):333-350. The ethical limits of the economic valuation of environmental impact of various power generation sources. The economic valuation can only partly model moral values, although these values are essential in the preferences that people make. The challenge lies not in discovering what private preferences are, but in promoting a public discourse in which such values are formed and registered. Such economic valuation needs to be set in a more comprehensive non-market valuation framework. The authors are in economics, University of Luleå, Sweden.

Soderholm, P., "Environmental Policy in Transition Economies: Will Pollution Charges Work?," Journal of Environment and Development 10(no.4, 2001): 365-90. (v.13,#2)

Soelle, Dorothee with Shirley A. Cloyes. To Work and to Love: A Theology of Creation. Philadelphia: Fortress Press, 1984.

Soifer, Eldon, ed., Ethical Issues: Perspectives for Canadians. Peterborough, Ontario: Broadview Press, 1992. An anthology with a Canadian focus: the distribution of scarce resources, the animal rights debate, and the foundations of environmental law and social policy. The standard positions and counter-positions of Garret Hardin, Peter Singer, Joel Feinberg, and R. G. Frey appear on these topics, but other angles are presented as well. Roger Crispin argues that a utilitarian ethic favors a "humane" exploitation of animals over vegetarianism, provided that the animals are well-cared-for before the slaughter. J. Baker documents the anti-fur lobby and its impacts, which he argues are harmful to aboriginal cultures and the protection of natural ecosystems. Most interesting are the approaches to environmental law and policy. The Canadian Law Reform Commission rejects both deep ecology and property law in favor of defending the environmental commons for reasons of human welfare, with a priority of health over amenity values. Paul Emonds reflects on the legal and policy implications of a shift in world view from dominating nature to cooperation. Charles Taylor discusses both the necessity and extreme difficulty of making the shift to a steady state economy for a society in which issues of self-identity, welfare, and justice are resolved on the premise of growth. (Thanks to Peter Miller, University of Winnipeg.)

Sokstad, Erik, "Engineered Fish: Friend or Foe of the Environment?" Science 297(13 September 2002):1797-1799. With the world's fish consumption rising, transgenic fish might alleviate pressure on wild stocks. But researchers worry that genetically engineered fish, if they escaped, could wreak ecological havoc.

Solbrig, Otto T., Solbrig, Dorothy J., So Shall You Reap: Farming and Crops in Human Affairs. Reviewed by E.G. Beauchamp. Journal of Agricultural and Environmental Ethics 9(1996):86-87. (JAEE)

Solomon, Rabbi David, et al., Eichut Hasviva ba Yahadut (Environmental Quality in Judaism). Tel-Aviv: Bar-Ilan University Press, 1990. In Hebrew. Perhaps the best of many academic publications in Hebrew about the environment in the Bible and in Talmudic literature. With many quotations. (v5,#1)

Solomon, Steven, The Confidence Game: How Unelected Central Bankers Are Governing the Changed World Economy. New York: Simon and Schuster, 1995. 606 pages. From behind the walls of the U.S.

Federal Reserve Bank, the German Bundesbank, the Bank of Japan, the Bank of England, and the enigmatic Bank for International Settlements in Switzerland, the world economy and politics have been transformed by the eruption of high-speed, volatile global money flows, a global monetary system that has often teetered on the brink of catastrophe. Solomon was formerly with Forbes magazine. (v.9,#4)

Solow, Andrew, Stephen Polasky, and James Broadus, "On the Measurement of Biological Diversity," Journal of Environmental Economics and Management 14(1993):60-68. To ensure an efficient allocation of conservation resources, we need to define fairly precisely what biological diversity we hope to conserve, but that requires better measures of biological diversity. The authors present a general, and rather mathematical, approach to optimizing the conservation of qualities that, like species, change only with extinction. We have no good models for large scale problems, but this one may be useful for small scale problems, like the selection of conservation sites. The model measures diversity but does not indicate how to value it. Their model is applied to crane species. Solow and Broadus are at Woods Hole Oceanographic Institution, Polasky is in economics at Boston College. (v5,#1)

Soltis, Pamela S. and Gitzendanner, Matthew A., "Molecular Systemics and the Conservation of Rare Species." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 3, June 1999):471- . (v10,#4)

Soma, Katrine, "Natura economica in Environmental Valuation," Environmental Values 15(2006): 31-50. Cost-benefit analysis is widely acknowledged to be an appropriate tool for providing advice to policy makers on the optimal use and management of natural resources. However, a great deal of research has indicated that the assumptions made in cost-benefit analysis concerning the natural environment diverge from real world observations. In this paper I discuss these observed divergences. To do so, I introduce the concept of Natura economica. Natura economica is the environment as it is understood in economic analysis in general, and cost-benefit analysis in particular, namely as a bundle of commodities with potential market value. I argue that if this understanding of nature and its value is very different from what is generally observed, it reduces the value of the resulting policy recommendations. I then suggest four questions that policy makers should ask when they evaluate their choice of appraisal methods. If the answer is 'yes' to all of them, then cost-benefit analysis can provide valid information. However, if the answer to any of these questions is 'no', other methods, such as multicriteria analysis and participatory processes, should be considered in order to arrive at better-founded policy recommendations. (EV)

Somach, Stuart L., Hitchings, Andrew W. "Antitrust Considerations in Water Marketing", Natural Resources & Environment 11(no.2, 1996):26.

Sombke, Laurence R. . The Solution to Pollution: 101 Things You Can Do to Clean Up the Environment, New York: Master Media Limited, 1990. \$ 7.95. (v1,#2)

Songorwa, Alexander N., Buhrs, Tom and Hughey, Ken F.D., "Community-Based Wildlife Management in Africa: A Critical Assessment of the Literature," Natural Resources Journal 40(no.3, Sumr 2000):603- . (EE v.12,#1)

Sonneborn, Carrie, "Generating Jobs," Alternatives 26 (No. 2, Sprg 2000): 30- .Sustainable energy initiatives deliver more jobs and lower greenhouse gas emissions. (v.11,#2)

Sonnekus, L. P., and Breytenbach, G. J., "Conservation Business: Sustaining Africa's Future," Koedoe (Research Journal, South African Parks) 44, no. 1, 2001, pp. 105-123. Protected areas in Africa suffer from a lack of funds and are often surrounded by extremely poor communities. Many conservation staff assume that business and profitability are unethical and will destroy natural resources. But there are ways to integrate entrepreneurial thinking with conservation principles and ethics. This is illustrated from a

workshop that assisted conservationists at the South African Wildlife College (near Kruger National Park). The group involved identified many innovative ways in which they could derive sustainable income from natural resources while simultaneously achieving their conservation objectives. Sonnekus is in education, University of South Africa, Pretoria. Breytenbach is with the South African Integrated Development Initiative, Cramerview, R.S.A. (v.12,#3)

Soos, Frank. Bamboo Fly Rod Suite. Athens, GA: University of Georgia Press, 1999. 80 pp. \$18.95. Living simply and well with reflections on fishing and the geography of grace. (v.10,#1)

Soper, Kate, What Is Nature? Culture, Politics and the Non-Human. Cambridge, MA: Blackwells's, 1995. The politics of nature; the demarcations drawn through the concept and its currently contested status. An encounter between "nature-endorsing" and "nature-skeptical" perspectives, the one associated with the ecological advocacy of nature and the request to respect and conserve it, the other with a post-structuralist focus on the "cultural construction" of nature. Soper hopes to pose the question of nature anew in ways that allow for a resolution of these contrary impulses. Postmodernists must accept a form of realism about nature, admitting that it is not completely a social construct. Environmentalists must attend to the oppressive uses to which the ideas of nature, the natural, wilderness, among others, continue to be put. Soper holds an anthropocentric view of our obligations to nature. Soper is in philosophy at the University of North London. (v8,#1)

Soper, Kate, What Is Nature? Culture, Politics and the Non-Human. Reviewed by Wayne Ouderkirk. Environmental Ethics 20(1998):105-08.

Soper, Kate. What is Nature? Review by Jane Howarth, Environmental Values 7(1998):360.

Sorabji, Richard, Animal Minds and Human Morals. Ithaca, NY: Cornell University Press, 1995. 267 pages. The crisis: the denial of reason to animals. Concepts and perceptual appearance without reason or belief. Memory, preparation and emotion without rational belief. Forms, universals, and abstraction in animals. The shifting concept of reason. Speech, skills, inference and other proofs of reason. Oikeiosis and bonding between rational beings. Did the Greeks have the idea of human or animal rights? Anarchy and contracts between rational beings. Religious sacrifice and meat-eating. Augustine on irrational animals and the Christian tradition. One-dimensionality of ethical theories. (v.9,#3)

Sorabji, Richard. Animal Minds and Human Morals: The Origins of the Western Debate. Ithaca: Cornell University Press, 1993. 267 pages. \$39.95 cloth. Tracing the roots of our thinking about animals to Aristotelian and Stoic beliefs, Sorabji shows that today's controversies about animal rights represent only the most recent chapter in millennia-old debates. Some chapters: "The crisis: The denial of reason to animals." "Plants and animals." "Did the Greeks have the idea of human or animal rights?" (v6,#1)

Soran, Viorel, Jozsef Biro, Oana Moldovan, and Aurel Ardelean. "Conservation of Biodiversity in Romania," Biodiversity and Conservation 9(no. 8, 2000):1187-1198. Abstract. This paper briefly discusses the history and development of nature protection in Romania. It summarises the current situation of protected areas, and discusses the ecological, ethical and philosophical ideas concerning biodiversity conservation in the country.

Key words: biodiversity, ecoethics. ecosophy, nature protection, Romania.

Soran, Viorel, Biro, Jozsef, Moldovan, Oana, and Ardelean, Aurel, "Conservation of biodiversity in Romania," Biology and Conservation 9(2000):1187-1198. Abstract. Discusses the history and development of nature protection in Romania. Summarises the current situation of protected areas, and discusses the ecological, ethical and philosophical ideas concerning biodiversity conservation in the country. Key words: biodiversity, ecoethics, ecosophy, nature protection, Romania. The lead author is in

the Department of Ecology and Environmental Protection, Faculty of Sciences, 'Lucian Blaga' University, Sibiu, Romania. (v.13,#1)

Sorensen, Merete, Arler, Finn, and Ishoy, Martin, eds., Mijo og etik (Environment and Ethics). Aarhus, Denmark: NSI Press (Nordisk Sommeruniversitet), 1997. 303 pages. The first environmental ethics anthology in Danish, with most articles by Scandinavian authors, two translated from English. Nordic Summer University is an organization operating both summer institutes and a press with the purpose of increasing mutual understanding between the Nordic countries. There are abstracts of the articles in English.

Contents: (With apologies for not being able to reproduce all the Scandinavian diacritical marks in English wordprocessing!)

--Rolston, Holmes, "Vaerdi i naturen og vaeridens natur" ("Value in Nature and the Nature of Value")

--Einarsson, Niels, "Naturens rettigheder og det islandske fiskeris realiteter," ("The rights of nature and the realities of Icelandic fishery")

--Sorensen, Merete, "Xenotransplantation: Respekt, sympati eller mangel pa samme?" ("Xenotransplantation: Respect, sympathy or lack of such?")

--Forsgard, Nils-Erik, "'Rattvisa at alla'--Zacharias Topelius och djurskyddet," ("Justice for all"--Zacharias Topelius and animal protection") (In Swedish, though the author is Finnish)

--Ishoy, Martin, "Kristen miljoetik. Kristendommens slaegtskab med dybokologien," ("Christian environmental ethics. The affinity between Christianity and Deep Ecology")

--Gram-Hanssen, Kirsten, "Naturesyn--etik-praksis," ("Views of nature--ethics--practice")

--Kaltoft, Pernille, "Ingeniører og naturetik," ("Engineers and environmental ethics")

--Zeitler, Ulli, "Miljoetik og miljokonsekvensvurderinger," ("Environmental ethics and environmental impact assessment")

--Arler, Finn, "Renere teknologi--hvor rent skal det vaere?" ("Cleaner technology--how clean ought it to be?")

--Ingimundarsson, Einar Valur, "Baeredygtig udvikling," ("Sustainable development")

--Ranum, Morten, "Naturpraksis--mod et ikke-dualistisk naturbegreb," ("Nature practice--toward a non-dualistic concept of nature")

--Vogel, Steven, "Habermas og naturetik," ("Habermas and ethics of nature")

Sorensen and Arler are in philosophy at the University of Aarhus, Denmark. Ishoy is a Ph.D. candidate in theology there. (v9,#1)

Sorlin, S, "Review of: Alf Hornborg and Gisli Palsson, eds., Negotiating Nature: Culture, Power, and Environmental Argument", Environmental History 8(no.1, 2003):132-134.

Soromenho-Marques, Viriato, "The Portuguese Environmental Movement." Pages 85-127 in Vasconcelos, Lia and Baptista, Idalina, eds., Environmental Activism in Society: Proceedings of a Workshop on the Role of Environmental Activism in Society: Environmentalism in 2020. Lisbon: Luso-American Foundation, 2002. In English. Environmentalism in Portugal, with comparisons to Germany and to the United States, differences and similarities, and ways in which Germany with its Green Party is a bridge between the environmental movement as a social movement in Portugal and in the U.S. Also attention to how Portuguese environmental interest was delayed by nearly a half century of dictatorship, prior to the contemporary democracy. With an extended discussion following. Soromenho-Marques is in philosophy Cidade Universitaria, Lisboa, Portugal. For a web copy, inquire of him at: e-mail: vsmarques@mail.telepac.pt. (v.13,#4)

Soromenho-Marques, Viriato, "O Problema da Decisao em Política de Ambiente (The Problem of Decision in Environmental Policy)," In Portuguese. Revista Crítica de Ciências Sociais, no. 36, February 1993, pp. 27-40. The problem of decision-making in the field of environmental policy, with all the complexity of its causes, is perhaps the principal task of environmental policy, which is here understood

as Realpolitik for the present crisis of modern society. The argument tries to clarify some aspects of that decisive and vital question. Soromenho-Marques is professor of philosophy at Cidade Universitaria, Lisboa, Portugal, and the chair of Quercus, Portugal's National Association for Conservation of Nature. Address: Departamento de Filosofia, Cidade Universitaria, 1699, Lisboa Codex, Portugal. (v4,#3)

Soromenho-Marques, Viriato, O Futuro Frágil: Os desafios da crise global do ambiente (The Fragile Future: The Challenges of the Global Environmental Crisis). Mira-Sintra (near Lisbon), Portugal: Publicações Europa-América, Lda, 1998. (Apartado 8, 2726 Mem Martins Codex, Portugal). 226 pages. ISBN 972-1-04435-0. In Portuguese. The first systematic work on environmental ethics in Portugal. Part I. The State of the Environmental Problem. First Essay: The Environmental Cause: Toward an Overview. Second Essay: Politics of the Environment in Portugal: Balance and Perspectives. Part II. Environment, Citizenship, and Values. Third Essay: Environment, Culture, and Citizenship: Five Fundamental Questions. Fourth Essay: Environmental Crisis: Ethics and Values. Part III. United by the Threat: In Search of Common Solutions. Fifth Essay: War, Environment, and Forced Cooperation. Sixth Essay: Environmental Crisis and International Politics. Soromenho-Marques is Associate Professor in the Faculty of Letters, University of Lisbon, and chairs the sections Philosophy of the History of Culture, and Philosophy of Politics and Law. He coordinates the Faculty of Nature and the Environment, and is a founder of Quercus, a leading conservation movement in Portugal. (v9,#2)

Soromenho-Marques, Viriato, Regressar à Terra: Consciência Ecológica e Política de Ambiente (Return to Earth: Ecological Conscience and Environmental Policy). Lisbon: Fim de Século Edições, Lda., 1994. 151 pages. Paper. ISBN 972-754-073-2 Twelve essays (all in Portuguese): Part I. Ecological Conscience: Emerging Aspects of a New World Vision. 1. "Ecologia, saber e crise contemporânea" ("Ecology, Knowledge and the Contemporary Crisis"). 2. "Seis reflexões sobre o ambiente" ("Six Reflection on the Environment"). 3. "Economia, ecologia e rigor" ("Economics, Ecology and Methodological Rigor") 4. "Tecnocracia ou economia global? Duas notas críticas" ("Technology or Global Economy? Two Critical Notes"). 5. "Justiça e sentido da Terra" ("Justice and the Sense of the Earth"). 6. "Cidadania, democracia e crise ambiental" ("Citizenship, Democracy and the Environmental Crisis"). Part II. Environmental Policy: The Difficult Apprenticeship of a New Way to Inhabit the Earth. 7. "1972-1992. Vinte anos entre o perigo e a esperança" ("1972-1992: Twenty Years Between Danger and Hope"). 8. "O problema de decisão em política de ambiente" ("The Problem of Decision in Environmental Policy"). 9. "Política de ambiente em Portugal. Condições, critérios e perspectivas" ("Environmental Policy in Portugal: Conditions, Criteria, and Perspectives"). 10. "Política de ambiente e política externa: Notas para uma leitura de conjunto de situação portuguesa" ("Environmental Policy and Foreign Policy: Notes for a Reading of the Totality of the Portuguese Situation"). 11. "Política de ambiente e desenvolvimento sustentável em Portugal: Problemas e perspectivas" ("Environmental Policy and Sustainable Development in Portugal: Problems and Perspectives"). 12. "Ecopolítica e destino histórico" ("Ecopolitics and Historical Destiny"). Soromenho-Marques is professor of philosophy at Cidade Universitaria, Lisboa, Portugal, and the chair of Quercus, Portugal's National Association for the Conservation of Nature. (v5,#4)

Soroos, Marvin S. The Endangered Atmosphere: Preserving a Global Commons. Columbia, SC: University of South Carolina Press, 1997. (v8,#3)

Soros, George, The Crisis of Global Capitalism [Open Society Endangered]. New York: Public Affairs, 1998, and London: Little, Brown and Co., UK, 1998. The endangered open society, following Karl Popper. The conflict of global capitalism with democracy, since the 1970's, especially pp. 109-112, "Capitalism Versus Democracy." "Truth be told, the connection between capitalism and democracy is tenuous at best" (p. 111). Natural sciences are amenable to Popper's philosophy of science, but social sciences are not. Despite Popper's conviction that open, pluralist societies are closest to any possible ideal, in contrast to totalitarian societies, in the new global capitalism the open society can be threatened

by the lack of social cohesion and absence of government. Soros is an internationally known money manager and philanthropist, reared in Hungary. (v.10,#2)

Sorrensen, Cynthia, "Contributions of Fire Use Study to Land Use Cover Change Frameworks: Understanding Landscape Change in Agricultural Frontiers", Human Ecology 32(no.4, August 2004):395-420(26).

Sosa, Nicholas M., "The Ethics of Dialogue and the Environment: Solidarity as a Foundation for Environmental Ethics." In Callicott, J. Baird, and da Rocha, Fernando J. R. Earth Summit Ethics: Toward a Reconstructive Postmodern Philosophy of Environmental Education. Albany, NY: State University of New York Press, 1996. (v7, #3)

Sosa, Nicolás M., ed., Educacion Ambiental: Sujeto, Entorno y Sistema. Salamanca, Spain, Amarú Editions, 1989. 175 pages, paper. An anthology of seven essays on environmental education and philosophy. Sosa is professor of moral and political philosophy at the University of Salamanca, Spain. (v3,#2)

Sosa, Nicolás M., Ética Ecológica: Necesidad, posibilidad, justificación y debate. Madrid: Libertarias/Prodhufi, S.A., 1990. Publisher's address: Calle de Lérida, 80-82, 28020 Madrid, Spain. 150 pages, paperback. This is the first book in Spanish to treat environmental problems from the standpoint of ethics. Chapter titles: The concept of ecology; social ecology; analysis of the ecological crisis; birth of the ecological conscience, antecedents of environmental ethics; the Club of Rome and work during the 1970's, worldwide meetings and conferences, work during the 1980's; animals and future generations, interests and values, the debate over anthropocentrism, the necessity, possibility, and justification of an environmental ethic. An appendix deals with religious foundations of an environmental ethic. There is also a bibliography. Sosa is professor of moral and political philosophy at the University of Salamanca, Spain. (v3,#1)

Soskolne, Colin L., and Light, Andrew. "Towards Ethics Guidelines for Environmental Epidemiologists." The Science of the Total Environment 184, nos. 1-2 (May 1996): 137-47. Over the past 5 years, several epidemiology organizations have published draft ethics guidelines for epidemiologists in general, without regard to sub-speciality. The authors review these various guidelines and extract the most salient of their principles to formulate a unified set of ethics guidelines for environmental epidemiologists. (v7, #3)

Soskolne, Colin L., and Bertollini, , Global Ecological Integrity and 'Sustainable Development': Cornerstones of Public Health, 74-page document which can be accessed on the World Wide Web from the home page of the WHO Centre in Rome at:

<http://www.who.it>. Click on "What's New". The document can be accessed for downloading more directly by going to:

<http://www.who.it/docs/Ecorep5.pdf>. Soskolne is an epidemiologist who spent a sabbatical leave with the European Centre for Environment and Health, World Health Organization, Rome Division. Colin L. Soskolne, Ph.D., F.A.C.E. Department of Public Health Sciences Faculty of Medicine and Dentistry, 13-103 Clinical Sciences Building, University of Alberta, Edmonton, Alberta, Canada, T6G 2G3 ph: (780)492-6013; fax: (780)492-0364; e-mail: colin.soskolne@ualberta.ca (v.10,#2)

Soskolne, Colin L., ed. *Sustaining Life on Earth: Environmental Health through Global Governance*. Blue Ridge Summit, PA: Lexington Books, 2007. Contents include: (1) "Institutions for Global Governance" by Klaus Bosselmann, (2) "A Covenant of Covenants: A Federal Vision of Global Governance for the Twenty-first Century" by J. Ronald Engel, (3) "Market Society and Ecological Integrity: Theory and Practice" by Richard Westra, (4) "A Full Spectrum Integrity Index of Nations" by

Helmut Burkhardt, (5) "Linkages among Globalization, Human Rights, and Health" by Maud Huynen and Pim Martens, (6) "Toward Sustainability with Justice: Are Human Nature and History on Side?" by William E. Rees, (7) "Protecting Society from Itself: Reconnecting Ecology and Economy" by James R. Karr, (8) "Strong Sustainability and Environmental Policy: Justification and Implementation" by Konrad Ott and Ralf Döring, (9) "Toward Sustainable Environmental Governance in South Africa: Cooperative Environmental Governance and Integrated Environmental Management as Possible Solutions to Fragmentation" by Louis J. Kotzé, (10) "Collective Decision-Making Bridging Public Health, Sustainability Governance, and Environmental Management" by Valerie Brown, (11) "Evolution of the Ecological Integrity Debate" by David Manuel-Navarrete, James J. Kay, and Dan Dolderman, (12) "A Sense of Possibility: What Does Governance for Health and Ecological Sustainability Look Like?" by Daniel Rainham, Ian McDowell, and Daniel Krewski, (13) "The *Earth Charter*, Ethics, and Global Governance" by Brendan Mackey, (14) "The Copenhagen Consensus: A Global Public-Good Perspective Comparing the *Earth Charter* with Other Recent Declarations" by Philippe Crabbé, (15) "Intergenerational Sustainability and Traditional Knowledge in Africa: The Natural Resource Management Perspective" by Yemi Oke, (16) "The Ominous Rise of Ideological Think Tanks in Environmental Policy-Making" by Donald A. Brown, (17) "Cutting CO2 Emissions in the Atmosphere: A Realistic Goal or a Mere Utopian Ideal?" by Giulio De Leo and Marino Gatto, (18) "Ecological Governance at Work: A Community Challenge to Genetically Modified Organisms" by Prue E. Taylor, (19) "The Future: World Population and Food Security" by David Pimentel and Marcia Pimentel, (20) "Refining International Water Law" by Joseph W. Dellapenna, (21) "Water as a Human Right: The Sri Lankan Experience" by Ruana Rajepakse, (22) "Cooperation in Promoting Ecological Integrity and Socioeconomic Justice in Marine Fisheries: European Community-West African Relations" by Emma Witbooi, (23) "The Institutionalized Use of Force in Economic Development: With Special References to the World Bank" by Robert Goodland, (24) "Globalization and the Degradation of Rural Livelihoods: A Comparative Study of Mexico and Vietnam under Trade Liberalization" by Jack P. Manno and Thanh Vo, (25) "A Toolkit for Ecoepidemiological Enquiry under Global Ecological Change" by Brian D. Ladd and Colin L. Soskolne, (26) "The Culture Environment: Implications for Public Health, Human Rights, and Ecological Sustainability" by Rose A. Dyson, and (27) "The Child's Rights to Health and the Role of the World Health Organization" by Laura Westra.

Souffrant, Eddy, "Multinational Ethics at Work in Nigeria," Philosophy in the Contemporary World 4 (no. 4, winter, 1997):34-41. Cases of intervention in international affairs are often thought justifiable if the intervention is exercised against rogue political leaders and delinquent nation-states. Analogously, one ought also to include an increasingly ubiquitous international agent, the profit generating corporation. A cosmopolitan ethics of responsibility renders corporations accountable in the international environment. This ethics of responsibility is applied to British/Dutch Shell, Inc., in Nigeria to argue the merits of international intervention. Souffrant is in philosophy at Marquette University. (v.9,#3)

Soule (Soulé), Michael, and Terborgh, John, eds., Continental Conservation: Scientific Foundations of Regional Reserve Networks. Washington, DC: Island Press, 1999. The complex issue of scale in designing reserves. Whether ecosystems are regulated by top down or bottom up forces, the role of ecological restoration, the critical importance of connectivity, core and buffer areas, an integrated system of reserves. Conservation must be pursued at spatial and temporal scales never before attempted. Some of these questions are difficult to answer, given the present state of science. (v.12,#4)

Soule (Soulé), Michael E., and Terborgh, John, eds., Continental Conservation: Scientific Foundations of Regional Reserve Networks. Washington, DC: Island Press, 1999. 227 pages. Reflects efforts of The Wildlands Project to think big about conservation. "The goal is to restore, over large portions of the continent, the abiotic and biotic processes that sustain biodiversity. Essential processes include fire and flooding that shape the physical environment, predation, [and] movements such as migration and dispersal. ... Beyond science, what we need most is the political will to succeed in an exciting venture

that will ensure a better future for all." Reviewed by Bill McKibben, New York Review of Books 46 (no. 13, Aug. 12, 1999):44-45. (v.10,#3)

Soule (Soulé), Michael, "Does Sustainable Development Help Nature?," Wild Earth 10(no.4, Wint 2000):56-. (v.12,#4)

Soule, Judith D. and Jon. K. Piper, Farming in Nature's Image: An Ecological Approach to Agriculture. Covelo, CA: Island Press, January, 1992. \$ 34.95 cloth, \$ 19.95 paper. 290 pages. A detail look at the pioneering work of The Land Institute, the leading educational and research organization for sustainable agriculture. Forward by Wes Jackson. (v2,#3)

Soule, ME; Estes, JA; Berger, J; DelRio, CM, "Ecological Effectiveness: Conservation Goals for Interactive Species," Conservation Biology 17(no.5, 2003):1238-1250. (v.14, #4)

Soule, Michael, "An Unflinching Vision: Networks of People for Networks of Wildlands," Wild Earth 9 (No. 4, Wint 1999): 38- . (v.11,#2)

Soule, Michael E., Lease, Gary, eds., Reinventing Nature: Responses to Postmodern Deconstruction. Reviewed by Raymond Aaron Younis. Ethics and the Environment 2(1997):203-206. (E&E)

Soulé, Michael E., "Conservation: Tactics for a Constant Crisis," Science, August 16, 1991, The fundamental factors that erode biological diversity are: population growth, poverty, misperception, anthropocentrism, cultural transitions, economics, and policy implementation failure. "Many conservationists argue that current cultural values are antithetical to effective conservation policies, and that a new ethic or a revolutionary change in human consciousness is necessary, before significant progress is made" (p. 746). (v2,#3)

Soulé, Michael E. and Gary Lease, eds. Reinventing Nature? Responses to Postmodern Deconstruction. Island Press, 1995. 186 pages. The rhetorical storm over "nature," and the practical consequences. "A wave of relativistic anthropocentrism originating in the humanities and social sciences with clear implications for a wide range of biodiversity conservation policies and actions." An interdisciplinary investigation of how perceptions and conceptions of nature affect both the individual experience and society's management of nature.

Chapter One: "Nature Under Fire" by Gary Lease. The boundary between the world and human beings is under fire. On the one hand nature is personified; on the other hand the idea that nature needs protection from humankind's onslaught begs the definition of the boundary and turns our attention to contesting constructions of nature and to competition among human groups for access to resources and power.

Chapter Two: "Virtually Hunting Reality in the Forests of Simulacra" by Paul Shephard. The postmodern constructionist view is that all texts, reports, narratives are but descriptions--focused chatter about an unknowable external world, psychobabble, webs of words that serve as ammunition in struggles over who dominates whom.

Chapter Three: "The Nature of Reality and the Reality of Nature" by Albert Borgmann. The substitute for the dualism of natural and artificial is a new continuum: reality--hyperreality. And even if nature (reality) is to some extent a human invention, it still can be eloquent and inspiring and still can invigorate the notion of excellence.

Chapter Four: "Searching for Common Ground" by N. Katherine Hayles. The notions of interactivity and positionality enliven the stakes in contesting for the integrity of the environment. Those in power, therefore, should consider marginal points of view, including those of other species.

Chapter Five: "Nature and the Disorder of History" by Donald Worster. A less extreme interpretation of contemporary history and ecology might stress two principles: one is social and

biological interdependence; the other is successful adaptation to situation and place by human groups and species.

Chapter Six: "Cultural Parallax in Viewing North American Habitats" by Gary Paul Nabhan. The polarized debate about aboriginal impacts obscures the complexity and diversity of old cultures in North America and ignores cultural adaptation and change.

Chapter Seven: "Concepts of Nature East and West" by Stephen R. Kellert. Even though nature evokes common emotional and intellectual structures in humans (evidence for a shared understanding), cultures are heterogeneous in how they value nature.

Chapter Eight: "Resolute Biocentrism: The Dilemma of Wilderness in National Parks" by David M. Graber. National parks (and wilderness in general) are by default the sites where the values of solitude, wildness, and otherness reside. Yet the baseline criteria for original, natural, or pristine states still elude managers.

Chapter Nine: "The Social Siege of Nature" by Michael E. Soulé. Humanity entertains manifold representations of living nature--from quite pagan/spiritual views to the more utilitarian (Judeo-Christian) and scientific conceptions displayed on television documentaries.

Soulé is in environmental studies at the University of California, Santa Cruz; Lease is dean of humanities there. (v6,#1)

Soulé, Michael E. and Gary Lease, eds. Reinventing Nature? Responses to Postmodern Deconstruction. Reviewed by Robert Blondeau. Environmental Ethics 19(1997):105-108. (EE)

Soulé, Michael E., and Press, Daniel, "What Is Environmental Studies?" BioScience 48(1998):397-405. The origins and development of environmental studies. Emerging themes, problems, and conflicts. Ideological conflicts. Institutional problems. Multidisciplinary illiteracy and solutions. Recommendations for environmental studies to include: ecology and environmental policy analysis; literature and philosophy; social criticism and critical theory. But a major conclusion is that the increasing disciplinary diversity of faculty who are contributing to environmental studies is causing crises of vision and curricular development, leading to both a paralysis of program planning and hyper-diverse, shallow curricula--"the environmental studies problem". Worth reading. Soulé and Press are both in Environmental Studies, University of California, Santa Cruz. (v9,#2)

Soulé, Michael E. "Are Ecosystem Processes Enough?" Wild Earth 6, no.1 (1996): 61. (v7, #3)

Soulé, Michael, "A Conservation Biologist's Dilemma: "Does Boycotting South Africa Constitute Human Chauvinism?" Earthwatch, April 1988, pp. 12-13. Soulé first accepted, then declined a consulting trip to South Africa, protesting apartheid. "Clearly, in this case 'humanism' (or is it 'specism?') triumphed over biological egalitarianism and whatever obligations I have to other species. This realization that I am, after all, a human chauvinist, came as a shock." (v3,#3)

Soulé, Michael E. and Terborgh, John. "Roundtable: Conserving Nature at Regional and Continental Scales--A Scientific Program for North America. Bioscience 49(No.10, Oct. 1999):809- . (v10,#4)

Soules, M. C., "An Analysis of Northwest Forest Plan Land Use Allocations," Natural Resources Journal 42(no.2, 2002): 353-84. Soules is a J. D. candidate at Yale Law School. (v.13,#4)

Southern Forest Sustainability, study released. A draft of the Southern Forest Resource Assessment (SFRA) was released on November 26 by the U.S. Forest Service. The SFRA, a two-year study of the health and future prospects of forests in the southern U.S., can be viewed at www.srs.fs.fed.us/sustain. The study was undertaken by federal agencies at the urging of the Dogwood Alliance and other organizations (www.dogwoodalliance.org.) Forest protection groups have been generally unsatisfied with both the draft and the "spin" given it by the Forest Service and the timber industry. Most media reports stated that the report listed urban development as the leading threat to the future of the region's forests,

while downplaying the impacts of industrial forestry, which often relies on extensive clearcuts and conversion of native forests to mono-culture pine plantations. The actual text, a long and detailed document, gives a more complex picture. While urban development is certainly a leading cause of forest loss in many areas, projections showing a dramatic rise in consumption of paper and other wood products on the global and national level are also troubling. Pulp and paper production is currently the leading use for wood harvested from the south, and a major use of forests elsewhere. ISEE members and others in the academic community and university systems, all major consumers of paper, have an important role to play by getting their institutions to increase their use of post-consumer recycled and/or alternative fiber papers. While many universities have recycling programs, most have not focused on the other side of the equation, which is the kind of paper they consume. Rethink Paper (www.rethinkpaper.org), a project of EarthIsland Institute, is one of the organizations that can provide valuable information on options for sustainable paper use. (v.12,#4)

Southgate, Christopher, "Peter Murage and the MOOF Project, Nanyuki, Kenya," Ecotheology No 10 (Jan 2001):111-112.

Southgate, Christopher, "God and Evolutionary Evil: Theodicy in the Light of Darwinism," Zygon: Journal of Religion and Science 27(2002):803-824. Southgate's evolutionary theodicy (going beyond his evaluation of accounts of Thomas Tracy, Holmes Rolston, Arthur Peacocke, and John Haught) explores whether Christians in their environmental ethics ought to become redeemers of the evils in evolutionary nature. Rolston finds a "cruciform nature," but it is not enough (as with Rolston) for nature to be regenerated and to evolve higher forms; all the "victims" that have suffered during evolutionary development need also to be redeemed. Nor is it sufficient to have all these myriads of creatures caught up in the evolutionary struggle merely remembered by God.

"Humans have a calling, stemming from the transformative power of Christ's action on the Cross, to participate in the healing of the world" (p. 817). "A calling to be co-redeemers offers humans a more positive role than most proposals in environmental ethics, which tend to emphasize the need for humans to back off from nature. ... Perhaps it is only in being involved, in however deep a humility, in the healing of nature that we can become human beings fully alive. ... Here I postulate that it is humanity that contains the seeds of nature's transformation. ... A redeemed humanity transcends its nature and can thus act on nature to assist in its healing" (pp. 818-819).

Southgate wonders also if the non-human victims of the evolutionary process in the past might not also be redeemed. Christians may need to posit a "pelican heaven" (Jay McDaniel), in which the lives sacrificed in the evolutionary struggle can fulfil their being. Southgate is in theology, University of Exeter, Exeter, UK.

Southgate, Christopher. *The Groaning of Creation: God, Evolution and the Problem of Evil*. Louisville, KY: Westminster John Knox Press, 2008. Southgate develops an extended inquiry into the suffering of nonhuman creatures and discusses how an openness to evolutionary science can deepen and enliven Christian theology's understanding of nature and nature's God. Pain, suffering, and extinction are intrinsic to the evolutionary process. The world that is "very good" (Genesis) is also "groaning in travail" (in a phrase from the Apostle Paul recalling a woman giving birth) and subjected by God to that travail. This ambiguity in creation is essential for accomplishing God's purposes. Southgate interprets this in terms of God's self-emptying and human beings' special responsibilities as created co-creators to care for creation. Southgate is in theology at the University of Exeter (UK).

Southwick, Charles H., "The Biology and Psychology of Crowding in Man and Animals," Ohio Journal of Science 71(no. 2, March 1971):65- . Crowded populations of animals often show a breakdown of normal behavior, with increased aggression and violence, aberrant sexual activity, improper parental care, and abnormal states of activity, aggression, or social withdrawal. A variety of stress-related diseases and mortality patterns may follow. Southwick taught pathobiology, Johns Hopkins University, Baltimore.

Southwick, Charles H. Global Ecology in Human Perspective. New York: Oxford University Press, 1996. 416 pp. \$39.95 cloth, \$21.95 paper. The scope and meaning of global ecology and a brief review of ecological principles relevant to global concerns. How humans affect global ecosystems and how these changes impact human health, behavior, economics, and politics. (v7,#4)

Southworth, Jane, "Conserving Biodiversity in Agricultural Landscapes: Model-based Planning Tools," Landscape Ecology 21 (no.2, February 2006): 309-310 (2).

Soutter, Di and Dave Mohr, Environmental Management and Auditing: Guidelines for South African Managers. Report prepared for the Southern African Nature Foundation and endorsed by the Department of Environment Affairs, 1993. ISBN 0-620-17324-6. 91 pages. Available from Russell Friedman Books, P. O. Box 73, Halfway House 1685, South Africa. (v6,#3)

Soward, AM, "Review of: James Kates, Planning a Wilderness: Regenerating the Great Lakes Cutover Region", Environmental History 8(no.1, 2003):147.

Sowards, Stacey K., "Identification through Orangutans: Destabilizing the Nature/Culture Dualism," Ethics and the Environment 11(2006):45-61. The nature/culture dualism has long been criticized for constructing social beliefs, attitudes, and behaviors that fail to respect and value the natural world. One possible way to bridge the divide between the human and non-human worlds is the process of identification. Orangutans, an endangered species found in Indonesia and Malaysia, enable individuals to bridge, connect, and identify with a seemingly separate natural world. Through identification with orangutans, humans come to reevaluate their own perspectives and dichotomous ways of thinking about their relationships with nature. Sowards is in communications at the Sam Donaldson Center at the University of Texas, El Paso. (Eth&Env)

Spaargaren, G, "Sustainable Consumption: A Theoretical and Environmental Policy Perspective," Society and Natural Resources 16(no.8, 2003):687-702. (v.14, #4)

Spaargaren, Gert, Arthur P. J. Mol, and Frederick H. Buttel, eds. *Governing Environmental Flows: Global Challenges to Social Theory*. Cambridge, MA: The MIT Press, 2006. Globalization and the changing role of the nation state call for new approaches to environmental governance. Recent developments in sociology show how social theory can be made less static, more fluid, and more directed toward flows and networks.

Spahn, Elizabeth. "Feeling Grounded: A Gendered View of Population Control," Environmental Law 27(no.4, 1997):1295- . (v9,#2)

Spaid, Elizabeth Levitan. "Minority Farmland Eroded by USDA Discrimination." The Christian Science Monitor, vol. 89, 31 Dec. 1996, p. 3.

Spaid, Elizabeth Levitan. "Tobacco Industry on Topes? Not on These Kentucky Farms." The Christian Science Monitor, vol. 89. 23 Jan. 1997, p. 9.

Spaid, Elizabeth Levitan. "Atlanta: Growth vs. Clean Air." The Christian Science Monitor, vol. 89, 14 January 1997, p. 3.

Spaid, Elizabeth Levitan, "Shoring Up the Future of Vermont's Old Barns," The Christian Science Monitor 86 (20 September 1994): 10-11. (v5,#3)

Spaid, Levitan Elizabeth. "Tracking Bobby Jo and Her Bottle-Nosed Gang." The Christian Science Monitor, vol. 89, 20 Feb. 1997, p. B2.

Spaid, Sue, "A political life: Arendtian aesthetics and open systems," Ethics and the Environment 8(no. 1, 2003):93-101. Since the 1990s, artists have broken ground by producing works that are "open systems." That is, they are incomplete, participatory, and elastic. In this paper, I will argue that open systems exemplify Hannah Arendt's conception of vita activa, in contrast to art's traditional role as inspiring vita contemplativa. Such works accommodate Arendt's notion of the political life, since they incorporate process, durability, pluralities of spectators, and unpredictability. Echoing Diotima's interest in immortality, Arendt links beauty to durability. Open systems are particularly durable because we remember them as a public experiences that include participants and spectators. Such performative and pleasurable worldly actions entail aesthetic engagements that are very much in line with Arendt's description of the political life. Spaid is an independent curator. (E&E)

Spalding, Mark J. "Resolving International Environmental Disputes: Public Participation and the Right-to-Know." The Journal of Environment and Development 4 (no. 1, 1995): 141-

Spalding, Mark J. "Lessons of NAFTA for APEC," The Journal of Environment and Development 6(no.3, 1997):252. (v8,#3)

Spaling, Harry, Dekker, Annette. "Cultural Sustainable Development: Concepts and Principles", Perspectives on Science and Christian Faith 48(no.4,1996):230 (v.7,#4)

Spaling, Harry, and Dekker, Annette, "Cultural Sustainable Development: Concepts and Principles," Perspectives on Science and Christian Faith 48 (no., 4, Dec. 1996):230-240.

Spaner, D. Review of F. Magdoff, F.H. Buttel and J.B. Foster, Hungry Profit: Agriculture, Food and Ecology, Journal of Agricultural and Environmental Ethics 11(1999):252-254. (JAEE)

Spaner, Dean, Review of Kneen, Brewster, Invisible Giant: Cargill and its Transnational Strategies. Journal of Agricultural and Environmental Ethics 10(1997):92-95. (JAEE)

Sparrow, Robert. "The Ethics of Terraforming." Environmental Ethics 21(1999):227-245. It has been argued that human restoration of nature is morally problematic because artificially restored natural entities are artifacts, which are ontologically different from natural entities and hence essentially devoid of the moral standing that natural entities have. I discuss the alleged assimilation of restored natural entities to artifacts, and argue that it does not follow from the ontological differences, if any, between the artifactual and the natural that the former is morally inferior to the latter. This defense against the devaluation of restored natural entities is aimed at narrowing the ethical gap between the wild and the tamed, which is often endorsed by ecocentric environmental ethics. (EE)

Spash, Clive L. "Economics, Ethics, and Long-Term Environmental Damages." Environmental Ethics 15(1993):117-32. Neither environmental economics nor environmental philosophy have adequately examined the moral implications of imposing environmental degradation and ecosystem instability upon our descendants. A neglected aspect of these problems is the supposed extent of the burden that the current generation is placing on future generations. The standard economic position on discounting implies an ethical judgment concerning future generations. If intergenerational obligations exist, then two types of intergenerational transfer must be considered: basic distributional transfers and compensatory transfers. Basic transfers have been the central intergenerational concern of both environmental economics and philosophy, but compensatory transfers emphasize obligations of a kind often disregarded. Spash is in the department of Economics, University of Stirling, Scotland. (EE)

Spash, Clive, L. "Ethical Motives and Charitable Contributions in Contingent Valuation: Empirical Evidence from Social Psychology and Economics." Environmental Values 9(2000):453-479. Abstract: Contingent valuation of the environment has proven popular amongst environmental economists in recent years and has increased the role of monetary valuation in public policy. However, the underlying economic model of human psychology fails to explain why certain types of stated behaviour are observed. Thus, good scope exists for interdisciplinary research in the area of economics and psychology with regard to environmental valuation. A critical review is presented here of some recent research by social psychologists in the US attempting to explain stated behaviour in contingent valuation. Attitudinal scales have been used to analyse the role of ecocentric, biocentric and altruistic motives for giving. However, the research is shown to draw some potentially misleading conclusions and be unrepresentative of contingent valuation. Two recent economic studies using contingent valuation are then reported and shown to have identified non-economic motives for WTP. The complexity of value formation and expression is found to go far beyond that generally accepted by economic models. Greater consideration of the role played by attitudes and ethical considerations then becomes relevant to the interpretation of results being used in standard cost-benefit analysis and environmental policy. Keywords: Attitudes, behaviour, contribution model, contingent valuation, environmental ethics, rights, social psychology. Clive L. Spash is at the Cambridge Research for the Environment Department of Land Economy, University of Cambridge, 19 Silver Street, Cambridge CB3 9EP, UK. (EV)

Spash, Clive L. "Human-Induced Climate Change: The Limits of Models", Environmental Politics 5(no.2, 1996):376. (v7,#4)

Spash, Clive L. "The Development of Environmental Thinking in Economics." Environmental Values 8(1999):413-435. ABSTRACT: There has always been a sub-group of established economists trying to convey an environmental critique of the mainstream. This paper traces their thinking into the late 20th century via the development of associations and journals in the USA and Europe. There is clearly a divergence between the conformity to neo-classical economics favoured by resource and environmental economists and the acceptance of more radical critiques apparent in ecological economics. Thus, the progressive elements of ecological economics are increasingly incompatible with those practising neo-classical environmental economics who try to reduce all concepts to fit within the confines of their models. A group of people can be identified who teach that ecological economics is nothing more than a name for the link between mainstream economics and ecology. A new movement and paradigm are unnecessary for such ends. This viewpoint is argued to be inconsistent with the roots and ideas of the ecological economics movement. Ecological economics is seen here to be synthesising various types of economics (e.g., socialist, institutional, environmental) and moving back to explicit inclusion of ethical issues in the mode of classical political economy. This inevitably means rediscovering neglected past works and exploring new ways of thinking about socio-economics and the environment. KEYWORDS: Ecological economics, environment, ethics, history of thought, political economy. Clive L. Spash, Cambridge Research for the Environment Department of Land Economy University of Cambridge 19 Silver Street, Cambridge CB3 9EP, UK. (EV)

Spash, Clive L., Review of Malnes, Raino, Valuing the Environment. Environmental Values 5(1996):270-273. (EV)

Spash, Clive L., Review of Nicholas Stern, *The Economics of Climate Change*, Environmental Values 16(2007):532-536.

Spash, Clive, Economics of Natural Resources and the Environment. Reviewed in Environmental Values 3(1994):86-87. (EV)

Spash, Clive L., "Editorial: A Worthwhile Academic Life (Alan Holland)," *Environmental Values* 17(2008):?? ??

Spash, Clive. Review of M. Grubb, M., C. Vrolijk and D. Brack. The Kyoto Protocol: A Guide and Assessment, London: Earthscan and Royal Institute of International Affairs, 1999, Environmental Values 10(2001):556. (EV)

Spash, Clive. Review of M. Patterson, Global Warming and Global Politics. Environmental Values 8(1999):407. (EV)

Spash, Clive. Review of Robert Costanza, Frontiers in Ecological Economics: Transdisciplinary. Environmental Values 9(2000):398.

Spash, Clive. Review of John Houghton, Global Warming: The Complete Briefing, Cambridge: Cambridge University Press, 1997, Environmental Values 10(2001):131. (EV)

Spash, Clive. Review of Robert Nau, Erik Gronn, Mark Machina and Olvar Bergland, eds., Economic and Environmental Risk and Uncertainty: New Models and Methods. Environmental Values 8(1999):283. (EV)

Spash, Clive. Review of C. Perrings, Economics of Ecological Resources: Selected Essays, Cheltenham: Edward Elgar, 1997, Environmental Values 10(2001):125. (EV)

Spash, Olive, Review of K.T. Pickering and L.A. Owens, An Introduction to Global Environmental Issues, Environmental Values 7(1998):493.

Spash, Clive. Review of Peter Calow, ed. Handbook of Environmental Risk Assessment and Management. Environmental Values 9(2000):109.

Spear, John R., "Conservation Medicine: The Changing View of Biodiversity," Conservation Biology 14(no.6, 2001): 1913-. (v.12,#3)

Specter, Michael, "The Dangerous Philosopher (Peter Singer)" The New Yorker, Sept. 6, 1999, pp. 46-55. Peter Singer has become director of the Princeton University Center for Human Values, but not without controversy. He couldn't be located in the philosophy department, and the biology department had reservations. Perhaps not without some warrant, since he is said to be "the most controversial philosopher alive." But this is not so much for his ethical views on animals as his views on people, which critics complain is a reckless utilitarianism. Singer argues that the two-thousand year old system of ethics protecting the sanctity of life has collapsed and that "it is ridiculous to pretend that the old ethics still make sense when plainly they do not." He argues that a human life is not necessarily more sacred than a dog's, and that it might be more compassionate to carry out experiments on seriously disabled, unconscious orphans than on rats. He argues that parents should kill a disabled infant if they can replace it with one who will be happier.

"Singer's philosophy condemns people for caring more about their families than about strangers." "Singer believes we are obliged to give money away until our sacrifice is of comparable moral importance to the agony of people starving to death. ... One should reduce oneself to very nearly the material circumstances of a Bengali refugee." He also holds "that heroin should be legal since its prohibition has done more harm than good."

Critics also argue that no one can live by Singer's ethics, including Singer himself, since, although he lives modestly and is charitable, has daughters who live comfortably as beneficiaries of a trust fund. Singer's mother, tragically, is in the advanced stages of Alzheimer's disease, and he has

employed, with compassion, a team of health care aides to look after her. Critics say that he is doing the right thing, but that this cannot be justified with Singer's professed ethics.

One Princeton alumnus wrote that, although Singer complains that moral degeneration in the U.S. is worse than anywhere else, in fact Singer's appointment at Princeton is a symptom of, not a cure for, this moral degeneration! On the first day of classes at Princeton, 250 protesters rallied at Princeton's main administration building. Some disabled persons handcuffed their wheelchairs together to block two doors of Nassau Hall, keeping administrators out of their offices until early afternoon. Campus police officers removed the handcuffs and arrested 14 protesters, who were charged with trespassing and disorderly conduct. Steve Forbes, a Republican Presidential candidate who is on Princeton's Board of Trustees, announced that he would not give money to the university until it rescinded Mr. Singer's appointment.

See also Will, George F., "Life and Death at Princeton," Newsweek, September 13, 1999, pp. 80, 82. Will comments that Singer will stimulate serious reflection, and be largely unpersuasive. "Singer does not deny that killing a fetus involves killing life. But he says some infanticide is not even as important as, say, killing a happy cat." George Will himself has a child with Down's syndrome, a child that, in the early stages of its life, Singer might have recommended replacing with another, normal child.

Meanwhile Singer's Practical Ethics has sold 120,000 copies, the best selling book ever published by Cambridge University Press. (v.10,#3)

Specter, Michael, "The World's Oceans Are Sending an S.O.S.," New York Times, May 3, 1992. Full page story. You will probably learn something from this one. "Drift nets can be forty miles long, or large enough to catch Manhattan." "An area of ocean the size of Ohio is swept by high seas fleets each night, and the nets catch virtually everything down to a depth of 30 feet." "The seas are eternal, but so is the river of pollutants." (v3,#2)

Spector, S, "Biogeographic Crossroads as Priority Areas for Biodiversity Conservation," Conservation Biology 16(no.6, 2002): 1480-1487.

Spector, Tom. "Does the Sustainability Movement Sustain a Sustainable Design Ethic for Architecture?" Environmental Ethics 28(2006):265-283. The sustainability movement, currently gathering considerable attention from architects, derives much of its moral foundation from the theoretical initiatives of environmental ethics. How is the value of sustainability to mesh with architecture's time-tested values? The idea that an ethic of sustainability might serve architects' efforts to reground their practices in something that opposes consumer values of the marketplace has intuitive appeal and makes a certain amount of sense. However, it is far from obvious that the sustainability movement provides a strong enough conceptual framework for an entire design philosophy. This issue is complicated by two different sustainable design outlooks which parallel two conceptions of environmental ethics: the practical and the radical. Nevertheless, sustainability need not resort to the philosophical excess of its radical branch to help foster a new public-spiritedness. (EE)

Spedding, C.R.W., "Animal Welfare Policy in Europe", Journal of Agricultural and Environmental Ethics 6(1993). Few European countries have a clear policy on animal welfare, specifying objectives and a strategy for achieving them. The U.K. has a policy of promoting high standards of farm animal welfare by legislation, advice, education and training. The Farm Animal Welfare Council (FAWC) is responsible for defining welfare standards and advising the Minister of Agriculture on appropriate action. A major current constraint on progress is the need to achieve uniformity of standards and practice across the European Community, in order to minimize unfair competition. A range of conventions and other agreements constitute the basis of a common welfare policy throughout Europe, but legislation varies from one country to another. Not all European countries have a body equivalent to FAWC but an attempt is now being made to establish liaison and information exchange between those that exist. This could lead to more effective examination of major welfare problems and better co-ordinated research programs. Spedding is with The UK Farm Animal Welfare Council, Tolworth Tower Surbiton, Surrey, KT6 7DX

England.

Spedding, Colin. *Animal Welfare*. Translator: Chui Weiguo. (Beijing: Chinese Politics and Law University Press, 2005). (in Chinese)

Speight, Laurence, The Case for an Ecocentric Consciousness, Master's Thesis, Department of Philosophy, Lancaster University, September 1994. (v7,#1)

Speight, Laurence, The Case for an Econcentric Consciousness, Master's Thesis, Department of Philosophy, Lancaster University, September 1994.

Spellerberg, I. E., "Ecological Effects of Roads and Traffic: A Literature Review," Global Ecology and Biogeography Letters 7(1998):317-333. The ecological consequences of roads and road construction.

Spellerberg, Ian, Review of Ecological Integrity and the Management of Ecosystems. Environmental Values 3(1994):274-275. (EV)

Spellerberg, Ian. Review of Rapport, Costanza, Epstein, Gaudet, and Levins, Ecosystem Health. Environmental Values 9(2000):389.

Spellman, Frank R. *Ecology for Non-Ecologists*. Blue Ridge Summit, PA: Government Institutes, 2007. Spellman's book is organized into three parts: the fundamentals of ecology, the role of biodiversity, and the practical side of ecology.

Spencer, Daniel T., Gay and Gaia. Cleveland, OH: Pilgrim Press, 1996. 464 pages. \$ 19.95 paper. The author claims we need to rethink our fundamental assumptions about the sacred, ecology, and sexuality. Ecological ethics must become the grounding for all ethics, and genuine justice requires right relations among all of creation, not simply among human beings. We ought to reject a human-centered worldview in favor of an ecocentric worldview. Only when we are able to integrate our sexuality with our spirituality will we fully experience the divine, and fully live out our ethical values. (v7,#4)

Spencer, Gary, New York Law Journal (12/18/98). Rivers and Private Property Rights: Recreational Use Prevents Closing. In a major case that greatly expands the public's right to use rivers on private land, a New York Court of Appeals adopted a new "recreational use" test for when a waterway is navigatable and thus beyond a private landowner's power to close. The Court replaced the old common law standard of a river's capacity for "commercial use" in bringing goods to market with a new test according to which recreational boating alone gives the public a right to use the river. The case dealt with a 12-mile stretch of the South Branch of the Moose River that crosses a 60,000 acre private preserve. The owners of the preserve had kept the river closed to public use for over a century. The ruling also recognized the public's right to portage around obstacles in a stream. (v.9,#4)

Spencer, Stuart, Eddy Decuyper, Stefan Aerts and Johan De Tavernier History and Ethics of Keeping Pets: Comparison with Farm Animals," Journal of Agricultural and Environmental Ethics 19(2006): 17-25. Perhaps the commonest reasons for the keeping of pets are companionship and as a conduit for affection. Pets are, therefore, being used for human ends in much the same way as laboratory or farm animals. So shouldn't the same arguments apply to the use of pets as to those used in other ways? In accepting the rights of farm animals to fully express their natural behavior, one must also accept the right of pets to express their intrinsic natural behavior. Dogs kept in houses for most of the day are being kept in an unnatural environment. So are rabbits kept in hutches, and guinea-pigs or birds in cages. These conditions infringe the animals telos. Dogs are naturally pack animals, so is a dog in isolation being denied its telos? Other actions more deliberately infringe telos and autonomy. Enforced shampooing or

even exercise; hair-cutting of poodles; putting animals in clothes; and tail-docking. If de-beaking of chickens is considered wrong, then the same must be true for tail-docking of dogs. One should also question the ethics of specialist breeding especially when that results in physiological disadvantages (boxers with breathing troubles). There would appear to be no advantage to the animals in having such health problems and when these are the direct result of the breeders desire for specific cosmetic traits, we should question the ethics of the practice at least as much as when animals are bred for specific agricultural traits. Keywords: companion animals - ethics - pets - speciesism The authors are at the Centre for Agricultural Bio- and Environmental Ethics, Katholieke Universiteit Leuven, Leuven-Heverlee, Belgium. (JAEE)

Sperling, L. "The effect of the civil war on Rwanda's bean seed systems and unusual bean diversity," *Biodiversity and Conservation* 10(no. 6, 2001):989-1009. (v.13,#1)

Sperling, S., *Animal liberators: Research & morality*. Berkeley: University of California Press, 1988.

Speth, J. G., "A New Green Regime: Attacking the Root Causes of Global Environmental Deterioration," *Environment* 44(no.7, 2002): 16-25. (v.13,#4)

Speth, James Gustave, and Peter M. Haas. *Global Environmental Governance*. Washington, DC: Island Press, 2006. This is the first volume in the new Island Press series "Foundations of Contemporary Environmental Studies." Speth and Haas present an introduction to global environmental politics and international environmental law by focusing on the problems of acid rain, regional air pollution, ozone depletion, climate disruption, deforestation, land degradation and desertification, freshwater degradation and shortages, marine fisheries decline, toxic pollutants, biodiversity loss, and excess nitrogen. The authors discuss the Stockholm, Rio, and Johannesburg conferences and treaty regimes, and sort through the United Nations system as it pertains to the environment.

Speth, James Gustave, *Red Sky at Morning: America and the Crisis of the Global Environment*. New Haven: Yale University Press, 2004. Reviewed by Udo E. Simonis. *Environmental Values* 13(2004):406-409. (EV)

Speth, James Gustave, and Peter M. Haas. *Global Environmental Governance*. Washington, DC: Island Press, 2006. This is the first volume in the new Island Press series "Foundations of Contemporary Environmental Studies." Speth and Haas present an introduction to global environmental politics and international environmental law by focusing on the problems of acid rain, regional air pollution, ozone depletion, climate disruption, deforestation, land degradation and desertification, freshwater degradation and shortages, marine fisheries decline, toxic pollutants, biodiversity loss, and excess nitrogen. The authors discuss the Stockholm, Rio, and Johannesburg conferences and treaty regimes, and sort through the United Nations system as it pertains to the environment.

Speth, James Gustave. *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*. New Haven: Yale University Press, 2008. Drawing from nearly four decades of environmental work with NGOs, the United States government, and the UN Development Programme, Speth, now Dean of the Yale School of Forestry & Environmental Studies, begins with the observation that if we continue to do exactly what we do on Earth with no economic or population growth, Earth will soon be an unfit planet on which to live. While the environmental community has continued to grow in strength and sophistication, the environment has continued to decline, and we are now on the edge of catastrophe. Speth argues that the root cause of this is the economic and political system of modern capitalism, and we must turn this system around by developing a new consciousness and new politics that makes the market work for the environment, changes the fundamental dynamics of the corporation, and moves us to a post-growth society that actually promotes the well-being of people

and nature.

Speth, James Gustave, Red Sky at Morning: America and the Crisis of the Global Environment. New Haven: Yale University Press, 2004. Economics has been largely detached from environmental issues; nature is at best a backdrop to economic activity. But now we are in crisis. Sustainable development involves the maintenance of wealth, where the required measure of wealth includes not only manufactured capital (buildings and machinery) and human capital (knowledge, skills, and health) but also natural capital (ecosystems). The natural capital has been too often been unpriced or underpriced without incentive to economize on its use. Speth argues for a new international organization that would act on behalf of the environment in much the way that the World Trade Organization acts on behalf of a rational trading order. Speth is dean of the School of Forestry and Environmental Studies, Yale University. Reviewed by Partha Dasgupta in Science 305(17 September 2004):1716. (v.14, #4)

Speth, JG, "Perspectives On The Johannesburg Summit," Environment 45(no.1, 2003): 24-29.

Spezio, Teresa Sabol. *Mountains in Every Direction: A Place-Based History of the Selway-Bitterroot Wilderness Area*. M.S. Thesis, University of Oregon, 2000. In Chapter III, "The Nimípu (Nez Perce) Relationship with Their Homeland," Spezio does extensive interviews with Native American elders and finds that, although they do not consider themselves "visitors" on the landscape they regularly inhabited, they do recognize "*titoqanót wétes*, peopleless land or wilderness," a pre-contact word that has kept the same meaning throughout the years. The word has many parallels with the definition of wilderness in the U.S. Wilderness Act, "where man is a visitor who does not remain." Such lands were often those high and relatively difficult to reach for the Nimípu for the much of the year. Young men were often sent into this wilderness for a week as a rite of passage to maturity to show their competence on their own. Spezio also cites Haruo Aoka, *Nez Perce Dictionary* (Berkeley: University of California Press, 1994), p. 763. Spezio is currently a Ph.D. student in environmental history at the University of California, Davis.

Spies, L 1991. Lelies en 'n lamp. In: Vos, C & Müller, J (eds): *Mens en omgewing*. Halfway House: Orion, 9-20. (Africa)

Spies T.A., "Ecological Concepts and Diversity of Old-Growth Forests," Journal of Forestry 102(no.3, April/May 2004):14-20(7). (v. 15, # 3)

Spinelli, EL, "Review of: Unnatural Disasters by Janet N. Abramovitz," Journal of Environment and Development 11(no.4, 2002): 446-447.

Spitler, Gene. "Sensible Environmental Principles for the Future." Environmental Ethics 2(1980):339-52. The attitudes of the American public toward the environmental movement may be undergoing change as the economic crunch continues and energy shortages reoccur. The principles underlying the environmental movement need to be defined and examined carefully to determine what makes sense for our changing conditions. An attempt is made to express the two primary ethical principles which have evolved from environmental thinking and, in turn, have influenced the directions taken by the movement. It is argued that these principles must not be accepted uncritically, but rather must be analyzed and subsequently modified to become compatible with more traditional ethical thinking. Such a synthesis is attempted. The modified principles can provide valuable guidance as we make difficult decisions which can influence the future path of life on Earth. Spitler is an Assistant Secretary of Standard Oil Co., Navoto, CA. (EE)

Spitler, Gene. "Justifying a Respect for Nature." Environmental Ethics 4(1982):255-60. Paul W. Taylor has proposed a foundational structure for developing a respect for nature. This structure appears to go well beyond what is needed to justify such respect. The intricacies and nuances of life on Earth can gain

our respect without attempting the impossible task of abandoning our human perspective or a particular interest in our own species. Spitler is in Diversification Research at Chevron Research Co., Navoto, CA. (EE)

Spitler, Gene. "Do We Really Need Environmental Ethics?" Environmental Ethics 7(1985):91-92.

Splash, Clive L. and Clayton, Anthony M. H., "The Maintenance of Natural Capital: Motivations and Methods," Philosophy and Geography 1 (1997): 143-173. Splash is a faculty member in the Department of Land Economy at the University of Cambridge. (P&G)

Sponberg, Adrienne Froelich. "Supreme Court Ruling Leaves Future of Clean Water Act Murky." BioScience Vol. 56, no. 12 (2006): 966.

Sponberg, Adrienne Froelich, "Environmental Science Sacrificed in Latest US Budget", BioScience 55(no.1, January 2005):16-16(1).

Sponberg, Alan. Review of Dharma Gaia: A Harvest of Essays in Buddhism and Ecology. Edited by Allan Hunt Badiner. Environmental Ethics 14(1992):279-82.

Spongberg, Stephen A., A Reunion of Trees: The Discovery of Exotic Plants and their Introduction into North America. Cambridge: Harvard University Press, 1990. Trees and shrubs as introduced into North America and their environmental effects. (v1,#4)

Sponsel, Leslie E., Headland, Thomas N., Bailey, Robert C., eds. Tropical Deforestation: The Human Dimension. New York: Columbia University Press, 1996. 352pp. \$49.50 cloth, \$19.50 paper. Looks at the insights local people have into conservation of their ecosystems, the effects of habitation on those ecosystems, and the impact of development and natural resource depletion on their lives in Central and South America, Africa, the Philippines, Indonesia, and Indian subcontinent. (v7,#4)

Spotte, Stephen, Zoos in Postmodernism. Reviewed by Elisa Aatola, Environmental Values 16(2007):536-539.

Spotts, N. Peter and Marguand, Robert. "A Lamb Ignites a Debate on The Ethics of Cloning." The Christian Science Monitor, vol. 89, 26 Feb. 1997, p. 3.

Spotts, Peter N. "Will Ocean's Ice Crystals Yield Energy?" The Christian Science Monitor, vol. 89, 4 Feb. 1997, pp. 1-13.

Spotts, Peter N. "Gear up for a Four-Day Race, Fueled by the Sun." The Christian Science Monitor, June 20, 1995, p. 12. (v6,#2)

Spotts, Peter N. "High Tech Water Worlds Slosh to Stardom." The Christian Science monitor, vol. 88, 25 Sept. 1996, p 1, 10-11.

Spotts, Peter N. "Summit Goal on Hunger Needs Bio-Breakthrough." The Christian Science Monitor, vol. 88, 13 Nov. 1996, pp. 1, 9.

Spotts, Peter N. "Sweating in the Name of Science: A Geological Journey. Are the Adirondacks Rising? . . ." The Christian Science Monitor, July 3, 1995, pp. 9-11. (v6,#2)

Spotts, Peter N. "Lakes Provide New Indicator of Global Change." The Christian Science Monitor, vol.

88, 12 Nov. 1996, pp. 12-13.

Spotts, Peter N. "Conifers Get Prickly When it Comes to New Locations." The Christian Science Monitor, vol. 89, 14 January 1997, p. 12.

Spotts, Peter N. "Where Should All the Spent Fuel Go?" The Christian Science Monitor, 3 March 1995, p. 4. (v6,#1)

Spotts, Peter. "Dams Disrupt a Key Balance in Sea." The Christian Science Monitor 89.84 (27 March 1997): 1.

Spotts, Peter. "Launch of Deep-Sea Atlantis Gives Ocean Research a High-Tech Boot." The Christian Science Monitor 89.102 (22 April 1997): 12.

Spotts, Peter. "Monitoring 'Stealth' Quakes." The Christian Science Monitor 89.82 (25 March 1997): 12.

Spotts, Peter. "Budget Cuts Imperil Agency's Ability to Forecast the Weather." The Christian Science Monitor 89.91 (7 April).

Spotts, Peter. "Wildlife Dilemma: Finding Habitat for Endangered Species." The Christian Science Monitor 89.77 (18 March 1997): 10.

Spragg, Mark, ed., *Thunder of the Mustangs: Legend and Lore of the Wild Horses*. Photos and essays by mustang lovers. San Francisco: Sierra Club Books, 1998. (v9,#2)

Spretnak, Charlene, The Resurgence of the Real: Body, Nature and Place in a Hypermodern World. London: Routledge, 1999. An ecological postmodern ethics, replacing the modern, mechanistic worldview with Homo economicus at its center. The ideologies of modernity have devalued "the knowing body, the creative cosmos, and the complex sense of place." The modern crisis is being challenged by an impressive network of corrective efforts. (v10,#4)

Spretnak, Charlene, The Resurgence of the Real, Chinese translation, translator: Zhang Nini. Publisher: Central Compilation & Translation Press, 2001 .

Spretnak, Charlene. *The Resurgence of the Real: Body, Nature, and Place in a Hypermodern World*. Translator: Zhang Nini. (Beijing: The Central Translation Press, 2001). (in Chinese)

Sprigge, T. L. S. Review of Of Mice, Models and Men. By Andrew W. Rowan. Environmental Ethics 8(1986):83-87.

Sprigge, T. L. S., "Some Recent Positions in Environmental Ethics Examined," Inquiry 34(1991):107-28. An examination of three recent books advocating beliefs about, and attitudes toward, wild or semi-wild nature, characteristic of those in eco-philosophy today. Paul Taylor, Respect for Nature; Holmes Rolston, Environmental Ethics; Andrew Brennan, Thinking about Nature. Taylor and Rolston are seen as forms of deep ecology; Brennan's position is humanistic ecology, a middle way between shallow and deep ecology. These authors are interpreted through Sprigge's panpsychism, in which he is sympathetic to the idea that there is value in nature apart from the life of humans and animals. Though Rolston and Taylor disclaim being panpsychists, it is hard to make sense of their claims without moving toward panpsychism, or at least broadening our conception of the distribution of sentience. Even for the panpsychist, however, where it is not the welfare of individual organisms that is in question, but the alleged value of units such as total ecosystems, species, or terrains, appeal must be mainly to aesthetic value. For even if there is a

world of inner feeling in nature, we must remain so ignorant of its character, except when it rises to the animal or human level, that we cannot do very much about it. The best answer to the question of the human role in nature lies in a special sense of oneness with the wider system of things which humans can obtain when away from human restrictions, even though nature is just as much there in much of the apparently humanized world. Sprigge is emeritus in philosophy at the University of Edinburgh. (v.8,#4)

Sprigge, T. L. S., "Idealism, Humanism, and the Environment," in Coates, Paul and Hutto, Daniel D., eds., Current Issues in Idealism. Bristol, England: Thoemmes Press, 1996), pp. 267-302. "My main conclusion is that absolute idealism, conceived as the view that Reality is 'a single Experience, superior to relations and containing in the fullest sense everything which is' (quoting Bradley), need not be, and should not be, in any way metaphysically humanist or vitalist, and that there is no reason therefore for those, like the deep environmentalists who are repelled by ethical humanism or even vitalism, and by metaphysical humanism or vitalism as implying it, to regard absolute idealism in general with suspicion; indeed they should recognize it as rather their best metaphysical friend, since it gives ground for recognizing as cognitively valid the pantheistic feelings towards nature which often inspire them. Sprigge is emeritus in philosophy at the University of Edinburgh. (v.8,#4)

Sprigge, T. L. S., "Non-human Rights: An Idealist Perspective," Inquiry 27(1984):439-461. The question whether an entity has rights is identified with that as to whether an intrinsic value resides in it which imposes obligations to foster it on those who can appreciate this value. There should be no difficulty in granting that animals have rights in this sense, but what of other natural objects and artifacts. It seems that various inanimate things, such as fine buildings and forests, often possess such intrinsic value, yet since they can only be fully actual in an observing consciousness the most basic such right is that of being observed from time to time. That at least is true of them as phenomenal objects. There must, however, be a thing in itself behind the phenomenal object and sometimes this may possess an intrinsic value which gives rise to rights, not a matter of the need to be actualized in an observing consciousness, though it is extremely difficult to reach reliable conclusions here. Sprigge is emeritus in philosophy at the University of Edinburgh.

Sprigge, T. L. S. (Philosophy, University of Edinburgh, Scotland), "Some Recent Positions in Environmental Ethics Examined: a Review" in Inquiry 34(1)(1991):107-128. Critiques Holmes Rolston, Environmental Ethics; Paul Taylor, Respect for Nature, and Andrew Brennan, Thinking about Nature: An Investigation of Nature, Value and Ecology.

Sprigge, T.L.S., "Are There Intrinsic Values in Nature?" Journal of Applied Philosophy 4, no. 1 (1987): 21-28. Sprigge argues that all value must be appreciated by a conscious evaluator, and thus, that if there are intrinsic values in nature we must subscribe to a panpsychist metaphysics, such as we discover in Royce, Fechner, or Whitehead. But his argument rests on the trivial point that if we imagine a nature without any conscious human valuers, we are conscious of it in our imagining. "I cannot make sense of [the world's] existing in some unexperienced manner" (p. 25). (Katz, Bibl # 1)

Sprigge, Timothy L. S. Review of Environmental Ethics and Process Thinking. By Clare Palmer. Environmental Ethics 22(2000):191-194.

Sprigge, Timothy, Review of Mathews, Freya, The Ecological Self. Environmental Values Vol.1 No.4(1992):365.

Springer, Allen L. "International Law After Rio: The Continuing Search for Equity," Ethics and International Affairs, 1993. 7:115-129. (v8,#3)

Springer, Allen L. "The Canadian Turbot War with Spain: Unilateral State Action in Defense of

Environmental Interests," The Journal of Environment and Development 6(1997):26.

Sprouse, T, "Review of: Alternate Futures for Changing Landscapes: The Upper San Pedro River Basin in Arizona and Sonora by Carl Steinitz, Hector Arias, Scott Bassett, Michael Flaxman, Tomas Goode, Thomas Maddock III, Dave Mount, Richard Peiser & Allen Shearer", Natural Resources Journal 43 (no.3, 2003): 918-920.

Sprugel, D. G., "Disturbance, Equilibrium, and Environmental Variability: What is 'Natural' Vegetation in a Changing Environment?" Biological Conservation 58(1991):1-18. On human scales many landscapes appear little changing. Early ecologists supposed that, despite disturbances, natural ecosystems reached a stable climax. More recently, scientific studies have discovered that many of these landscapes are non-equilibrium. They do change over hundreds of years. Examples: African savannas, the Big Woods of Minnesota, the lodgepole forests of Yellowstone National Park, and possibly the old-growth Douglas-fir forests of the Pacific Northwest. The changes are introduced by climate change, by erratic storms, by periods of drought. "The notion of 'natural' vegetation or ecosystem processes need not be abandoned as a goal for park or reserve management, even though it must be revised to recognize that there is a range of ecosystems that can legitimately be considered 'natural' (p. 15). Sprugel is in forestry, University of Washington, Seattle.

Spurway, Neil, ed., Humanity, Environment and God. Cambridge, MA: Blackwell Publishers, 1993. 240 pages. \$ 49.95. A collection of essays by eminent theologians, historians, and scientists reexamining the world we live in. The Glasgow Centenary Gifford Lectures. (v4,#4)

Spurway, Neil, ed., Humanity, Environment and God. Cambridge, MA: Blackwell's, 1993. 240 pages. Hardcover. \$ 49.95. What are the conditions in which humankind finds itself and what should our response to those conditions be? Answers by the physicist-cosmologist John Barrow, the evolutionary biologist Richard Dawkins, the historian John Roberts, the philosopher Anthony Kenny, and the theologians Don Cupitt and Archbishop John Habgood. A reexamination of the world we live in, and the impact of our physical, biological, social, and spiritual environment on modern thought. Spurway is at Glasgow University. (v5,#2)

Squadrito, Kathleen M. "Locke's View of Dominion." Environmental Ethics 1(1979):255-62. I examine the extent to which Locke's religious and political ideology might be considered to exemplify values which have led to environmental deterioration. In the Two Treatises of Government, Locke appears to hold a view of dominion which compromises humanitarian principles for economic gain. He often asserts that man has a right to accumulate property and to use land and animals for comfort and convenience. This right issues from God's decree that men subdue the Earth and have dominion over every living thing. Although abuse of the environment appears to be justified in Locke's political works, I argue that there are many passages in this work that cast doubt on such an interpretation. Further, the view of dominion adopted in Locke's educational work is one of responsible stewardship. On the whole, his view stresses man's duties and obligation towards all creation. Squadrito is in the philosophy department, Indiana University-Purdue University, Fort Wayne, IN. (EE)

Squatriti, P, "Offa's Dyke between Nature and Culture", Environmental History 9 (no.1, 2004): 37-56.

Squiers, Edwin, ed., The Environmental Crisis: The Ethical Dilemma. Mancelona: MI: Ausable Trails Institute of Environmental Studies, 1982.

Srinivas, K. Ravi. "The Great Population Debate", Environmental Politics 5 (no.2, 1996):359. (v7,#4)

Srinivas, K. R., "Bt Cotton in India: Economic Factors Versus Environmental Concerns," Environmental

Politics 11(no.2, 2002): 154-58. (v.13,#4)

Srinivas, KR, "Demystifying Dams and Development: The World Commission on Dams and Development," Environmental Politics 10(no, 3, 2001):134-138. (v.13,#1)

Stackhouse, Max L., Dennis P. McCann and Shirely Roels, with Preston N. Williams, eds. On Moral Business: Classical and Contemporary Resources for Ethics in Economic Life. Grand Rapids, MI: Eerdmans, 1996. 979 pages. \$ 35.00 paper. The primary editors believe that we today live in a global, post-socialist economy, and that the Soviet bloc's collapse thoroughly disposed of any naive belief in socialism. At the same time, all too many religious leaders and other ethicists cling to the belief that capitalism is greedy, individualistic, exploitative and also failing. What is needed is a post-socialist faith that can transform the contemporary business corporation, for this peculiarly modern and increasingly powerful human organization holds both promise and threat to humanity. In the U.S. at least, Christians are a sizeable enough force within corporations--as managers at all levels--that the work of making business a positive and creative force is both feasible and necessary. With articles by Wendell Berry and James A. Nash making strong claims about the coming environmental crisis. Reviewed by Daniel Finn in Christian Century, April 24, 1996, who replies, "No matter how dead socialism looks in the U.S., it would be good to invite some debate about it."

Stackhouse, Max L., with Paris, Peter J., eds., God and Globalization, Volume 1: Religion and the Powers of the Common Life. With Browning, Don S., eds., God and Globalization, Volume 2: The Spirit and the Modern Authorities. With Obenchain, Diane B., God and Globalization, Volume 3: Christ and the Dominions of Civilization. Harrisburg, PA: Trinity Press International, 2001, 2002. Thinking globally and trying to make sense of a shrinking world. Ecumenical and interfaith movements constitute a religious dimension of globalization. Religion in various forms is--and should be--an actor in globalization. Globalization should neither be welcomed uncritically nor dismissed as wholly deleterious. We need better conceptions of global justice and of human redemption.

Stackhouse, Max. *God and Globalization: Volume 4, Globalization and Grace*. New York: Continuum Books, 2007. God's loving mercy is manifest in globalization, though many pastors and secularists see globalization as a soulless mechanism. Globalization holds unparalleled opportunities and responsibilities for Christian believers and world citizens. Globalization is creating a new transnational kind of affiliation—a global civil society—that will simultaneously fulfill and modify core Christian ideals. It is creating an expanded political public, a morally enriched domain of free association. Globalization has already lifted hundreds of millions out of poverty and created newly empowered middle classes throughout the developing world.

Staebler, Rebecca N., "Forestry and Foresters: Looking Back 100 Years," Journal of Forestry 98(no.11, NOV 01 2000):4- . In 1903 Theodore Roosevelt told a gathering of the Society of American Foresters that there were no greater body "who have in their power to do greater service to the country". This commemorative issue shows how well foresters and SAF have lived up to Roosevelt's charge during our first 100 years. (EE v.12,#1)

Stafford, Barbara Maria, "Toward Romantic Landscape Perception: Illustrated Travels and the Rise of 'Singularity' as an Aesthetic Category," The Art Quarterly 1(no. 1, 1977):89-124. Scientific travel literature in the eighteenth century gave rise to an interest in lone, visually distinctive landscape configurations. "The dominant natural configuration, demanding immediate respectful attention, became a potent feature of scientific travel literature and created an aesthetic category of its own: that of singularity" (p. 89). This "relates to the voyager's absorption in what he sees to such a point that the obliteration of his own identity results. The becoming one with the singularity beheld is a riveting of the imagination to its object in a passionate identification with it" (pp. 113-114).

Stafford, Barbara Maria, "Toward Romantic Landscape Perception: Illustrated Travels and the Rise of 'Singularity' as an Aesthetic Category," The Art Quarterly 1(no. 1, 1977):89-124. Scientific travel literature in the eighteenth century gave rise to an interest in lone, visually distinctive landscape configurations. "The dominant natural configuration, demanding immediate respectful attention, became a potent feature of scientific travel literature and created an aesthetic category of its own: that of singularity" (p. 89). This "relates to the voyager's absorption in what he sees to such a point that the obliteration of his own identity results. The becoming one with the singularity beheld is a riveting of the imagination to its object in a passionate identification with it" (pp. 113-114).

Stafford, S. L., "The Effect of Punishment on Firm Compliance with Hazardous Waste Regulations," Journal of Environmental Economics and Management 44(no.2, 2002): 290-308. (v.13,#4)

Stafford, Tim, "Are People the Problem?" Christianity Today, October 3, 1994. A special report funded by the Pew Charitable Trust. Christians have a vital stake in the population debate, since population concerns cover areas that Christians deeply care about, the meaning of persons and families, the role of women, the use of population controls, coercion, persuasion, abortion, and related issues. Paul Ehrlich's views are contrasted with Julian Simon's, and evangelical Christians come out in between, but nearer to Simon, provided that resources are used with justice and love, and the cornucopian argument must not become a substitute for these concerns. In a way, what Christians now urge ought to urge in developing countries is what the best in Protestant Christian missions has been urging for the last century: hard work, thrift, modern scientific methods, limited family size, justice, love, and charity, honest, democratic government, contentment with enough. With boxes by Andrew Steer, Director of the World Bank with responsibilities for environmental and social policies, and a Christian who is rather more concerned with the adverse results of escalating populations. (v5,#3)

Stager, Curt. "Update on the Ecological Condition of Adirondack Lakes." Wild Earth 6, no.1 (1996): 29. (v7, #3)

Stamand, MG; Merriam, DH, "Defensible Moratoria: The Law Before and After the Tahoe-Sierra Decision", Natural Resources Journal 43 (no.3, 2003): 703-752.

Stamps, AE; Smith, S, "Environmental Enclosure in Urban Settings," Environment and Behavior 34(no.6, 2002): 781-794.

Stanfield, BJ;Bliss, JC; Spies, TA, "Land ownership and landscape structure: a spatial analysis of sixty-six Oregon (USA) Coast Range watersheds", Landscape Ecology 17(no.8,2002):685-697.

Stanford, Craig B., The Hunting Apes: Meat Eating and the Origins of Human Behavior. Princeton, NJ: Princeton University Press, 1999. 262 pages. \$ 25. What made humans unique was meat, the desire for meat, the eating of meat, the hunting of meat, the sharing of meat. Being a "clever, strategic, and mindful sharer of meat is the essential recipe that led to the expansion of the human brain." From analyses of the behavior of chimps and other great apes, and existing human hunting and gathering societies, Stanford claims that meat eating has been central to human evolution. Meat provides a highly concentrated source of protein, essential for the development and health of the brain, and is craved by many primates, including humans. This craving has given meat genuine power--the power to cause males to form hunting parties and organize entire cultures around hunting. And it has given men the power to manipulate and control women in these cultures. Steven N. Austad comments in Natural History: "I justify my meat eating by tradition. As Craig Stanford's book makes abundantly clear, my ancestors have been killing and eating meat for more than five million years. What kind of egotist would it take to break a tradition like that?" (Perhaps Austad continues to dominate his women too!) Although Stanford

portrays "the roots of human behavior as manipulation and cunning that arise from the use of meat by our ancestors," he, at least, concludes that we are not biologically driven to do any of these things and that we are not innately aggressive demons. Stanford is in anthropology at the University of Southern California. (v10,#4)

Stange, Mary Zeiss. Woman the Hunter. Boston: Beacon Press, 1997. A reintroduction of women as hunters can defy traditional stereotypes of man the hunter and woman the gatherer. Hunting "encapsulates a worldview that locates humans in the natural scheme of things in a markedly different way from agriculture or industry. It affords a mode of conscious participation in natural life that is unavailable elsewhere" (p. 124). Woman the Hunter understands that "everything that lives will die. And out of its dying others will live" (p. 176). Reviewed by Greta Gaard, Environmental Ethics 22(2000):203-207. (v.11,#3)

Stange, Mary Zeiss. Woman the Hunter. Reviewed by Greta Gaard. Environmental Ethics 22(2000):203-206.

Stanisci, A., Pelino, G; Blasi, C, "Vascular plant diversity and climate change in the alpine belt of the central Apennines (Italy)," Biodiversity and Conservation 14 (no. 6, June 2005): 1301-1318.

Stankey, George H., "Wilderness around the World," Journal of Forestry 91 (no. 2, February, 1993):33-36. Protection efforts are expanding, despite varying definitions of "wilderness," typically an area not substantially modified by modern human activity and reflecting primarily a natural character. A preliminary survey by UNEP, the World Bank, the World Resources Institute, and the Sierra Club finds that perhaps one-third of the terrestrial Earth is in this condition. Outside the U.S., wilderness areas exist by legislation in Australia, Canada, Finland, New Zealand, and South Africa; and administratively in Zimbabwe, Sweden, and Kenya. The Mavuradonha Wilderness in Zimbabwe is the first such area designation in a developing nation, managed for a variety of activities with resulting economic benefits to local villagers and farmers. Stankey is in the Department of Forest Resources, Oregon State University. This whole issue of the Journal of Forestry is on wilderness management. (v5,#4)

Stankey, GH; Bormann, BT; Ryan, C; Shindler, B; Sturtevant, V; Clark, RN; Philpot, C, "Adaptive Management and the Northwest Forest Plan: Rhetoric and Reality," Journal of Forestry 101(no.1, 2003): 40-46.

Stanley, Emily H., Fisher, Stuart G., Grimm, Nancy B. "Ecosystem Expansion and Contraction in Streams," Bioscience 47(no.7 1997):427. Desert streams vary in both space and time and fluctuate dramatically in size. (v8,#3)

Stanley, Jr., Thomas R., "Ecosystem Management and the Arrogance of Humanism," Conservation Biology 9 (1995): 255-62. There are two fundamentally different views of ecosystem management: biocentric, considering human uses of resources to be constrained by the primary goal of maintaining ecological integrity; and anthropocentric, centering on human resources and including ecological and social considerations. The anthropocentric view is uppermost, tacitly in the logic of ecosystem management, and ecosystem management is, in its usual manifestations, another example of the arrogance of humanism. Stanley is with the U.S. National Biological Survey, Fort Collins, CO, USA. (v6,#2)

Stanners, David, Bourdeau, Phillippe, The European Environment Agency, eds. Europe's Environment: The Dobbris Assessment. London: Earthscan Publications Ltd., 1995. 712pp. £47. This provides a comprehensive guide to the state of the environment in 46 countries and is based on data from a wide range of sources. It is a unique source of information on Europe's cities by examining all the pressures, such as energy, transport, tourism, air, and water, on a highly urbanised continent. (v8,#1)

Stanton, Mark and Dennis Guernsey, "The Christian's Ecological Responsibility: A Theological Introduction and Challenge," Perspectives on Science and Christian Faith, March 1993. (v4,#3)

Stanturf, John A., Gardiner, Emile S., and Warren Jr., Melvin E., "Restoring Bottomland Hardwood Ecosystems in the Lower Mississippi Alluvial Valley," Journal of Forestry 98(no. 8, Aug. 1, 2000):10- . Because of concerns for wildlife habitat and water quality protection, the valley is now the site of the most extensive forest restoration effort in the United States. (v.12,#2)

Star, L., E. D. Ellen, K. Uitdehaag and F. W. A. Brom, "A plea to implement robustness into a breeding goal: poultry as an example," Journal of Agricultural and Environmental Ethics 21(2008):109-125. The combination of breeding for increased production and the intensification of housing conditions have resulted in increased occurrence of behavioral, physiological, and immunological disorders. These disorders affect health and welfare of production animals negatively. For future livestock systems, it is important to consider how to manage and breed production animals. In this paper, we will focus on selective breeding of laying hens. Selective breeding should not only be defined in terms of production, but should also include traits related to animal health and welfare. For this we like to introduce the concept of robustness. The concept of robustness includes individual traits of an animal that are relevant for health and welfare. Improving robustness by selective breeding will increase (or restore) the ability of animals to interact successfully with the environment and thereby to make them more able to adapt to an appropriate husbandry system. Application of robustness into a breeding goal will result in animals with improved health and welfare without affecting their integrity. Therefore, in order to be ethically acceptable, selective breeding in animal production should accept robustness as a breeding goal. The authors are at the Animal Breeding and Genomics Centre, Wageningen University, Wageningen, The Netherlands.

Starik, Mark, "Should Trees Have Managerial Standing? Toward Stakeholder Status for Non-Human Nature," Journal of Business Ethics 14(1995):207-217. Most definitions of the concept of "stakeholder" include only human entities. The non-human world can be integrated into the stakeholder management concept. The natural environment is finally becoming recognized as a vital component of the business environment; the stakeholder concept is more than a human political/economic one, and non-human nature currently is not adequately represented by other stakeholder groups. In addition, any of several stakeholder management processes can readily include the natural environment as one or more stakeholders of organizations. This integration would provide a more holistic, value-oriented, focused and strategic approach to stakeholder management, potentially benefiting both nature and organizations. Starik is professor of strategic management and public policy, The George Washington University.

Starik, Mark, "Should Trees Have Managerial Standing? Toward Stakeholder Status for Non-human Nature," Journal of Business Ethics 13(no. 3, 1995):207-217.

Starik, Mark, and G. P. Rands, "Weaving an Integrated Web: Multilevel and Multisystem Perspectives of Ecologically Sustainable Organizations," Academy of Management Review 20(no., 4, 2000):313-329.

Starik, Mark. Review of R.E. Freeman, J. Pierce, & R. Dodd, "Environmentalism and the New Logic of Business: How Firms Can Be Profitable and Leave Our Children a Living Planet", Organization and Environment 14 (No. 2, June 2001) pp.248-51. Starik is associate professor of business and public management at George Washington University. (v.13,#2)

Stark, Bennett. "Uncommon Ground Needing to be Re-trodden," Wild Earth 6(1996):53. (v8,#1)

Stark, Judith, "Ethics and ecotourism: connections and conflicts," Philosophy and Geography 5 (No. 1, 2002): 101-113. In this essay the author examines the burgeoning industry of ecotourism, analyzing

definitions of "ecotourism" and exploring a number of compelling issues raised by the recent trend in worldwide tourism. She then examines three sample codes of ecotourism: one site-specific (Antarctic Traveler's Code), one from a major environmental group (National Audubon Society), and one developed by a consultant for a travel research firm (Code for Leisure Destination Development). The presuppositions, value and limitations of these codes are then analyzed. On the basis of this analysis, the author proceeds to a discussion of the frameworks for negotiating discourses about ecotourism. Stark argues that the limitations detected in the sample codes of ethics for ecotourism would be fruitfully addressed by Jürgen Habermas's discourse ethics augmented by the feminist ethical and political theories of Seyla Benhabib who draws on the work of Hannah Arendt. While bracketing the debates surrounding the justification of Habermas's principle of universalizability, the author argues that the over-emphasis on the rational aspects both of the principle itself and on the notion of "rational trust" stand in need of a corrective if discourse ethics is to be used successfully in negotiating real-life conflicts. Stark argues for a kind of "application discourse" using the feminist ethical and political theories of Benhabib drawn from Arendt's work in which "associational public spaces" are created through relational processes in the acts themselves of meeting and discourse. The author claims that Benhabib and Arendt's works contain fruitful theoretical approaches that also leave room to deal with policies and practical applications as debates about ecotourism increase around the world. Far from exhausting the possibilities, this essay opens up the connections between these theoretical approaches and a new area of environmental concern—ecotourism. Stark is an associate professor of philosophy at Seton Hall University in New Jersey. (P&G)

Starr, Christopher, Are Native Species Always Best?: A Discussion of the Scientific, Cultural and Ethical Issues Surrounding the Native Species Debate, With Particular Reference to Forest and Woodland Trees in the United Kingdom, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Starr, Christopher, Are Native Species Always Best?: A Discussion of the Scientific, Cultural and Ethical Issues Surrounding the Native Species Debate, With Particular Reference to Forest and Woodland Trees in the United Kingdom, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Starrs, Paul F., Let the Cowboy Ride: Cattle Ranching in the American West. Baltimore: Johns Hopkins University Press, 1998. (v.9,#3)

Staten, Mike, Hodges, John. "An Industrial Approach to Managing for Wildlife and Timber," Journal of Forestry 95(no.8, 1997):35. (v8,#3)

Staudt, Kathleen, ed. Women, International Development, and Politics: The Bureaucratic Mire. Updated and expanded edition. Philadelphia: Temple University Press, 1997. 312pp. \$24.95 paper. This new edition reflects the intensified interest in women's empowerment in developing countries demonstrated by the Beijing Conference. (v8,#1)

Staus, NL; Strittholt, JR; DellaSala, DA; Robinson, R, "Rate and pattern of forest disturbance in the Klamath-Siskiyou ecoregion, USA between 1972 and 1992," Landscape Ecology 17(no.5, 2002): 455-470.

Staver, K. W. and Brinsfield, R. B., "Agriculture and Water Quality on the Maryland Eastern Shore: Where Do We Go from Here?," Bioscience 51(no.10, 2001): 859-68. (v.13,#2)

Stead, J. G. and W. E. Stead, "Ecoenterprise Strategy: Standing for Sustainability," Journal of Business Ethics 24(no. 4, 2000):313-329.

Steady, Filomina Chioma, "Women, Shelter and the Environment." Environmental Values Vol.2 No.2(1993):163-176. ABSTRACT: The aim of this paper is to point out the logic of the links between shelter, women and the environment in order to understand this important dimension of the crisis in human settlements, particularly in the provision of human shelters. It also discusses the relationship of this crisis to processes of development which are both unsustainable and detrimental to the well-being and socio-economic situation of people in general, and women and children in particular. This paper then attempts to evaluate the effect of development strategies that aim to alleviate the problem and examines some successful initiatives which have promoted both sustainable development and the involvement of women in sustainable human shelter activities. It finally argues that solutions to the problem of human shelter will be ineffective without consideration of women's needs, concerns and contributions in this important aspect of sustainable development. KEYWORDS: Development, environment, gender, shelter policies, women's movements. UNCED, PO Box 80, CH-1231 Conches, Switzerland.

Stearns, Beverly Peterson and Stearns, Stephen C., Watching from the Edge of Extinction. New Haven: Yale University Press, 1999. Stories, reflections from those watching extinctions, often from people dedicating their lives to what becomes a heartbreaking effort, sometimes for the lost species, sometimes for the mistakes, confusions, foibles of the humans involved. "We have written this book not only as a tribute to those species which are on the edge of extinction but for us humans who will be left behind, and in hopes we can draw some lessons from what is happening. The fates of some of these species have not been settled--not quite. We can still make a difference. "You who may open this book years from now, wondering how they went: remember too the eyes that watched them go, and the tongues that strove to articulate the loss" (frontis). (v.13,#1)

Stearns, Beverly Peterson, and Stearns, Stephen C., Watching from the Edge of Extinction. New Haven, CT: Yale University Press, 1999. A sampling of a dozen endangered species and the almost incredible complexity of efforts to save them. Key issues: competing views as to the rationale for endangered species protection, financial constraints, politics that engender unwanted results, and the politics of conservation biology. (v.10,#3)

Stedman, R and Hammer, R, "Environmental Perception in a Rapidly Growing, Amenity Rich Region: The Effects of Lakeshore Development on Perceived Water Quality in Vilas County, Wisconsin," Society and Natural Resources 19 (no. 2, February 2006): 137-151.

Stedman, R., "A Review of: Baker, Mark, and Jonathan, Kusel. Community Forestry in the United States: Learning from the Past, Crafting the Future," Society and Natural Resources 18(no. 9, October 2005): 853-856.

Stedman, RC, "Is It Really Just a Social Construction?: The Contribution of the Physical Environment to Sense of Place," Society and Natural Resources 16(no.8, 2003):671-686. (v.14, #4)

Steeger, Will and Jon Bowermaster. Saving the Earth: A Citizen's Guide to Environmental Action, New York: Alfred A. Knopf, 1990. \$ 10.95. (v1,#2)

Steel, Brent S., List, Peter, and Schindler, Bruce, "Conflicting Values About Federal Forests: A Comparison of National and Oregon Publics," Society and Natural Resources 7(1994):137-153. The degree to which the public embraces different values in forests nationally and regionally in Oregon, but finding strong biocentric value orientations in both cases. Value orientations are strongly related to policy preferences. Steel is in Political Science, Washington State University-Vancouver. List is in Philosophy, Schindler in Forest Resources, Oregon State University. (v.10,#1)

Steel Brent S., Peter List, and Bruce Schindler, "Conflicting Values About Federal Forests: A Comparison

of National and Oregon Politics," Society and Natural Resources 7(1994):137-153. Both national and Oregon publics are more biocentric than anthropocentric in general orientation toward federal forests, though the national public is more strongly biocentric than the Oregon public. A biocentric orientation does not give primacy to human interests but places them in a nature-centered or ecocentric approach. It does not deny that human values are important, but places these in a larger context, finding inherent as well as instrumental value in nature. Among the public, younger persons, women, members of environmental organizations, liberals, and postmaterialists are significantly more biocentric than older persons, men, those economically dependent on timber, conservatives, and materialists. One can predict that biocentric orientations will increase in the future, and agencies that manage resources with traditional anthropocentric orientations, such as the U.S. Forest Service and the Bureau of Land Management, are likely to encounter steadily more resistance from the public. Steel is in political science at Washington State University, Vancouver; List in philosophy, and Shindler in forest resources at Oregon State University. (v5,#4)

Steele, Kristin and Kaza Stephanie, "Buddhist Food Practices and Attitudes among Contemporary Western Practitioners," Ecotheology No 9 (July 2000):49-67.

Steelwater, Eliza, "Mead and Heidegger: Exploring the Ethics and Theory of Space, Place, and the Environment," Philosophy and Geography 1 (1997): 189-207. Steelwater is assistant professor in the Department of Urban and Regional Planning at the University of Illinois at Urbana-Champaign. (P&G)

Steeves, H. Peter, ed., Animal Others: On Ethics, Ontology, and Animal Life. Albany, NY: State University of New York Press, 1999. Contains:

-Behnke, Elizabeth, "From Merleau-Ponty's Concept of Nature to an Interspecies Practice of Peace" (v.13,#4)

Steeves, H. Peter, ed., Animal Others: On Ethics, Ontology, and Animal Life. Albany: State University of New York Press, 1999. 294 pages. Paper, \$ 18.00. Eleven contributors, exploring the status of animals from the continental philosophy perspective. The moral status of animals, animal minds, understanding what it is to be an animal, and what it is to be with an animal. The role animals play in the work of philosophers such as Husserl, Heidegger, Nietzsche, Merleau-Ponty, and Derrida. Steeves is in philosophy at DePaul University. (v.10,#3)

Stefan Baumgartner, Malte Faber and Johannes Schiller, *Joint Production and Responsibilities in Ecological Economics* (Cheltenham: Edward Elgar, 2006). Reviewed by Richard B.Howarth, *Environmental Values* 17(2008):111-113.

Stefanovic, Ingrid Leman. "Interdisciplinarity and Wholeness: Lessons from Eco-Research on the Hamilton Harbour Ecosystem." Environments 23, no.3 (1996): 74. (v7, #3)

Stefanovic, Ingrid, "Philosophy, Earth, and Environment," Philosophy and Geography 4 (No. 2, 2001): 244-248. Book review of Robert Frodeman's "Earth Matters: The Earth Sciences, Philosophy and the Claims of Community," New Jersey: Prentice Hall, Inc., 2000. (P&G)

Stefanovic, Ingrid Leman. "Phenomenological Reflections on Ecosystem Health." Ethics and the Environment 5(2000):253-270. ABSTRACT: That the notion of ecosystem health is of central importance to environmental policy making is clear, even from a cursory survey of landmark documents. The World Commission on Environment and Development (1987) has declared good health to be "the foundation of human welfare and productivity" and "a broad-based health policy" to be essential for sustainable development. The Rio Declaration similarly advocates a global partnership to "conserve, protect and restore the health and integrity of the Earth's ecosystem," and the International Society for Ecosystem Health at the University of Guelph concludes that the idea of health "provides an immediate

and powerful approach" to the challenge of overcoming the earth's environmental crisis.

As frequently as we refer to the concept of health, we rarely explore in explicit terms what we mean. How does one define health? Perhaps, as St. Augustine found himself understanding well the notion of time until he was asked to define it, similarly we take for granted that we agree on the meaning of health until we are asked to achieve a universal consensus on our mutual conceptions of the term. If we were to collectively attempt to define the concept of health, would our definitions converge?

Some philosophers might argue that fruitful policy making cannot proceed in the absence of a clarification of the meaning of the terms that are employed. As logical as this conclusion may sound, it is not completely justified. Moreover, our understanding of the concepts of human and ecosystem health can nevertheless be enlarged, even if we do not achieve consensus on definitions. (E&E)

Stefanovic, Ingrid Leman, Safeguarding our Common Future. Re-thinking Sustainable Development Reviewed by Lijmbach, Susanne. Journal of Agricultural and Environmental Ethics 16(2003):209-217. (JAEE)

Stefanovic, Ingrid Leman, "Evolving Sustainability: A Re-Thinking of Ontological Foundations," Trumpeter, 8:4, Fall 1991, pp. 194-200. The meaning of sustainability, from the perspective of phenomenology. Critical of the positivist roots of sustainable development concepts, the author suggests a more originative understanding of sustainability by re-thinking the notions of "dwelling" and "wholeness."

Stefanovic, Ingrid Leman, Safeguarding our Common Future. Albany: State University of New York Press, 2000. The relevance of the phenomenological tradition to questions surrounding environmental ethics and sustainable development. A phenomenological approach, as conceived by Heidegger, helps us evolve a more originative and informed way of thinking about the foundations of sustainable development. Stefanovic is in philosophy at the University of Toronto. (v.11,#3)

Steffen, Lloyd H. "In Defense of Dominion." Environmental Ethics 14(1992):63-80. The biblical notion of dominion has often been cited as the source and sanction for Western attitudes of environmental disregard. An analysis of the Genesis passage in which dominion (radah) is mentioned reveals a curious misreading of the text: dominion is actually an ideal of human-divine intimacy and peacefulness--as one ought to expect in a paradise creation story. I analyze Genesis dominion not only as a religious concept, but also as a philosophical notion manifesting the Hebrew selfunderstanding of its contemporary experience with the natural world. Being a verb, radah is also an action concept that connotes an ethic of environmental responsibility. Dominion authorizes a philosophical critique of Western attitudes and practices of environmental exploitation. I defend it here as an intentional expression of the Western religious consciousness that could, if it were understood as an ideal of responsible action rather than as an authorization for callous disregard of the natural world, actually promote interreligious dialogue on environmental issues. Steffen is University Chaplain and in the department of religious studies, Lehigh, University, Bethlehem, PA. (EE)

Steffen, Lloyd. "What Religion Contributes to an Environmental Ethic." *Environmental Ethics* 29(2007):193-208. Religion and ethics overlap and are in many respects related; yet, they differ in their primary focus of concern. Ethics projects are anthropocentric in that they are constructed in the context of self-other relationships, which includes human beings in relation to the "other" of the natural world, and even religious ethics reflect this relational structure. Religion, however, is focused on the human relation to ultimacy and presents a distinctive consciousness of the self and its relations, including relation to the natural world. As religion decenters the self and reframes how the self is related to the other of the natural world - Thomas Merton and Thich Nhat Hanh articulate this distinctively religious consciousness in relation to the environment - religious consciousness can provide positive support for actions of care and regard toward the natural world. But religion need not go this direction. Focused as it is on ultimacy,

which is a power concept that can be dangerous, religion can also sponsor destructive environmental action. Although religion can, indeed, yield in distinctive ways actions and attitudes that amount to support for an ethic of positive regard for the natural world, religiously inspired actions must always be subject to moral critique. (EE)

Steffen, Lloyd. Review of *The Oxford Handbook of Religion and Ecology*. Edited by Roger S. Gottlieb. *Environmental Ethics* 30(2008):439-442. (EE)

Steffen, W; Andrae, MO; Bolin, B; Cox, PM; Crutzen, PJ; Cubasch, U; Held, H; Nakicenovic, N; Scholes, RJ; TalaueMcManus, L, "Abrupt Changes: The Achilles' Heels of the Earth System", *Environment* 46 (no.3, 2004): 8-21.

Steg, Linda and Sievers, Inge, "Cultural Theory and Individual Perceptions of Environmental Risks," *Environment And Behavior* 32 (No. 2, 2000, Mar 01): 250- . (v.11,#2)

Steidlmeier, Paul. "The Morality of Pollution Permits." *Environmental Ethics* 15(1993):133-50. The Clean Air Act of 1990 sets forth a system of tradable permits in pollution allowances. I examine the moral implications of such marketable allowances as a means to achieving a clean air environment. First, I examine the "ends sought" in environmental policy by discussing foundational ethical perspectives. Second, I set forth a framework for judging the moral suitability of various means. I conclude with reflections on interest group power, public policy, and the legitimacy of "second best" solutions. Steidlmeier is at the School of Management, State University of New York, Binghamton, New York. (EE)

Stein, BA, "A Fragile Cornucopia: Assessing the Status of U.S. Biodiversity," *Environment* 43(no. 7, 2001):10-23. (v.13,#1)

Stein, Bruce A., Kutner, Lynn S., and Adams, Jonathan S., eds., *Precious Heritage: The Status of Biodiversity in the United States*. New York: Oxford University Press, 2000. Paper, \$ 20.00. Draws together information developed from natural heritage programs from across the U.S. over a quarter of a century. Produced by the Nature Conservancy and the Association for Biodiversity Information. Richly illustrated. (v.12,#2)

Stein, Taylor V., Anderson, Dorothy H., and Kelly, Tim, "Using Stakeholders' Values to Apply Ecosystem Management in an Upper Midwest Landscape," *Environmental Management* 24(no. 3, 1999):399-413. Much of the justification behind ecosystem management is biocentric. However clear connections that show how biodiversity benefits humans are rarely discussed. Many people are wary of the concept of ecosystem management because they believe it leaves humans out of the picture. The biocentric justifications need to be complemented by anthropocentric justifications. Stein is in the School of Forest Resources and Conservation, University of Florida. Anderson is in the Department of Forest Resources, University of Minnesota. Kelly is in the Office of Planning, Minnesota Department of Natural Resources. (v.13,#2)

Steinberg, Ted, *Down to Earth: Nature's Role in American History*. New York: Oxford University Press, 2002. I. The preindustrial age. II. The great industrial expansion of the nineteenth century. III. Twentieth century consumer society has processed and packaged nature on an unprecedented scale. What that did to the land and to Americans. Nature has profoundly shaped American history, but here it is hard to see how Americans understood their land or that they cared about it except as natural resources. Environmentalism's most radical contribution--translating scientific descriptions of human involvement in nature into definite moral tasks for individuals and society--appears only as the bland statement that a "sharpening of the links between everyday life ... and its ecological consequences laid the groundwork for

... a new moral framework, one that urged Americans to take responsibility for their actions with respect to nonhuman nature." Steinberg teaches history and law at Case Western Reserve University. Reviewed by Thomas R. Dunlap, "What Hath Nature Wrought?" Science 297(30 August 2002):1480. (v.13,#4)

Steinberg, Ted. *Down to Earth: Nature's Role in American History*, 2nd ed. Oxford: Oxford University Press, 2008. In his discussion of environmental history in the United States, Steinberg shows how a precarious ecological balance can be undermined and destroyed by the smallest of unintended consequences. He argues that treating natural entities as capitalist commodities is fundamentally at odds with diverse and healthy ecosystems.

Steinberg, Ted. *Down to Earth: Nature's Role in American History*, 2nd ed. Oxford: Oxford University Press, 2008. In his discussion of environmental history in the United States, Steinberg shows how a precarious ecological balance can be undermined and destroyed by the smallest of unintended consequences. He argues that treating natural entities as capitalist commodities is fundamentally at odds with diverse and healthy ecosystems.

Steinberg, Theodore, "Do-It-Yourself Deathscape: The Unnatural History of Natural Disaster in South Florida," Environmental History 2(Oct. 1997):414-. (v.8,#4)

Steinbock, Bonnie, "Speciesism and the Idea of Equality," Philosophy 53(no. 204, April 1978):247-256. Reprinted in Barbara MacKinnon, Ethics: Theory and Contemporary Issues, 2nd ed. (Belmont, CA: Wadsworth Publishing Co., 1998), pp. 381-388. Steinbock is in philosophy at SUNY, Albany.

Steinbrecher, Ricarda A. "From Green Revolution to Gene Revolution: The Environmental Risks of Genetically Engineered Crops," The Ecologist 26(no.6, 1996):273. Many interest groups claim that an increasing world population cannot be fed unless genetically engineered crops are grown. Such crops, so the theory goes, will produce higher yields than conventional farming methods and have fewer adverse environmental impacts because the frequency, range and toxicity of weed-killer and pesticide applications will be reduced. Ecological risk assessments are said to indicate that several products can be grown safely on a wide scale. In fact, growing genetically engineered plants is likely to increase the use of herbicides and pesticides and to accelerate the evolution of "superweeds" and "superbugs". Crucially, major environmental risks are unpredictable effects and the unintended transfer of transgenes to plant relatives. Risk assessments are limited and have primarily been based on an outdated understanding of gene behavior. (v8,#2)

Steiner, Dieter and Markus Nauser, eds., Human Ecology: Fragments of Anti-fragmentary Views of the World. London: Routledge, 1993. 365 pages. £ 65. Part I. Transdisciplinarity, biohistory, and the human ecological triangle of person-society-environment. Part II. Epistemology. Part III. Structuration. Part IV. The regional dimension. Human ecology is really human geography and can and ought to be a serious science. Written from the perspective of contemporary geographical theory and social science. A difficult book to read. (v6,#4)

Steiner, Gary, Anthropocentrism and Its Discontents: The Moral Status of Animals in the History of Western Philosophy. Pittsburgh: University of Pittsburgh Press, 2005.

Steingraber, Sara, Living Downstream: An Ecologist Looks at Cancer and the Environment. Reading, MA: Addison-Wesley, 1997. Reviewed by Alastair McIntosh in Environmental Values 4(1995):274-276. (v.9,#4)

Steins, Nathalie A. and Edwards, Victoria M. "Collective Action in Common-Pool Resource Management: The Contribution of a Social Constructivist Perspective to Existing Theory." Society &

Natural Resources 12(No. 6, Sept. 1999):539- . (v10,#4)

Stem, C., J. Lassoie, D. Lee, D. Deshler and J. Schelhas, "Community Participation in Ecotourism Benefits: The Link to Conservation Practices and Perspectives," Society and Natural Resources 16(no. 5, 2003): 387-414. (v 14, #3)

Stenholm, Charles W. and Waggoner, Daniel B., "Animal Agriculture Production and Research in the 1990s: A View From Capitol Hill", Journal of Agricultural and Environmental Ethics 6(1993). Animal agriculture production systems vary throughout the world, but many of the limitations and complexities of production are universal. It is common to attempt comparisons among management systems, even though systems may differ in several features. A sound animal husbandry program should provide a system of care that permits an animal to grow, mature, reproduce and maintain general health. Animal welfare concerns relate to housing, reproduction, confinement, feeding, health, slaughter and research. Factors driving the increased interest in farm animal well-being are varied and complex, and the issues are unfortunately often evaluated on emotional grounds rather than on a factual, scientific and rational basis. The scientific community should develop "best management practices" that enhance profitability, stewardship and sustainability for producers. Unfortunately, the need for expanded work in animal behaviour and related areas comes at a time of shrinking federal and private research budgets. Effective farm animal quality assurance programs should be developed which are targeted towards providing an educational and training format for producers. All parties must be willing to inform the public truthfully about farm animal welfare, particularly scientifically sound production practices. Stenholm is Chairman of United States House Subcommittee on Livestock, Dairy, and Poultry, 1226 Longworth Building, Washington, DC 20515. Waggoner is Staff Director of United States House Subcommittee on Livestock, Dairy, and Poultry, 1301 Longworth Building, Washington, DC 20515.

Stenmark, Mikael, Environmental Ethics and Policy Making. Aldershot, UK: Ashgate, 2001. Originally in Swedish, 2000; here in English translation. Stenmark analyzes how environmental ethics informs environmental policy and sustainable development. What people do depends on why they do it. There is often critical divergence between anthropocentric, biocentric, and ecocentric ethical perspectives. Different convictions can involve different duties (contrary to Bryan Norton's "convergence hypothesis), here applied to concerns about population, future generations, agriculture, endangered species, and wilderness. Much attention to UN and UNCED documents. Extensive analysis of Aldo Leopold, Tom Regan, Paul Taylor, J. Baird Callicott, and Holmes Rolston. "In conclusion, ... anthropocentrism, biocentrism and ecocentrism generate different views about the direction of current environmental policy making and management, and ... lack of unity at the ethical or normative level cannot therefore be ignored" (p. 147). Stenmark is "trying to create a bridge between ethical theory and practice" (p. 143). Stenmark is in theology, Uppsala University, Sweden. (v.12,#4)

Stenmark, Mikael. "The Relevance of Environmental Ethical Theories for Policy Making." I address the issue of whether differences in ethical theory have any relevance for the practical issues of environmental management and policy making. Norton's answer, expressed as a convergence hypothesis, is that environmentalists are evolving toward a consensus in policy even though they remain divided regarding basic values. I suggest that there are good reasons for rejecting Norton's position. I elaborate on these reasons, first, by distinguishing between different forms of anthropocentrism and nonanthropocentrism, second, by contrasting the different goals that anthropocentrists, biocentrists, and ecocentrists set up for environmental policy making, and, lastly, by identifying three important policy areas (population growth, wilderness preservation, and wildlife management) where differences in basic values generate divergent policies. Environmental Ethics 24(2002):135-148. (EE)

Stenson, Anthony J., and Tim S. Gray. "An Autonomy-Based Justification for Intellectual Property Rights of Indigenous Communities." Environmental Ethics 21(1999):177-190. The claim that indigenous communities are entitled to have intellectual property rights (IPRs) to both their plant varieties and their

botanical knowledge has been put forward by writers who wish to protect the plant genetic resources of indigenous communities from uncompensated use by biotechnological transnational corporations. We argue that while it is necessary for indigenous communities to have such rights, the entitlement argument is an unsatisfactory justification for them. A more convincing foundation for indigenous community IPRs is the autonomy theory developed by Will Kymlicka. (EE)

Stenstad, Gail. Review of *The Incarnality of Being: The Earth, Animals, and the Body in Heidegger's Thought*. *Environmental Ethics* 29(2007):437-438. (EE)

Stephens, Martin L., "A Current View of Vivisection: Animal Research in America", *The Animals' Agenda* 16(no.4, 1996):20. A comprehensive look at the complex and volatile issue of vivisection in America. Who does animal experiments, where, and why. Claims that information about the issue is kept almost as far from public view as the animals themselves. Stephens is with the Humane Society of the United States.

Stephens, P. H. G., "Hubris, Humility, History and Harmony: Human Belonging and the Uses of Nature," *Environmental Politics* 11(no.2, 2002): 174-80. (v.13,#4)

Stephens, PHG, "Review of: Laura Westra and Bill E. Lawson (eds.), *Faces of Environmental Racism: Confronting Issues of Global Justice*," *Environmental Politics* 11(no.4, 2002): 144.

Stephens, PHG, "A Space for Place: Pragmatic Naturalism, Particularity and the Politics of Nature," *Environmental Politics* 11(no.3, 2002): 168-173.

Stephens, PHG, "Green Liberalisms: Nature, Agency and the Good," *Environmental Politics* 10(no, 3, 2001):1-22. (v.13,#1)

Stephens, Piers H.G. "Nature, Purity, Ontology." *Environmental Values* 9(2000):267-294. ABSTRACT: Standard defences of preservationism, and of the intrinsic value of nature more generally, are vulnerable to at least three objections. The first of these comes from social constructivism, the second from the claim that it is incoherent to argue that nature is both 'other' and something with which we can feel unity, whilst the third links defences of nature to authoritarian objectivism and dangerously misanthropic normative dichotomies which set pure nature against impure humanity. I argue that all these objections may be answered by recasting the relationship between man and nature into a tripartite spectrum of ontological form between nature and artifact, with the key question being the extent to which nature has been humanised in accordance with certain modes of strongly instrumental rationality, these in turn being defined by reference to the split between abstract reason and natural feeling which was exacerbated by specific elements in the Enlightenment period. This new model may grant normative force by linking external nature to a broader conception of human psychological wellbeing than that offered by the quantitatively orientated models of human rationality and agency. KEYWORDS: Nature, purity, reason, instrumentalism, ontology. Stephens is in the Department of Politics and Philosophy, Manchester Metropolitan University, Oxford Road, Manchester M15 6LL, UK. (EV)

Stephens, Piers H.G. Review of Alan Carter, "A Radical Green Political Theory", *Organization and Environment* 14 (No. 1, March 2002) pp.99-102. Stephens is in philosophy at the University of Liverpool and the Manchester Metropolitan Metropolitan University, UK. (v.13,#2)

Stephens, Piers H.G., "Nature and Human Liberty: The Golden Country in George Orwell's 1984 and an Alternative Conception of Human Freedom", *Organization and Environment* 17 (no. 1, March 2004).

Stephens, Piers H.G. Review of Andrew Dobson (Ed.), "Fairness and Futurity: Essays on Environmental

Sustainability and Social Justice" Organization and Environment 14 (No. 3, September 2001) pp.372-5. Stephens is in philosophy at the University of Liverpool and the Manchester Metropolitan Metropolitan University, UK. (v.13,#2)

Stephens, Piers H.G. "Hubris, Humility, History and Harmony: Human Belonging and the Uses of Nature", Environmental Politics, 11 (No. 2, Summer 2002): 174-80. An extended review article revolving around two edited volumes, William Throop's "Environmental Restoration: Ethics, Theory and Practice" and Charles T. Rubin's "Conservation Reconsidered: Nature, Virtue and American Liberal Democracy", and dealing with themes of conservation, preservation, environmental restoration and property rights. Stephens is in philosophy at the University of Liverpool and the University of Manchester, UK. (v.13, #3)

Stephens, Piers H. G. Review of: de Greus, Marius, The End of Over-consumption: Towards a Lifestyle of Moderation and Self-restraint. Utrecht: International Books, 2002. Reviewed by Piers H. G. Stephens. Environmental Values 13(2004):263-266.

Stephens, Piers H. G., Value, Nature and the Subject-Object Divide. PhD thesis, Centre for Philosophy and the Environment, University of Manchester, 1997. 362 pages. Modernity is characterized by dynamics of appropriation and artefactualisation that are drawn from Descartes, Bacon and Locke, manifesting themselves in continuously reductive instrumentalisation. This dynamic is challenged by synthesising the work of Anthony Weston and Robert E. Goodin within the epistemological framework of William James' pragmatic naturalism. Nature is ontologically contrasted to artifice, then defended as a source of spontaneity at the experiential level and of coherence at the theoretical/political level, making the claim for nature as a necessary primary good in the latter domain. The thesis supervisor was Keekok Lee. The external examiner was Andrew Dobson, University of Keele. (v.8,#4)

Stephens, Piers, et. al. eds., *Contemporary Environmental Politics: From Margins to Mainstream*, Routledge: Routledge Research in Environmental Politics Series, 2006.

Stephens, Piers H.G. "Blood, not Soil: Anna Bramwell and the Myth of 'Hitler's Green Party'", Organization and Environment 14 (No. 2, June 2001) pp.173-87. The anti-green backlash that began in the 1990s has constantly advanced charges of misanthropic extremism against ecologists, most dramatically illustrated by claims of historical or thematic linkage between ecologism and Nazism, mainly drawn from Anna Bramwell's work. The author analyses Bramwell's work both historically and systematically, arguing first that her claims of association between ecologism and Nazism are historically flawed, and second, that her conceptual treatment fails to take into account the central motivational roles of Social Darwinism and absolutist purity in National Socialism. These factors effectively divorce green thought about nature from Nazi connection. The author concludes that Bramwell fails to demonstrate any clear historical or conceptual link between ecologism and Nazism, but that greens should nonetheless eschew dangerous purity notions if possible. Stephens is in philosophy at the University of Liverpool and the Manchester Metropolitan Metropolitan University, UK. (v.13,#2)

Stephens, Piers H.G. "A Space for Place: Pragmatic Naturalism, Particularity and the Politics of Nature", Environmental Politics, 11 (No. 3, Autumn 2002): 168-73. A review article dealing with John M. Meyer's "Political Nature: Environmentalism and the Interpretation of Western Thought" and Peter Hay's "Main Currents in Western Environmental Thought", focusing on the motivational possibilities of place in relation to the history of Western thought, and to the American pragmatic naturalist tradition in particular. (v.13, #3)

Stephens, Piers H.G., "Patriotism, Environmentalism and the Circles of Ethics: A Response to Cafaro." Response to Philip Cafaro's claim that patriotism needs to be reclaimed by environmentalists as loyalty to a homeland, landscapes included. Stephens maintains that there are vital differences between one's

sense of personal belonging to land and the patriot's appeal to collective nationhood. Stephens is at the University of Liverpool. Email: <mfedphs@fs1.art.man.ac.uk> (v.12,#4)

Stephens, Piers H.G. Review of Wayne Ouderkirk and Jim Hill (eds.), Land, Value, Community: Callicott and Environmental Philosophy, Organization and Environment, 16, (No. 2, 2003): 255-58. Stephens teaches philosophy at the University of Liverpool and University of Manchester, and is honorary research fellow at the School of Politics, International Relations and the Environment, University of Keele, UK.

Stephens, Piers H. G., John Barry, and Andrew Dobson, eds., *Contemporary Environmental Politics*. Reviewed by John Foster, *Environmental Values* 16(2007):542-544.

Stephens, Piers. Review of J. Baird Callicott, Beyond the Land Ethic: More Essays in Environmental Philosophy, Albany: Suny Press, 1999, Environmental Values 10(2001):138. (EV)

Stephens, William O., "Stoic Naturalism, Rationalism, and Ecology." Environmental Ethics 16(1994):275-286. Cheney's claim that there is a subtextual affinity between ancient Stoicism and deep ecology is historically unfounded, conceptually unsupported, and misguided from a scholarly viewpoint. His criticisms of Stoic thought are thus merely ad hominem diatribe. A proper examination of the central ideas of Stoic ethics reveals the coherence and insightfulness of Stoic naturalism and rationalism. While not providing the basis for a contemporary environmental ethic, Stoicism, nonetheless, contains some very fruitful ethical concepts. Stephens is with the Dept. of Philosophy, Creighton University, Nebraska. (EE)

Stephens, William O., Review of John Lawrence Hill, The Case for Vegetarianism: Philosophy for a Small Planet. Environmental Ethics 19(1997):221-224. (EE)

Stephenson, Bret, and Bratton, Susan Power, "Martin Luther's Understanding of Sin's Impact on Nature and the Unlanding of the Jews," Ecotheology No 9 (July 2000):84-102.

Stepien, Kathy Ann, Does an Ecological Self Need an Environmental Ethics? An Analysis and Critique of Warwick Fox's Deep Ecology. M.A. thesis, Colorado State University, Fall 1999. Warwick Fox's interpretation of the deep ecological position takes Self-realization as the fundamental norm, a self essentially interconnected with all other entities, and contrasted with a tripartite conception of the self in traditional accounts. Fox rejects the need for environmental ethics, as a result of his expanded sense of self. The self's behavior is internally motivated, not externally regulated. But this is a mistake; rather a deep ecological ethics is in fact needed, offering much-needed moral reasoning to the expanded self, making difficult decisions in the real world. Rejected environmental ethics is reaffirmed, enabling the moral development of the expanded self, seeking to care in a complex world. The advisor was Holmes Rolston. Stepien, who is also a physical therapist, now lives in Alaska in a cabin outside Juneau (where she drinks the water that runs off her roof into a cistern) and assists in some teaching at the University of Alaska--Southeast in Juneau. (v10,#4)

Stapp, Holly E., "Logging Suspended in the Boone," Lexington (Kentucky) Herald-Leader, 17 June 1997, pp. A1, A6. Logging Suspended in Daniel Boone National Forrest (Kentucky). The U.S. Forest Service has temporarily suspended almost all logging on the Daniel Boone National Forrest as a result of a ruling by U.S. District Court Judge Karl Forester. The ruling blocked only a proposed sale of timber from 200 acres near the Red River Gorge. All commercial logging is prohibited in the Gorge. Judge Forester, in a sharply worded decision, ruled that the Forest Service had violated the Endangered Species Act by not giving top priority to protecting the endangered Indiana bat; violated the National Forest Management Act by drawing up policies without obtaining public comment; and violated the National Environmental Policy Act by failing to prepare an environmental impact statement before deciding to sell the trees.

Although the ruling applied only to this particular sale, the Forest Service decided to suspend all logging since they had followed standard Forest Service procedure for this sale. They are considering appealing the decision to the 6th Circuit U.S. Court of Appeals. The Forest Service is being represented by Kelly Mofield, an attorney for the U.S. Department of Justice. The suit was brought by Kentucky Heartwood, an environmental activist organization that opposes all timber sales on national forests and that has filed lawsuits against virtually every sale on the Boone. The ban will result in about 100 workers losing their jobs. Timber sales from the Boone are only 5% of state's total. Also, since government agencies do not pay local taxes, the Forest Service voluntarily gives 25% of the gross from all sales on the Boone to the counties where the timber is located. (v8,#2)

Stepp, J. R., "Review of: Zerner, Charles, ed., People, Plants, & Justice," Society and Natural Resources 15(no.1, 2002): 98-99. (v.13,#2)

Sterba, James, Morality in Practice, 4th edition. Belmont, CA: Wadsworth, 1994. Paper. 576 pages. Contains a section, "Animal Liberation and Environmental Justice": R. D. Guthrie, "Anthropocentrism"; Peter Singer, "All Animals Are Equal"; Paul W. Taylor, "The Ethics of Respect for Nature"; James P. Sterba, "Environmental Justice"; plus a section on applications. Sterba is in philosophy at the University of Notre Dame. (v4,#3)

Sterba, James P., "Reconciling Anthropocentric and Nonanthropocentric Environmental Ethics." Environmental Values 3(1994):229-244. I propose to show that when the most morally defensible versions of an anthropocentric environmental ethics and a nonanthropocentric ethics are laid out, they would lead us to accept the same principles of environmental justice. KEYWORDS: Anthropocentric, nonanthropocentric, nonquestion-begging. Sterba is at the Department of Philosophy at Notre Dame, Indiana. (EV)

Sterba, James P., ed., Earth Ethics: Environmental Ethics, Animal Rights, and Practical Applications. Englewood Cliffs, NJ: Prentice-Hall, 1995. Sections: Animal Liberation and Animal Rights; Respect for Nature; The Land Ethic/Deep Ecology; Attempts at Reconciliation (of animal rights vs. land ethic; of anthropocentrism vs. nonanthropocentrism); Ecological Feminism; Social Ecology and Christian Ecology; and in a section on practical applications: Vegetarianism; Global Warming, Acid Rain, and Ozone Depletion; Endangered Species; Radical Environmental Action; Economic Growth and Environmental Quality. 36 authors, a major anthology in the field. Sterba teaches philosophy at the University of Notre Dame. (v5,#4)

Sterba, James P. "From Biocentric Individualism to Biocentric Pluralism." Environmental Ethics 17(1995):191-207. Drawing on and inspired by Paul Taylor's Respect for Nature, I develop a view which I call "biocentric pluralism," which, I claim, avoids the major criticisms that have been directed at Taylor's account. In addition, I show that biocentric pluralism has certain advantages over biocentric utilitarianism (VanDeVeer) and concentric circle theories (Wenz and Callicott). Sterba is in the department of philosophy, University of Notre Dame. (EE)

Sterba, James P. "Reviewing a Reviewer: A Response to Peter Wenz." Environmental Ethics 22(2000):333-334.

Sterba, James P., ed., Morality in Practice, 5th edition. Belmont, CA: Wadsworth, 1997. 585 pages. Continues the section from the 4th edition on "Animal Liberation and Environmental Justice," now including Karen Warren, "The Promise and Power of Ecological Feminism." Sterba is in philosophy at the University of Notre Dame. (v7,#4)

Sterba, James P. "A Biocentrist Strikes Back," Environmental Ethics 20(1998):361-76. Biocentrists are

criticized (1) for being biased in favor of the human species, (2) for basing their view on an ecology that is now widely challenged, and (3) for failing to reasonably distinguish the life that they claim has intrinsic value from the animate and inanimate things that they claim lack intrinsic value. In this paper, I show how biocentrism can be defended against these three criticisms, thus permitting biocentrists to justifiably appropriate the salutation, "Let the life force (or better the ethical demands of life) be with you." Sterba is in philosophy, University of Notre Dame, Notre Dame, IN. (EE)

Sterba, James P., "Environmentalism: The Human Bias in Traditional Ethics and How to Correct It." In Sterba, Three Challenges to Ethics: Environmentalism, Feminism, and Multiculturalism. New York: Oxford University Press, 2001. Singer's Utilitarian Environmentalism. Regan's Kantian environmentalism. Taylor's Kantian environmentalism. Priority principles for biocentric pluralism, correcting other positions. Two examples (modifying Taylor): (1) A Principle of Human Defense: Actions that defend oneself and other human beings against harmful aggression are permissible even when they necessitate killing or harming individual animals or plants or even destroying whole species or ecosystems. (2) A Principle of Human Preservation: Actions that are necessary for meeting one's basic needs or the basic needs of other human beings are permissible even when they require aggressing against the basic needs of individual animals and plants or even of whole species or ecosystems. (pp. 33-34). Two other principles are of (3) Disproportionality and (4) Restitution. Sterba is in philosophy, University of Notre Dame. (v.12,#3)

Sterba, James P. "Biocentrism and Human Health." Ethics and the environment 5(2000):271-284. ABSTRACT: Biocentrists endorse the equality of species. But is endorsing the equality of species compatible with maintaining the health of humans, or should at least sometimes the health of humans be sacrificed for the sake of other species? In this article, I argue for the compatibility of biocentrism and human health. I argue that maintaining the equality of species, correctly understood, is in no way in conflict with maintaining human health. In fact, I will argue that there is a mutually supporting relationship between the requirements of biocentrism and the requirements for human health. (E&E)

Sterba, James P., "Reconciliation Reaffirmed: A Reply to Steverson," Environmental Values 5(1996):363-368. In this reply to Brian Steverson's objections to my reconciliationist argument, I have clarified the requirements that follow from my principles of environmental justice. I have also clarified the notion of intrinsic value that I am endorsing and the grounds on which my claim of greater intrinsic value for humans rests. KEYWORDS: Justice, reciprocity, intrinsic value, utilitarianism (EV)

Sterba, James P., "On the possibility of grounding a defense of ecofeminist philosophy," Ethics and the Environment 7(no. 2, 2002):27-38.

Sterba, James P., Three Challenges to Ethics: Environmentalism, Feminism, and Multiculturalism. New York: Oxford University Press, 2000. Traditional ethics has yet to confront the three significant challenges posed by environmentalism, feminism, and multiculturalism. Though successful in dealing with the problems it has faced, ethics has not addressed the possibility that its solutions to these problems are biased in favor of humans, men, and Western culture. In the case of environmentalism, traditional ethics must incorporate conflict resolution principles that favor nonhumans over humans in a significant range of cases. Sterba is in philosophy at the University of Notre Dame. (v.11,#3)

Sterba, James, Three Challenges to Ethics Oxford University Press, 2000. Reviewed by Bates, Lisa. Ethics and the Environment 8(no. 2, 2003):126-131.

Sheppard, James W., Review of: Environmentalism: A Global History by Ramachandra Guha. New York: Longman. Ethics and the Environment 8(no. 2, 2003):132-139.

Sterba, James, "A Morally Defensible Aristotelian Environmental Ethics: Comments on Gerber, O'Neill,

Frasz and Cafaro on Environmental Virtue Ethics," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001): 63-66. Professor Sterba delivered these comments as part of the International Society for Environmental Ethics panels on Environmental Virtue Ethics, held at the annual meeting of the Pacific Division of the American Philosophical Association, April 2000, in Albuquerque, New Mexico. (v.13,#2)

Sterba, Jim and Peter Wenz. "Peacemaking Philosophy: Another Try." Environmental Ethics 23(2001):112-112.

Sterckx, Sigrid, and Tom MacMillan, "Taking Citizens Seriously," Journal of Agricultural and Environmental Ethics 19(2006): 219-223. Sterckx is in the Vakgroep Wijsbegeerte en Moraalwetenschap, Universiteit Gent, Gent, Belgium. McMillan is with the Food Ethics Council, Brighton, United Kingdom. (JAEE)

Sterling, L. G., Halbrecht, C. K., and Kitto, S. L., "Impact of Education on the Attitudes of College Students Toward Biotechnology", Journal of Agricultural and Environmental Ethics 6(1993):75-88. An interdisciplinary course was designed as an introduction to the applications of, and the socio-economic issues associated with, biotechnology. College students enrolled in the course were surveyed prior to the first formal lecture, and again upon completion of the course. Assessment was made of the impact of the educational materials on the attitudes and perceptions of the students toward the applications of biotechnology to agriculture. The course was effective in increasing the knowledge base of the students, but not as effective in allaying their perceptions of risks associated with biotechnology. Sterling, Halbrecht, and Kitto are at the College of Agricultural Sciences, University of Delaware, Newark, Delaware.

Stern, Nicholas, *The Economics of Climate Change*. Reviewed by Clive L. Spash, *Environmental Values* 16(2007):532-536.

Stern, Paul C., Dietz, Thomas, Guagnano, Gregory A. "The New Ecological Paradigm in Social-Psychological Context," Environment and Behavior 27(no.6, Nov. 1995):723- . (v6,#4)

Stern, PC, "Deliberative Methods for Understanding Environmental Systems," BioScience 55 (no. 11, November 2005): 976-982. Environmental problem solving needs science but also inevitably requires subjective judgment. Science can help in dealing with subjectivity, because scientists have long experience developing institutions and practices to address the subjective and value laden choices that are essential to scientific progress. Democracy has also developed approaches to the problem. The underlying principles can be applied to environmental policymaking. This article explores these issues in the context of decisions about environmental risks, drawing on the work of the National Research Council and other sources. It suggests some guidelines for risk deliberation including broad based participation, commitment to scientific quality, explicit attention to values, transparency of processes, etc.

Sterritt, David. "'Leopard Son' Offers Rare Glimpse Into Life on Africa's Serengeti Plain." The Christian Science Monitor, vol. 88, 26 Sept. 1996. p. 12.

Stevens, B., and Rose, A., "A Dynamic Analysis of the Marketable Permits Approach to Global Warming Policy: A Comparison of Spatial and Temporal Flexibility," Journal of Environmental Economics and Management 44(no.1, 2002): 45-69. (v.13,#4)

Stevens, Jane Ellen. "It's a Jungle in There." Bioscience 46, no.5 (1996): 314. Oral ecologists find the warm, moist human mouth a microhabitat in which benign creatures dominate and terrible ones lurk. (v7, #3)

Stevens, Margaret, "Environmental Ethics: Elective Only?" Land (Landscape Architecture News Digest), March-April 1993. A briefer summary of the same study. The Code of Professional Conduct of the American Society of Landscape Architects says, "the member has a social and environmental responsibility to reconcile the public's needs and the natural environment with minimal disruption to the natural system." Ian McHarg says, "The study of environmental ethics, with its roots in ecology, is absolutely essential to landscape architecture." Yet very few design education programs have incorporated environmental ethics into their curricula. (v4,#1)

Stevens, Payson R. and Kevin W. Kelley, Embracing Earth. Chronicle Books, 1992. 176 pages. \$ 39.95. Recent photographs and computer images from space, beautiful and haunting images of a fragile planet undergoing natural and manmade changes. (v3,#2)

Stevens, Stan. Conservation through Cultural Survival: Indigenous Peoples and Protected Areas. Covelo, CA: Island Press, 1997. 320 pp. \$22.95 paper. Contributors who have been actively involved in projects around the world provide in-depth accounts from Nepal, Australia, New Guinea, Nicaragua, Honduras, Canada, and Alaska of some of the most promising efforts to develop protected areas where indigenous peoples maintain their rights to settlement and subsistence and participate in management. (v8,#2)

Stevens, W. K., "Debating Nature of Nature in Yellowstone," New York Times, 7/23/98 and McMillion, Scott, "Scientists Examine Park Policy," Bozeman Chronicle, 7/12/99. Scientists study natural regulation of Yellowstone Park. The National Academy of Sciences is carrying out a congressionally mandated study of the scientific claims surrounding the controversy over the National Park Service's management philosophy of "natural regulation." The philosophical questions are just as much in need of study. The policy of letting nature take its course, says Yellowstone's chief scientist John Varley, involves a *laissez-faire*, hand's-off approach, except when intervention is required to fix a human-caused problem. Says Varley, "If nature is making all the right decisions, then you let nature make the decisions, but if there is something dysfunctional caused by humankind, then we need to go in and fix it." For example, the size of the Yellowstone elk herd, once managed by park officials, is now allowed to fluctuate in response to changes in climate, food supply, and pressure from predators. The recent restoration of wolves to the park can be seen as correcting an earlier human-caused dysfunction in the system.

This policy is pregnant with questions for environmental philosophers: What if the "dysfunction" in the system is not caused by humans? Does the policy acknowledge the possibility of such dysfunction? And how is dysfunction to be defined, given the instability typical of many natural systems? Critics of the policy claim that the elk herd has severely overgrazed and degraded the northern range in the park, with devastating affects on cottonwood, willow and aspen trees, beaver populations, and stream sides. Others dispute these claims, suggesting that the critics see overgrazing because they believe the ecosystem should look like one managed to produce maximum grass for cattle, an inappropriate standard for a wild landscape. Other critics deny that it even makes sense to speak of natural regulation of a bioregion that--despite being "the only scrap of land in the lower 48 states that has all the major species known to live there in pre-Columbian times"--continues to be significantly influenced by humans. They point out that each year the elk herd migrates outside the park "where they leave natural regulation behind and human predation becomes a major player." Montana wildlife officials encourage hunters to kill lots of elk (typically anywhere from 10 to 20% of the herd) to keep them from degrading habitat. Another critic calls Yellowstone's northern range an "ecological slum" and argues that Native Americans should be allowed to "camp there all summer and shoot all the elk they want" thus controlling the elk population as he believes they did for 12,000 years before the park was formed.

A further question concerns the rationale for natural regulation. The park superintendent Michael Finley claims the reason for "hands lightly on the tiller" in Yellowstone is that too little is known about the ecosystem's functioning to be confident of the impact of human action. He cites John Muir's famous dictum about interconnectedness "when you try to pick one thing out of the universe you find it hitched to

everything else." This suggests that should we come to have sufficient knowledge of how ecosystems like Yellowstone work, we should abandon natural regulation and take control of nature's tiller. (v.10,#2)

Stevens, W. K., "Tentative Accord is Reached to Cut Greenhouse Gases," New York Times (1/11/97): A1. Kyoto Greenhouse Gas Accord Reached. One hundred and fifty nations meeting in Kyoto, Japan reached an agreement that would legally obligate the industrialized nations to cut greenhouse gas emissions by an average of 5.2 percent below 1990 levels. The accord was reached when the United States agreed to a 7 percent reduction by 2010, dropping its earlier less stringent target of simply reducing emissions to 1990 levels, rather than below them. This is a significant goal, for current trends in U.S. energy use would result in U.S. greenhouse gas emissions being 30 percent higher in 2010. To meet these goals, people will have to start driving more efficient vehicles, power companies will have to alter their methods of producing energy, and consumers will have to buy more energy-efficient appliances. Industry and labor groups are fighting the treaty, predicting that it would lead to a loss of millions of jobs and, for example, a decrease in farm income of 50%. The treaty includes provisions for emissions trading whereby one country or company can meet its reduction targets by buying credits from others countries or companies that have exceeded their targets. It also provides incentives for transferring energy-efficient technologies and nonpolluting forms of energy production from richer nations to poorer ones. It is unclear if the U.S. Senate will sign the treaty as it had previously strongly endorsed the idea that greenhouse gas reduction by developing nations like China must be included, something the treaty failed to achieve. The Clinton Administration continues to seek "meaningful participation" by the developing world in controlling greenhouse gases and said it won't submit the treaty for Senate ratification until this is achieved. While it is imperative that the developing nations not repeat the industrialized world's high pollution path to development, fairness dictates that the developed world--which caused the global warming problem--should shoulder the vast majority of the burden of its solution. (v.8,#4)

Stevens, William K., "One in Every 8 Plant Species Is Imperiled, A Survey Finds," New York Times (4/9/98): A1. Ninety percent of the plants on the list are native to only one country, thus making them especially vulnerable. The U.S. rate is so much higher because plants were likely better surveyed there than elsewhere. Two years ago the union placed nearly one quarter of mammals species and 11 percent of birds on the list. Ecologist Stuart Pimm claims that the latest report is one more piece of evidence that "a whole chunk of creation is at risk." "All the evidence is that the destruction is continuing at an accelerating pace."

Stevens, William K., "Humanity Confronts its Handiwork: An Altered Planet Whose Vast Resilience is Stretched to the Limit." New York Times, May 1, 1992. Full double page spread following a half page lead story in the Science Times section. Nothing new here for those who are regular readers about environmental issues, but the article does show intense concern and communicate this well to the enormous New York Times reader audience. (v3,#2)

Stevens, William K., "Red Foxes Thrive in Suburban Woods," New York Times, May 5, 1998, B13, B17. Red foxes are doing well and quite adaptable to rural and suburban living, fortunately, since the red fox is considered one of the most clever and beautiful animals in the world. One reason may be that they are rather cat-like canines. (v9,#2)

Stevens, William K., Miracle Under the Oaks: The Revival of Nature in America. New York: Pocket Books, 1995. 332 pages. Illustrated. \$22. Tells the story of how teams of volunteers have adopted and rehabilitated parcels of land. (v6,#2)

Stevens, William K., "Dead Trees and Shriveling Glaciers as Alaska Melts," New York Times, August 18, 1998, B7, B10. Alaska is thawing and much of northern Russia and Canada with it, and many think this is one of the most telling signs of global warming. Experts have long said this bellwether region

should warm more and faster than Earth as a whole. The Columbia Glacier has retreated more than eight miles in the last sixteen years. Warmer temperatures have encouraged beetle epidemics in spruce forests. There is a longer growing season but less rain. Melting permafrost ruins roads, telephone poles, and trees sink into swamps. (v.9,#3)

Stevens, William K., "Suspects in 'Blitzkrieg' Extinctions: Primitive Hunters," New York Times (3/28/00). Evidence for Human-caused Blitzkrieg Extinctions. A new study suggests that stone-age Polynesian's colonizing New Zealand drove an entire class of flightless birds called moas to extinction in less than 160 years. There were 11 species of moa and an estimated 160,000 individuals. Some stood 10 feet tall and weighed over 500 pounds. Radiocarbon dating of campsite materials suggest the earliest arrival of Polynesians was in the 13th century. Archaeological analysis of moa remains in the campsites show that none were killed after the 14th century. Estimates of numbers of Polynesian colonists and reproductive rates of moas were also used in the study. One expert on ancient extinctions claims that there is "no way of interpreting this record other than that it had to happen virtually overnight" and that the evidence makes a "really very impressive" case for hunting as the prime cause. Another says that this study's results "reinforce the view that people with even the most basic technologies--fire, clubs, snares--can have major environmental effects." As with the moas in New Zealand, large-scale extinctions of big animals have often coincided with the arrival of early humans in places they had never been before. That such large-scale extinctions did not happen in Africa may be because people and animals evolved together there and thus African animals were not naive about humans. The extinctions in North America of mammoths, mastodons, camels, ground sloths, saber-toothed cats, etc., 13,000 years ago is believed to have occurred in about 400 years. Three causes have been suggested for that extinction event: (1) That humans swept across the continent from Siberia in a killing front that moved about 100 miles a decade; (2) That these animals were killed by diseases carried by the newly-arriving humans and their dogs; (3) That rapid climate change played the major causal role. (v.11,#1)

Stevens, William, "Everglades Restoration Plan Does Too Little, Experts Say," New York Times (2/22/99): A1. Critics charge Everglades restoration perpetuates human management. Prominent environmental scientists have criticized the \$8 billion plan to restore the Florida Everglades to ecological health as failing to go far enough in re-establishing the natural flow of water in the ecosystem. Instead, they charge the restoration--as currently proposed--would leave the Everglades much as they are now, "a series of disconnected fragments dependent less on natural processes and more on human management involving a complex system of levees, canals, pumps, gates, and reservoirs." Paul Ehrlich, Gary Meffe, Gordon Orians, Peter Raven, E.O. Wilson, and Stuart Pimm are asking that the plan undergo an independent scientific review before it is submitted to Congress for approval in July of 1999. This is the most comprehensive ecological restoration effort ever proposed. It involves recapturing billions of gallons of water now channeled into the Atlantic and gulf, storing some of it in reservoirs and pumping some of it, through wells, into an aquifer. This water would then be pumped out and released when needed through a network of canals, many of them new, to be used by South Florida's growing population and also to mimic the natural flow of water in the Everglades. University of Tennessee ecologist Stuart Pimm argues that this approach at restoration is flawed because it fails to restore natural water flow as much as possible and retains the fragmentation of the Everglades. He believes the philosophy ought to be "natural is better than managed" and he rejects "the notion that the entire system can be managed in perpetuity" by humans. Staff scientists at Everglades National Park have made similar criticism of this high-tech approach at restoration favored by the Army Corp of Engineers. A case where the ecological health and naturalness goals of restoration may be in some tension. For an overview of the Everglades restoration project, see William Stevens "Putting Things Right in the Everglades," NY Times (4/13/99): D1. Also, story in Science 283(1999):1093. (v.10,#1)

Stevens, William K., "Lush Life: But as Species Vanish, What Will We Lose?" New York Times, June 2, 1998. Section D. Special section on endangered species. Also contains:

--Cushman, John H., Jr., "Evolutionary Law." The Endangered Species Act is changing rapidly as the Clinton Administration pushes agreements that give broader habitats limited protection.

--Revkin, Andrew C., and Passell, Peter, "So What?" Scientists and economists look at the reasons for caring about biodiversity and what we are willing to pay to preserve it.

--Egan, Timothy, "Trout Truths." As a devastating disease infects the pristine rivers of Montana, questions arise about whether human efforts to improve on nature are to blame.

--Collins, Glenn, "Hall of Hard Questions." Life, where to fit it all? The creation of the American Museum of Natural History's new biodiversity exhibit was an adventure in itself. (v9,#2)

Stevens, William K., "Long-Line Fishing Seen as Damaging to Some Fish and to the Albatross," New York Times (11/5/96): B5. Long-line fishing: Almost as bad as drift nets. Drift nets are 30-mile long walls of fine mesh that catch nearly everything that they contact. Drift nets have been banned because of their devastation of marine life. Now technologically sophisticated long-line fishing is also proving to be quite damaging. Typical long-lines are between 20 and 40 miles long, though some stretch to 80 miles. Each of these lines carries thousands of hooks; large ships put out tens of thousands of hooks at once. Some vessels have systems that bait the hooks and remove the catch automatically, and many are outfitted with satellite tracking, sonar, and radar. Thousands of these ships are now roaming the seas. Though more discriminating than drift nets in what they catch, long-liners are being blamed for the deaths of many non-targeted species, including pilot whales, common dolphins, and various surface-feeding sea birds that grab the baited hooks before they sink and then get dragged under water. The most notable of these is the wandering albatross, the largest bird in the world with an eleven-foot wing span. It can fly over 500 miles a day at 50 miles per hour. Other species of albatross are hooked as well, and one study concludes that more than 40,000 are being killed by long-liners each year in the southern Pacific. Scientists are also worried that this high-technology fishing will deplete such target fish populations as tuna, sharks, and swordfish. For example, long-liners are responsible for the decline in Atlantic swordfish, whose numbers are at only 58% of the minimal viable population size. The populations of reproducing adults is only 2-3% of its un-fished size. (v8,#2)

Stevens, William K., "New Evidence Finds This Is Warmest Century in 600 Years," New York Times, April 28, 1998, page B13. Greenhouse gases now seem to be the major influence. (v9,#2)

Stevenson, James, Review of: R. Kerry Turner, Ian Bateman and Neil Adger, Economics of Coastal and Water Resources: Valuing Environmental Functions, Environmental Values 11(2002):528-530.

Stevenson, John, "The Mediation of the Public Sphere: Ideological Origins, Practical Possibilities," Philosophy and Geography 2 (1998): 189-206. Stevenson is a lecturer in the Department of Liberal Education at Columbia College, and an instructor in the Department of Philosophy at Roosevelt University. (P&G)

Steverson, Brian K. "On Norton's Reply to Steverson." Environmental Ethics 19(1997):335-336. (EE)

Steverson, Brian K. "Contextualism and Norton's Convergence Hypothesis." Environmental Ethics 17(1995):135-150. Toward Unity among Environmentalists is Bryan Norton's most developed effort to surmount the frequently intractable debate between anthropocentrists and nonanthropocentrists. Norton argues that the basic axiological differences between the two positions have become irrelevant at the level of policy formation. His thesis is that the two camps converge when dealing with practical goals and aims for environmental management. I argue that Norton's approach falls significantly short of establishing such a convergence because of the overall methodological framework for policy formation that he defends. The key problem with that framework is that it fails to provide for the degree of species protection most suitable to the nonanthropocentrist position. Steverson is in the department of philosophy, Gonzaga University, Spokane, WA. (EE)

Steverson, Brian K., "On the Reconciliation of Anthropocentric and Nonanthropocentric Environmental Ethics," Environmental Values 5(1996):349-361. I argue that James Sterba's recent attempt to show that, despite their foundational axiological differences regarding the relative value of humans and members of nonhuman species, anthropocentrists and nonanthropocentrists would accept the exact same principles of environmental justice fails. The failure to reconcile the two positions is a product of an underestimation of the divergence that occurs at the level of general principles and practical policy as a result of the initial value commitments which characterize each position. The upshot of this is that, contrary to those who argue that environmental ethicists ought to move beyond the traditional anthropocentric-nonanthropocentric debate, the foundational debate about interspecific egalitarianism will continue to issue in substantial debates about environmental policy formation. KEYWORDS: Anthropocentrism, environmental justice, nonanthropocentrism, Sterba (EV)

Steverson, Brian K. "Ecocentrism and Ecological Modeling." Environmental Ethics 16(1994):71-88. Typical of ecocentric approaches such as the land ethic and the deep ecology movement is the use of concepts from ecological science to create an "ecoholistic" ontological foundation from which a strong environmental ethic is generated. Crucial to ecocentric theories is the assumption that ecological science has shown that humanity and nonhuman nature are essentially integrated into communal or communal-like arrangements. I challenge the adequacy of that claim. I argue that for the most part the claim is false, and that if it were true, it would overextend the sphere of morally considerable entities to include entities that are implausibly deserving of moral consideration. In either case, the foundation of ecocentrism is significantly weakened. Steverson is in the philosophy department, Gonzaga University, Spokane, WA. (EE)

Stavis, Dimitris and Assetto, Valerie J., eds., The International Economy of the Environment: Critical Perspectives. (International Political Economy Yearbook, volume 12). Boulder, CO and London: Lynne Rienner Publisher, 2002. Fourteen contributors who believe that environmental problems are real, serious, and need to be solved. Environmental managerialism is often a servant of capital; there is much 'capture' of the environmental agenda by business. The authors seek to harness the power of political theory and the governance of the state to find solutions for environmental crises. Case studies of how societies respond to an idea become fashionable that may threaten their survival, status, or credibility, or offer new opportunities, such as for public subsidies and influence. The editors are in political science, Colorado State University.

Stewart, Frank, A Natural History of Nature Writing. Shearwater/Island Press, 1995. Cloth, \$32.50; paper, \$16.95. From Thoreau to Ed Abbey, nature writing has profoundly influenced American literature. (v6,#2)

Stewart, Robert Scott and Nicholls, Roderick, "Virtual worlds, travel, and the picturesque garden," Philosophy and Geography 5 (No. 1, 2002): 83-99. Debate concerning virtual reality is often drawn in terms of sharply defined dichotomies – for example, between "real" (or "actual") and "virtual," "authentic" and "inauthentic," and "natural" and "artificial." In this paper we offer an alternative approach by suggesting a conception of a virtual world that highlights a continuity and commonality with our sense of everyday reality. We accomplish this in part by an examination of the English picturesque garden as if it were a virtual world partially constructed out of ideas and objects collected during travels to foreign lands on the Grand Tour. Such foreign travel transformed not only the English person's sense of self, but also altered the English landscape. We conclude that in one sense the "real" England" is also a "virtual" reality. Stewart is an Associate Professor of Philosophy at the University College of Cape Breton. Nicholls is an Associate Professor of Philosophy at the University College of Cape Breton. (P&G)

Stewart, Susan, "Response to Brady, Phillips and Rolston," Environmental Values 15(2006): 315-320. A

response to conference papers by Brady, Phillips, and Rolston on aesthetics and environmentalism, this essay argues that sound environmental policy might begin with basic questions about the purpose and extent of human life, for such policies shape human nature as they also shape the phenomenal world. Decisions based upon short-lived economic conditions cannot provide those long-term benefits necessary for the preservation of the environment. Aesthetic judgments, because they are reflective, help us anthropomorphise ourselves; along with scientific judgments, they might serve as foundational, rather than auxiliary, practices for determining the future of our finite planet. (EV)

Stewart Wayne, Metaphysics by Default. A website book publication. Juxtaposes metaphysicians and naturalists, often thought to be at odds with one another, to create a dialogue between them, and even a peaceful co-existence. Nineteen chapters. Website address: <http://mbdefault.org/> (v10,#4)

Stewart, Wayne, Metaphysics by Default, an electronic publication at: <http://mbdefault.org> Can metaphysical philosophy be reconciled to naturalism? The author argues that it can. The challenge of the reconciliation is shown to lie in finding naturalistic foundations for metaphysical concepts. This paper focuses upon personal identity--first analyzing the known naturalistic criteria of personal identity; then interpreting the metaphysics which emerges from that analysis. An initial, qualitative metaphysics is discussed and defended. Thereafter, the author quantifies several aggregate metaphysical results. Along the way, a historical precedent is reconstructed from the Arabic writings of Fatimid Hellenists. At the end, the author sets forward potential benefits: contemporary ethical and ecological difficulties are seen to be resolved within the context of this new metaphysics. Stewart can be reached at e-mail: WayneStewart@email.msn.com

Stich, Stephen P., "Do Animals Have Beliefs?", Australasian Journal of Philosophy, 57 (1979): 15-28. (Abstract based on abstract in Philosopher's Index) On the one hand, it seems plausible that higher animals' behaviour can be explained by a belief-desire theory in just the same way as human behaviour is explained; on the other hand, it seems impossible to say just what it is that an animal believes. Stich's thesis is that the title question is moot. It is argued that the intuitive concept of belief is a hybrid one. To be a belief a psychological state must have certain functional or causal properties and it must have an expressible content. What is more, having a content requires having a body of beliefs similar to ours. Animals may well have psychological states whose functional characteristics qualify them as beliefs, but which have no expressible content.

Stier, SC; Siebert, SF, "The Kyoto Protocol: an Opportunity for Biodiversity Restoration Forestry," Conservation Biology 16(no.3, 2002):575-576. (v.13, #3)

Stiglitz, Joseph E., Globalization and Its Discontents. New York: Norton, 2002. Although not opposed to globalization per se, economist and Nobel laureate Stiglitz offers a trenchant polemic against the type of globalization promoted by the U.S. and world financial institutions--a type he says is neither fair nor efficient and is often detrimental to poorer countries. He concludes by outlining steps toward "a globalization with a more human face."

"I have written this book because while I was at the World Bank, I saw firsthand the devastating effect that globalization can have on developing countries, and especially the poor within those countries. ... Especially at the International Monetary Fund ... decisions were made on the basis of what seemed a curious blend of ideology and bad economics, dogmas that sometimes seemed to be thinly veiling special interests ... The IMF's policies, in part based on the outworn presumption that markets, by themselves, lead to efficient outcomes, failed to allow for desirable government interventions in the market, measures which can guide economic growth and make everyone better off" (p, ix, p. xiii, p. xii). Stiglitz was on the Council of Economic Advisors under U.S. President Bill Clinton, and then Chief Economist for the World Bank. (v.13,#4)

Stiles, M, "Review of: Community Forestry in the United States: Learning From the Past, Crafting the Future by Mark Baker and Jonathan Kusel," Journal of Environment and Development 12(no.3, 2003):340-341. (v.14, #4)

Stilgoe, John, Alongshore. New Haven: Yale University Press, 1994. 444 pages. \$ 35.00. A study of the New England seashore and the American culture entwined with it. The cultural evolution of the meaning of the shore area of New England through the history of European habitation there. The shore as an endangered zone, where the geomorphological forms of ocean and land meet and a human culture develops out of this unique interaction. (v6,#4)

Still, Christopher J., Foster, Prudence N., and Schneider, Stephen H., "Simulating the Effects of Climate Change on Tropical Montane Cloud Forests," Nature 398(15 April 1999):608-610. Tropical montane cloud forests are unique among terrestrial ecosystem in that they are strongly linked to regular cycles of cloud formation. They are also high in biodiversity. Modeling suggest that climate change could alter cloud formation, which could have serious conservation implications, given that these ecosystems harbour a high proportion of endemic species. See related article, Pounds, J. Alan, et al, "Biological Response to Climate Change on a Tropical Mountain," Nature 398(15 April 1999):611-615. (v.10,#2)

Stillman, Peter G. "Morality, Economics, and Environmental Policy." Environmental Ethics 6(1984):95-96.

Stine, Jeffrey K., "Environmental Politics in the American South: The Fight over the Tennessee-Tombigbee Waterway," Environmental History Review, vol. 15, no. 1, spring 1991, Stine is at the National Museum of American History, Smithsonian Institution. (v2,#2)

Stirling, Andy, Review of: S. Allan et al., Environmental Risks and the Media, Environmental Values 11(2002):118-120.

Stirling, Andy: Review of: Mary O'Brien, Making Better Environmental Decisions: An Alternative to Risk Assessment, Environmental Values 11(2002):518-521.

Stivers, Robert L., "Integrity: One Way of Understanding God's Presence in All Creation," Earth Letter, January 2000, pp. 4-6. Published by Earth Ministry, 1305 NE 47th St., Seattle, WA 98105. Website: www.earthministry.org "At first glance, it does not seem to make much sense to speak of the integrity of nature. ... Plants and animals react instinctively and possess only rudimentary intentionality. With no substantial freedom, they do not sin. There is no justice in a wilderness. Impersonal predation is central to the evolutionary process and a precondition of healthy ecosystems. Nature, it would seem, is without integrity. Nevertheless, we can still speak of integrity in nature. ... We can recognize as a form of integrity in nature the dynamic integration of individuals, species, and ecosystems. The integrity of nature in this sense is the intact quality of this integration. We can further recognize that the preservation of nature's integrity is now a matter of human responsibility." Stivers teaches religion at Pacific Lutheran University, Tacoma. (v10,#4)

Stivers, Robert L. Hunger, Technology & Limits to Growth: Christian Responsibility for Three Ethical Issues. Minneapolis: Augsburg Publishing House, 1984.

Stivers, Robert L. "The Ancient Forests of the Pacific Northwest: The Moral Debate," Theology and Public Policy 5(no. 2, 1993).

Stock, Gregory, Redesigning Humans: Our Inevitable Genetic Future. New York: Houghton-Mifflin, 2002. Gene manipulation offers hope, health, and challenge. If we can make better humans, why not do

it? Nature has not been particularly kind. "Brutal decay lies in store for each of us lucky enough to reach it." Postponing the blighting afflictions--stroke, cancer, Alzheimer's--reducing infertility, preventing birth defects; all these can hardly be called inhumane. We are not likely radically to redesign ourselves, but we can certainly improve on what nature has given us. Stock directs the medical school at UCLA. (v.13, #3)

Stoett, Peter J. The International Politics of Whaling. Review by Sidney J. Holt, Environmental Values 7:(1998):372.

Stoett, Peter J., "Whaling: Confrontations Continue," Environmental Politics 8(no. 2, Summer 1999):153-161. (v.11,#1)

Stoett, Peter, Review of Sachs, Wolfgang, ed., Global Ecology: A New Arena of Political Conflict. Environmental Values 5(1996):92-93. (EV)

Stohlgren, T. J., Coughenour, M. B., Berry, J. K. "Landscape Analysis of Plant Diversity," Landscape Ecology 12(no.3, 1997):155. (v8,#3)

Stokes, Edward. Hong Kong's Wild Places: An Environmental Exploration. New York: Oxford University Press, 1996. 196pp. \$40. A journey through the towering peaks, grassy hills, wooded valleys, and coastal waters--revealing the varied life that survives among them in Hong Kong. (v8,#2)

Stokes, Samuel N., Watson, A. Elizabeth, and Mastram, Shelley S., Saving America's Countryside, 2nd ed. (National Trust for Historic Preservation) Baltimore: John Hopkins University Press, 1989, 1997. Rural Communities, landscapes, and their conservation. (v.10,#1)

Stokstad, Eric, "What's Wrong With the Endangered Species Act?" Science 309(30 September 2005):2150-2152. Mainly the claim that it has not worked very well, owing to growing backlog of candidate species and lack of effective designation of critical habitat, with much of the slow-down from lack of funding owing to congressional lack of support, owing in turn to pressures from developers.

Stokstad, Eric, "States Sue Over Global Warming," Science 305(30 July, 2004):590. See also New York Times, "A Novel Tactic on Warming," July 28, 2004, A 18. Where the Bush Administration fails to act, seven states--California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont--and New York City have filed suit against five of the country's largest power companies, to force them to reduce carbon dioxide emissions. Their claim is that the utility companies release pollutants that harm their residents. But under public-nuisance law, to win the states will have to show that their citizens are harmed more than citizens of other states, which could be tough to do, considering how much the pollutants move around. (v. 15, # 3)

Stokstad, Erik, "University Bids to Salvage Reputation after Flap over Logging Paper," Science 312 (2 June 2006): 1288. Oregon State University College of Forestry continues to show deep divisions in the faculty after the furor over attempting to suppress publication of a paper in Science by graduate student Dan Donato and colleagues on the adverse ecological effects of salvage logging. Subpoenaed e-mails from Dean Hal Salwasser express contempt for environmental activists calling them "goons" and comparing their protests to Mafia extortionists. Salwasser says he now regrets those e-mails which he calls "stupid, unthinking, unkind." The faculty reveals deep tensions over management to increase harvests and spur regeneration after fires and an emphasis on biodiversity conservation, as well as misgivings over industry pressures and academic freedom.

Stokstad, Erik, "House Revises Endangered Species Act," Science 310(7 October 2005):32. The U.S. House passed a revised Endangered Species Act, hustled through the House Resources Committee in just four days by Richard Pombo, longtime critic of the Act and chair of that committee. The bill passed the

House 229-193. The revised Act eliminates critical habitat provisions, requires that FWS evaluate proposals in 180 days or else proposals get an automatic green light, and that if land is preserved unaltered for species protection, the U.S. Fish and Wildlife Service must compensate owners, without providing any additional money to do so. The U.S. Senate is unlikely to work on a companion bill until spring 2006, and likely to make more moderate changes to the Act.

Stokstad, Erik, "Humane Science Finds Sharper and Kinder Tools," *Science* 286(5 November 1999):1068-1071. New technology is helping researchers reduce their reliance on animal experiments, while at the same time improving their results. "Humane science is better science," was a frequent conclusion at the Third World Congress on Alternatives and Animal Use in the Life Sciences. Use of animals in the U.K. has declined nearly 50% (from over 5 million a year in the seventies to about 2.5 million a year), although use of transgenic animals is up sharply in this decade from 50,000 to 450,000. A major feature is implantable chips. But government regulatory agencies are slow to accept these results. (v10,#4)

Stokstad, Erik, "Debate Continues Over Safety of Water Spiked with Rocket Fuel," *Science* 307(28 January 2005):507. Drinking water in a hundred or more locations around the United States is contaminated with perchlorate, used in rocket fuel and explosives. With enough dose, damage to the thyroid gland and to the developing brain results. But what is a safe dose, one part per billion or 220 parts per billion. The Environmental Protection Agency and a study group of the National Academy of Sciences disagree, by orders of magnitude. A recent NAS panel takes a conservative view but industry says precaution is trumping science. Precautionary principle?

Stokstad, Erik, "Louisiana's Wetlands Struggle for Survival," *Science* 310(25 November 2005):1264-1266. More than 600 square kilometers of wetlands in the area have disappeared in the last decade along. After hurricanes Katrina and Rita, and a new appreciation of the role of wetlands in flood prevention, ecologists hope their large-scale plants will be implemented. The past 40 years wetlands decline have increased storm surges 2.4-3 meters, although it is not likely that wetland restoration would have been enough to reduce the Katrina storm surge enough to prevent breaching the dikes. Another problem is that now such wetlands have to be artificially maintained, which is fragile and expensive.

Stokstad, Erik, "'Genetic Rescue' Helps Panthers but Puts Researchers on the Spot," *Science* 309(19 August 2005):1162. In 1995 researchers transplanted eight female panthers from Texas to south Florida in a last-ditch effort to reverse the troubling effects of inbreeding in the small population of surviving Florida cats. Stuart Pimm and a team of biologists have analyzed a decade of data (54 offspring from the eight females, mating with Florida males; 118 offspring from purebred Florida kittens) and conclude that the survival rate of the "hybrid" offspring is three times greater, especially for females. But some Florida Fish and Wildlife Conservation Commission researchers complain that the analysis is premature.

Stokstad, Erik. "Feared Quagga Mussel Turns Up in Western United States." *Science* Vol. 315, no. 5811 (26 January 2007): 453. Close relative of the zebra mussel that has tormented the Great Lakes has been found in Lake Meade and below in the Colorado River.

Stokstad, Erik. "Big Land Purchase Triggers Review of Plans to Restore Everglades." *Science* Vol. 321, no. 5885 (4 July 2008): 22. A major land deal in Florida, buying out US Sugar Corporation, the largest sugar cane producer in the state, offers new opportunities for regulating water flow through the Everglades.

Stokstad, Erik. "Deadly Wheat Fungus Threatens World's Breadbaskets." *Science* Vol. 315, no. 5820 (30 March 2007): 1786-87. New mutations have resulted in the devastating spread of a killer wheat fungus. Causing black stem rust, the fungus destroyed wheat crops in the 1950s, but resistant wheat varieties were

found during the Green Revolution. Now that the fungus is back, new varieties that attack previously resistant wheat have appeared in Uganda and Ethiopia and are rapidly spreading into the Middle East, from whence they may spread to Asia.

Stoll, John, "Review of: Slater, Candace ed. *In Search of the Rain Forest*," Society and Natural Resources 19 (no.5, May-June 2006): 473-475 (3).

Stoll Kleemann, S. and O'Riordan, T., "From Participation to Partnership in Biodiversity Protection: Experience from Germany and South Africa," Society and Natural Resources 15(no.2, 2002): 161-78. (v.13,#2)

Stoll, M., "Green versus Green: Religions, Ethics, and the Bookchin-Foreman Dispute," Environmental History 6(no. 3, 2001):412-427. (v.13,#1)

Stoll, S., "Review of: Conevery Bolton Valencius. *The Health of the Country: How Americans Understood themselves and their Land*," Environmental History 8(no. 3, 2003): 492.

StollKleemann, S., "Reconciling opposition to protected areas management in Europe: The German experience," Environment 43(no.5, 2001):32-44. (v.12,#4)

Stolzenburg, William, "Sweet Home Alabama," Nature Conservancy 47(no. 4, Sept./Oct 1997):8-9. Alabama a biodiversity hotspot? Well, yes. The 29th largest of the United States, Alabama is the nation's fourth richest kingdom of plants and animals. In species per square mile only Florida can match it. Part of the reason is the wide ranging topography, from sea level to the Southern Appalachians, which coincides with a reach from almost subtropical to mountain temperate forests. But, alas, Alabama's number of extinct or mission species towers above all other states in the lower 48. Some 98 species have gone extinct. See also Lydeard, Charles and Mayden, Richard L., "A Diverse and Endangered Aquatic Ecosystem of the Southeast United States," Conservation Biology 9(1995):800-805. (v9,#1)

Stone, Alison, Review of de Jonge, Eddy, *Spinoza and Deep Ecology: Challenging Traditional Approaches to Environmentalism*. Aldershot: Ashgate, 2004. Environmental Values 14(2005):524-527.

Stone, Alison, "Introduction: Nature, Environmental Ethics, and Continental Philosophy," Environmental Values 14(2005):285-294. Until recently, there has been relatively little self-conscious reflection - from either environmental or continental philosophers - on the specific contributions which continental philosophy, insofar as it is a distinctive tradition, might make to environmental thought. This situation has begun to change with several recent publications, such as Charles S. Brown and Ted Toadvine's (2003) edited collection *Ecophenomenology: Back to the Earth Itself*, and Bruce V. Foltz and Robert Frodeman's (2004) collection *Rethinking Nature: Essays in Environmental Philosophy*. This special issue aims to continue the discussion of how the continental tradition might advance or transform environmental thinking, both by reconsidering authors such as Kant, Schelling, Nietzsche and Heidegger, and by considering how themes and concepts from continental philosophy and social theory - including Merleau-Ponty's concept of flesh, Foucault's notion of discipline, and Bourdieu's social critique of taste - bear on environmental practice and theory. Stone is at the Centre for Philosophy, Furness College, Lancaster University, Lancaster, UK. (EV)

Stone, Alison, *Petrified Intelligence: Nature in Hegel's Philosophy*. Reviewed by Paul Ashton, Environmental Values 15(2006):121-124.

Stone, CD, "Land Use and Biodiversity," Ecology Law Quarterly 27(no.4, 2000):967-1002. (v.12,#4)

Stone, Charles B. and Danielle B. Stone, eds. Conservation Biology in Hawai'i. Honolulu: University of Hawaii Cooperative National Park Resources Studies Unit, 1989. Distributed by University of Hawaii Press, Honolulu. Today's Hawaiian biota is the most unique assemblage anywhere and the most endangered in the United States and one of the most endangered in the world. Biological and sociological analyses. The closing section is on values and ethics, with essays on native Hawaiian conservation values, outdoor ethics, humanity's responsibility for future life, and priorities in paradise, conservation education in Hawaii. (v1,#2)

Stone, Christopher D. "Legal Rights and Moral Pluralism." Environmental Ethics 9(1987):281-84.

Stone, Christopher, Earth and Other Ethics: The Case for Moral Pluralism. New York: Harper & Row, 1987. Pp. viii, 280. This is a book length sequel to Stone's pioneering legal brief "Should Trees Have Standing?" (Los Altos, CA: William Kaufmann, 1974). Here Stone offers a view of normative ethics that is pluralistic regarding the entities and actions that are morally relevant. Much of the material overlaps with Stone's long article "Should Trees Have Standing? Revisited: How Far Will Law and Morals Reach? A Pluralist Perspective," Southern California Law Review 59 (1985): 1-154. (Katz, Bibl # 1) Reviewed in Environmental Ethics 10(1988):259-65.

Stone, Christopher, D., "Do Morals Matter? The Influence of Ethics on Courts and Congress in Shaping U.S. Environmental Policies," U.C. Davis Law Review 37(2003):13 - . Simultaneously published in Environs Environmental Law and Policy Journal 27(2003):13 - .

Stone, Christopher D., The Gnat Is Older than Man, Reviewed by Anthony Weston in Environmental Ethics 16(1994):441

Stone, Christopher D., The Gnat Is Older than Man: Global Environment and Human Agenda. Princeton: Princeton University Press, 1993. 341 pp. \$ 21.95. Proposes a Global Commons Trust Fund, monies raised on the premise that nations using the common heritage of the planet--the oceans, the atmosphere--be charged for their use. The natural environment and species within it can, from this fund, be represented by "ecoguardians." Stone is a law professor at the University of Southern California Law School. (v4,#2)

Stone, Christopher D., Should Trees Have Standing? And Other Essays on Law, Morals, and the Environment, 25th anniversary edition. Dobbs Ferry, NY: Oceana Publications, 1996. 186 pages. Stone wrote the seminal article, "Should Trees Have Standing?" a quarter century ago. Here is a reprint, with an introduction and epilogue "'Trees' at Twenty-five." Other essays: "The NonPerson in Law"; "Should We Establish a Guardian for Future Generations"; "How to Heal the Planet"; "Reflections on Sustainable Development"; "The Convention on Biological Diversity." "An Environmental Ethic for the 21st Century": "Moral Pluralism and the Course of Environmental Ethics." Stone is in law at the University of Southern California. (v9,#1)

Stone, Christopher D. Review of The Economy of the Earth. By Mark Sagoff. Environmental Ethics 10(1988):363-68.

Stone, Christopher D. The Gnat is Older Than Man: Global Environment and Human Agenda: (Princeton University Press, 1993). Reviewed by Alexander Gillespie in Environmental Values 4(1995):182-185. (EV)

Stone, Christopher D. "Moral Pluralism and the Course of Environmental Ethics." Environmental Ethics 10(1988):139-54. Environmental ethics has reached a certain level of maturity; further significant advances require reexamining its status within the larger realm of moral philosophy. It could aim to

extend to nonhumans one of the familiar sets of principles subject to appropriate modifications; or it could seek to break away and put forward its own paradigm or paradigms. Selecting the proper course requires as the most immediate mission exploring the formal requirements of an ethical system. In general, are there constraints against bringing our moral relations with different sorts of things under different rules of governance? In particular, how much independence can an environmental ethic (or ethics) aim to have? For replies, see: Callicott, J. Baird. "The Case against Moral Pluralism." Environmental Ethics 12(1990):99-124; Wenz, Peter. "Minimal, Moderate, and Extreme Moral Pluralism." Environmental Ethics 15(1993):61-74; Varner, Gary E. "No Holism without Pluralism." Environmental Ethics 13(1991):175-79. Stone is at the School of Law, University of Southern California, Los Angeles, CA. (EE)

Stone, Christopher D., "Should Trees Have Standing? Revisited: How Far Will Law and Morals Reach? A Pluralist Perspective." Southern California Law Review 59 (1985): 1-154. Stone returns to the scene of his pioneering article on the legal rights of nature, now with the luxury of developing a full-scale argument for a position he terms "Moral Pluralism": "moral activities [are to be] partitioned into several distinct domains, each governed by distinct principles and logical texture" (p. 9). Stone focuses on the toughest possible test case for environmental ethics: can we ascribe "legal consideration" to entities he calls Ds--disinterested entities, i.e., entities without any sentience at all. He argues that legal consideration is not a problem from a logical point of view; but the question remains whether it is a rational, wise, or moral policy to undertake. To answer this question we require a moral theory that can take account of Ds, and this he thinks is moral pluralism: treating different entities differently, for they are located on different moral planes. This is a complex and important paper. The challenge to Stone's moral pluralism is its tendency to degenerate into a kind of relativistic intuitionism. (Katz, Bibl # 1)

Stone, Christopher D., "Moral Pluralism and the Course of Environmental Ethics," Environmental Ethics 10(1988):139-154. This is a precis of Stone's book, Earth and Other Ethics: The Case for Moral Pluralism. Stone argues that we should give up the attempt to develop a "moral monism," i.e., one guiding moral principle that is applicable in all situations, with all kinds of human, animal, and natural entities. But pluralism implies the ultimate indeterminacy of ethical systems and judgments. (Katz, Bibl # 2)

Stone, Jerome A. Review of The Paradise of God: Renewing Religion in an Ecological Age. By Norman Wirzba. Environmental Ethics 27 (2005):207-208.

Stone, Jerome A. "Broadening Care, Discerning Worth: The Environmental Contributions of Minimalist Religious Naturalism." Process Studies 22 (no. 4, Winter 1993):194-203. Religious naturalism, in conjunction with the theory and practice of appreciative awareness such as outlined by Bernard Meland, can contribute to extending our moral concern toward the environment as well as aesthetically appreciating it. In addition, a minimalist religious naturalism with a pluralistic emphasis and a prophetic principle can provide a helpful sense of the plurality of values and a critical readiness to undergo paradigm shifts, both of which are needed in facing our ever-growing eco-crisis. Stone teaches philosophy and religion at William Rainey Harper College, Palatine, IL. (v6,#3)

Stone, Jerome A., ed. American Journal of Theology and Philosophy 18(no. 1, January, 1997). Contains:
--Engel, J. Ronald, "The Post-World War II Eco-Justice Movement in Christian Theology: Patterns and Issues," pp. 9-19.
--Engel, Joan Gibb, "Ecology, Justice, and Christian Faith: Comments of a Comma Consultant," pp. 21-31. An analysis of a recently published bibliography, Peter W. Bakken, Joan Gibb Engel, and J. Ronald Engel, Ecology, Justice and Christian Faith: A Critical Guide to the Literature, finding anthropocentrism is old and new guises. "I see the eco-justice discourse needing a few well-placed commas. Generally speaking, nature is not on an equal footing with theology or social concerns in our literature.

--Ruether, Rosemary Radford, "Ecofeminism: First and Third World Women," pp 33-45.
--Tuan, Yi-fu, "Sense of Place: What Does It Mean to be Human?" pp 47-57.
--Rolston, Holmes III, "Ecological Spirituality," pp. 59-63.
--Callicott, J. Baird, "The Challenge of a World Environmental Ethic," pp. 65-79.
--Traina, Cristina L. H., "Baird Callicott's Ethical Vision: Response to Baird Callicott," pp. 81-87.
(v8,#1)

Stone, Jerome A. Review of A Greener Faith: Religious Environmentalism and Our Planet's Future. *Environmental Ethics* 29(2007):441-442. (EE)

Stone, Joshua M., "Restraints on Competition Through the Alteration of the Environment at the Genetic Level," *New York University Environmental Law Journal* 8(no.3, 2000):704-. (EE v.12,#1)

Stone, Richard, "A Plan to Save Hawaii's Threatened Biodiversity," *Science* 285(1999):817-818. Hawaii's Threatened Biodiversity. Legacy 2000 is a five year \$ 200 million initiative to save Hawaii's biodiversity, the most threatened in the U.S. Advocates note that the U.S. is spending billions to save the Everglades, and neglecting Hawaii. (v. 10, # 3).

Stone, Richard, "Caspian Sea Ecology Teeters on the Brink," *Science* 295(18 January 2002):430-433. As nations around the world's largest lake bicker over oil rights, the wildlife of the Caspian Sea is in a state of siege from which it may never recover. Hardest hit are four major species of sturgeon, supplying 90% of the world's caviar, a lucrative commodity, and drastically overfished. Petroleum is naturally so close to the surface that nature does some polluting of its own. Nations around the lake want the oil, but the oil is also considered a major prize by Western powers. With no international effort to safeguard the lake anywhere in sight, the lake itself seem doomed to suffer. (v.13,#1)

Stone, Richard, and Hawk Jia. "Going Against the Flow." *Science* Vol. 313, no. 5790 (25 August 2006): 1034-37. The Chinese government has begun a massive engineering project to divert water from three southern rivers to the parched north a controversial scheme for rearranging nature moving river flows over 1,000 kilometers with unknown consequences.

Stone, Richard. "Can Palm Oil Plantations Come Clean?" *Science* Vol. 317, no. 5844 (14 September 2007): 1491. Palm oil has recently surpassed soybean as the top-selling vegetable oil in the world and has become Malaysia's number one crop. But a just-completed review by three dozen academics details species declines pinned on the oil palm, a native of Africa that has now become a dominant feature of Southeast Asia's landscape. Some scientists and like-minded industry people hope to cut the destruction of wildlife with better palm oil plantation practices.

Stone, Roger D., The Nature of Development: A Report from the Rural Tropics on the Quest for Sustainable Economic Growth. New York: Alfred A. Knopf, 1992. 286 pp. \$ 23. Planning has been from the top-down by the World Bank and International Monetary Fund and largely unsuccessful. Planning ought rather to be from the bottom-up, especially as third world peoples become increasingly skilled at ecological research and strategy and ever more adept at communicating their needs and opinions. Still, a major obstacle is the "excruciating difficult of accomplishing anything in rural work." Stone is a senior fellow at the World Wildlife Fund. (v3,#3)

Stone, Roger D., "The Denuded Earth: What Is to Be Done?" *World Policy Journal* 15(no.2, 1998), p. 50. (v.9,#4)

Stonehouse, D. Peter, "A New Modus Operandi For the Agricultural Economics Profession," *Journal of Agricultural and Environmental Ethics* 10(1997):55-67. Agricultural economics has, until the 1990s,

enjoyed a reputation for relevance and usefulness to the agri-food industry and policy-makers. That reputation has been jeopardized by a growing infatuation with models and quantification, and a concomitant underemphasis placed on many complex problems and issues of society. An illustrative example is explored, using agricultural activity-related damage to the natural resource base, environment and ecology. Agricultural economists are urged to respond by broadening their terms of reference and joining forces with other disciplines. (JAEE)

Stonehouse, D.P. Review of M.R. Redclift, M.R., J. N. Lekakis and G. P Zanias, eds., Agriculture and World Trade Liberalization: Socio-Environmental Perspectives on the Common Agricultural Policy, Journal of Agricultural and Environmental Ethics 14(2001):102-106. (JAEE)

Stonehouse, Peter. Review of S. Dabbert, A. Dubgaard, L. Slangen and M. Whitby, eds., The Economics of Landscape and Wildlife Conservation, Journal of Agricultural and Environmental Ethics 11(1999):247-249. (JAEE)

Stoneman, Colin, "Spiritual Biology," Journal of Biological Education 31 (no. 2, Summer 1997):131-134. What should biology teachers do where there is an interest in education for spiritual development? The UK government Office for Standards in Education has long held that education should contribute to pupil's moral, spiritual, and social development, but more recently, since 1992 as a consequence of the Education (Schools) Act of 1992, has urged that all subjects of the curriculum contribute to this development, including biological science. Biology does not deal with "spirit"; some think that the success of biology requires chasing out the spirits; and yet biologists do not want the reputation of being indifferent toward their pupils whole and well rounded development. The guidelines say: "Spiritual development refers to that aspect of inner life through which pupils acquire insights into their personal existence which are of enduring worth [including] valuing a non-material dimension to life and intimations of an enduring reality." There are better and worse ways of interpreting what this might mean for biology. Might it involve caring for creation and environmental responsibility for example? Or the deeper questions of human existence, such as the mind-body problem, the human relation to nature, or ethics and biology? In any case, (British) biologists have a challenge. Stoneman is a retired biology teacher. (v8,#3)

Stonich, Susan C. "The Environmental Quality and Social Justice Implications of Shrimp Mariculture Development in Honduras," Human Ecology 23, no. 2 (June 1995): 143-

Story Earth: Native Voices on the Environment. San Francisco, CA: Mercury House, 1993. First published in the Netherlands as Het verhaal Aarde by In de Knipsheer Publishers for Bridges Books, Amsterdam, 1992. No editor is named. 200 pages. Stories from indigenous peoples, and by indigenous authors, on six continents, from Australia, Brazil, Canada, Easter Island, Egypt, Finland, Guatemala, India, Kenya, Lesotho, Nepal, Papua New Guinea, Peru, Philippines, Solomon Islands, Sri Lanka, and the United States. The nature of the global crisis and changes we must make in the way we view the world. Only by turning away from the industrial view of the Earth as a resource to be consumed, and only by listening to the lessons of traditional cultures that have for centuries maintained a sustainable relationship to the Earth can we cure the damage that Western civilization has wrought. Originally published with a subsidy from the Dutch Environment Ministry. (v8,#2)

Straede, Steffen, and Finn Helles, "Park-People Conflict Resolution in Royal Chitwan National Park, Nepal: Buying Time at High Cost," Environmental Conservation 27(no.4, Dec. 2001): 368-. (v.12,#3)

Straede, Steffen, and Helles, Finn, "Park-people Conflict Resolution in Royal Chitwan National Park, Nepal: Buying Time at High Cost?" Environmental Conservation 27 (no. 4, 2000):368-381. Royal Chitwan National Park, Nepal, is a major tiger and rhino sanctuary, also a dozen other charismatic

species, located in lowland Nepal (the Terai), and surrounded by an exploding, impoverished human population. Local peoples have been permitted to cut grasses, mostly for thatch, in the park ten days a year; they also take much fuelwood without penalty, though this is officially illegal. The authors present survey data and argue that forest conservation is being compromised, habitat being degraded, and that, whether one is concerned for the tigers and rhinos or not, even the grass cutting program is not sustainable. The deeper problems are only being postponed. They recommend some possible changes for the better. The authors are in forestry and natural resource economics, Royal Veterinary and Agricultural University, Denmark. (v.12,#3)

Strahan, Ronald, ed. Mammals of Australia. Washington, D.C.: Smithsonian Institution Press, 1996. 756pp. \$75 cloth. Written by more than one hundred experts, this book surveys the rich and varied world of Australian mammals, describing every species known to have existed in the last two hundred years. It includes well known mammals, as well as the less known. It has reference documents for each species' habitat, diet, reproduction, and growth as well as patterns of activity such as feeding, sheltering, attack and defense, social interactions, courtship, mating, and care of the young. The conservation status of each species and the effect of human settlement on its population are included.

Strand, R. and P., The hijacking of the humane movement: Animal extremism. Wilsonville, OR: Doral Publishing, 1993.

Strang, Carl A. "The Ethics of Wildlife Rehabilitation." Environmental Ethics 8(1986):183-85.

Strang, Rob, "Gibbs v. Babbitt: The Taking of Red Wolves on Private Land, a Post-Lopez Challenge to the Endangered Species Act," Tulane Environmental Law Journal 14(no.1, Wint 2000):229-. (v.12,#4)

Strassman, Judith A., and Sam H. Ham, "Interpreting Controversial Species: A Case Study and Principles" (The Grizzly Bear), Journal of Interpretation 14 (no. 2, 1990):7-9. Present the facts. Dispel myth and misinformation. Cultivate a respect and appreciation for the grizzly bear as an endangered species. Develop credibility and public trust in the federal and other agents involved. Be open-minded about all sides of the issue. With details of how the authors applied this to the conservation of the bears. Strassman and Ham are in the College of Forestry, Wildlife and Range Sciences, University of Idaho. (v5,#4)

Strauss, Andrew L., "From GATTZILLA to the Green Giant: Winning the Environmental Battle for the Soul of the World Trade Organization," University of Pennsylvania Journal of International Economic Law 19 (no. 3, Fall 1998): 769-821.

Strauss, D.F.M. "Thought and Language: On the Line of Demarcation Between Animal and Human Abilities." South African Journal of Philosophy 13(no. 4, 1994): 175-182. Although an anthropomorphic mode of expression may easily tempt us to attribute human abilities to animals, a closer investigation shows that animals are neither able to think logically, nor do they share in the dimension of human language. It is argued that if animals did have logical concepts at their disposal, then they should have been able to express logical judgments--something explicitly denied by prominent advocates of the idea that animals possess a-verbal concepts. A negative test is given in the question: Is it possible for animals to think illogically?--something never demonstrated experimentally. Crucial differences between human and animal communication are highlighted. Strauss in is philosophy, University of the Orange Free State, Bloemfontein, South Africa. (v6,#1)

Strayer D.L.; Downing J.A.; Haag W.R.; King T.L.; Layzer J.B.; Newton T= .J.; Nichols S.J., "Changing Perspectives on Pearly Mussels, North Americas Most Imperiled = Animals," BioScience 54(no.5, 1 May 2004):429-439(11). (v. 15, # 3)

Streever, B., "Science and Emotion, on Ice: The Role of Science on Alaska's North Slope," Bioscience 52(no.2, 2002): 179-84. (v.13,#2)

Streiffer, R., "In Defence of the Moral Relevance of Species Boundaries," American Journal of Bioethics 3(2003):37-38.

Streiffer, Robert, and Thomas Hedemann, "The Political Import of Intrinsic Objections to Genetically Engineered Food," Journal of Agricultural and Environmental Ethics 18(2005):191-210. Many people object to genetically engineered (GE) food because they believe that it is unnatural or that its creation amounts to playing God. These objections are often referred to as intrinsic objections, and they have been widely criticized in the agricultural bioethics literature as being unsound, incompatible with modern science, religious, inchoate, and based on emotion instead of reason. Many also argue that even if these objections did have some merit as ethical objections, their quasi-religious nature means that they are entirely irrelevant when interpreted as political objections. We argue that this widespread view is false. Intrinsic objections have much more political import than has previously been recognized. Keywords ethics - genetically engineered food - genetically modified food - GM food - intrinsic objections - liberal neutrality - playing God - political liberalism - unnaturalness - yuck factor. The authors are in philosophy, medical history, and bioethics, University of Wisconsin, Madison, WI. (JAEE)

Streiffer, Robert. Review of Vexing Nature? On the Ethical Case against Agricultural Biotechnology. By Gary Comstock. Environmental Ethics 27 (2005):213-216.

Stretesky, P. and Gabriel, J., "Self Policing and the Environment: Predicting Self Disclosure of Clean Air Act Violations Under the U.S. Environmental Protection Agency's Audit Policy," Society and Natural Resources 18(no. 10, November/December 2005): 889-905.

Stricker, P., "Diaz-Briquets, Sergio, and Jorge Perez-Lopez. "Conquering Nature: The Environmental Legacy of Socialism in Cuba," Society and Natural Resources 14(no.5, 2001):443-444. (v.12,#4)

Strickland, Rennard. "Osage Oil: Mineral Law, Murder, Mayhem, and Manipulation," Natural Resources & Environment 10(no.1, Summer 1995):39- . (v6,#4)

Stricklin, W. Ray and Swanson, Janice C., "Technology and Animal Agriculture", Journal of Agricultural and Environmental Ethics 6(1993). Technology can be defined as the manipulation of nature to serve human needs and interests. Food and fibre producing animals were domesticated through an alteration of their gene pools by humans to serve human interests. Thus, we present an argument that the domestication and use of animals in animal agriculture is a technology. During the initial stages of domestication, the relationship was possibly one of symbiosis between humans and animals, but humans now have control over animals through the application of technology. Recently, new techniques in molecular genetics (biotechnology) have presented the possibility of rapid and radical changes in animal genotypes and the production of compounds such as biologically engineered growth enhancers. The application of other technologies, especially those related to the control or eradication of contagious diseases, permitted the development of intensive confinement animal agriculture. These production systems typically involve large numbers of animals managed in one housing unit, sometimes as one group. Animals in these confinement systems are less diseased, grow faster and more efficiently, but live in structures that limit their freedom of movement and control their social environment. The modern confinement production systems that employ recent advances in technology have been characterized by some as biologically inefficient, harmful to the environment, harmful to human health and bioethically unjustifiable because of restrictions on the animal's behaviour and activity. Some persons have proposed that all technology has a negative impact on animal welfare. The term "factory farming" is now a phrase

that implies the harmful impact of technology on animal well-being. We contend that some technologies have actually enhanced animal welfare, and extend this idea to suggest that control over nature does not have to equate to negative animal well-being. A challenge for animal agriculturalists is to design food production systems that provide an appropriate quality of life for animals, are efficient and sustainable in the utilization of resources and are compatible with the social and economic interests of the general and agricultural public. Stricklin and Swanson are in the Department of Animal Sciences, University of Maryland, College Park, MD 20742.

Stricklin, W. Ray, and Joy A. Mench, eds., "An International Conference on Farm Animal Welfare: Ethical, Scientific and Technological Perspectives." An International Conference on Farm Animal Welfare was held at Queenstown, Maryland in June 1991. The reviewed proceedings from the conference are included in two issues of the Journal of Agricultural and Environmental Ethics, volume 6. The conference dealt with ethical, scientific and technological perspectives on animal welfare. Accordingly, persons from university, government, animal industries and animal protection organizations participated in the conference. The major financial sponsors were the National Science Foundation and the Geraldine Dodge Foundation. A primary objective of the conference was to establish dialogue on the topic of farm animal welfare that would serve as the basis for formulating general research directions.

Stridbeck, Bolof. Ekosofi och Etik. Göteborg, Sweden: Bokskogen, 1994. ISBN 91 7776 070 0. A doctoral dissertation in practical philosophy delivered to the Humanities faculty at the University of Gothenburg, Sweden, in June 1993. With an English summary, pp. 289-299. Chapter 1. Ecological balance as homeorhetic balance, balance in a system that maintains the same direction of change. Chapters 2-5 follow an analogy with the Noble Truths of Buddhism, and feature selected Norwegian and other ecophilosophers. Chapter 2. The truth of suffering. How bad is it today? Sigmund Kvaloy (Sätereng). Chapter 3. The truth of the cause of suffering. Why is it like this? Hjalmar Hegge. Chapter 4: The truth of the end of suffering. How should it be instead? Arne Naess and Henryk Skolimowski. Generally he finds that these thinkers complement one another. Chapter 5. The truth of the way to the end of suffering. Thomas Mathiesen, and his political strategy for promoting "ecological balance and creative manifoldness." Stridbeck also concludes "No concrete entities other than experiences have intrinsic value."

Strittholt, J. R. and Dellasala, D. A., "Importance of Roadless Areas in Biodiversity Conservation in Forested Ecosystems: Case Study of the Klamath-Siskiyou Ecoregion of the United States," Conservation Biology 15(no.6, 2001): 1742-54. (v.13,#2)

Strittholt, James R. "Valuing Ecosystem Functions," Conservation Biology 11(no.4, 1997):1039. (v8,#3)

Strochinskii, AA; Pozyvailo, YM; Jungst, SE, "Forests and Forestry in Ukraine: Standing on the Brink of a Market Economy," Journal of Forestry 99(no. 8, 2001):34-38. (v.13,#1)

Strohmaier, David, "Threescore and ten: Fire, place, and loss in the West," Ethics and the Environment 8(no. 2, 2003):31-41. "Some things are worth protecting from fire simply because they are important to us--even a part of us. ... What's critical, though, as we struggle to live in a land that burns, is getting clear about how we want that land to look and why. I fear that we've become so transfixed by the power of ecological sounding arguments--scientific sounding arguments gilded with graphs and statistics--that we either fail to recognize how values permeate our ecology or we downplay the legitimacy of preserving parts of nature for other than strictly ecological or economic reasons. Those who advocate restoring fire to western ecosystems (myself included) as often as not pawn off aesthetic, philosophical or economic reasons for ecological reasons." Strohmaier is a historian with Historical Research Associates, Missoula, Montana, and a fire fighter. (E&E)

Strohmaier, David J., *The Seasons of Fire: Reflections on Fire in the West*. Reno: University of Nevada Press, 2001. The moral nexus between fire, humans, and the landscape of the American West. Epistemological role of natural phenomena, such as fire. Fire as axis mundi. sacrament, object of fear, and object of reverie. An apologetic on behalf of the value of fire, and on behalf of those who find value in watching, tending, and actively engaging fire. Strohmaier, for many years a fire fighter himself, has also studied environmental ethics, and is now a public comment analyst with the U.S. Forest Service in Missoula, MT. ISEE will sponsor an "Author Meets Critics" session on this book at the Pacific APA in Seattle, 2002. (v.12,#3)

Strong, David, "Technological Subversion of Environmental Ethics," in Winston, Morton E., and Edelbach, Ralph D., eds., Society, Ethics, and Technology (Belmont, CA: Wadsworth, 2000). Reprinted extract from Strong's Crazy Mountains. Strong is in philosophy at Rocky Mountain College, Billings, MT. (v.11,#1)

Strong, David, "Environmental Ethics," entry in Carl Mitcham, ed., Encyclopedia of Science, Technology, and Ethics (Farmington, MA: Macmillan Reference, USA, Thomson/Gale, 2005), vol. 2, pp. 653-661.

Strong, David. Crazy Mountains: Learning from Wilderness to Weigh Technology. Reviewed in Environmental Ethics 21(1999):321-324.

Strong, David. Crazy Mountains: Learning from Wilderness to Weigh Technology. Albany: State University of New York Press, 1995. 253 pages. \$ 14.95 paper. Strong uses the Crazy Mountains of Montana, a wilderness, jeopardized by a newly bulldozed road and a planned timber sale to trigger a series of wide-ranging reflections on the way in which technology is transforming the Earth in increasingly extensive ways. From wilderness we can learn what things are real and how this reality can re-order our lives. Written with considerable literary power and philosophical clarity. Strong teaches philosophy at Rocky Mountain College, Billings, Montana. (v6,#3)

Strong, David. "Disclosive Discourse, Ecology, and Technology." Environmental Ethics 16(1994):89-102. Currently, much hope for the protection of nature is pinned on the science of ecology. Without suggesting that we should pay less serious attention to science, I argue for a more pluralistic approach to the environmental and technological problems facing our time. I maintain that when ecology changes attitudes and ways of life, it does so by importing a language of engagement with nature rather than by remaining confined to a strictly scientific account. This language of engagement, which shows how nature and natural things can be engaged by humans in a multiplicity of ways, I call disclosive discourse. Disclosive discourse, however, is not used exclusively by ecologists and other scientists. To the contrary, the great literary writers exemplify in their writings the ways this discourse can present nature and natural things in their most profound and powerful appeal. Moreover, disclosive discourse is not limited to words: artworks, too, are disclosive. By characterizing the deeper problem with which we are faced differently, as fundamentally technological rather than environmental, a more diversified plurality of alternatives to technology, not limited to those having to do with primarily nature, can be brought into relief and encouraged. Strong is in the department of philosophy, Rocky Mountain College, Billings, MN. (EE)

Strudler, Alan, "Valuing Nature: Assessing Damages for Oil Spills," Report from the Institute for Philosophy and Public Policy 15 no. 1 (Winter, 1995): 6-10. The Valdez spill reviewed. Determining dollar amounts commensurate with nonuse values has proved elusive. But one should not conclude that any dollar amount imposed by a court is arbitrary and unfair. Arbitrariness can be limited by judges who review damage awards for their consistency with comparable cases. Accidents themselves are deeply arbitrary, and, in the case of oil spills, there is no reason that the weight of the arbitrary should fall

entirely on the shoulders of the public. By imposing liability for lost nonuse values on firms like the Exxon corporation, the burden of arbitrariness is more fairly shared. Strundler is a Research Scholar at the Institute for Philosophy and Public Policy, University of Maryland. (v6,#2)

Stuart, Chris, Stuart, Tilde. Africa's Vanishing Wildlife. Washington, D.C.: Smithsonian Institution Press, 1996. 208 pp. \$39.95 cloth. Drawing on data from IUCN publications, this work documents the perils of Africa's vulnerable, rare, and declining species. Pinpointing both keystone species --such as the African elephant--and those that are little known, the authors cover primates, carnivores, antelopes, birds, reptiles, amphibians and freshwater fish. Synthesizing the biology, natural history, and conservation status of Africa's vanishing species, this is an accessible review of the continent's wildlife. (v7,#4)

Stuart, Nicole, "Technology and Epistemology: Environmental Mentalities and Urban Water Usage," *Environmental Values* 16(2007): 417-431. This paper examines the mentalities associated with the transformation of 'nature' into urban life in industrial societies, with particular reference to the conversion of rainwater into tap water. It argues that industrial technologies dissociate urban dwellers from the natural environment upon which they depend. The paper maintains that this dissociation has contributed to mentalities encouraging the depletion and degradation of water resources and critically examines technological strategies for managing urban water use. The paper argues that epistemological systems must be reformed in conjunction with changing technological systems before environmental management strategies are likely to succeed. It concludes by suggesting ways in which urban water provision could be transformed so as to encourage greater ecological awareness and activism. Stuart is in the School of Earth and Geographical Sciences, University of Western Australia, Crawley.

Stuart, Simon N., et al (6 others), "Status and Trends of Amphibian Declines and Extinctions Worldwide," *Science* 306(3 December 2004):1783-1786. A global census shows that most of the 5,743 known amphibian species are in decline and one-third are currently endangered. Amphibians are more threatened and are declining more rapidly than either birds or mammals. Although many declines are due to habitat loss, other, unidentified processes are driving species quite quickly to extinction. The lead author (and several of others) are with the IUCN Species Survival Commission/Conservation International Center for Applied Biodiversity Science, Biodiversity Assessment Unit, Washington, DC.

Stuart, Tilde, Stuart, Chris. Africa's Vanishing Wildlife. Washington, D.C.: Smithsonian Institution Press, 1996. 208 pp. \$39.95. Pinpointing both keystone species and those that are little known, the authors provide information on each animal's behavior, evolution, habitat, diet, social structure, and conservation status. (v8,#3)

Stuartmurray (Stuart-Murray), John. Review of Jay Appleton The Experience of Landscape, *Environmental Values* 7(1998):359.

Student Conservation Association. The Guide to Graduate Environmental Programs. Covelo, CA: Island Press, 1997. 384 pp. \$29.95 cloth. \$16.95 paper. More than 160 in-depth profiles provide information on enrollments, student-faculty ratios, tuition, areas of specializations, facilities, admission and degree requirements, career counseling and job placements, special program features and more. (v9,#2)

Student Conservation Association. The Guide to Graduate Environmental Programs. Covelo, CA: Island Press, 1997. 384pp. \$29.95 cloth, \$16.95 paper. This presents in a single volume information on the various types of programs available across the full spectrum of environmental fields--the city and regional planning, environmental law, public policy, natural resources management, ecology, biological sciences, public health, architecture, and many others. (v8,#1)

Stuessy, Tod, Sohmer, S.H., eds. Sampling the Green World. New York: Columbia University Press,

1996. 384 pp. \$49.50 cloth. Twenty-one leading experts in systematic botany outline an intelligent plan for mapping phytodiversity in the next half century. The authors look at the protocols and procedures for collecting, documenting, storing, and preserving specimens and consider methods of retaining images for plants that cannot be sampled, surveying advanced computerized video applications including virtual reality. (v7,#4)

Stuntz, Linda G. "The Energy Policy Act of 1992: Changing the Electricity Industry," Natural Resources & Environment 10(no.1, Summer 1995):69- . (v6,#4)

Sturgeon, Kareen B. "The Classroom as a Model of the World." Environmental Ethics 13(1991):165-73. This paper explores the relationship between science and ethics and its implications for educational reform and environmental change. It is a personal account of my search to find a place for ethics in an environmental science class and how, in the process, the class itself is being transformed. I document how I have come to believe that the classroom is a model of the world: within my own development, the transformation of a course is implicated and, within the development of the course, the potential transformation of an educational system and the world is enfolded. Sturgeon is at the Biology department, Linfield College, McMinnville, OR. (EE)

Sturgeon, Noël. Ecofeminist Natures: Race, Gender, Feminist Theory and Political Action. Reviewed in Environmental Ethics 21(1999):429-432.

Sturm, Matthew et al., "Winter Biological Processes Could Help Convert Arctic Tundra to Shrubland", BioScience 55(no.1, January 2005):17-26(10). In arctic Alaska, air temperatures have warmed 0.5 degrees Celsius (C) per decade for the past 30 years, with most of the warming coming in winter. Over the same period, shrub abundance has increased, perhaps a harbinger of a conversion of tundra to shrubland. Evidence suggests that winter biological processes are contributing to this conversion through a positive feedback that involves the snow-holding capacity of shrubs, the insulating properties of snow, a soil layer that has a high water content because it overlies nearly impermeable permafrost, and hardy microbes that can maintain metabolic activity at temperatures of -6C or lower. Increasing shrub abundance leads to deeper snow, which promotes higher winter soil temperatures, greater microbial activity, and more plant-available nitrogen. High levels of soil nitrogen favor shrub growth the following summer. With climate models predicting continued warming, large areas of tundra could become converted to shrubland, with winter processes like those described here possibly playing a critical role.

Style, S, "The new Mexican government's plan to open up the country to corporate domination," The Ecologist 31(no.5, 2001):50-51. (v.12,#4)

Styles, John, The Animal Creation: Its Claims on Our Humanity Stated and Enforced. Originally published: London: T. Ward, 1849. Reprint edition: Lewiston, NY: Edward Mellon Press, 1997. With an introduction by Comstock, Gary L. (v.10,#3)

Su Xiangui, "Thoreau's thoughts of nature and its implication for ecological ethics", Journal of Beijing University 2002(2)

Suagee, Dean B. "Clean Water and Human Rights in Indian Country", Natural Resources & Environment 11(no.2, 1996):46. (v7,#4)

Subramaniam, Mangala. "Whose Interests? Gender Issues and Wood-fired Cooking Stoves," American Behavioral Scientist 43(No.4, 2000). Environmental justice. (v.11,#1)

Sugameli, Glenn P., "Lucas v. South Carolina Coastal Council: The Categorical and Other "Exceptions"

to Liability for Fifth Amendment Takings of Private Property Far Outweigh the "Rule," Environmental Law 29 (No. 4, 1999): 939- . The Takings Clause of the Fifth Amendment to the United States Constitution provides that private property cannot be taken for public use without just compensation. Mr. Sugameli discusses the takings rule outlined by the Supreme Court's 1992 decision in *Lucas v. South Carolina Coastal Council* and cases that have interpreted and applied the Lucas rule and concludes that the exceptions described in Lucas outweigh the liability rule. (v.11,#2)

Sullivan, Caroline, Review of: E. B. Barbier, *The Economics of Environment and Development*, Environmental Values 11(2002):106-108.

Sullivan, John, "Nuclear Plant in New Jersey Draws Censure," New York times, October 11, 2004, p. A1, p. A25. The Salem Nuclear Power Station in southwestern New Jersey, with the second largest nuclear power output in the United States, has been censured for dozens of violations, from the reliability of equipment to leaks to the availability of spare parts to supervision in a control room. (v.14, #4)

Sullivan, Shannon, McCann, Elizabeth, DeYoung, Raymond, Erickson, Donna. "Farmers' Attitudes about Farming and the Environment: A Survey of Conventional and Organic Farmers," Journal of Agricultural and Environmental Ethics 9(1996):123-143. This paper compares the attitudes and beliefs of a group of conventional farmers to those of a group of organic farmers. It was found that while both groups reject the idea that a farmer's role is to conquer nature, organic farmers were significantly more supportive of the notion that humans should live in harmony with nature. Organic farmers also reported a greater awareness of and appreciation for nature in their relationship with the land. Both groups view independence as a main benefit of farming and a lack of financial reward as its main drawback. Overall, conventional farmers report more stress in their lives although they also view themselves in a caretaker role for the land more than do the organic farmers. In contrast, organic farmers report more satisfaction with their lives, a greater concern of living ethically and a stronger perception of community. Both groups are willing to have their rights limited (organic farmers somewhat more so) but they do not trust the government to do so. Keywords: environmental attitudes, organic farming environmental ethics. Sullivan, DeYoung and Erickson teach in the School of Natural Resources and Environment, University of Michigan. McCann teaches in the College of Natural Resources, University of Wisconsin Stevens Point. (JAEE)

Sumner, David, Review of Michel B. Gerrard, Whose Backyard, Whose Risk: Fear and Fairness in Toxic and Nuclear Waste Siting. Environmental Values 7(1998):122.

Sumner, David, and Gilmoura, Peter. "Radiation Protection and Moral Theory." Environmental Values 4(1995):241-255. It seems likely that there is no threshold for the induction of cancer by ionising radiation. Hence even small radiation doses may result in a finite number of premature deaths if a large number of people are exposed. Various arguments are used to demonstrate that such deaths, if they occur, are acceptable; these arguments are shown to be flawed. Many of the arguments, and the ICRP's principle of justification, appear rooted in a utilitarian system of moral philosophy. Such a system is superficially attractive as it appears objective and rational; however, the objectivity may be an illusion masking the underlying aims of the interested parties. KEYWORDS: Radioactive discharges, utilitarianism, emotivism, justification, cost-benefit analysis. Sumner resides at Whithorn, UK. Gilmoura resides at Glasgow. (EV)

Sumner, L. W. Review of The Ethics of Environmental Concern. By Robin Attfield. Environmental Ethics 8(1986):77-82.

Sumner, L. W., Donald Callen, and Thomas Attig, eds., Values and Moral Standing. Bowling Green: Applied Philosophy Program, Bowling Green State University, 1986. Pp. iii, 167. This is the eighth

volume in a series of conference papers on various subjects in applied philosophy. All the 1986 papers concern questions of moral standing: what kind of entities deserve moral consideration, and why? All the papers are tangentially related to environmental issues, but only three discuss environmental ethics directly. Anthony Weston, "Towards an Inclusive Ethics," continues his defense of a theory of pragmatic value--a Deweyan holism which transcends the person-centered model of moral value and recognizes the moral value of nonhuman entities (see also his article in Environmental Ethics, 1985). Eric Katz, "Buffalo-killing and the Valuation of Species" (pp. 114-123), examines the two main schools of non-anthropocentric environmental ethics, individualism and holism, and argues that each is appropriate at certain times--neither view is comprehensive. Holmes Rolston, "The Human Standing in Nature: Fitness in the Moral Overseer" (pp. 90-101), discusses the proper place of humanity in the comprehension of, or interaction with, nature. Although man transcends nature because he can have a global objective world view, the challenge implied by the view is to "learn interspecific altruism." The value in nature for man is "storied achievement:" the unity of history with natural ecological development. "Humans want a storied residence in nature where the passage of time integrates past, present, and future in a meaningful career" (p. 99). (Katz, Bibl # 1)

Sumner, L. W. Review of Animal Liberation. By Peter Singer. Environmental Ethics 1(1979):365-70.

Sumner, L. W. Review of Animal Rights and Human Obligations. Edited by Tom Regan and Peter Singer. Environmental Ethics 1(1979):365-70.

Sunderlin, William D. "Between Danger and Opportunity: Indonesia and Forests in an Era of Economic Crisis and Political Change." Society & Natural Resources 12(No. 6, Sept. 1999):559- . (v10,#4)

Sundermeier, T 1992. Development and ecology in Africa. In: Koegelenberg, R (ed): Church and development: an interdisciplinary approach, 246-253. Cape Town: EFSA. (Africa)

Sunding, D., and Zilberman, D., "The Economics of Environmental Regulation by Licensing: An Assessment of Recent Changes to the Wetland Permitting Process," Natural Resources Journal 42(no.1, 2002): 59-90. (v.13,#4)

Sunevag, Kjell. Review of C. Carraro, ed. International Environmental Negotiations: Strategic Policy Issues, Cheltenham: Edward Elgar, 1997, Environmental Values 10(2001):130. (EV)

Sunquist, Fiona, "End of the Ark? International Wildlife 25 (no. 6, Nov./Dec. 1995):22-29. Captive breeding is out; conservation in the wild is in. Facing increasing disapproval of keeping animals in the captivity, Michael Hutchins, Director for conservation and science at the American Zoo and Aquarium Association, says: "The zoo profession is at an important crossroads in its history. The world is changing around us, and if we choose to conduct business as usual, we are not sure that zoos will ultimately survive. ... As zoos struggle to define what they are supposed to be and do, they're finding an ever-greater role in saving animals in the wild." William Conway, director of what was once the Bronx Zoo (now a "Conservation Park," says, "I don't believe there is any question but that every accredited North American zoo will have a significant field conservation effort within six years." At present, the budget for one good U.S. zoo can equal the entire budgets of all the national wildlife conservation agencies in countries south of the Sahara in Africa.

Sunstein, Cass R., Risk and Reason: Safety, Law, and the Environment. New York: Cambridge University Press, 2002. A wide-ranging analysis of the problem of managing environmental health risks (and not much further attention to ecosystem health, or nature conservation). From the 1970's the U.S. Congress was inclined to "command and control" regulation, often silent on cost-benefit balancing, sometimes even precluding it. On the whole these laws led to major environmental and health

improvements that justify the high visible costs they often entailed. But some, especially cleaning up waste sites, cost too much with too little benefit.

Regulatory reforms are now needed. Agencies need to conduct a quantitative assessment of risks before developing regulations, and not to rely either on qualitative impressions or on public perceptions, which are often wrong. Reforms need to consider tradeoffs, and to express both costs and benefits, often in monetary terms. An appropriate value for a human life is in the range of \$ 5 million to \$ 8 million. Reforms need to go beyond "command and control" to use economic incentives, encourage self-disclosure, allow trading of pollution permits. But cost-benefit analysis does have its limits, especially when scientific uncertainty is great (as with arsenic in drinking water). Sunstein defends what he calls "a highly technocratic approach to risk regulation." Conservatives are likely to regard Sunstein's proposals as self-evident; environmentalists will have their doubts. Sunstein is in law, University of Chicago Law School.

Sunstein Cass R., and Martha C. Nussbaum, eds., *Animal Rights: Current Debate and New Directions* (New York: Oxford University Press, 2004). Reviewed by Richard Haynes, *Journal of Agricultural and Environmental Ethics* 20(2007):533-542.

Sunstein, Cass R., and Nussbaum, Martha C., eds., Animal Rights: Current Debates, New Directions. New York: Oxford University Press, 2004. With particular attention to animals and the law, providing concrete suggestions for legal reform.

Suomen Luonto (Nature in Finland) is the magazine of Suomen Luonnonsuojeluliitto (Finnish Association for Nature Conservation). The magazine has 80,000 subscriptions, one of the more widely circulating magazines in Finland. The society has 25,000 members. (v5,#2) (Finland)

Surgery, John, "Agriculture. A War on Nature?" Journal of Applied Philosophy 6 (1989): 205-207. Brief "dialogue" between a farmer and an environmentalist over the possibility of an agriculture in "harmony" with nature. Cultivation involves aggression and domination, but when done correctly also involves gentleness and cooperation. (Katz, Bibl # 2)

Susanne, Charles & Hens, L., "From anthropocentrism to ecocentrism". Pages 35-55 in Susanne, Charles & Gallé, László eds. Ecotechnie and Sustainable Development. Szeged, Hungary: Officina, 1998. ISBN: 963-482-283-5 (v.12,#4)

Sustainability Issues, a special section in Daphne Gail Fautin, et al. ed., Annual Review of Ecology and Systematics 26 (1995). Includes Robert Goodland, "The Concept of Environmental Sustainability," Christopher Humphries et al., "Measuring Biodiversity Value for Conservation," Robert Nelson, "Sustainability, Efficiency and God: Economic Values and The Sustainability Debate," John Vandermeer, "The Ecological Basis of Alternative Agriculture," John Clark, "Economic Development vs. Sustainable Societies: Reflections on the Players in a Crucial Contest."

Sustainable Forestry in the Boreal, Taiga News, no. 16, February/March 1996. Special issue on sustainable forestry in boreal forests. Taiga Rescue Network, Ajtte, P. O. Box 116, S-962 23 Jokkmokk, Sweden. Phone 46 971 17039. Fax 46 971 12057. (v7,#1)

Sutcliffe, Felicity, Review Essay of Frans de Waal, Good Natured. Animal Issues (University of Sydney, Australia) 2, no. 1, 1998. (v.10,#1)

Sutcliffe, Odette L., Thomas, Chris D. "Open Corridors Appear to Facilitate Dispersal by Ringlet Butterflies (Aphantopus hyperantus) between Woodland Clearings", Conservation Biology 10 (no.5,1996):1359.

Sutherland, Anne and Jeffrey E. Nash. "Animal Rights as a New Environmental Cosmology." Qualitative Sociology 17 (no. 2, 1994): 171-186. The secularization and modernization of society have created opportunities for broad interpretations of fundamental questions of life. The Animal Rights Movement challenges Judeo-Christian cosmology and offers an alternative. It redefines the distinctions between humans and animals and gives them a new meaning within the generalized environmental other. As an emerging cosmology, it functions to give believers a means of dealing with questions of order and chaos, suffering, good and evil, and justice. It also creates a community of people who seek redemption through saving animals. The animal rights movement goes beyond moral protest and takes on the role of a religious cosmology. Sutherland is in anthropology at Macalester College, St. Paul, MN. (v6,#1)

Sutherland, D. Dixon, "The Space of Creation: Theology's Search for an Ecological Ethic," Communio Viatorum 1 XXXVI 1994, pages 46-60. Communio Viatorum is published by the Protestant Theological Faculty of Charles University, Prague. The historic cords that bind the ecological crisis and Christian theology together run deeper than expected. Modern theology and the ecological crisis cannot be separated. The roots of both are historically and substantively entangled. In a profound sense, the ecological crisis of the twentieth century has propelled theology into its own severe crisis. Dixon teaches Christian ethics at Stetson University, DeLand, Florida. (v7,#2)

Sutherland William J., Susan Armstrong-Brown, Paul R. Armsworth, Tom Brereton, Jonathan Brickland, Colin D. Campbell, Daniel E. Chamberlain, Andrew I. Cooke, Nicholas K. Dulvy, Nicholas R. Dusic, Martin Fitton, Robert P. Freckleton, H. Charles J. Godfray, Nick Grout, John H. Harvey, Colin Hedley, John J. Hopkins, Neil B. Kift, Jeff Kirby, and William E. Kunin. "The Identification of 100 Ecological Questions of High Policy Relevance in the UK." *Journal of Applied Ecology* Vol. 43, no. 4 (2006): 617-27. Some of the questions include agriculture, marine fisheries, forests, climate change, ecosystem function, ecosystem services, aliens, invasive species, recreation, field sports, pollution, energy, carbon management, land management, restoration, and biodiversity conservation. Policy is driven by broad interests rather than specific ones, but scientists are often best equipped to answer specific questions. Applied ecologists need to feed into policy more carefully and emphasize the generic relevance of their work.

Sutter, P, "What Can U.S. Environmental Historians Learn from Non-U.S. Environmental Historiography?", Environmental History 8(no.1, 2003):109-129.

Sutter, Paul, "A Retreat from Profit": Colonization, the Appalachian Trail, and the Social Roots of Benton MacKaye's Wilderness Advocacy," Environmental History 4 (No. 4, Oct 01 1999): 553- . (v.11,#2)

Sutton, Philip W., Nature, Environment and Society. Palgrave Macmillan, 2004. "Ecocentric theorists are right to argue that human being are natural beings, but they are wrong to suggest that the biological is somehow more `real' than the social. Such a view remains a serious obstacle to ecocentric theories of self and society as well as to any accommodation between ecocentric and sociological approaches to environmental issues" (p. 114). Sutton teaches sociology at Robert Gordon University in Aberdeen, Scotland. (v.14, #4)

Sutton, Richard, The Future of Environmental Education, Master's Thesis, Department of Philosophy, Lancaster University, September 1992. (v7,#1)

Sutton, Richard, The Future of Environmental Education, Master's Thesis, Department of Philosophy, Lancaster University, September 1992.

Suzuki, David, with McConnell, Amanda, The Sacred Balance: Rediscovering Our Place in Nature.

Amherst, NY: Prometheus Books, 1998. 269 pages. Cloth \$26.00. "Nature is the ultimate source of our inspiration, of our sense of belonging, of our hope that life will survive long after we are gone. In order to realize this hope, we must learn to regard the planet as sacred." Suzuki is a Canadian media celebrity, and geneticist, host of a popular science program, "The Nature of Things."

Suzuki, David and Peter Knudtson, eds., Wisdom of the Elders: Sacred Native Stories of Nature. New York: Bantam Books, 1992. 275 pages. Cloth and paper. Several dozen vignettes characterizing native ecologies from around the world. Each chapter is organized beginning with a thumbnail sketch of modern scientific perspectives relevant to the chapter's theme, as a backdrop against which the native vignettes are juxtaposed. The editors are impressed with the fundamental validity and power of aboriginal notions of the sacredness of nature. Suzuki is professor of zoology at the University of British Columbia and a distinguished Canadian broadcaster and environmentalist. Knudtson is a Vancouver-based journalist. (v4,#4)

Svancara, LK, et al., "'Policy driven versus Evidence based Conservation: A Review of Political Targets and Biological Needs," BioScience 55 (no. 11, November 2005): 989-995. "How much is enough?" is a question that conservationists, scientists, and policymakers have struggled with for years in conservation planning. To answer this question, and to ensure the long term protection of biodiversity, many have sought to establish quantitative targets or goals based on the percentage of area in a country or region that is conserved. In recent years, policy driven targets have frequently been faulted for their lack of biological foundation. In this manuscript, we reviewed 159 articles reporting or proposing 222 conservation targets and assessed differences between policy driven and evidence based approaches. Our findings suggest that the average percentages of area recommended for evidence based targets were nearly three times as high as those recommended in policy driven approaches. Implementing a minimalist, policy driven approach to conservation could result in unanticipated decreases in species numbers and increases in the number of endangered species.

Swaffield, S. and Primdahl, J., "Spatial Concepts in Landscape Analysis and Policy: Some Implications of Globalisation," Landscape Ecology 20(no. 6, September 2005): 657-673.

Swaffield, Simon, "Sustainable Management and the Pastoral Ideal," Environmental Politics (Summer 1997):101-. (v.8,#4)

Swaffield, Simon; Primdahl, Jorgen, "Spatial Concepts in Landscape Analysis and Policy: Some Implications of Globalisation," Landscape Ecology 21 (no.3, April 2006): 315-331 (17).

Swan, James A. In Defence of Hunting. San Francisco: Harper, San Francisco, 1995. 290 pages. \$20. Hunting is not cruel or contrary to ecological training, but rather offers modern people an opportunity to experience some of the most basic impulses of existence: the desire to hunt. Within each of us there lives a hunter, and repressing this instinct can result in personal and societal strife and violence. Swan is an environmental author and has taught natural resources and recreation at various universities. (v6,#1)

Swan, James, Nature as Teacher and Healer. New York: Random House, Villard Books, 1992. 322 pages. \$ 13.00. "A spiritual first-aid kit for anyone who feels alienated from nature." Swan is an environmental psychologist who heads the Institute for the Study of Natural Systems, Mill Valley, CA. (v4,#3)

Swan, James A., Sacred Places: How the Living Earth Seeks our Friendship. Santa Fe, NM: Bear and Company Publishing, 1990. 237 pages. \$ 12.95. Chapter titles: The dilemma of sacred places in a modern world. Varieties of native American sacred places. The right place at the right time. Sacred places on trial. Minding the spirit of place. The new Earth paradigm. Visiting a place of power. With an appendix: Sacred places of the United States. Bibliography. Foreword by James Lovelock. Swan is a

psychologist, who specializes in environmental psychology with native Americans, a faculty member at the California Institute of Integral Studies. "Dr. Swan understands the American Indian mind better than any other white man I know" - Bill Fields, Cherokee, retired director of Indian Affairs, U. S. National Park Service. (v5,#2)

Swanson, Frederick H. "Time Series Mapping of Utah's Wild Lands," Wild Earth 7(no.1, 1997):64. (v8,#2)

Swanson, Stevenson, "To Bring Back Starry Skies, Local Ordinances Restrict Excess Illumination," Washington Post (12/25/97): A 19. Community Ordinances to Protect Starry Sky. A growing number of local governments are regulating lighting to prevent unsafe glare and to bring back the night sky. The U.S. is so well illuminated that only one in 10 Americans lives in a place where light pollution has not marred the beauty of the night sky. These ordinances require that new lighting be shielded so that light is directed downward, not sideways or up, and they require that outdoor lights not needed for security must be reduced or turned off after business hours. In addition to making the night sky more visible, the ordinances aim to make driving more safe by reducing glare that can temporarily blind or disorient motorists. (v.8,#4)

Swanson, Timothy M., ed. The Economics and Ecology of Biodiversity Decline: The Forces of Driving Global Change. New York: Cambridge University Press, 1995. 176 pages. \$39.95 cloth. Economists analyze how economic growth predictably alters the earth, and ecologists consider how the drive for fitness and consequent population growth changes the globe. Both look at the institutional interface between humans and biosphere, and explain global change as the consequence of human noncooperation and conflict. (v7, #3)

Swanson, Timothy, ed., The Economics of Environmental Degradation: Tragedy for the Commons? Brookfield, VT: Edward Elgar Publishing Co., 1996. 240 pages. \$64.00. Swanson is at the University of Cambridge and University College, London. (v7,#2)

Swanson, Timothy M., and Edward B. Barbier, eds. Economics for the Wilds: Wildlife, Wildlands, Diversity and Development. London: Earthscan, 1992. 226 pages. £ 12.95, paper. The only way to save wildlife is to make it economically profitable to save them. The reason wildlife is now under threat is that there are so few economic incentives; the vast majority of species are refugees of the international economic system. Unless we find ways of integrating these wild values into the economic system, wildlife and wildlands face a bleak future. They cannot be saved in peopleless parks. Unfortunately, the largest reserves of biological diversity lie in some of the poorest countries of the world, and it is neither fair nor prudent to ask developing countries to preserve wildlands, especially when the developed countries have destroyed theirs. The contributors suggest new ways of making wildlife and wildlands count economically. Bruce Aylward, "Appropriating the Value of Wildlife and Wildlands" argues, however, that there are some aspects of biodiversity that cannot be brought into economic arguments. Questions of our moral obligations to nonhuman species are given scant treatment here; most of the authors hold that such moral arguments are likely to be increasingly flimsy in the face of overwhelming population pressures and the inequitable trading relations and development patterns between North and South. (v5,#4)

Swanson, Timothy. Global Action for Biodiversity: An International Framework for Implementing the Convention on Biological Diversity. Covelo, CA: Island Press, 1997. 208pp. \$61.50 cloth, \$26.50 paper. This book describes the nature of the issues now before the international community, the gaps in the CBD Convention which remain to be filled, and the ways in which the international community can reach agreement on those gaps. (v8,#2)

Swanson. Timothy M., ed. Intellectual Property Rights and Biodiversity Conservation: An

Interdisciplinary Analysis of the Values of Medicinal Plants. New York: Cambridge University Press, 1995. 285 pages. \$59.95 cloth. A detailed analysis of the economic and scientific rationales for biodiversity conservation. The contributions form an interdisciplinary approach encompassing fields of study such as evolutionary biology, chemistry, economics and legal studies. The arguments are presented through the case study of medicinal plant use in the pharmaceutical industry. (v7, #3)

Swara (the Swahili for impala) is the conservation magazine of the East African Wildlife Society (2nd floor, Museum Hill Centre. Mailing address: P. O. Box 20110, Nairobi, Kenya. Phone 748170. Fax 746868). They print about 10,000 copies. (v6,#3)

Swart, Betsy. "The Fight Against Fur." The Animals' Agenda 16(Jul. 1996):18. (v7,#2)

Swart, Jac. A.A., "Care for the Wild: An Integrative View on Wild and Domesticated Animals," Environmental Values 14(2005): 241-250. Environmental ethics has to deal with the challenge of reconciling contrasting ecocentric and animal-centric perspectives. Two classic attempts at this reconciliation, which both adopted the metaphor of concentric circles, are discussed. It is concluded that the relationship between the animal and its environment, whether the latter is human or natural, should be a pivotal element of such reconciliation. An alternative approach is presented, inspired by care ethics, which proposes that caring for wild animals implies caring for their relationship to the natural environment and thus taking action to maintain wildlife habitat. This type of care is labelled non-specific care because it is not directed towards the individual wild animal and its specific individual needs. In contrast, caring for domestic animals is called specific care because it is much more directed towards the individual animal's needs. Swart is in biology, University of Groningen, The Netherlands. (EV)

Swart, Jac. A.A., "The Wild Animal as a Research Animal," Journal of Agricultural and Environmental Ethics 17(2004):181-197. Most discussions on animal experimentation refer to domesticated animals and regulations are tailored to this class of animals. However, wild animals are also used for research, e.g., in biological field research that is often directed to fundamental ecological-evolutionary questions or to conservation goals. There are several differences between domesticated and wild animals that are relevant for evaluation of the acceptability of animal experiments. Biological features of wild animals are often more critical as compared with domesticated animals because of their survival effects. An important issue is what is called here "natural suffering": the suffering from natural circumstances. Should this type of suffering be taken into account when suffering from experimentation is evaluated? As an answer, it is suggested that "natural functioning" should be considered as an additional standard in the evaluation of wild animal experimentation. Finally, two topics related to the ecological context are considered. Firstly, the often inevitable involvement of non-research animals in wild animal experimentation, and secondly, the eco-centric approach to nature conservation. According to the latter position, animals are subordinated to ecosystems. All these aspects make the evaluation of wild animal experiments much more complex than experiments with domesticated animals. Preliminary scores are proposed to deal with these aspects. It is argued that this should not lead to a more complex governmental regulation, since an effective maintenance and control are hard to realize and one may lose the cooperation of researchers themselves. In addition, non-governmental professional organizations such as research societies and funding organizations play a pivotal role. Keywords: animal experimentation, animal welfare, domesticated animals, field biological research, natural functioning, natural suffering, wild animals

The author is in the Section Science and Society, Department of Biology, Groningen University, The Netherlands. (JAEE)

Swearingen, Jack C. "Brownfields and Greenfields: An Ethical Perspective on Land Use." Environmental Ethics 21(1999):277-292. America's industries and families continue to forsake cities for suburban and rural environs, in the process leaving nonproductive lands (brownfields) and simultaneously

removing greenfield land from agriculturally or biologically productive use. In spite of noteworthy exceptions, urban regions which once functioned as vital communities continue in economic and social decline. Discussion or debate about the problem (or, indeed, whether it is a problem at all) invokes systems of values which often are not articulated. Some attribute the urban exodus to departure from personal ethical norms (e.g., substance abuse, violence, welfare addiction) by urban residents, as though ethical decline is driving the phenomenon. Others take the exact opposite stance, that social and economic decline follow the departure of the economic base. There is no consensus on what government should do about the problem, or whether government should be involved at all. I present elements of a land-use ethic which can accommodate the foregoing. I argue that government is already involved in the brownfields problem because urban flight is facilitated by public policies which de facto subsidize the process. I further argue that the debate invokes key--but unexamined--assumptions regarding limits. Where there are few substitutes for resources and the social cost of exploitation is high, government intervention in the market is necessary; "value-free" economic approaches need to be supplemented by values concerning what ought to be, i.e., what is desirable for society. (EE)

Swearingen, Thomas Craig. Moral Development and Environmental Ethics. Ph.D. dissertation in the College of Forest Resources, University of Washington, 1989. Available through University Microfilms, Ann Arbor, MI. 293 pages. Kohlberg's theory of moral development is relevant to the development of environmental ethical reasoning. Kohlberg is Western and anthropocentric. His theory is extended and adapted to environmental ethics. An instrument is developed to measure principled moral reasoning with an environmental orientation. Approximately 25,000 subjects were observed in a national park; persons observed to engage in environmentally destructive behavior and a matched random sample of other visitors were studied, 568 respondents. Analyses indicate that the subjects' responses are consistent with the extended theory hypothesizing stages in the development of environmental ethical reasoning. The thesis advisor was Robert G. Lee. A paper in progress, continuing this research is, "The Development of an Environmental Morality: A Theoretical Synthesis." Swearingen teaches in the Department of Health, Physical education, and Leisure Studies, University of Alabama, Mobile. (v6,#3)

Swedlund A.C., "Book Review: Human Population Dynamics: Cross-Disciplinary Perspectives. By Helen Macbeth and Paul Collinson eds. Cambridge University Press, Cambridge, UK, 2002. Biosocial Society Symposium Series. Hb-75.00, Pb-28.00. Glossary, index, 224 pp," Human Ecology 32(no.3, June 2004):389-391(3). (v. 15, # 3)

Sweet, Leonard I. State of the Ark. A special number of Bibelot, a periodical for pastors and alumni of the United Theological Seminary, Dayton, Ohio. The issue is devoted to environmental ethics and religion and environment. Many current books are reviewed and developments in these areas are analyzed. \$3.00 a copy from United Theological Seminary, 1810 Harvard Boulevard, Dayton, OH 45406. (v1,#1)

Swenson, J.J., and J. Franklin, "The Effects of Future Urban Development on Habitat Fragmentation in the Santa Monica Mountains," Landscape Ecology 15(no.8, Dec. 2000): 713-. (v.12,#3)

Swertlitz, Marc, ed., Judaism and Ecology, 1970-1986: A Sourcebook of Readings. Fourteen of the principal scholarly articles in the field, also with further bibliography. Contact: Ellen Bernstein, Shomrei Adamah, 550 Wissahickon Avenue, # 804C, Philadelphia, PA 19144. 215/844-8150. (v5,#2)

Swertlitz, Marc, ed., Judaism and Ecology, 1970-1986: A Sourcebook of Readings, 1990, published by Shomrei Adamah, Church Road and Greenwood Ave., Wyncote, PA 19095, available at that address. An anthology of fourteen articles intended to provide Jewish leaders and educators with liturgical, educational, and resource materials that inspire an awareness of nature and promote an active practice of

stewardship. With a selected bibliography. (Thanks to Steven Shaw for these two entries.) (v3,#3)

Swidler, Leonard, "Toward a Universal Declaration of a Global Ethic." Pages 1-18 in Swidler, ed., For All Life: Toward a Universal Declaration of a Global Ethic. Ashland: White Cloud Press, 1999.

Swift Jr., Lloyd W. and Burns, Richard G. "The Three Rs of Roads: Redesign, Reconstruction, and Restoration." Journal of Forestry 97(No.8, August 1999):40- . Old unpaved access roads located near streams and rivers often contribute sediment to the watershed. For landowners who cannot reconstruct and relocate such roads to protect water quality, low-cost mitigation alternatives are available. (v10,#4)

Swimme, Brian and Thomas Berry, The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era--A Celebration of the Unfolding of the Cosmos. San Francisco: Harper and Row, 1992. 305 pp. Hardcover, \$ 22.00. Swimme is a mathematical cosmologist, California Institute of Integral Studies, San Francisco; Berry is a Catholic priest and historian of cultures. (v3,#4)

Swimme, Brian. The Hidden Heart of the Cosmos: Humanity and the New Story. Maryknoll, NY: Orbis Books, 1997. 12pp. \$15 cloth. Swimme takes a journey through the cosmos in search of the "new story" that is developing in answer to this age-old question. He shows that science can be a wisdom tradition, its lessons integral to our being and well-being. (v8,#1)

Sydoriak, Charisse; Allen, Craig; Jacobs, Brian, "Would Ecological Restoration Make the Bandelier Wilderness More or Less of a Wilderness," Wild Earth 10(no.4, Wint 2000):83-. (v.12,#4)

Sylvan, Richard, "What Is Wrong with Applied Ethics?" One problem is the delivery of the commodity, but deeper problems lie in the applied idea and in what the application is presumed to be made to. There is something odd about the very idea of applied ethics, rather like applied nursing. All ethics is applied; there is no pure ethics. But further, environmental ethics challenges the whole body of ethical theory, not just application. The label "applied" is substantially a misnomer. A main matter with the body of ethics is its anthropic bias. Three options that emerge are inappropriate application, or extension or adjustment, and fashioning of something new, and these correspond more or less to the threefold division of environmental positions: shallow, intermediate, and deep. A provocative and insightful paper. This paper was given at a conference, "Philosophy and Applied Ethics Re-examined," at the University of Newcastle in August 1993. (v5,#1)

Sylvan, Richard, and David Bennett, The Greening of Ethics: From Human Chauvinism to Deep-Green Theory. Tucson: University of Arizona Press; and Cambridge UK: White Horse Press, 1994. Pp. 269. \$22.95 paper, \$45.00 cloth; £11.95 paper, £29.95 cloth. Environmental ethics from "down under" showing how topsy turvy the uppermost Western, first world view really is. The most insightful work of many to come out of Australia so far as it seeks to define, in its own national development, Australia's unique contribution to the greening of ethics. Forceful, critical, subversive, even satirical, and, ultimately, quite constructive, Sylvan and Bennett show that if conservation fails in Australia, then all hope of convincing the rest of the world of its importance is dead.

Sylvan and Bennett's analysis is by no means peculiarly Australian. Environmental ethics, they argue, everywhere comes in shallow, intermediate, and deep forms, and the authors use their position to evaluate what is happening in Europe and the United States. In their most original chapter (5), the authors set out their "deep-green theory," both sharing features with, and contrasted with, "deep ecology." The earlier chapters are mostly "de-constructionist," but in conclusion the authors advance their own construction of an appropriately green ethics based on intrinsic value in nature. The final chapters look at practical applications, always more radical than we like first to suppose. Sylvan is in philosophy at the Research School of Social Sciences, Australian National University, Canberra. Bennett is environment officer with the Aboriginal and Torres Strait Islander Commission in Canberra. (v5,#4)

Sylvan, Richard, "War and Peace IV: Tao and Deep-Green," 23 page typescript. Taoism and deep-green environmental theory diverge over war. Taoism is not a pacific doctrine but is committed to skilful defensive militarism, limited defensive military operations for specific purposes. Deep-green theory stands opposed to professional militarism, and is committed to a principled pacifism. Conveniently, a route through Taoism leads to problems of pacifism and toward a deep green theory. Available from Department of Philosophy, Research School of Social Sciences, Australian National University, P. O. Box 4, (v2,#4)

Sylvan, Richard, and David Bennett, The Greening of Ethics. Cambridge, UK: Whitehorse Press, 1994. 300 pages. £ 11.95. Chapter titles: Ethics and its Reluctant Greening, Set Against Escalating Environmental Problems. Shallow Environmental Ethics. Intermediate Environmental Ethics. A Prominent Deep Environmental Movement: Deep Ecology. An Outline of Deep-Green Theory, by Way of Contrast with Deep Ecology. On the Development of Environmental Ethics. On Ways and Means of Marketing, Propagating, Inculcating and Implementing Environmental Ethics. Suggestions on a Range of Initiatives and for Action. The authors claim "that Australia has become a bellwether territory," and hold that "if conservation fails in Australia then all hope of convincing the rest of the world of its importance is dead." The work grows out of a UNESCO study on environmental ethics in Australia; it has an Australian flavor and cast. There is, throughout, a subversive tone, in the best philosophical sense, in that it casts a steady critical eye over the traditional, that is, modernist assumption of the European West, its domination over nature, its worship of entrepreneurial, capitalist economics, its arrogant colonialism, the British sense of empire of which Australia is a result.

One gets the sense that one is reading a book by disaffected renegades who know the tradition they are rebelling against inside out, products of it themselves, and making criticisms too forceful and well put for one to dismiss them as those of idiosyncratic disaffection. There is insight here that cannot or ought not be ignored. Chapters 1-4 are deconstructionist, but the authors construct their own deep green theory in Chapter 5 in a highly original way. Chapters 6, 7, 8 are on "applying" ethics, a term the authors rightfully find problematic, with persistent criticism of the idea of development, asking what it is that one wants to develop. Ideas like "marketing, propagating, inculcating, packaging, and implementing" environmental ethics are real teasers because every word is loaded; the authors are taking the terms of the standard worldview and using them subversively to show the limitations of the marketing mentality. The authors are in philosophy at the Research School of Social Sciences, Australian National University, Canberra; see below. An American co-publisher is University of Arizona Press. (v5,#1)

Sylvan, Richard, Bennett, David, The Greening of Ethics. Reviewed by Robert Elliot. Environmental Values 5(1996):273-274. (EV)

Sylvan, Richard, "On the Value Core of Deep-Green Theory." Pages 222-229 in Oddie, Graham and Perrett, Roy W., eds., Justice, Ethics and New Zealand Society. Auckland, New Zealand: Oxford University Press, 1992.

Sylvan, Richard, "Mucking with Nature" In Sylvan, Against the Main Stream. Discussion Papers in Environmental Philosophy, no. 21. Canberra: Research School of Social Sciences, Australian National University, 1994. Criticizes Robert Elliot's "Faking Nature," Eric Katz, "The Big Lie: Human Restoration of Nature," and Eugene Hargrove on "therapeutic nihilism."

Sylvan, Richard, "Problems and Solutions in Radical Deeper Green Political Theory: An Australian Perspective." There is a growing dissatisfaction with Australia's political institutions, and increasing demand to change them. This demand has been initiated top-down; there is so far little surge from grass-roots levels. Nonetheless, along with apathy, there is widespread popular disenchantment. There is now an opportunity, if a rather small window of opportunity, to get green and radical themes on the agenda for

real political change in Australia. That opportunity should not be missed. (v5,#1)

Sylvan, Richard, Transcendental Metaphysics. Cambridge, UK: The White Horse Press, 1998. 500 pages. £ 45.00. Sylvan links his "deep green" theory of environmental philosophy to wide-ranging work in metaphysics, semantics, logic and value theory, his last work just completed before he died. Pioneering, eclectic, and controversial. Sylvan advocates "plurallism" (sic). "There is not merely a plurality of correct theories and more or less satisfactory worldviews: there is a corresponding plurality of actual worlds. Plurality penetrates deeper in full plurallism than linguistic surface or than conceptual or theoretical structure, to worlds ... There is no single fact of the matter, there are facts and matters."

Contents:

Chapter 1. Introducing and placing full and deep plurallisms

Chapter 2. Explaining full metaphysical plurallisms: their features, their differences.

Chapter 3. Paths and arguments leading to deep plurallism: vias negativas Chapter 4. More arguments to deep plurallism: vias positivas

Chapter 5. Still more positive arguments to plurallism

Chapter 6. Worlds and wholes: their natures and relative features

Chapter 7. Talking and thinking plurallese as well as more ordinarily: modellings and discourse

Chapter 8. Making a wider metaphysical sweep: traditional notions, traditional pluralism, traditional objections

Chapter 9. Distancing plurallism from realism, anti-realism and relativism, and those other -isms

Chapter 10. Plurallistic investigation of relevant philosophers and philosophical schools

Chapter 11. Impacts upon Philosophy: harmonious applications and further problem-solving

Chapter 12. What deep plurallism does, its intellectual impact, and where it leads

Chapter 13. Beyond intellectual plurallism--to liberating practice

Richard Sylvan was Senior Research Fellow in the Philosophy Program at the Australian National University. (v9,#1)

Sylvan, Richard and David Bennett, "Of Utopias, Tao and Deep Ecology," Discussion Papers in Environmental Philosophy, No. 19. Available from Department of Philosophy and Law, Research School of Social Sciences, Australian National University, P. O. Box 4, Canberra, ACT, Australia 2600. (v2,#3)

Sylvan, Richard, "A Critique of (Wild) Western Deep Ecology: A Response to Warwick Fox's Response to an Earlier Critique," manuscript paper. "Western deep ecology differs in important respects from the deep ecology originated and pursued by Naess, ... authentic deep ecology. ... Western deep ecology ... is very roughly a doctrine of the west of those new world continents where environmental philosophy functions; it has been advanced primarily by West Coast Americans (Devall, Drengson, Sessions and others) and associated West Australians (Fox, now of Tasmania, also Hallem and others). Unlike authentic deep ecology, Western deep ecology is hostile to environmental ethics, which it tends to dismiss as mere axiology; and it is excessively enthusiastic about transpersonal experience, spiritual 'paths' and 'ways', and unitarian metaphysics. ... On a personal level, I am quite attracted by authentic deep ecology; but I am substantially repelled by Western deep ecology." Available from: Department of Philosophy, Research School of Social Sciences, Australian National University, P. O. Box 4, Canberra, ACT 2600. (v1,#2)

Sylvan, Richard, "A Critique of Deep Ecology." Radical Philosophy 40 (Summer 1985): 2-12 and Radical Philosophy 41 (Fall 1985). A difficult paper to understand but absolutely essential as an analysis of the popular Deep Ecology movement. Sylvan (formerly Routley) has been a leading critic of anthropocentric environmental ethics, and thus his criticisms of an environmental philosophy closely aligned with his views is all the more impressive. Sylvan attacks Deep Ecology for being too vague: it is based on unsupported intuitions that actually permit anthropocentric biases to creep in. The problem is traced to the deep ecologist's avoidance of rational argument. There is an inconsistency between biospherical

egalitarianism and holism: all the parts of the ecosystem cannot have equal value if the system itself is to be protected. Deep Ecology tries to emphasize the importance of life--and distorts the concept by including as living entities such systems as "river"--but life should not be as important as the system of nature. Finally, the Deep Ecology goal of "self-realization" lends itself to a criterion of value based on experience, and perhaps conscious experience--self-direction. In sum, Sylvan argues that because of its vagueness, Deep Ecology claims to support many positions that actually undermine a real environmental perspective. (Katz, Bibl # 1)

Sylvan, Richard, "Gaeian Greenhouse, Nuclear Winter, and Anthropic Doomsday," Research Series in Unfashionable Philosophy, No. 4, 1990, Division of Philosophy and Law, Research School of Social Sciences, Australian National University, Canberra. Some provocative reflections, especially on the greenhouse effect. Possible responses rationally assessed, pessimism, skepticism, but Sylvan concludes: "From the angle of radical change, then, the impact of the Greenhouse problematique is far from entirely negative. For it may encourage or even force many more of us into thinking about and doing what should be done from a deep perspective anyway, such as rectifying recent heavy human impact upon environments, and beginning at once to put in place more environment-friendly arrangements and structures." No. 4 in this series includes two other papers by Sylvan, "As to the Purpose of the Universe," and "Illogic and Illusion in Biologic Evolution." Available from Department of Philosophy, Research School of Social Sciences, Australian National University, P. O. Box 4, Canberra, ACT 2600. (v1,#2)

Sylvan, Richard, "Paradigmatic Roots of Environmental Problems." Virtually all diagnoses of the roots and sources of environmental problems are defective, and hence the problems will not be adequately addressed. The roots of the problem are typically found in answers that do not question entrenched paradigms but seek to explain problems through defective practice, or in those that do look to entrenched paradigms, but are flawed by a monist concentration on a single paradigm, or a single narrow band of paradigms. Sylvan seeks a wider, more satisfactory answer. He disentangles in detail proposed and alleged sources of the problems; none of these answers is satisfactory. A different, more complex answer through broader classes of paradigms is investigated. One result is that philosophy portrayed through its standard history is dismal environmental news. Sylvan (d. 1996) was professor of philosophy, Research School of Social Sciences, Australian National University. (v5,#1)

Sylvan, Richard. See also Routley, Richard.

Sylvan, Richard. Obituaries: Grey, William, Bennett, David, Rawles, Kate, Holland, Alan, "Obituaries of Richard Sylvan," Environmental Values 5(1996):265-266. (EV)

Symanski, Richard, and Pickard, John. "Rules by Which We Judge One Another." Progress in Human Geography 20, no.2 (1996):175. (v7, #3)

Symanski, Richard. "Dances with Horses: Lessons from the Environmental Fringe." Conservation Biology 10, no.3 (1996): 708. (v7, #3)

Symstad, AJ; Chapin, FS; Wall, DH; Gross, KL; Huenneke, LF; Mittelbach, GG; Peters, DPC; Tilman, GD, "Long-Term and Large-Scale Perspectives on the Relationship between Biodiversity and Ecosystem Functioning", Bioscience 53(no.1, 2003):89-97.

Systematic works, Environmental ethics:

--Abram, David, The Spell of the Sensuous: Perception and Language in a More-than-Human World. New York: Pantheon Books, 1996.

--Attfield, Robin, The Ethics of Environmental Concern. Columbia University Press and Blackwell, Oxford, 1983. Second edition, University of Georgia Press, 1992.

- Attfield, Robin, Environmental Ethics: An Overview for the Twenty-First Century. Cambridge: Polity Press, 2003.
- Belshaw, Christopher, Environmental Philosophy: Reason, Nature and Human Concern. Chesham, Buckshire, UK: Acumen, 2001. Montreal: McGill-Queen's University Press, 2001.
- Brennan, Andrew, Thinking About Nature: An Investigation of Nature, Value and Ecology. London: Routledge, and Athens: University of Georgia Press, 1988.
- Callicott, J. Baird, In Defense of the Land Ethic. Albany: State University of New York Press, 1989.
- Callicott, J. Baird, Earth's Insights: A Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback. Berkeley: University of California Press, 1994.
- Clayton, Patti H., Connection on the Ice: Environmental Ethics in Theory and Practice. Philadelphia: Temple University Press, 1998.
- Deane-Drummond, Celia E., The Ethics of Nature. Oxford: Blackwell Publishing Co., 2004.
- Des Jardins, Joseph R., Environmental Ethics: An Introduction to Environmental Philosophy. First edition, Wadsworth, 1993. Second edition, Wadsworth, 1997. Third edition, Wadsworth/Thomson Learning, 2001.
- Devall, William, and Sessions, George, Deep Ecology. Peregrine Smith Books, 1985.
- Drengson, Alan R., Beyond Environmental Crisis: From Technocrat to Planetary Person. New York: Peter Lang Publishing Co., 1989.
- Fox, Warwick, Toward a Transpersonal Ecology: The Context, Influence, Meanings, and Distinctiveness of the Deep Ecology Approach to Ecophilosophy. Boston: Shambhala Publications, 1990.
- Hargrove, Eugene C., Foundations of Environmental Ethics. Englewood Cliffs, NJ.: Prentice-Hall, 1989.
- Johnson, Lawrence E., A Morally Deep World: An Essay on Moral Significance and Environmental Ethics. Cambridge: Cambridge University Press, 1991.
- Katz, Eric, Nature as Subject: Human Obligation and Natural Community. Lanham, MD: Roman and Littlefield, 1997.
- Kohák, Erazim, The Green Halo: A Bird's-Eye View of Ecological Ethics. Chicago: Open Court, 2000.
- Marietta, Don E., For People and the Planet: Holism and Humanism in Environmental Ethics. Philadelphia: Temple University Press, 1995.
- Matthews, Freya, The Ecological Self. Routledge, Barnes and Noble, 1991.
- McLaughlin, Andrew, Regarding Nature: Industrialism and Deep Ecology. Albany, NY: State University of New York Press, 1993.
- Naess, Arne, Ecology, Community, and Lifestyle: Outline of an Ecosophy. New York: Cambridge University Press, 1989. Translated and revised by David Rothenberg from Okologi, Samfunn, og Livsstil, published in Norwegian in 1976.
- Norton, Bryan G., Toward Unity Among Environmentalists. New York: Oxford University Press, 1991.
- Palmer, Clare, Environmental Ethics. Santa Barbara, California: ABC-CLIO, 1997 (P. O. Box 1911, Santa Barbara, CA 93116-1911). Especially good as basic resource guide to materials, chronology, principal figures, principal issues.
- Palmer, Clare, Environmental Ethics and Process Thinking. Oxford: Clarendon Press, Oxford University Press, 1998.
- Peacock, Kent, Living with the Earth: An Introduction to Environmental Philosophy. Toronto: Harcourt Brace Canada, 1996.
- Pojman, Louis P., Global Environmental Ethics. Mountain View, CA: Mayfield Publishing Co., 2000.
- Pratt, Vernon, with Howarth, Jane, and Brady, Emily, Environment and Philosophy. London and New York: Routledge, 2000.
- Rolston, III, Holmes, Conserving Natural Value. New York: Columbia University Press, 1994.
- Rolston, III, Holmes, Environmental Ethics. Philadelphia: Temple University Press, 1988.
- Sagoff, Mark, The Economy of the Earth: Philosophy, Law, and the Environment. New York: Cambridge University Press, 1988.

--Smith, Pamela, What Are They Saying About Environmental Ethics? Mahway, NJ: Paulist Press, 1997.
--Stone, Christopher F., Earth and Other Ethics. New York: Harper and Row, 1987.
--Sylvan, Richard, and Bennett, David, The Greening of Ethics: From Human Chauvinism to Deep-Green Theory. Tucson: University of Arizona Press; and Cambridge UK: White Horse Press, 1994.
--Taylor, Paul, Respect for Nature. Princeton: Princeton University Press, 1986.
--Wenz, Peter S., Environmental Justice. Albany: State University of New York Press, 1988.
--Wenz, Peter S., Environmental Ethics Today. New York: Oxford University Press, 2001.
--Westra, Laura, An Environmental Proposal for Ethics: The Principle of Integrity. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1994.
--end, systematic works.

Szarka, J., "The Politics of Bounded Innovation: 'New' Environmental Policy Instruments in France," Environmental Politics 12(no. 1, 2003): 93-114. (v 14, #3)

Szaro, Robert C., Johnston, David W. Biodiversity in Managed Landscapes: Theory and Practice. New York: Oxford University Press, 1996. 808pp. \$55. The scientific basis for understanding biodiversity, documenting with case examples of theory and concepts applied at differing scales. Examines policies that affect biodiversity conservation. (v8,#1)

Szasz, Andrew and Michael Meuser. "Unintended; Inexorable: The Production of Environmental Inequalities in Santa Clara, County, CA," American Behavioral Scientist 43(No.4, 2000). Environmental justice. (v.11,#1)

Szasz, Andrew, Ecopolitism: Toxic Waste and the Movement for Environmental Justice. Minneapolis: University of Minnesota Press, 1994. 232 pages. \$39.95; \$16.95 paper. A case study of how grass-roots movements reinvigorate politics. Traces the movement of toxic waste issues from "official" Washington policy to TV, popular consciousness, and then thousands of local, community-based groups. (v5,#2)

Szathmary, Eörs, Jordán, Ferenc, and Pál, Csaba, "Can Genes Explain Biological Complexity," Science 292(2001):1315-1316. The number of genes correlates poorly with complexity in plants and animals. An important further factor is the number of networks that can be established by transcription factors and the genes they regulate. Immune systems and brains are more complex than the genes that generate them. There may be a significant analogy to ecosystems, where the number of species is not the main consideration in complexity of ecosystems, but the number of connections between species. We need to distinguish between two forms of complexity: one measured by the number of genes and the other by the connectivity of gene regulation networks. The authors are in the Collegium Budapest (Institute for Advanced Study). (v.12,#2)

Sze, Julie. *Noxious New York: The Racial Politics of Urban Health and Environmental Justice*. Cambridge, MA: The MIT Press, 2006. Sze relies extensively on fieldwork and interviews with community members and activists to track urban planning and environmental health activism in Brooklyn's Sunset Park and Williamsburg sections, West Harlem, and the South Bronx in response to economic decay and a concentration of noxious incinerators, solid waste transfer stations, and power plants. The emergence of local campaigns organized around issues of asthma, energy systems, and garbage in the 1980s and 1990s is linked to the nineteenth century's sanitation movement and New York's history of garbage, sewage and sludge management.

Szerszynski, Bronislaw. Wallace Heim, and Claire Waterton, eds., Nature Performed: Environment, Culture and Performance. Oxford: Blackwell Publishing, 2003. Reviewed by Patrick Laviolette in Environmental Values 15(2005):536-539.

Szerszynski, Bronislaw. "Risk and Trust: The Performative Dimensionl." Environmental Values 8(1999):239-252. ABSTRACT: This paper will explore some of the implications of attending to the performative aspects of language for the sociological understanding of issues of risk and trust among lay communities. Ulrich Beck and Anthony Giddens have alerted us to the way that in late or reflexive modernity trust in authority cannot be taken for granted, but increasingly has to be actively earned and actively invested. For his part, Brian Wynne has pointed out that lay judgements are relational and hermeneutic, including as they do judgements about the behaviour of relevant expert institutions, and about the risk to one's self-identity incurred by being caught up in relationships of dependency. Wynne has also argued that public avowals of trust can often mask deep private distrust, and thus be expressions more of fatalistic acceptance than of genuine trust. However, all of these analyses work from a basic model of "trust" as being the result of a cognitive process - as a judgement as to the trustworthiness of others. Yet trust is frequently "active" in an even stronger sense than this. To take a posture of trust towards another can often be best understood not just as a cognitive judgement but as an attempt to bind the "trusted" into a relationship and attitude of responsibility - and thus perhaps to alter their behaviour - through the taking up of a position in a social ritual. Speech act theory can help us be sensitive to this sort of use of the language of "trust", by reminding us that language can perform a number of different functions - not just that of describing the world, or of acting out ascribed roles and identities, but also that of trying to change the world. The analysis of public discourse about risk, trust and mistrust must thus be sensitive to the range of things that people might be attempting to do when they are saying things if it is to avoid drawing misleading conclusions about public attitudes to risk. KEYWORDS: Risk, trust, lay knowledge, performativity, speech acts. Bronislaw Szerszynski, Centre for the Study of Environmental Change Lancaster University Lancaster LA1 4YT E-mail: bron@lancaster.ac.uk (EV)

Szerszynski, Bronislaw, "The Varieties of Ecological Piety" Worldviews: Environment, Culture, Religion, vol.1, no.1.

Sztybel, David, "Marxism and Animal Rights," Ethics and the Environment 2(1997):169-185. There is no doubt that Marx and Engels rejected animal rights. However, they did embrace the communist principle, "From each according to his abilities, to each according to his need." Furthermore, they acknowledge that nonhuman animals have needs. So the principle can enjoin us to respect animals' needs, even if they lack certain abilities (e.g., tool-making, perhaps even self-consciousness). I argue that it is essentially speciesist to restrict this principle to human beings, and that its acceptance implies either animal rights or a substantive equivalent. Marxism may have to undergo a profound dialectical transformation in light of the implications of its own maxim. Sztybel is completing a doctorate at the University of Toronto. (E&E)

Sztybel, David, "A Living Will Clause for Supporters of Animal Experimentation," Journal of Applied Philosophy 23 (no.2, May 2006): 173-189 (17).

Sztybel, David, "Can the Treatment of Animals Be Compared to the Holocaust?" Ethics and the Environment 11(2006):97-132. The treatment of animals and the Holocaust have been compared many times before, but never has a thoroughly detailed comparison been offered. A thirty-nine-point comparison can be constructed, whether or not one believes that animals are oppressed. The question of whether or not the comparison ought to be expressed merely brings into question whether animal liberationists have liberal-democratic rights to express themselves, which they surely do. Four objections are considered: Is the comparison offensive? Does the comparison trivialize what happened to the victims of the Nazis, overlook important differences, or ignore supposed affinities between animal liberationists and Nazis? These four lines of attack are shown to fail. The comparison stands to help us to reflect on the significance of how animals are treated in contemporary times. Sztybel finished a doctorate in animal rights ethics at the University of Toronto. (Eth&Env)

Sztybel, David. "Animal Rights: Autonomy and Redundancy." Even if animal liberation were to be adopted, would rights for animals be redundant - or even deleterious? Such an objection, most prominently voiced by L. W. Sumner and Paul W. Taylor, is misguided, risks an anthropocentric and anthropo-morphic conception of autonomy and freedom, overly agent-centered rights conceptions, and an overlooking of the likely harmful consequences of positing rights for humans but not for nonhuman animals. The objection in question also stems from an overly pessimistic construal of autonomy-infringements thought to result from extending rights to animals, and also, of confusions that supposedly may ensue from ascribing animal rights. Whether or not a case for animal liberation and/or animal rights can cogently be made, the redundancy-or-worse objection to animal rights need pose no barrier. Keywords: animal liberation, animals, anthropocentrism, anthropomorphism, autonomy, ethics, rights, utilitarianism. Sztybel is in the Philosophy Department, University of Toronto, Toronto, Ontario, Canada. (JAEE)

Tabarelli, M; Cardoso da Silva, JM; Gascon, C, "Forest fragmentation, synergisms and the impoverishment of neotropical forests", Biodiversity and Conservation 13 (no.7, 2004): 1419-1425(7).

Tabor, Joseph A. and Hutchinson, Charles F. "Using Indigenous, Knowledge, Remote Sensing and Sustainable Development," Indigenous Knowledge and Development Monitor (published by Ciran/NUFFIC in the Netherlands) 2(1)(1994): 1-6. The IK&D Monitor is an excellent source of information on people and projects in this area. For more information, contact Aake Tick (tick@nufficcs.nl) or write the editorial office: Centre for International Research and Advisory Networks (CIRAN)/NUFFIC, P.O. Box 29777, 2502 LT The Hague, The Netherlands. (v6,#4)

Tacey, David J. Edge of the Sacred: Transformation in Australia. North Blackburn, Victoria: HarperCollins Publishers, 1995. (v6,#3)

Taft, Oriane; Haig, Susan, "Importance of Wetland Landscape Structure to Shorebirds Wintering in an Agricultural Valley," Landscape Ecology 21 (no.2, February 2006): 169-184 (16).

Taiga-News: Newsletter on Boreal Forests is a newsletter that watches developments threatening, or protecting, boreal forests in both hemispheres. Contact Taiga Rescue Network, Ajtte, Box 116, S-962 23 Jokkmokk, Sweden. Phone: 46 (country code) 971 (city code) 17037. Fax: 12057. (v5,#3)

Tait, Malcolm, "Bessie and the Gaur," The Ecologist 30(no. 9, Dec. 1, 2000):46-47. A cow named Bessie was used in an attempt to clone a gaur, an endangered ox-like animal from Asia. Attempt failed. Cloning extinct or endangered animals is not the future of conservation--it is merely an excuse to carry on our destructive ways. (v.12,#2)

Taiwan Christian Ecological Center, Taipei. The Center produces a number of educational materials on environmental ethics, sustainable development, and Christian stewardship of creation. Recent materials interpret the proposed Earth Charter for Taiwan, and the Center was involved in the 2001 Asia Pacific Earth Charter conference in Brisbane, Australia. Another publication is on "Natural Aesthetics." The group sponsored the translation into Chinese of Dieter T. Hessel's After Nature's Revolt: Eco-justice and Theology (originally Fortress Press, 1992). Contact: Nancy Tzu-Mei Chen, Secretary General, 1F. # 3, Lane 269, Roosevelt Road Section 3, 106 Taipei, Taiwan. E-mail: tctcenvr@ms6.hinet.net. Fax 886-2-23699885.

Takacs, David, The Idea of Biodiversity. Philosophies of Paradise. Baltimore: Johns Hopkins University Press, 1996. Biodiversity as a social construct. "It is difficult to distinguish biodiversity, a socially constructed idea, from biodiversity, some concrete phenomena" (p. xv). "This book is about the dialectic between two natures: nature, the real world that surrounds us, and "nature," how we portray the world.

Or, rather, it is about the dialectic between biodiversity, the notional totality of life on this planet, and biodiversity, the term biologists have concocted as an approximation for that totality: a scientized synonym for nature, imbued with the values biologists cherish. The term biodiversity is only a decade old, but it stems from nature and wilderness, notions whose roots burrow deep into human history. In a rare opportunity to watch the conscious creation and dissemination of a new paradigm of our conceptions of nature, we are able to examine how and why biologists have concocted and promoted the word" (pp. 105-106).

The originator and chief advocate, and constructor, of biodiversity is E. O. Wilson. "Wilson is stitching together nothing less than a new 'natural' religion, with biodiversity as the icon of worship. He seeks to lead a corps of renaissance biologist acolytes in the mission to spread the new eco-gospel" (p. 310). Takacs interviewed some 40 biologist / advocate / constructors of biodiversity. He is convinced "biodiversity" is constructed, a new religion; but he halfway believes it himself, and he does want to respect and save nature. (v.13,#1)

Takacs, David. The Idea of Biodiversity: Philosophies of Paradise. Baltimore, Maryland: The Johns Hopkins University Press, 1996. 500pp. \$35.95. Takacs analyzes what biodiversity represents to the biologists who operate in broader society on its behalf, drawing on in-depth interviews with the scientists most active today in the mission to preserve biodiversity, including Peter Raven, Thomas Lovejoy, Jane Lubchenco, and Paul Ehrlich. He also looks at the work of twentieth-century forerunners of today's conservation biologists--Aldo Leopold, Charles Elton, Rachel Carson, David Ehrenfeld--and points out their contributions to the current debates. He takes readers to Costa Rica, where a group of scientists is using biodiversity to remake nature and society. An extended section profiles the thoughts and works of E.O. Wilson. (v8,#1)

Takacs, David. The Idea of Biodiversity: Philosophies of Paradise. Reviewed by Sterling H. Burnett, Environmental Ethics 20(1998):203-06.

Takeik, Milton, "Modernisation and its Lost Horizons," Environmental Politics (Summer 1997):173-. (v.8,#4)

Talbert, Cheryl; Marshall, David, "Plantation Productivity in the Douglas-Fir Region Under Intensive Silvicultural Practices: Results from Research and Operations," Journal of Forestry 103(no.2, March 2005):65-70(6).

Talbert, Matthew. "Contractualism and Our Duties to Nonhuman Animals." Environmental Ethics 28(2006):201-215. The influential account of contractualist moral theory offered recently by T. M. Scanlon in *What We Owe to Each Other* is not intended to account for all the various moral commitments that people have; it covers only a narrow—though important—range of properly moral concerns and claims. Scanlon focuses on what he calls the morality of right and wrong or, as he puts it in his title, what we owe to each other. The question arises as to whether nonhuman animals can be wronged in the narrow sense of a moral wrong with which contractualism is concerned. Can we owe things to nonhuman animals? Scanlon is sensitive to the importance of this question, but he ultimately favors an account in which the perspectives of nonhuman animals are not explicitly included in contractualist theorizing. Nevertheless, it appears that contractualism, largely as Scanlon conceives it, can accommodate duties to nonhuman animals. Moreover, if contractualism cannot make this accommodation, then its status as a theory that answers to important common-sense moral intuitions becomes questionable in ways that extend beyond its failure to live up to intuitions many share about the status of nonhuman animals. (EE)

Talberth, John. "State of the Southern Rockies: San Juan-Sangre de Cristo Bioregion." Wild Earth 9(No. 2, Summer 1999):68- . (v10,#4)

Talbot, Carl, Review of Fox, Warwick, "Towards a Transpersonal Ecology." Environmental Values Vol.1 No.2(1992):178.

Talbott, Steve, "A Conversation with Nature," The New Atlantis, No. 3, Fall 2003, pages 34-46. Between the extremes of ridding nature of all human influence and total management of nature, perhaps we humans can have a conversation with nature. "I would like to think that what all of us, preservationists and managers alike, are really trying to understand is how to conduct an ecological conversation. We cannot predict or control the exact course of a conversation, nor do we fall any such need-not, at least if we are looking for a good conversation. Revelations and surprises lend our exchanges much of their savor. We don't want predictability; we want respect, meaning coherence. A satisfying conversation is neither rigidly programmed nor chaotic, somewhere between perfect order and total surprise we look for a creative tension, a progressive and mutual deepening of insight, a sense that we are getting somewhere worthwhile." (p. 36). Talbott is a senior researcher at the Nature Institute. (v. 15, # 3)

Talbott, Steven. "The Language of Nature." *The New Atlantis* No. 16 (Winter 2007): 41-76. Nature "speaks," or has meaning to those who encounter it sensitively, but science has had a tendency to mechanize this nature and drain it of this meaning. Talbott is a researcher at the Nature Institute. E-mail: stevet@oreilly.com.

Talbott, Strobe, Engaging India: Diplomacy, Democracy, and the Bomb (Washington, DC, USA. Brookings Institution Press, 2004). Reviewed by Amitrajeet A. Batabyal, Journal of Agricultural and Environmental Ethics 18(2005):311-313. (JAEE)

Talhok, S. et al., "Patterns of floristic diversity in semi-natural coastal vegetation of Lebanon and implications for conservation," Biodiversity and Conservation 14(no.4, April 2005):903-915(13).

Taliaferro, Charles. "The Environmental Ethics of the Ideal Observer." Environmental Ethics 10(1988):233-50. The ideal observer theory provides a fruitful framework for doing environmental ethics. It is not homocentric, it can illuminate the relationship between religious and nonreligious ethics, and it has implications for normative environmental issues. I defend it against criticism raised by Thomas Carson and Jonathan Harrison. Taliaferro is in the philosophy department, St. Olaf's College, Northfield, MN. (EE)

Taliaferro, Charles. "Vices and Virtues in Religious Environmental Ethics." In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Tallacchini, Mariachiara, "A legal framework from ecology," Biology and Conservation 9(2000):1085-1098. Abstract. This paper proposes some legal principles for environmental protection as outlined from ecology. Such an environmental legal framework consists essentially of three criteria which deal (1) with ecological limits, (2) Gestalt and (3) uncertainty. These guidelines for an ecologically-oriented law are defined as normative because they show that there is a link between ecological descriptions and legal prescriptions. Key words: ecology, environmental normative principles, law. Tallacchini is in law, Dipartimento di Teoria e Storia de l Diritto, University of Florence, Italy. (v.13,#1)

Tallacchini, Mariachiara, ed., Etiche della terra: Antologia di filosofia dell' ambiente. Milan: Vita e Pensiera, 1998. 372 pages. An Italian anthology on environmental ethics. Contains:

--Barr, James, "Uomo e natura. La controversia ecologica e l'Antico Testamento (Man and Nature: The Ecological Controversy in the Old Testament)," 1972.

--Barbour, Ian G., "Ambienta e uomo (Environment and Man)," 1978.

--Attfield, Robin, "Gli atteggiamenti cristiani verso la natura (Christian Attitudes toward Nature," 1983.

--Leopold, Aldo, "L'etica della terra (The Land Ethic)," 1949.

--Naess, Arne, "Il movimento ecologico: ecologia superficiale ed ecologia profonda. Una sintesi (The Shallow and the Deep, Long-Range Ecology Movement)," 1973.

--Rolston, Holmes III, "Esiste un'etica ecologica? (Is There an Ecological Ethic?)," 1975.

--Sagoff, Mark, "La preservazione dell'ambiente naturale (On Preserving the Natural Environment)," 1974.

--Murdy, W.H., "L'antropocentrismo: una versione moderna (Anthropocentrism: A Modern Version)," 1975.

--Callicott, J. Baird, "La liberazione animale: una questione triangolare (Animal Liberation: A Triangular Affair)," 1980.

--Nuyen, A. Tuan, "Un'etica antropocentrica per gli animali e la natura (An Anthropocentric Ethic towards Animals and Nature)," 1981.

--Callicott, J. Baird, "Teoria non-antropocentrica del valore ed etica ambientale (Non-anthropocentric Value Theory and Environmental Ethics)," 1984.

--Sober, Elliot, "Problemi filosofici dell'ambientalismo (Philosophical Problems for Environmentalism)," 1986.

--Brown, Montague, "Il diritto naturale e l'ambiente (Natural Law and the Environment)," (1990).

--Rodman, John, "Quattro forme di coscienza ecologica. Una rivisitazione (Four Forms of Ecological Consciousness Reconsidered)," 1976.

--Wenz, Peter S., "Il pluralismo morale: minimo, moderato ed estremo (Minimal, Moderate, and Extreme Pluralism)," 1993.

--Ost, Francois, "Il giusto `milieu'. Una concezione dialettica del rapporto uomo-natura (Le juste milieu. Pour une approche dialectique du rapport homme-nature)," 1993.

Tallacchini is a researcher in philosophy of law at the University of Florence, Italy. (v.10,#1)

Tallacchini, Mariachiara, "Human Right to the Environment or Rights of Nature?" in Martin, Rex, and Sprenger, Gerhard, eds., Challenges to Law at the End of the 20th Century: Rights. Vol. I. Proceedings of the 17th World Congress of the International Association for Philosophy of Law and Social Philosophy (IVR), Bologna, June 16-21, 1995. Stuttgart: Franz Steiner Verlag, 1997. In English. The environment is a fairly recent object for law and rights. The need to place limits of human intervention in the environment has led to two opposing theories of rights: (1) the human right to the environment, which protects man from man in the exploitation of nature, and (2) the rights of nature, which protect nature from man. The environment as an object of a human right is the expression of the so-called third generation of human rights--whose reference-value is solidarity, "freedom together,"--and aims at defending human beings from environmental degradation produced by industrial development. The configuration of the rights of nature swings between extreme conceptions: a minimal one, which merely exploits the emphasis of the language of rights to refer to human duties; a maximal one, according to which "biorights" are "the rights of unique landscapes to remain untouched." The first considers subjective rights as a mere persuasive formula, the second leads to the contradictory consequence whereby the complete intactness of nature demands the disappearance of man and of law. But if the expression "rights of nature" is to have any meaning at all, the meaning is to be sought by excluding these two definitions. (v.8,#4)

Tallacchini, Mariachiara, Diritto per la natura: Ecologia e filosofia del diritto (Law for Nature: Ecology and Philosophy of Law). Torino: Giappichelli, 1996. 410 pages. ISBN 88-348-6139-6. Lire 40.000. Inadequate attention has so far been paid to philosophical reflection on the bases of environmental law, that is, on the conception of the relation between human beings and nature implicit in the growing legal concern with the environment. "Shallow" and "deep" ecophilosophies offer opposite ways of solving the tormented relationship between human beings and nature. Shallow ecologies, here called "environmentalist," hold an anthropocentric point of view and attribute to nature an instrumental value. Deep ecologies, here called "ecologist" philosophies, instead take an ecocentric point of view, that of the biosphere, and claim for nature an intrinsic value. "Environmentalisms" do not uphold great innovations

in the relationship with nature, only a cautious management of resources; "ecologisms" introduce an attempt to "think like a mountain" and so inspire human actions with the principle of non-interference in ecosystemic processes.

Italian laws on the environment appear as an inextricable entangling of not always consistent norms, due to the lack of a specific constitutional rule protecting the environment as a fundamental value. They reveal an attitude aimed more at repairing nature than preventing damage. European law consists almost of principles, and the original economic inspiration of the 1956 Rome treaties is difficult to reconcile with the ecological caring implicit in the Maastricht agreements. International law, lastly, appears torn between old principles, which still recognize single states as autonomous sovereign units and the new global reality, which makes of the Earth a single common home.

What are the links between positive law and environmental philosophies? Legal system risk failing in their intent to safeguard the environment unless they have a consistent sustainable attitude as a basis for decisions. From remote times, law has been responsible for environmental degradation, an anthropocentric ideology. After a critical examination of the new rights for the protection of the biosphere (human right to the environment, animal rights, nature's rights), the author outlines, with the idea of "law for nature," a legal framework for an adequate protection of nature. From the methodological point of view, there is the assumption of a systemic Gestalt in line with deep ecology. From the axiological point of view there is the adoption of a weak, humble anthropocentrism, in line with the most advanced approaches of shallow ecology. From this paradigm "ecological normativity" flows. Sustainable law "must" have three elements:

(1) Normativity of limits (law of limits). The finiteness of the world becomes the starting point from which to define the rights and the concrete basis for the goal of uncertainty.

(2) Normativity of uncertainty (law of uncertainty). The uncertainty of ecological forecasts produces the need for a precautionary approach (as, for example in the precautionary principle of the Rio Declaration).

(3) Normativity of Gestalt (the law of Gestalt). It is necessary to elaborate new legal concepts, because ecological entities cannot always be grasped by traditional legal tools.

Tallacchini is a researcher in philosophy of law at the University of Florence. Address: Dipartimento di Teoria e Storia del Diritto, Piazza Indipendenza 9, 50129 Firenze, Italia. Tel. 39-55-496533/496610. Fax 39-55-474756. E-mail: mctall@tsd.unifi.it (v.8,#4)

Tallacchini, Mariachiara. "A Legal Framework from Ecology," Biodiversity and Conservation 9(no. 8, 2000):1085-1098. Abstract. This paper proposes some legal principles for environmental protection as outlined from ecology. Such an environmental legal framework consists essentially of three criteria which deal (1) with ecological limits, (2) Gestalt, and (3) uncertainty. These guidelines for an ecologically-oriented law are defined as normative because they show that there is a link between ecological descriptions and legal prescriptions. Key words: ecology, environmental normative principles, law.

Tallacchini, Mariachiara. Diritto Per la Natura. Reviewed in Environmental Ethics 21(1999):101-103.

Tallmadge, John. "Saying You to the Land." Environmental Ethics 3(1981):351-63. In formulating the concept of a "land ethic," Aldo Leopold suggested that true conservation would begin when we enlarged our sense of community to include other organisms besides human beings. This cannot be done, I argue, until we begin viewing other beings in nature as worthy of existence on their own terms, rather than simply as means to human ends. I use Martin Buber's philosophy of dialogue, as expounded in "I and Thou", to shed light on the spiritual roots of our environmental crisis and show how we can appreciate beings in nature if we encounter them as persons rather than things. Applying Buber's concepts to the experiences of backpackers suggests that wilderness travel can help individuals develop habits of mind conducive to "I-You" relations, thereby enhancing our life with other people as well as with our natural environment. Tallmadge is in the department of English, Carleton College, Northfield, MN. (EE)

Tallmadge, John. Meeting the Tree of Life: A Teacher's Path. Salt Lake City: University of Utah Press, 1997. 220pp. \$44.95 cloth, \$18.95 paper. Tallmadge describes a young teacher's coming of age through wilderness adventures framed by the study of nature writing. His experiences in New England, Utah, Wyoming and Minnesota's canoe country help him discover what true teaching and personal survival really mean. (v8,#1)

Tam, CL, "Review of: The World and the Wild by David Rothenberg & Marta M. Ulvaeus, editors," Environments 30(no.2, 2002): 81-82.

Tamborra, Marialusia and Dino Pinelli. Review of Terry Barker and Jonathan Kohler, eds., International Competitiveness and Environmental Policies, Cheltenham: Edward Elgar, 1998, Environmental Values 10(2001):268. (EV)

Tamburrino, Antonio, Evoluzione Ambientale, Guiffre' Editore 1988, Libera Universita' Internazionale deli Studi Sociali, Roma, Italy. L. 36,000. 480 pages. Another Italian work bearing on environmental ethics. (v2,#1)

Tammemagi, Hans. The Waste Crisis: Landfills, Incinerators, and the Search for a Sustainable Future. New York: Oxford University Press, 1999. 288 pp. \$24. The magnitude and complexity of the waste management in North America, focusing on municipal wastes and placing them in the perspective of other wastes such as hazardous, biochemical, and radioactive debris. Also the components of an integrated waste management program, including recycling, composting, landfills, and waste incinerators, and the scientific and engineering principles underlying these technologies. (v.10,#3)

Tanaka, Atsushi. "Stakeholder analysis of river restoration activity for eight years in a river channel." Biodiversity and Conservation Vol. 15, no. 8 (2006): 2787-2811.

Tanaka, M., "Bridging The Gap Between Northern NGOs and Southern Sovereigns in the Trade-Environment Debate: The Pursuit of Democratic Dispute Settlements in the WTO Under the Rio Principles," Ecology Law Quarterly 30(no. 1, 2003): 113-222. (v 14, #3)

Tang Kuiyu & Ye Ping, "Progress in Green Education Practice and Research in China." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Tang, S. M., and Montgomery, D. R., "Forest Harvest Patterns and Landscape Disturbance Processes," Landscape Ecology 12(Dec. 1997):249-. (v.8,#4)

Tangley, Laura (and others), "The Growing Threat of Wildlife Disease," National Wildlife 41(no. 3, April/May 2003):37-44. West Nile virus, chronic wasting disease, and other diseases that threaten to move from wildlife to humans, often facilitated by crowding and modern means of travel.

Tangley, Laura, "How Many Species Exist," National Wildlife 37 (no. 1, December/January 1999):32-33. The question takes on increasing significance as plants and animals vanish before scientists can identify them. 1.7 million have been named. 13,000 more are named each year. Most of the unnamed ones are invertebrates. There are fewer than 200 scientists in the world who can name tropical beetles, a group that may account for one-third of all the species on Earth. Scientists are so much in the dark that estimates of the unknown invertebrates vary widely, from 3 to 5 to 10 billion species. (v.9,#4)

Tangley, Laura, "The Case of the Missing Migrants," Science 274(1996):1299-1300. Are new methods of cultivating coffee in Latin America bad for birds? Some researchers say that shift from shade to sun plantations is hastening the decline of songbirds. (v7,#4)

Tangley, Laura. "Ground Rules Emerge for Marine Bioprospectors." Bioscience 46, no.4 (1996): 245. Developers of natural products juggle potential profits and fairness. (v7, #3)

Tanke, Joseph J., "The Care of the Self and Environmental Politics: Towards a Foucaultian Account of Dietary Practice," *Ethics and the Environment* 12(no. 1, 2007):79-96. This essay appropriates the understanding of ethics developed by Michel Foucault in his courses at the College de France from 1980 until his death in 1984, with the aim of formulating a progressive environmental politics. As such, it attempts to navigate some of the long-standing divides between the movement for animal rights and environmental ethics proper, finding in the practice of vegetarianism a form of self-relation that is conducive to critical forms of speech and politics. The final phase of Foucault's work is replete with insights into how the care of the self can serve as a resistance to forms of power and political stasis. This paper presents these unpublished materials, allowing for a glimpse of the unknown Foucault, and reinterprets vegetarianism as a form of self-practice that is linked with truth and critical speech. Tanke is at Boston College, Boston.

Tannenbaum, J., Veterinary Ethics, 2nd ed., St. Louis: Mosby, 1995.

Tanner, A., "Book Review: People and Forests. Communities, Institutions and Governance. Edited by Clark C. Gibson, Margaret A. McKean, and Elinor Ostrom. MIT Press, Cambridge and London, 2000, 298pp. \$70.00. ISBN 0 262 07201 7," Human Ecology 32(no. 4, 2004): 525-529(5). (v.14, #4)

Tanner, Adrian, "Book Review of: People and Forests. Communities, Institutions and Governance. Edited by Clark C. Gibson, Margaret A. McKean, and Elinor Ostrom. MIT Press, Cambridge and London, 2000", Human Ecology 32(no.4, August 2004):525-529(5).

Tanner, Randy, "Inholdings within Wilderness: Legal Foundations, Problems, and Solutions," International Journal of Wilderness 8(no. 3, December 2002):9-14. Legislation varies but typically owners of inholdings have to be given "reasonable use and enjoyment" of their lands, though these uses are not to disturb the quality of or be incompatible with the surrounding wilderness. Owners are to be given "adequate access" (which may not be motorized access) or the government shall offer exchange of land of approximately equal value. Most of the debate turns on what access is adequate and whether the offer of exchange must be accepted in lieu of access. Condemnation on Western wilderness is possible, but requires an Act of Congress. Condemnation on Eastern wilderness is possible by agency action, but has never been used. A legal article, worth an ethical analysis. Tanner is a graduate student the University of Montana.

Tanner, Thomas, ed. Aldo Leopold: The Man and His Legacy. Reviewed in Environmental Ethics 10(1988):169-76.

Tanner, Thomas, ed., Aldo Leopold: The Man and His Legacy. Ankeny, Iowa: Soil Conservation Society of America, 1987.

Tanner, Thomas, ed., Aldo Leopold: The Man and His Legacy. Published in 1987, this book is still available from a somewhat atypical publisher and many interested in environmental ethics have probably neglected to obtain it. This volume resulted from an Aldo Leopold Centennial Celebration at Iowa State University. Contains 13 essays by Susan Flader, Baird Callicott, Roderick Nash, Curt Meine, Raymond Dasmann, Bruce Babbitt and others, and reminiscences by members of Leopold's family, Carl Leopold, Estella Leopold, Luna Leopold, Nina Leopold Bradley, and Frederic Leopold. Published by the Soil Conservation Society of America, 7515 Northeast Ankeny Road, Ankeny, Iowa 50021. \$ 10.00. Phone 515/289-2331 or 1-800-THE-SOIL. (v2,#2)

Tanner, William F., "'Planet Earth' or 'Land'?" Perspectives on Science and Christian Faith 49 (no. 2, June 1997):111-115. Ancient Greek and Hebrew words which are commonly translated as "earth" ("Earth") or "world" in the English Bible do not refer to the planet on which we live, but rather to "land," "country," "ground," "soil" or "dirt." The meaning of "all the Earth" is vastly different from "all the land." The concept of our home as a planet was not known until many centuries later. The discovery by geographers that the Earth is essentially a sphere is not closely related to the equally important discovery that it is one of the planets. Modern English dictionaries do not invariably make the necessary distinctions, in some instances even citing "earth" (without an initial capital E) as the name (identification) of our planet, although other planets, such as Venus, are identified with a capital initial letter. The result is linguistic confusion and ambiguity. Tanner is at Florida State University. (v8,#3)

Tannsjo (Tännsjö), Torbjörn, Understanding Ethics: An Introduction to Moral Theory. Edinburgh: Edinburgh University Press, 2003. Chapter 8 is on Environmental Ethics. Tännsjö is in philosophy, Stockholm University.

Tantillo, James, "Sport Hunting, Eudaimonia, and Tragic Wisdom," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):101-112. Anti-hunters frequently overlook or underestimate the positive values associated with reflective sport hunting. In this essay I characterize the value of hunting in the context of an Aristotelian virtue ethic. Sport hunting done for the purpose of recreation contributes heavily to the eudaimonia (flourishing) of hunters. I employ Aristotelian insights about tragedy to defend hunting as an activity especially well-suited for promoting a range of crucial intellectual and emotional virtues. Reflective sport hunters develop a "realistic awareness of death" and experience what may be called "tragic" pleasure, which yields the important intellectual virtue of tragic wisdom. Tantillo has just finished a Ph.D. on hunting ethics in the Department of Natural Resources, Cornell University. (v.13,#2)

Tarasofsky, Richard G., Towards a Mutually Supportive Relationship between the Convention on Biological Diversity and the World Trade Organization. Covelo, CA: Island Press, 2002.

Tardiff, Andrew, "A Catholic Case for Vegetarianism," Faith and Philosophy 15(1998):210-222. Very few Catholics become vegetarians for moral reasons, and virtually no one would expect them to since vegetarianism seems to go hand in hand with views which are incompatible with the Catholic faith. But the Catholic Church accepts principles--widely accepted by others, too--which imply a conditional, though broadly applicable, obligation to avoid killing animals for food. Catholic thinkers have not hitherto applied these principles to vegetarianism, but have long used them in other ways. The case is built on texts from St. Thomas Aquinas and the Catechism of the Catholic Church. Tardiff is at Rhode Island College. (v.9,#3)

Targ, Nicholas. "Water Law on the Public Lands: Facing a Fork in the River," Natural Resources & Environment 12(no.1,1997):14. (v8,#3)

Tarlock, A. Dan, "The Nonequilibrium Paradigm in Ecology and the Partial Unraveling of Environmental Law," Loyola of Los Angeles Law Review 27 (no. 3, 1994):1121- . To a large extent, science undergirds, shapes, and legitimizes environmental law; it enables us to identify problems and craft solutions. For the past twenty-five years, lawmakers have looked to the equilibrium paradigm--popularly called the balance of nature--as the foundation for a superstructure of environmental rules. But ecologists have rejected this paradigm and replaced it with a nonequilibrium paradigm. The basis for environmental law is unraveling. Analysis of the ideas behind each paradigm and the implications for environmental law. Environmental law should respond to this paradigm shift by creating a framework for continuous dialogue between scientists and public policy makers. (v.10,#2)

Tarlock, Dan. Review of Mark Sagoff, *The Economy of the Earth: Philosophy, Law, and the Environment*, 2nd ed. (Cambridge: Cambridge University Press, 2008). *Journal of Agricultural and Environmental Ethics* 21(2008):499-501.

Tarr, Joel. Explorations in Environmental History. Reviewed by John Opie. *Environmental Ethics* 22(2000):325-326.

Tarrant, MA; Cordell, HK; Green, GT, "PVF: A Scale to Measure Public Values of Forests," Journal of Forestry 101(no.6, 2003):24-30. (v.14, #4)

Tarrant, Michael A., H. Ken Cordell, and Gary T. Green, "PVF: A Scale to Measure Public Values of Forests," Journal of Forestry 101(no, 6, 2003):24-30. A 12-point scale for measuring the relative importance of national forest resources, both economic and noneconomic, to the American public. There are three latent factors: protection, amenity, and outputs. In surveys, protection values are significantly higher for women, urban residents, and younger respondents. Decisions that fail to include economic nonuse values in benefit-cost analyses may underestimate the total value of forest protection. Over the past 40 years, there has been a paradigm shift toward a more inclusive orientation that recognizes both economic and noneconomic values. Tarrant is in forest resources, University of Georgia, Athens. Cordell and Green are with the USDA Forest Service, Southern Research Station, Athens, GA.

Tarrant, Michael A., and H. Ken Cordell, "Amenity Values of Public and Private Forests: Examining the Value-Attitude Relationship," Environmental Management 30(no. 5, 2002):692-703. Public values toward forests have changed since the late 1980s from a commodity-oriented perspective toward a more inclusive (commodity and non-commodity) orientation. The authors use a survey involving wood production (a utilitarian value), clean air (a life support value), scenic beauty (an aesthetic value), and heritage (a spiritual value). They survey over five hundred persons of differing ages, ethnic backgrounds, and deal with both public and private forests. Tarrant is in the School of Forest Resources, University of Georgia, Athens. Cordell is with the U.S. Forest Service, Southern Research Station, Athens, GA.

Tarrant, Michael A., Glenn E. Haas, and Manfredo, Michael J. "Factors Affecting Visitor Evaluations of Aircraft Overflights of Wilderness Areas." Society & Natural Resources 8 (no. 4, July 1995):351- . (v6,#3)

Tatum, Jesse Seaton, Review of: Frederick Ferré, ed., Research in Science and Technology, *Environmental Ethics* 16(1994):107-109.

Tauber, Alfred I. Review of Thoreau's Living Ethics: Walden and the Pursuit of Virtue. By Philip Cafaro. *Environmental Ethics* 27 (2005):441-444.

Tausch, Robin J., Peter E. Wigand, and J. Wayne Burkhardt, "Viewpoint: Plant Community Thresholds, Multiple Steady States, and Multiple Successional Pathways: Legacy of the Quaternary?," Journal of Range Management 46(1993):439-447. Ecological theory that has been the basis of vegetation management for most of this century is now being questioned. The legacy of Quaternary climate change is that plant communities are far less stable than they appear to be from our perspective (at least in the U.S. West). They are unique at each location, difficult to define, and communities that are relics from a previous environment can be sensitive to small or transient environmental changes. Many ecological principles and concepts, and ecosystem paradigms derived from them, require revision to incorporate this variation. Plants adapt to climate change as much by migrating as by genetic adaptation. In ecosystems, various plants are entering and leaving at various times. Many ecosystems have no one steady state, many can follow multiple successional pathways, often depending on small changes at threshold points. This calls for more hands on management and more managerial decisions about the routes preferred, since

there is no one natural state to be preferred. Tausch is at the US Forest Service Intermountain Research Station, Reno, Nevada, and Wigand and Burkhardt are at the University of Nevada. (v5,#4)

Tauson, Ragnar, "Research Approaches for Improving the Physical Welfare and Environment of Laying Hens", Journal of Agricultural and Environmental Ethics 6(1993), Supplement. Introductory studies at the Funbo-Lvsta Research Station, which included detailed observations of laying hens in commercial cages of different designs, revealed that there were large differences in cages with respect to bird welfare. Some findings were quite striking and had not been reported earlier, e.g. concerning plumage condition, foot health, frequency of trapped hens and neck skin atheroma. After discussion of the results with the manufacturers involved, a series of subsequent trials with modified as well as completely new cages was conducted which resulted in significant improvements in the welfare traits mentioned and often also improved the economics of egg production. The studies increased concern and awareness among most participating manufacturers and considerably affected cage design in many European countries. This development was followed by other additional design innovations studied on a small scale, e.g. the introduction of claw abrasive tapes and perches. In Sweden several of the findings have influenced subsequent animal welfare legislation, and recommendations based on the findings have also been proposed in other countries. A similar approach has been used in developing alternative systems like aviaries. In many respects the results reveal similar problems but of another character, and in particular involve foot health and trapping of hens. Because of the structure and large group sizes in the aviaries studied, the relative speed of development is considerably reduced as compared to cages. Due to the conditions required for alternative systems in Sweden by the Agricultural Committee, it seems that multiple-tiered aviary-like systems will require considerable research before they can become approved and accepted. This is due to factors such as the working environment with its very high content of respirable dust and unsuitable ergonomics, erratic outbreaks of feather pecking and cannibalism, the need for medication against endo-and-ecto-parasites and hence the question of residuals in the eggs, and generally low predictability. Tauson is in the Department of Animal Nutrition and Management, Swedish University of Agricultural Sciences, Funbo-Lövsta Research Station, 755 97 Uppsala Sweden.

Taylor, Angus, Animals and Ethics: An Overview of the Philosophical Debate Guelph, Ontario: Broadview Press, 2003. Traces the background of these debates from Aristotle to Darwin, and he provides fair-minded commentaries on the positions of such influential and contemporary philosophers as Peter Singer, Tom Regan, R.G. Frey, and Peter Carruthers. Discussions of virtue ethics and Rawlsian contractarianism. A previous edition of this book appeared under the title Magpies, Monkeys, and Morals.

Taylor, Angus, Magpies, Monkeys, and Morals: What Philosophers Say about Animal Liberation. Peterborough, Ont, Canada: Broadview Press, 1999. 167 pages. \$ 15. 1. Animals and the moral community. 2. From Aristotle to Darwin. 3. Do animals have moral rights? 4. Is it wrong to eat or hunt animals? 5. Is it wrong to use animals for scientific research? 6. Can liberationists be environmentalists? Taylor teaches philosophy at the University of Victoria in British Columbia. (v.10,#2)

Taylor, Angus, "Animal Rights and Human Needs," Environmental Ethics 18(1996):249-264. The idea that animal rights can be married to environmental ethics is still a minority opinion. The land ethic of Aldo Leopold, as interpreted by J. Baird Callicott, remains fundamentally at odds with the ascription of substantial rights to (nonhuman) animals. Similarly, Laura Westra's notion of 'respectful hostility,' which attempts to reconcile a holistic environmental ethic with 'respect' for animals, has no place for animal rights. In this paper, I argue that only by ascribing rights to sentient animals can an environmental ethic avoid an unacceptable degree of anthropocentrism because only a rights-based environmental ethic can prohibit humans from significantly interfering with sentient animals when human vital needs are not at stake. A rights view that permits significant interference when it is required for the satisfaction of human vital needs avoids problems that otherwise plague a rights view. The 'vital-needs rights view' reconciles the rights of animals with the satisfaction of human vital needs—including the vital need to have a

flourishing natural environment—suggesting a possible alliance between animal rights and deep ecology and revealing the connections among vital needs, capitalism, and environmental degradation. Taylor is in philosophy, University of Victoria, B.C. (EE)

Taylor, Bob Pepperman, Review of Matthew Humphrey, *Ecological Politics and Democratic Theory*,” *Environmental Values* 16(2007):399-401.

Taylor, Bob Pepperman. "John Dewey and Environmental Thought." Environmental Ethics 12(1990):175-84. In response to Chaloupka's discussion of Dewey's "social aesthetics," I argue, first, that Chaloupka has failed to fully appreciate the democratic, political foundation of Dewey's aesthetic sensibility and, second, that his description of Dewey's naturalism is ambiguous and misleading. I conclude that Dewey does have things to say to environmental thinkers, but that his views regarding environmental issues are much less unique than Chaloupka suggests. His work stands more as a democratic challenge to environmentalists than as a guide for their thought. Taylor is in the department of Political Science, University of Vermont, Burlington, VT. (EE)

Taylor, Brad W., and Rebecca E. Irwin, "Linking Economic Activities to the Distribution of Exotic Plants," Proceedings of the National Academy of Sciences of the United States of America (PNAS) 101(no. 51, December 21, 2004):17725-17730. In a study of several hundred exotic plants to try to establish a pattern of their establishment, the strongest predictor for why aliens are where they are is real estate activity. Taylor is in zoology, University of Wyoming, Laramie; Irwin is in ecology, University of Georgia, Athens.

Taylor, Bron, "Diggers, Wolves, Ents, Elves and Expanding Universes: Bricolage, Religion, and Violence from Earth First! and the Earth Liberation Front to the Anti-Globalization Resistance," in The Cultic Milieu Oppositional Subcultures in an Age of Globalization. Eds. Jeffrey Kaplan and Heléne Lööw (Altimura, 2002), 26-74. (v. 15, # 3)

Taylor, Bron Raymond, ed. Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism. Reviewed in Environmental Ethics 21(1999):97-100.

Taylor, Bron, "Battling Religions in Parks and Forest Reserves: Facing Religion in Conflicts Over Protected Places" (with Joel Geffen), in Full Value of Parks and Protected Areas: From Economics to the Intangible, eds. D. Harmon & Allen Putney. (Rowman and Littlefield, 2003), 281-94. Republished in The George Wright Forum 21 (2):56-68. (v. 15, # 3)

Taylor, Bron, ed. Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism. Albany: State University of New York Press, 1995. \$19.95 pb. ISBN 0-7914-2646-7. To order, contact: CUP Services, POB 6525, Ithaca, NY 14851; 800-666-2211.

Ecological resistance movements are proliferating around the world. Some are explicitly radical in their tactics while others have emerged from a variety of social movements that, in response to environmental deterioration, have taken up ecological sustainability as a central objective. This book brings together a team of international scholars to examine contemporary movements of ecological resistance. The first four sections focus on the Americas, Asia and the Pacific, Africa, and Europe, and the book concludes with a selection of articles that address the philosophical and moral issues these movements pose, assess the trends found among them, and evaluate their impacts and prospects.

Contents: Introduction: "The global emergence of popular Ecological Resistance," Bron Taylor; "Earth First! and global narratives of popular ecological resistance," Bron Taylor; "With liberty and environmental justice for all: the emergence and challenge of grassroots environmentalism," Bob Edwards; "Bread and soil of our dreams: women, the environment and sustainable development--case studies from Central America," Lois Lorentzen; "Profits, parrots, peons: ethical perplexities in the

Amazon," Heidi Hadsell; "International native resistance to the new resource wars," Al Gedicks; "Visitors to the commons: approaching Thailand's "environmental struggles from a Western starting point," Larry Lohmann; "Grassroots environmental resistance in India," Vikram K. Akula; "Popular environmentalists in the Philippines: people's claims to natural resources," Emma Porio and Bron Taylor; "Grassroots resistance to dominant land-use patterns in Southern Africa," Yash Tandon; "Luta, livelihood and lifeworld in contemporary Africa," Ben Wisner; "Have a friend for lunch: Norwegian radical ecology versus tradition," David Rothenberg; "Between moderation and marginalization: environmental radicalism in Britain," Wolfgang Rudig; "Popular resistance and the emergence of radical environmentalism in Scotland," Brendan Hill, Rachel Freeman, Steve Blamires, and Alistair McIntosh; "Postmodern environmentalism: a critique of deep ecology," Jerry A. Stark; "In search of Gaian politics: earth religion's challenge to modern western civilization," Daniel Deudney; "In defense of banner hangers: the dark green politics of Greenpeace," Paul Wapner; "The effectiveness of radical environmentalists," Sheldon Kamieniecki, S. Dulaine Coleman, Robert O. Vos; "Popular ecological resistance and radical environmentalism," Bron Taylor.

Bron Taylor is Director of Environmental Studies at the University of Wisconsin-Oshkosh. Address: c/o Dept. of Religious Studies and Anthropology, Oshkosh, WI 54901. PH/FAX 414-235-7478, 414-424-7183 Office, Office FAX 414-424-0882; E mail: taylor@vaxa.cis.uwosh.edu. (v6,#4)

Taylor, Bron, "Threat Assessments and Radical Environmentalism," Terrorism and Political Violence 15(no. 4, 2003):1-10. (v. 15, # 3)

Taylor, Bron, "Revisiting Ecoterrorism" in Religionen im Konflikt. Eds. Vasilios N. Makrides and Jörg Rüpke. (Münster: Aschendorff, 2004), 237-248. (v. 15, # 3)

Taylor, Bron R., "Evoking the Ecological Self," Peace Review 5(1993):225-230. Three function of the arts in the deep ecology movement: (1) evoking ecological consciousness, (2) calling forth and empowering ecological activists, and (3) a tool for ecological resistance. Taylor teaches religion and social ethics at the University of Wisconsin, Oshkosh and is currently writing Once and Future Primitive: The Spiritual Politics of the Deep Ecology Movement (Beacon Press). (v4,#3)

Taylor, Bron, ed., Encyclopedia of Religion and Nature, 2 vols. Continuum, 2005. The introduction, early reviews, sample entries (including a religion focused "Environmental Ethics" entry by the volume's editor) and other information, are available online. This work is chronologically, geographically, and theoretically comprehensive, with 1000 entries from 520 contributors, including many ISEE members. Extensive information about this and related volumes is available at: <http://www.religionandnature.com>. Taylor is in the Graduate Program in Religion and Nature, Department of Religion, University of Florida.

Taylor, Bron R., ed., Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism. Albany: State University of New York Press, 1995. 288 pages. \$ 59.50. Popular ecological resistance movements around the world, and the continuities these have with earlier forms of social resistance. The philosophical and moral issues these movements pose. Taylor directs environmental studies, University of Wisconsin. (v6,#4)

A review and exchange on this book is Bill Devall, "How Radical and How Deep the Resistance," The Trumpeter 12, no. 4 (Fall 1995):201-203. Reply by Taylor, "Ecological Resistance Movements: Not Always Deep but if Deep, Religious: Rely to Devall," The Trumpeter 13, no. 2 (Spring 1996):98-103. Counterreply by Devall, "Respose to Bron Taylor's Criticisms of my Review of Ecological Resistance Movements," The Trumpeter 13, no. 3 (Summer 1996):147-150.

Taylor, Bron Raymond, ed. Encyclopedia of Religion and Nature. New York: Continuum International Publishing Group, 2008.

Taylor, Bron. "A Green Future for Religion?" Futures Journal (Special Issue, ed. William Bainbridge) 36(no.9, 2004):991-1008. (v. 15, # 3)

Taylor, Bron. Review of Earth First! and the Anti-Roads Movement: Radical Environmentalism and Comparative Social Movements. By Derek Wall. Environmental Ethics 23(2001):87-90. (EE)

Taylor, Bron. "Earth First! Fights Back." Terra Nova 2, no. 2 (Spring 1997): 27-41. Examines the recent escalation of direct action resistance to logging, focusing on the campaigns at Cove-Mallard, Idaho, and Warner Creek, Oregon. Argues that given the record of government lawlessness in its administration of biodiversity-related environmental law, direct action resistance is morally justifiable and yet, grassroots activists must also redouble efforts to defend and strengthen environmental laws and increase citizen vigilance with regard to them. This latter endeavor is essential if activists are to force the government to employ the best science in its decision making and comply with its own statutory obligations. (v8,#2)

Taylor, Bron. "Earthen Spirituality or Cultural Genocide? Radical Environmentalism's Appropriation of Native American Spirituality." Religion 27 (1997): 183-215. The appropriation by non-Indians of Native American religious practices has become a highly contentious phenomenon. The present analysis focuses on the controversy as it has unfolded within the 'Deep Ecology' or 'Radical Environmental' Movement in North America. Taking as its central case study Earth First!, the radical vanguard of this movement, it describes the diverse forms such borrowing takes, the plural American Indian and non-Indian views shaping the ensuing controversy, and the threats this controversy poses to a nascent and fragile Indigenous-Environmentalist alliance. Concluding reflections address the ethics of appropriation with the aim of reducing the tensions attending these phenomena. (v8,#2)

Taylor, Bron. "Focus Introduction: Aquatic Nature Religion." *Journal of the American Academy of Religion* Vol. 75, no. 4 (2007): 864-74. Outdoor adventure and other recreational practices can express, evoke, and reinforce religious perceptions and orientations to natural and social worlds. Some participants in them understand nature itself to be sacred in some way and believe that facilitating human connections to nature is the most important aspect of their chosen practice. Such activities can be construed by scholars as "nature religion," and profitably analyzed by comparing characteristics commonly associated with religion to the beliefs and practices of participants engaged in these activities. Three case studies examined are surfing, fly-fishing, and whitewater kayaking.

Taylor, C. C. W. (Christopher Charles Whiston), Ethics and the Environment. Oxford, UK: Corpus Christi College, 1992. 97 pp., paper. Proceedings of a conference held at Corpus Christi College, Oxford, September 20-21, 1991. F. A. Osborn, "Environmental Policy Making--The Ethical Dimension"; Sir Christopher Harding, "The Social Responsibility of the Nuclear Industry"; R. M. Hare, "What Are Cities For? The Ethics of Urban Planning"; Bernard Williams, "Must a Concern for the Environment Be Centered on Human Beings?"; Bryan Gould, M. P., "Questions the Politicians Should Answer"; John Haldane, "Philosophy and the Ethics of the Environment"; P. E. Hodgson, "Nuclear Power and the Environment"; Robin Attfield, "Claims, Interests and Environmental Concerns--A Response to Professor Williams." (v4,#3)

Taylor, CE, "Genetic Deterioration in Threatened and Endangered Species," Conservation Biology 17(no.5, 2003):1468-1469. (v.14, #4)

Taylor, D. E., "Blacks and the Environment: Toward Explanation of the Concern and Action Gap between Black and Whites." Environment and Behavior 21(1989):175-205.

Taylor, David A. "Saving the Forest for the Trees: Alternative Products from Woodlands," Environment 39(no. 1, 1997):6. Local communities around the world have begun to develop markets for a diverse

array of products from fruit to insecticides to cloth that make preserving rather than logging forests the priority. (v8,#1)

Taylor, Dorceta, "Blacks and the Environment," Environment and Behavior 21(1989):204-222. (v8,#3)

Taylor, Dorceta. "The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses," American Behavioral Scientist 43(No.4, 2000). (v.11,#1)

Taylor, Doreceta E., *Diversity in Environmental Institutions: Summary Results of the MELDI Studies*. Ann Arbor, MI: University of Michigan School of Natural Resources and Environment, August 2005. A study of the Minority Environmental Leadership Development Institute (MELDI). 23 page booklet. www.umich.edu/meldi Ethnic diversity in the environmental field. A 1990 poll of the largest environmental nonprofits found that only 14 (1.9%) of the 745 workers of the Audubon Society, Friends of the Earth, Natural Resources Defense Council, and Sierra Club were minorities. A 2002 report that examined diversity in 61 organizations in the Natural Resources council of America found that 11.5% of the 6,347 staff and 9.6% of the 1,324 board members of these organizations were minorities. Many question whether minorities have the similar levels of concern for the environment as whites. A study of these issues.

Taylor, Ericka. "The Undergraduate Experience-Exploration in Human Ecology." Human Ecology Forum 24 (Winter 1996): 5. The college is distinguished by its community contacts, extension programs, and land-grant mission to the state. New students are introduced to these and other aspects of the college through an expanded orientation program. (v7, #3)

Taylor, Estelle. "Native Trees," Alternatives 24(no.3, 1998):4. Court decisions recognize aboriginal title to Canadian forests. (v.9,#4)

Taylor, Estelle. "Fishing for Control," Alternatives 24(no. 2, spring 1998):7- . Former enemies join forces as BC coastal communities seek to manage their own fisheries. (v9,#2)

Taylor, G., and B. Flynn, "It's Green, but is it of a Light Enough Hue? Past Performance, Present Success and the Future of the Irish Greens," Environmental Politics 12(no. 1, 2003): 225-232. (v 14, #3)

Taylor, J. Edward, and Adelman, Irma. Village Economics: The Design, Estimation, and Use of Villagewide Economic Models. New York: Cambridge University Press, 1996. 250 pages. \$49.95 cloth. A new generation of villagewide economic modeling designed to capture relevant interactions when assessing the impacts of policy, market and environmental changes on rural economics in less-developed countries. (v7, #3)

Taylor, J. E., "Review of: Margaret Beattie Bogue, Fishing the Great Lakes: An Environmental History," Environmental History 6(no.4, 2001): 639. (v.13,#2)

Taylor, Jane, Lawson, Andrew. The English Garden Cottage. London: Orion of Weidenfeld and Nicolson, 1994 (distributed by Trafalgar Square, North Promfet, VT 05053; 800 423 4525). Prowling through the countryside, photographer Lawson catches infinite variations of the endearing style of cottage gardens-- clematis in cascades, grappling roses, walkways massed with medleys of color. Author Taylor finds the wisdom at work in this calculated riot, and how it all evolved from medieval herbs through imported wonders brought down from the big house. England grew more salad greens in the 16th century than in the 20th, and that red flowers planted near the house kept the devil away. Like old cottage walls, the lore of their gardens has layers. (v7,#1)

Taylor, Kenny, Review of Keiter, Robert B. and Mark S. Royce, eds., The Greater Yellowstone Ecosystem. Environmental Values Vol.2 No.1(1993):88.

Taylor, Marion. "Natural Heritage on Ontario: Setting the Record Straight", Environments 24(no. 1, 1996):57.

Taylor, Martin F.J.; Suckling, Kieran F.; Rachlinski, Jeffrey J., "The Effectiveness of the Endangered Species Act: A Quantitative Analysis," BioScience 55(no.4, April 2005):360-368(9). Population trends for 1095 species listed as threatened and endangered under the Endangered Species Act were correlated with the length of time the species were listed and the presence or absence of critical habitat and recovery plans. Species with critical habitat for two or more years were more than twice as likely to have an improving population trend in the late 19= 90s, and less than half as likely to be declining in the early 1990s, as species without. Species with dedicated recovery plans for two or more years were significantly more likely to be improving and less likely to be declining than species without. The proportion of species improving increased, and the proportion declining decreased, with increasing time listed throughou= t the 1990s, irrespective of critical habitat and recovery plans. On the basis of these results, we recommend increased funding for earlier listing of imperiled species and prompt provision of critical habitat and recovery plans.

Taylor, P. An Ecological Approach to International Law: Responding to Challenges of Climate Change. Andover: Routledge, 1998. Review by Simon Sneddon, Environmental Values 10(2001):127. (EV)

Taylor, Paul, "In Defense of Biocentrism," Environmental Ethics 5(1983):237-243. Taylor is a leading proponent of the "biocentric" outlook on moral valuation of nature: all natural entities have an equal inherent worth. Here he answers some criticisms of his view. Of particular interest is his distinguishing the content of the theory from both its practical significance and its psychological motivations. But he also admits that respect for individuals is not truly "ecological " and that the killing of natural entities is sometimes permissible. Thus the theory does not seem to be a proper basis of environmental protection. (Katz, Bibl # 1)

Taylor, Paul W. Respect for Nature. Reviewed in Environmental Ethics 9(1987):261-67.

Taylor, Paul W., "Frankena on Environmental Ethics," Monist 64(no. 3, July 1981):313-324.

Taylor, Paul W. "In Defense of Biocentrism." Environmental Ethics 5(1983):237-43. Gene Spitzer has raised certain objections to my views on the biocentric outlook: (1) that a factual error is involved in the assertion that organisms pursue their own good, (2) that there is an inconsistency in the biocentric outlook, (3) that it is impossible for anyone to adopt that outlook, and (4) that the outlook entails unacceptable moral judgments, for example, that killing insects and wildflowers is as morally reprehensible as killing humans. I reply to each of these points, showing that the biocentric outlook on nature is not only a possible, but also a reasonable world view. Taylor is in the philosophy department, Brooklyn College of the City University of New York, Brooklyn, NY. (EE)

Taylor, Paul W., Respect for Nature: A Theory of Environmental Ethics. Princeton: Princeton University Press, 1986. Pp. ix, 329. This book is essential reading: it is the first book-length treatment of environmental ethics from the perspective of non-anthropocentric "intrinsic" natural value (although Taylor rejects this terminology). Taylor's position is not new or surprising, since he has been developing it in a series of articles in Environmental Ethics since 1981; nevertheless, this long treatment of the argument adds to the power of his views. The argument grounds a precise set of normative rules regarding the human treatment of nature on a particular axiology of natural value. Taylor's "theory of environmental ethics" has three components: First, there is a belief system or world view, which he calls

the "biocentric outlook on nature." A moral agent who holds this outlook is informed by current biological and ecological knowledge to conceive of himself and all humanity as members of "Earth's Community of Life." From this perspective, all living things are "unified systems of organized activity" that seek their own good. The biocentric outlook also denies human superiority; in theory, at least, it calls for a radical bioegalitarianism. Second, those who hold the biocentric outlook will adopt a particular moral attitude, "Respect for Nature," which involves valuing the individual natural living entities of the world as having inherent worth, i.e., value not based in any way on human purposes or experiences. Third, then, this attitude of respect for nature requires the formation of definite normative standards or rules for treating the natural wildlife of the world. Among these rules are the rule of nonmaleficence and noninterference.

Taylor is attempting to create an environmental ethic modelled after Kant's respect for persons; the difference is that natural wildlife takes the place of Kantian rational autonomous agents as the foci of moral value. This parallel between environmental ethics and human-centered ethics adds plausibility to the enterprise; yet the symmetry must fail, and does. Although Taylor denies human superiority, he devotes the entire last chapter to a discussion of conflicts between humans and wildlife which pays only lip service to a true bioegalitarianism. For Taylor, it is permissible for humans to sacrifice basic interests of nonhuman wildlife for the sake of nonbasic human interests, when "the human interests involved are so important that rational and factually informed people who have genuine respect for nature are not willing to relinquish the pursuit of those interests even when they take into account the undesirable consequences for wildlife" (p. 280). So much for the denial of human superiority! Taylor's theory fails-falls into contradiction-because of its individualism. A moral attitude which respects all living things must degenerate into an exceedingly complex casuistry, usually to the detriment of the natural environment. A successful environmental ethic will find value in nature as a whole, not merely in the individuals that comprise natural systems. Contains a good, but limited, bibliography. (Katz, Bibl # 1)

Taylor, Paul, "Are Humans Superior to Animals and Plants," Environmental Ethics 6(1984):149--160. An answer to the criticisms of Lombardi (see 1983). (Katz, Bibl # 1)

Taylor, Paul W. "Are Humans Superior to Animals and Plants?" Environmental Ethics 6(1984):149-60. Louis G. Lombardi's arguments in support of the claim that humans have greater inherent worth than other living things provide a clear account of how it is possible to conceive of the relation between humans and nonhumans in this way. Upon examining his arguments, however, it seems that he does not succeed in establishing any reason to believe that humans actually do have greater inherent worth than animals and plants. Taylor is in the philosophy department, Brooklyn College of the City University of New York, Brooklyn, NY. (EE)

Taylor, Paul W. "The Ethics of Respect for Nature." Environmental Ethics 3(1981):197-218. I present the foundational structure for a life-centered theory of environmental ethics. The structure consists of three interrelated components. First is the adopting of a certain ultimate moral attitude toward nature, which I call "respect for nature." Second is a belief system that constitutes a way of conceiving of the natural world and of our place in it. This belief system underlies and supports the attitude in a way that makes it an appropriate attitude to take toward the Earth's natural ecosystems and their life communities. Third is a system of moral rules and standards for guiding our treatment of those ecosystems and life communities, a set of normative principles which give concrete embodiment or expression to the attitude of respect for nature. The theory set forth and defended here is, I hold, structurally symmetrical with a theory of human ethics based on the principle of respect for persons. Taylor is in the philosophy department, Brooklyn College of the City University of New York, Brooklyn, NY. (EE)

Taylor, Peter J., and Buttler, Frederick H., "How Do We Know We Have Global Environmental Problems? Science and the Globalization of Environmental Discourse," Geoforum (UK) 23(no. 3, 1992):405-416. Science has a central role in shaping what count as environmental problems. This has

been evident most recently in the success of planetary science and environmental activism in stimulating awareness and discussion of global environmental problems. We advance three propositions about the special relationship between environmental science and politics: (1) in the formulation of science, not just in its application, certain courses of action are facilitated over others; (2) in global environmental discourse, moral and technocratic views of social action have been privileged; and (3) global environmental change, as science and movement ideology, is vulnerable to deconstructive pressures. These stem from different nations and differentiated social groups within nations having different interests in causing and alleviating environmental problems. We develop these propositions through a reconstruction of The Limits to Growth study of the early 1970's, make extensions to current studies of the human/social impacts of climate change, and review current sources of opposition to global and political formulations of environmental issues. Taylor is in science and technology studies, Cornell University, Ithaca; Buttel is in rural sociology, University of Wisconsin, Madison. (v.10,#1)

Taylor, Ricky, The Greater St Lucia Wetland Park. Durban: Natal Parks Board, 1991. ISBN 0 949939 70 6. 48 pages. Interpreting conservation opportunities and issues at this park on the Natal coast. (v6,#3)

Taylor, Sarah McFarland. *Green Sisters: A Spiritual Ecology*. Cambridge, MA: Harvard University Press, 2007. Green sisters are environmentally active Catholic nuns who are working to heal the earth as they cultivate new forms of religious culture. Taylor gives a firsthand understanding of the practice and experience of women whose lives bring together Catholicism and ecology, orthodoxy and activism, traditional theology and a passionate mission to save the planet. Green sisters explore ways of living a meaningful religious life in the face of increased cultural diversity and ecological crisis and an understanding of the connections between women, religion, ecology, and culture.

Taylor, Shirley, Todd, Peter. "An Integrated Model of Waste Management Behavior: A Test of Household Recycling and Composting Intentions," Environment and Behavior 27(no.5, Sept. 1995):603-. (v6,#4)

Taylor, V. J., and Dunstone, N., eds., The exploitation of mammal populations. New York: Chapman and Hall, 1996.

Taylor, Victoria J., Dunstone, Nigel, eds. The Exploitation of Mammal Populations. Washington, D.C.: Smithsonian Institution Press, 1997. 440 pp. \$72.95. In 22 chapters the issues involved in harvesting, hunting, sustainable trade and ecotourism are explored and set in the context of past and present mammal exploitation. These are taken from a joint conference of the Universities' Federation for Animal Welfare and the Mammal Society. (v8,#3)

Taylor, William E., Gerath, Mark. "The Watershed Protection Approach: Is the Promise About to be Realized?" Natural Resources & Environment 11(no.2, 1996):16.

Tchudi, Stephen, ed., Change in the American West: Exploring the Human Dimension. Reno, NV: University of Nevada Press, 1996. 276 pages. \$ 14.95. How the humanities can help to survive the changes in the American West. Published by the Nevada Humanities Committee through a grant from the National Endowment for the Humanities. (v7,#2)

Tear, T. H. E. A., "How Much Is Enough? The Recurrent Problem of Setting Measurable Objectives in Conservation," Bioscience 55(no. 10, October 2005): 835-849. International agreements, environmental laws, resource management agencies, and environmental nongovernmental organizations all establish objectives that define what they hope to accomplish. Unfortunately, quantitative objectives in conservation are typically set without consistency and scientific rigor. As a result, conservationists are failing to provide credible answers to the question "How much is enough?" This is a serious problem

because objectives profoundly shape where and how limited conservation resources are spent, and help to create a shared vision for the future.

Teck, Richard, Moeur, Melinda, Eav, Bov. "Forecasting Ecosystems with the Forest Vegetation Simulator", Journal of Forestry 94(no.12, 1996):7. (v7,#4)

Teclaff, Ludwik A. "Evolution of the River Basin Concept in National and International Water Law", Natural Resources Journal 36(no.2, 1996):359. (v7,#4)

Teel, Julie, "Regulating Genetically Modified Products and Processes: An Overview of Approaches," New York University Environmental Law Journal 8(no.3, 2000):649- . (EE v.12,#1)

Teel, Tara; Bright, Alan; Manfredo, Michael; Brooks, Jeffrey, "Evidence of Biased Processing of Natural Resource-Related Information: A Study of Attitudes Toward Drilling for Oil in the Arctic National Wildlife Refuge," Society and Natural Resources 19 (no.5, May-June 2006): 447-463 (17).

Tefft, Shelia. "Rare Przewalski Horse of Mongolia Returns Home." The Christian Science Monitor, vol. 88, 5 Nov. 1996, p. 10.

Tefft, Shelia. "Gobi Desert: Land of the Unexpected." The Christian Science Monitor, vol. 88, 5 Nov. 1996, p. 11.

Teich, GMR; Vaughn, J; Cortner, HJ, "National Trends in the Use of Forest Service Administrative Appeals", Journal of Forestry 102 (no.2, 2004): 14-19(6).

Teichman, J., "Review of: Mary Warnock, Making Babies: Is There a Right to Have Children?," Journal of Applied Philosophy 20(no. 1, 2003): 113-114. (v 14, #3)

Teichman, Jenny, Social Ethics: A Student's Guide. Oxford: Blackwell Publishers, 1996. Part Two is "A Defence of Humanism," and within this Chapter 5 is "Human Beings and the Other Animals." Extremes are that only humans count and that all animals count equally. "Given that both forms of extremism are wrong we can say that there must be 'a queue of moral concern' (Mary Midgeley). Our problem is to arrange the queue. This is not an easy task. Placing human beings at the head of the queue is only the beginning; how are we to rank the apes and the dolphins and the whales and the tigers and our domestic pets? How much weight should we give to cultural factors? Won't our own human lives be seriously impoverished if we ignore cultural factors? Finally, it is agreed on all sides that our moral obligations belong to us because we are human. Is that itself a 'speciesist' theory? I shall have to leave these questions about the queue for readers to think about and answer if they can. But here is a final question. Is it because humanity is no more important than the other animals that we should be compassionate to them? Or is it because we are higher than they are?" Teichman is a Fellow of New Hall, Cambridge University.

Teifer, Elizabeth, Food for Thought: Philosophy and Food. London and New York: Routledge, 1996. Reviewed by William Hughes, Philosophy Dept., University of Guelph, Journal of Agricultural and Environmental Ethics 11(1998):55-58.

Teisl, M. F. and Obrien, K., "Who Cares and Who Acts? Outdoor Recreationists Exhibit Different Levels of Environmental Concern and Behavior," Environment and Behavior 35(no. 4, 2003): 506-522.

Teisl, Mario F. and Roe, Brian, "Environmental Certification: Informing Consumers about Forest Products," Journal Of Forestry 98 (No. 2, Feb 01 2000): 36- . Consumer research highlights the communications issues surrounding the environmental certification and labeling of forest products. (v.11,#2)

Teisl, MF; Roe, B; Hicks, RL, "Can Eco-Labels Tune a Market? Evidence from Dolphin-Safe Labeling," Journal of Environmental Economics and Management 43(no.3, 2002):339-359. (v.13, #3)

Teixeira, Maria Gracinda C. Energy Policy in Latin America: Social and Environmental Dimensions of Hydropower in Amazonia. Brookfield, Vt.: Ashgate, 1996. 368 pp. \$76.95. A criticism of the policy of energy production in Brazilian Amazonia focusing on the dramatically accumulated social and environmental debt resulting from the way Amazonia rivers have been utilized to provide hydropower and to sustain an export oriented industrial economy. (v8,#2)

Teko-ha: Boletin de la Red Latinoamerica de Ecologia Social (Teko-ha: Bulletin of the Latin-American Network on Social Ecology) is published in Spanish quarterly by the Centro Latinoamerica de Ecología (Latin-American Center of Social Ecology), Casilla de Correo 13000, 11700 Montevideo, Uruguay. "Teko-ha" is an aboriginal word that includes the self in its natural environment. There are short articles, notices, issues, and, in each issue, a list of recent publications in social ecology, environmental ethics, and related fields, with particular attention to Latin America. (v3,#2)

Telecky, Teresa M. "The Smoke Screen of CAMPFIRE," The Animals' Agenda 17(no.1, 1997):17. Rich American trophy hunters use your tax dollars to kill African wildlife. (v8,#2)

Television Trust for the Environment, The. 46 Charlotte Street, London W1P 1LX, is a British nonprofit organization founded in 1984 by Central Television (U.K) and the United Nations Environment Programme. They have produced a paperback book, Switching on to the Environment, that describes and evaluates one hundred films on environment and development, most of which are also available in VCR format. The films/videotapes are often European, mostly about development and environment in lesser developed countries, nearly all produced in the 1980's, nearly all originally shown on television in the country of origin. Most are available in English. The book has both a thematic and country index. Television Trust for the Environment also produces Moving Pictures Bulletin, a quarterly guide to films on development and the environment. (v1,#1)

Telfer, Elizabeth. Food for Thought: Philosophy and Food. Review by William Hughes, Journal of Agricultural and Environmental Ethics 11(1999):55-58. (JAEE)

tenHave (ten Have), Henk A.M.J., ed. *Environmental Ethics and International Policy*. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO), 2006. (ISBN: 139789231040399) A UNESCO contribution to environmental ethics, with a focus on application to international policy. The editor is Director of the Division of Ethics of Science and Technology, UNESCO, Paris. This anthology includes:

- Henk A.M.J. tenHave (ten Have): "Introduction: Environment, Ethics, and Policy."
- Tongjin Yang: "Towards an Egalitarian Global Environmental Ethics."
- Holmes Rolston: "Intrinsic Values on Earth: Nature and Nations."
- Robin Attfield: "Environmental Ethics and Global Sustainability."
- Emmanuel Agius: "Environmental Ethics: Towards an Intergenerational Perspective."
- Alan Holland: "Must We Give Up Environmental Ethics?"
- Mark Sagoff: "Environmental Ethics and Environmental Science."
- Teresa Kwiatkowska: "Let Earth Forever Remain: Putting Environmental Ethics to Work."
- Johan Hattingh: "The Start of the Art in Environmental Ethics as a Practical Enterprise: A View from the Johannesburg Documents."

Tennant, Alan, On the Wing: To the Edge of the Earth with the Peregrine Falcon. New York: Alfred Knopf, 2004. Following peregrine falcons to see where they pick up the toxics that imperil the species, and using this as an icon for the future of humans on Earth. With admiration for one of the most impressive

achievements of evolutionary natural history, the peregrine falcon with its skills in flight, and dismay at the human carelessness that puts first it and then ourselves in jeopardy. (v.14, #4)

Tennessee Law Review, vol. 56, no. 1 (Fall 1988) is a symposium "Developing an Environmental Ethos: Christopher Stone and Earth and Other Ethics" with articles by Stone and others: Milner S. Ball, "Moral Pluralism, the Tardis and Rattlesnakes"; Stephen Toulmin, "The Case for Cosmic Prudence"; A. Dan Tarlock, "Earth and Other Ethics: The Institutional Issues"; and the Sagoff article below. (v1,#4)

Tepper, Sherri S. Beauty. Reviewed in Environmental Ethics 15(1993):283-85.

Terborgh, John, James Estes, and Noss, Reed. "The Role of Top Carnivores in Regulating Terrestrial Ecosystems." Wild Earth 9(No. 2, Summer 1999):42- . (v10,#4)

Terborgh, John, "Reflections of a Scientist on the World Parks Congress," Conservation Biology 18(no.3, 2004):619-620. (v. 15, # 3)

Terborgh, John, Requiem for Nature. Washington, DC: Island Press, 1999. 234 pages. Some chapter titles: Paradise Fading; The Danger Within; Protecting Biodiversity; Preserving Biodiversity for Posterity; From Wildlands to Wasteland: Land Use and the Mirage of Sustainable Development; Why Conservation in the Tropics is Failing; Hard Choices in the Twenty-First Century; Nature, a Global Commons. Ecoprospecting and ecotourism are unlikely to help much, nor are "extractive reserves" where natives harvest nuts and resins. Nor is sustainable development, given the pressures of overpopulation and aggressive capitalism.

We should focus on "functional government that is capable of making things happen on the ground." The U.S. example of federal lands, abused though these often are, is as promising model as any for third-world nations--if and only if there is government with integrity. Further, parks and reserves will often need to be uninhabited, even areas that were long inhabited by indigenous peoples, since the modern ones have chainsaws and guns, and escalating numbers. "Nature can be saved, but only through a thoughtful combining of good science and strong institutions. Right now, much of the world benefits from neither. We have a long way to go before anyone can feel comfortable about the future of nature. And there is no time to lose in getting on with the journey." Terborgh is a tropical biologist and ornithologist at the Duke University Center for Tropical Conservation.

Reviewed by Bill McKibben, New York Review of Books 46 (no. 13, Aug. 12, 1999):44-45, who quarrels with Terborgh's exclusion of people from reserves, citing the Adirondack mountain park in New York, where he lives, as a better model. (v.10,#3)

Terborgh, John, "In the Company of Humans," Natural History 109(no. 4, May 2000):54-63. Animals that prefer the company of humans. "Sometimes wild animals are attracted to people. They seem to weigh the risks of association with us and conclude that under certain circumstances, hanging out with Homo sapiens is the safest thing to do." One example is a peccary that, injured, took up living near a research station in the Amazon, near Trail 1, a main thoroughfare. "Our peccary must have decided that the risk of consorting with humans was less than the one it faced by remaining alone in the forest. Perhaps it had noticed that the jaguar was seldom in the vicinity of the station. Whatever its reasoning, the huangana [peccary] was right. Its vigor and agility steadily improved until, one day, a herd of its species crossed Trail 1 and our peccary was gone." Terborgh is director, Center for Tropical Conservation, Duke University. (v.12,#3)

Terra Nova, vol. 2, no. 3, summer 1997 is a theme issue: Music from Nature. The many ways that music can reach and define nature. Among many contributions:

--Krause, Bernie, "What Does Western Music Have to Do with Nature?", pp. 109-114. Western music in general has very few ties to the natural world, whatever other excellences it has, and this is a shortcoming.

Krause is an audio artist, does sound design for Hollywood films, and records natural soundscapes for their preservation.

--Takemitsu, Toru, "Nature and Music," pp. 4-13. Takemitsu was a contemporary Japanese composer, died 1996. (v10,#4)

Terra Nova: Nature and Culture will begin quarterly publication by MIT Press starting January, 1996. The goal is to show how environmental issues are at the focus of the general cultural debate of our time. Contributions from philosophy, literature, history, anthropology, environmental studies, politics, activism, and the arts are encouraged. Terra Nova will be professional and refereed. Submissions should be rigorous but comprehensible, written for the generalist. David Rothenberg is the editor. Department of Social Science and Policy Studies, New Jersey Institute of Technology, University Heights, Newark, NJ 07102. Phone 201/596-3289. Fax 201/565-0586.

Terrie, Philip G., Contested Terrain: A New History of Nature and People in the Adirondacks. Syracuse, NY: The Adirondack Museum/Syracuse University Press, 1997. 223 pages. \$ 30 cloth. "I want to show that the history of the Adirondacks is a tale of contested terrain and to connect current conflicts to their historical, social, and cultural roots." Terrie wants "to bring to the dialogue certain groups, mainly the year-round residents, whose voice has been noticeably absent from most previous efforts to write Adirondack history."

Terry, Lori A. "Clean Water Act Citizens Suits: Key Elements and Defenses." Journal of Environmental Law and Practice 4, no.1 (1996): 19. Citizens suits are on the rise, and the author explains their key elements and defenses. (v7, #3)

Tershy, B. R., Bourillon, L. and Barnes, J., "A Survey of Ecotourism on Islands in North-western Mexico," Environmental Conservation 26(no. 3, Sept 01 1999):212- . (v.11,#1)

Tesh, SN; PaesMachado, E, "Sewers, Garbage, and Environmentalism in Brazil," Journal of Environment and Development 13(no.1, 2004):42-72. (v. 15, # 3)

Tesh, Sylvia Noble, Uncertain Hazards: Environmental Activists and Scientific Proof. Ithaca, NY: Cornell University Press, 2000. Over-reliance on empirical research can leave environmentalists stranded when science is inconclusive.

Tesi, Moses K., ed., The Environment and Development in Africa. Lanham, MD: Lexington Press, 2000. (v.12,#3)

Tester, Frank, and Drover, Glen. "Offsetting Corporate Trade: Free Trade, Community Development and Alternative Trade in the South Pacific," Alternatives 22(no.1, Jan.1996):16- . Community development initiatives and alternative trading arrangements point to more ecologically and socially attractive approaches to development. (v6,#4)

Tester, Keith, "The British Experience of the Militant Opposition to the Agricultural Use of Animals", Journal of Agricultural Ethics 2(1989):241-251. This article discusses the militant political opposition to the agricultural use of animals. It relates specifically to developments in the United Kingdom. It surveys two of the main ideas that advocate a transformation of the treatment of animals and shows how they have led to acts like arson, burglary, and the destruction of property. Tester is in social policy and sociology at the University of Leeds, England.

Tétrault, Mary Ann, "Formal Politics, Meta-Space, and the Construction of Civil Life," Philosophy and Geography 2 (1998): 81-97. Tétrault is a professor in the Department of Political Science at Iowa State

University of Science and Technology. (P&G)

Teutsch, Gotthard M., "Mensch und Mitgeschöpf unter ethischem Aspekt (Humans and Fellow Creatures from an Ethical Aspect)," Altex: Alternativen zu Tierexperimenten (Heidelberg), 18(no. 4, 2001):227-259. In German. A summary of recent literature, with a focus on that in German. Teutsch lives in Bayreuth, Germany. (v.13, #3)

Thanheiser, Lauri DeBrie. "The Allure of a Lure: Proposed Federal Land Use Restriction Easements in Remediation of Contaminated Property," Boston College Environmental Affairs Law Review 24(1997):271.

Thapar, Valmik, Land of the Tiger: A Natural History of the Indian Subcontinent. Berkeley: University of California Press, 1998. 287 pages. \$ 30. (v9,#2)

Thayer, Robert L. Grey World, Green Heart: Technology, Nature, and the Sustainable Landscape. New York: Wiley, 1994. Environmental degradation, human ecology, sustainable development. (v7, #3)

Theberge, John. "Planning for the Biosphere", Environments 24(no. 1, 1996):145.

Theobald, P., "The Advent of Liberalism and the Subordination of Agrarian Thought in the United States", Journal of Agricultural and Environmental Ethics 5(1992)161-182. This essay contends that the ascendancy of Western liberalism after the Enlightenment worked catalytically on the development of both the Industrial Revolution and a "modern agrarianism" based on the widespread dispersal of small-scale property ownership. One aim of this essay is to sort out the differences in liberal rhetoric, industrialism, and agrarian philosophical tradition and examine their implications for a contemporary reconsideration of agrarian thought. Theobald is in educational curriculum and instruction at Texas A&M University, College Station.

Theodori, G., "Community and Community Development in Resource Based Areas: Operational Definitions Rooted in an Interactional Perspective," Society and Natural Resources 18(no. 7, August 2005): 671-672.

Theokritoff, Elizabeth, "Creation and Salvation in Orthodox Worship," Ecotology No 10 (Jan 2001):97-108.

Theology & Public Policy has a special double issue (Summer and Winter, 1996): The Ethics of Population, Consumption, and Environment. There are two general articles and several case studies, with commentaries. Contact: Churches' Center for Theology and Public Policy, 4500 Massachusetts Avenue, N.W., Washington, DC 20016-5690. 202/885-8648.

--Hessel, Dieter, and Nash, James A. "Interlocked Trends Shaping the 21st Century," Theology & Public Policy, A Special Issue on the Ethics of Population, Consumption, and Environment 8, nos. 1&2 1(1996): 6-16. The interlocked trends are demographic trends, economic trends, ecological trends, and technological factors.

--Hessel, Dieter. "Ecumenical Ethics for Earth Community," Theology & Public Policy 8(nos. 1&2, 1996):17-29. The ecumenical movement worldwide and in the U.S. spanning more than three decades has acquired a normatively rich understanding of "just, sustainable, and participatory society," and the imperatives of "justice, peace, and the integrity of creation." This ethical perspective has theological roots in visions of Creation's Sabbath, the Kingdom of God, and a flourishing Earth Community.

--Gudorf, Christine E. "Finding the Sources of Hope: Women and Development," Theology & Public Policy 8(nos. 1&2, 1996):30-41.

--Bratton, Susan Power. "Plight of the Female Farmers: Land Ownership/Tenure," Theology & Public Policy 8(nos. 1&2, 1996):42-56.

- Martin-Schramm, James, Hoffstedt, Kirsten. "Consuela's Dilemma: Ethics, Refugees, and Immigration Policy," Theology & Public Policy 8(nos. 1&2, 1996):57-61, with commentary by James A. Nash. Consuela Ramirez is a pediatrician and president of the Florida chapter of the American Medical Association involved in a commission required to cut social services to illegal immigrants.
- Hunt, Douglas B. "What's in the Cup? Issues of Responsible Consumption," Theology & Public Policy 8(nos. 1&2, 1996):70-79.
- Eaton, Heather. "Rwanda: Survival of the Dominant," Theology & Public Policy 8(nos. 1&2, 1996):80-93. Poverty in Rwanda and the pressure on natural resources, with reference to the mountain gorillas endangered there.
- Ruether, Rosemary Radford. "Theological-Ethical Reflections on the Cases," Theology & Public Policy 8(nos. 1&2, 1996):94-100.
- Clugston, Richard M. "An Agenda for Action," Theology & Public Policy 8(nos. 1&2, 1996):101-112. (v8,#1)

Theoxeni, Sister, "Lifestyle: Orthodox Tradition and the Protection of the Environment: The Project of the Holy Monastery of Chrysopigi (Chania, Crete)," Ecotheology No 4 (Jan 1998):70-76.

Thero, Daniel P. "Rawls and Environmental Ethics: A Critical Examination of the Literature." Environmental Ethics 17(1995):93-106. The original position contractarian model of ethical reasoning put forth by John Rawls has been examined as a basis for an environmental ethic on three previous occasions in this journal and in Peter Wenz's *Environmental Justice*. In this article, I critically examine each of these treatments, analyzing the proposals offered and identifying their shortcomings. I find a total of seven different proposals in this literature for modifying Rawls' theory to augment its adequacy or as a ground environmental ethics. The diverse difficulties that arise in attempting to apply Rawls suggest the conclusion that Rawlsian ethics may not be a suitable foundation for an adequate long-term environmental ethics. Thero is in the department of philosophy, State University of New York, Albany. (EE)

Thiel, Jo, Land Communities, Land Ethics, and Private Land, M.A. thesis, Colorado State University, fall 2001. Three metaphysical views of land are analyzed: the market view, the mechanistic view, and the land community view. The land community view is most adequate and leads to a land ethic, with the goal of land health, distinguished from the pristine integrity of wild nature. Land health is the responsibility of private landowners as well as appropriate public policy. Land owners must envision themselves as members of three types of community in order correctly to pursue a land ethic: the ecosystemic community, the ethical community, and the social community. Thiel is now in a Ph.D. program with the University of Colorado, Denver, in public affairs, focusing on non-profit environmental organizations and their role in environmental policy. Holmes Rolston was the principal advisor. (v.12,#3)

Thiele, Leslie Paul. Environmentalism for a New Millennium: The Challenge of Coevolution. New York: Oxford University Press, 1999. 336 pp. \$28. Coevolutionary thought and action grounded in the interdependence of humans and nature in a global context. With the goal of sustainable development in mind, contemporary environmentalists argue that human livelihoods must be integrated into complex and evolving ecological systems. This affirmation of coevolutionary interdependence has brought coherence to an inherently diverse social movement. (v.10,#3)

Thiele, Leslie Paul. "Nature and Freedom: A Heideggerian Critique of Biocentric and Sociocentric Environmentalism." Environmental Ethics 17(1995):171-190. A reformulation of our understanding of freedom is required if we are adequately to confront the environmental crisis. Engaging the debate between biocentric ecologists and sociocentric ecologists, I argue that the biocentric effort to ascribe rights (negative liberty) to nature is misbegotten. In turn, I suggest that the sociocentric effort to seek ecological realignment through the extension of human reason (positive liberty) is equally problematic. Martin Heidegger, who rejects both "negative" and "positive" notions of liberty, offers an understanding

of human freedom that constitutes an ecologically attuned alternative. Thiele is in the department of political science, University of Florida. (EE)

Thingmount Working Paper Series on Philosophy and Conservation is a series jointly sponsored by the British Association of Nature Conservation and the Department of Philosophy at Lancaster University. The title, "Thingmount" recalls a Viking term for a flat-topped mound used as a place of assembly, examples of which are found in the English Lake district. Some titles: Kate Rawles and Alan Holland, "The Ethics of Conservation"; Gill Aitken, "Extinction"; Gill Aitken, "Rarity"; Alan Holland and John O'Neill, "The Integrity of Nature over Time"; Jane Howarth, "In Praise of Backyards"; and others. Contact: The Secretary--Thingmount, Department of Philosophy, Furness College, Lancaster University, Lancaster, LA1 4YG, UK. (v7,#2)

Thiollay, J. M., "Important Bird Areas in Africa and Associated Islands. Priority Sites for Conservation. 2001.," Biodiversity and Conservation 11(no.9, 2002): 1697-98. (v.13,#4)

Thiollay, Jean-Marc, "Effects of hunting on guianan forest game birds," Biodiversity and Conservation 14(no.5, May 2005):1121-1135(15).

Thiroux, Jacques P., Ethics: Theory and Practice, 5th edition. Englewood Cliffs, NJ: Prentice-Hall, 1995. 577 pages. The first edition was 1977. Chapter 15, the last chapter, is "Environmental Ethics." Key terms. Nature and morality. Our attitude toward nature and what lies behind it. Arguments for use and exploitation of the natural environment. Moderate position. Criteria for animal rights. Ways of dealing with animal rights. Use of animals for food. Use of animals for experimentation. Killing animals for sport. Protection of endangered species. Cases for study. Supplementary reading. A rather brief introduction, perhaps understandable in a text that covers everything, but not particularly penetrating. Bibliography is considerably out of date. Thiroux teaches philosophy at Bakersfield College. (v5,#4)

This bibliography contains ISEE Newsletter entries, vols. 1-7, 1990-1996, but not 1997 Newsletter entries. They will be merged into this document January 1998.

This bibliography contains ISEE Newsletter entries, vols. 1-13, 1990-2002, but not 2003 Newsletter entries. They will be merged into this document spring 2004. They can meanwhile be searched in the separate quarterly newsletters at the ISEE website.

Thogmartin, Wayne. "Why Not Consider the Commercialization of Deer Harvests?" *BioScience* Vol. 56, no. 12 (2006): 957.

Thomas, Christine L., "One Hundred Twenty Years of Citizen Involvement with the Wisconsin Natural Resources Board," Environmental History Review, vol. 15, no. 1, spring 1991. Thomas is a professor of resource management at the University of Wisconsin-Stevens Point. (v2,#2)

Thomas, Christopher Jon, A Philosophical Justification for the Legal Rights of Animals, M.A. thesis, Colorado State University, 2005. Previous attitudes and reasoning about human duties to domestic animals, which are largely based on duties to owners of the animals, are inadequate. This is partly because of our increased capacities to exploit animals and partly because of increasing ethical sensitivities. Domestic animals need now to be given rights, and such rights ought to be increasingly adopted into law. An examination of theory and practice in law and its application to extending legal rights to animals.

Thomas, David, Review of M. Leach and R. Mearns, The Lie of the Land. Environmental Values

7:(1998):481.

Thomas, David H. L. "Fisheries Tenure in an African Floodplain Village and the Implications for Management." Human Ecology 24, no.3 (1996): 287. (v7, #3)

Thomas, Elizabeth Marshall. *The Old Way: A Story of the First People*. New York: Farrar, Straus and Giroux, 2006. Thomas presents a tribute to the San people of the Kalahari Desert in South Africa, the "bushmen," and a lament about how they have been decimated by modernity, poverty, alcoholism, and AIDS.

Thomas, Emyr Vaughan, Review of Joop de Boer Aiking, and Johan Vereijken, eds., *Sustainable Protein Production and Consumption*, Environmental Values 16(2007):539-542.

Thomas, Emyr Vaughan, "Rolston, Naturogenic Value and Genuine Biocentrism," Environmental Values 6(1997):355-360. ABSTRACT: Holmes Rolston III attempts to get us to recognise nature as an objectively independent valuational sphere with its own activity of defending value. But in inspiring our ...psychological joining (with) on-going planetary natural history... what his account ultimately does is assimilate nature to the human. For, on his account, we find value in nature through a recognition that something that goes on in us (namely, defending value) also occurs in the natural world. That, it is argued, is far from the authentically deep form of biocentrism that is implicitly his ideal. The real depth to a biocentric viewpoint is to be found through a route other than the one taken by Rolston. Moreover, it is a route that has nothing to do with advancing the idea of what I call a naturogenic value--a value generated by nature. Rather, it relates to seeing nature as other than the human (as illustrated with reference to Emerson), in a way that is genuinely unsullied by the claims of self which, in the case of human beings, are the most elemental supports for a species perspective. Directorate of Policy and Science, Countryside Council for Wales, Ffordd Penrhos, Bangor, LL57 2LQ, UK1. With reply by Rolston. (EV)

Thomas, Frank, "Book Review of: Human Ecology and Community. Edited by Robert J. Gregory. (2003). Kamla-Raj Enterprises, Delhi, India, 2003", Human Ecology 32(no.5, October 2004):647-648 (2).

Thomas, Jack Ward., and Huke, Susan. "The Forest Service Approach to Healthy Ecosystems." Journal of Forestry 94, no.8 (1996): 14. (v7, #3)

Thomas, Jack Ward, "Restoring the Agency's Environmental Ethic," Inner Voice (Association of Forest Service Employee's for Environmental Ethics), vol. 6, no. 1 (January-February 1994). Jack Ward Thomas has recently been named chief of the U.S. Forest Service, replacing Dale Robertson, a highly symbolic replacement, since Thomas was a key figure in the spotted owl report, and Robertson, though in many ways a moderate, was too much associated with the timber cutting past. "In brief, a land ethic is nothing more than the acceptance of constraints on human treatment of land in the short term to ensure long-term preservation of the integrity, stability, and beauty of the biotic community." "Such interest in a land ethic on the part of land management professionals has, for whatever reason, trailed behind the demands of a highly vocal segment of the public around the world." "Without skilled and ethical practitioners of biopolitics in natural resource management, natural resources cannot be managed. Biological information is not derived through immaculate conception, and politics can as readily be ennobling as corrupting." "We live in an age of euphemisms, half truths, obfuscation, double-talk, and double think. ... Tell the truth, all the truth, all the time. It is the right thing, the healthy thing, the professional thing to do." "Questions about ethical behavior do not ordinarily come in the form of a clear-cut challenge to honor and courage." A longer article is in Joyce K. Berry and John C. Gordon, eds., Environmental Leadership (Washington, DC: Island Press, 1993). (v5,#1)

Thomas, Jack Ward and Burchfield, James, "Comments on "The Religion of Forestry: Scientific Management," Journal of Forestry 97(no. 11, Nov 01 1999):10- . Foresters strive to satisfy the objectives

of their employers and are accustomed to working within a political and social context. Civil discourse, informed by science, is the method for revolving inevitable conflicts over resource use. (v.11,#1)

Thomas, John C., "Values, the Environment and the Creative Act," Journal of Speculative Philosophy 4(no. 4, 1990);323-336. Human beings are essentially aesthetic and overemphasis on moral value alienates human beings from natural being.

Thomas, John C., "Values, the Environment and the Creative Act," Journal of Speculative Philosophy 4(no. 4, 1990);323-336. Human beings are essentially aesthetic and overemphasis on moral value alienates human beings from natural being.

Thomas, Rosamund M., ed. Teaching Ethics, Volume Three: Ethics and The Environment. Cambridge, UK: Centre for Business and Public Sector Ethics, and London: HMSO (Her Majesty's Stationery Office) and Ethics International Press, Ltd. 1996. 805 pp. ISBN 0 11 7020591. Environmental ethics from a business and policy perspective. These articles are not written by professional philosophers, but by professionals in business and government concerned for environmental responsibility. A massive volume. Some of these papers resulted from conferences held at the Cambridge Centre for Business and Public Sector Ethics on the environment.

Contains the following:

- Slater, R.W., "Changing the Way We Govern--Sustainable Development in Canada," pages 1-30
- Osborn, F.A. (Derek), "Government Responsibility for the Environment: The United Kingdom Experience." pages 31-38
- Gentry, Bradford S., "Differences in European and United States Approaches to Environmental Issues," pages 39-68
- Taylor, Derek, "Working with the Local Community to Produce a Local Agenda 21 Programme for a Sustainable Environment: The Lancashire Model," pages 69-94
- Thomas, Christopher, "A Systematic Approach to the Adoption of Environmentally Responsible Management," pages 97-111
- Stapleton, Julian, "The Environmental Imperative: An Industrial Perspective," pages 113-148
- Western, D.J., "Environmental Issues in Electricity Generation," pages 149-176
- Long, Roland, "The Ethics of Conservation: A Yorkshire Dales Perspective," pages 177-181
- Joy, David, "Quarrying in the Dales: Some Recent Developments," pages 183-189
- Jain, R.B., "The Bhopal Disaster Case," pages 191-237
- Carey, Bernard, "Environmental Ethics: A Framework for Analysis (With Special Reference to Environmental Audit)," 241-267. Includes a list of environmental legislation in New South Wales, Australia.
- Adams, Trevor, "Criminal and Civil Liability."271-290
- Tuppen, Chris, "Communicating with Customers--Some Environmental Dilemmas," 293-311
- Frederickson, H. George, "Should There Be Social Equity Between Generations?" pages 313-326
- Thomas, Rosamund, "Nuclear Energy and Environmental Ethics," pages 327-347
- Osborn, F. A., "Environmental Policy Making--The Ethical Dimension," pages 357-394.
- "This Common Inheritance: Britain's Environmental Strategy: First Principles (United Kingdom White Paper 1990)", pages 393-431
- Royal Commission on Environmental Pollution (United Kingdom): Sixteenth Report: Freshwater Quality," pages 433-458
- Ishi, Hiroyuki, and Shimbun, Asabi, "Basic Environmental Attitudes in East and West--Why Do the Japanese Eat Whales?", pages 461-479
- "EC (European Communities) Eco-Management and Audit Scheme," pages 483-510
- Supreme Court of India, "Union Carbide Corporation v. Union of India," pages 513-618
- Macve, Richard and Carey, Anthony, "Corporate Environmental Disclosure: International Developments, Practice and Recent Recommendations," pages 621-638

- Russell, Colin A., "Troubled Waters: The Evolution Controversy," pages 641-669. Effect of evolution controversy on conservation of biodiversity
- Graham, Loren R., "Concerns about Science and Attempts too Regulate Inquiry," pages 671-696
- Berry, R. J. (Sam), "Environmental Knowledge, Attitudes and Action: A Code of Practice," pages 697-714
- Dwivedi, O. P., "An Ethical Approach to Environmental Protection: A Code of Conduct and Guiding Principles," pages 715-736 (v.9,#4)

Thomas, V. G. and Kevan, P. G., "Basic Principles of Agroecology and Sustainable Agriculture", Journal of Agricultural and Environmental Ethics 6(1993):1-20. In the final analysis, sustainable agriculture must derive from applied ecology, especially the principle of the regulation of the abundance and distribution of species (and secondly their activities) in space and time. Interspecific competition in natural ecosystems has its counterparts in agriculture, designed to divert greater amounts of energy, nutrients, and water into crops. Whereas natural ecosystems select for a diversity of species in communities, recent agriculture has minimized diversity in favour of vulnerable monocultures. Such systems show intrinsically less stability and resilience to perturbations. Thomas is in zoology at the College of Biological Science, University of Guelph, Ontario. Kevan is in environmental biology at Ontario Agricultural College, University of Guelph, Ontario.

Thomas, V. G., "The Environmental and Ethical Implications of Lead Shot Contamination of Rural Land in North America," Journal of Agricultural and Environmental Ethics 10(1997):41-54. Lead shot deposited in fields and woodlands near shooting ranges and intense, upland, hunting adds an enormous tonnage of lead to environments, worldwide. This contamination is not remedied by banning lead shot use only for waterfowl hunting. Lead pellets disintegrate extremely slowly, during which time they may be ingested from the soil by wild birds, livestock, or silage-making machinery, and cause sublethal or fatal lead poisoning. Lead pellet corrosion products contaminate soil, surface waters, and ground waters, often exceeding permissible levels. In heavily contaminated sites, earthworms ingest lead compounds which are bioaccumulated in higher consumers of food webs. Non-toxic substitutes made from steel or bismuth are available internationally, but nations are slow to require their use due to hunters and international sport shooting organizations opposing the use of non-toxic substitutes and overt emphasis by government agencies on the burden of scientific proof for every situation, rather than taking preventative action according to the Precautionary Principle. The ethical approach of Denmark and The Netherlands, which banned all uses of lead shot, is advocated as a precedent for other nations to adopt. (JAEE)

Thomas, Vernon G., "Attitudes and Issues Preventing Bans on Toxic Lead Shot and Sinkers in North America and Europe," Environmental Values 6(1997):185-200. ABSTRACT: It is paradoxical that lead shot and fishing sinkers are still used widely, given society's understanding of lead contamination and avian lead toxicosis. The statutory action taken by governments varies from total bans on both lead products to no regulation of either shot or sinkers. Many government agencies and field sport organisations are reluctant to use the precautionary principle and the polluter pays principle and regulate use of available non-toxic substitutes. The attitudes of individuals towards their roles in environmental lead contamination and remediation reflect marked self-deception about the need for changes and the benefits to be derived from substitution. Fatal lead poisoning of highly symbolic, revered species such as British mute swans and American bald eagles promoted development of national regulations to ban lead shot and fishing weights. Despite the parallels between these countries reforms, there has been little parity between the banning of lead shot and fishing sinkers. Department of Zoology College of Biological Science, University of Guelph, Guelph, Ontario, N1G 2W1, Canada. (EV)

Thomas, William, "Indigenous Knowledge and Conservation Policy in Papua New Guinea," Wild Earth 9(no. 3, Fall 1999):41- . (v.11,#1)

Thomashow, Mitchell. Ecological Identity: Becoming a Reflective Environmentalist. Cambridge, MA: The

MIT Press, 1995. 268 pages. \$ 25.00. How environmental studies can be taught from a different perspective, one deeply informed by personal reflection. Constructing an ecological identity using the direct experience of nature as a framework for personal decisions, professional choices, political actions, and spiritual inquiry. John Muir, Henry David Thoreau, and Rachel Carson are environmental archetypes, though today we have also to consider new emphases, such as ecofeminism and bioregionalism. Tries to make peace within the environmental movement by exploring the spiritual benefits of activism. Thomashow is in environmental studies at Antioch New England Graduate School. (v6,#3)

Thomashow, Mitchell. Bringing the Biosphere Home: Learning to Perceive Global Environmental Change. Reviewed in Environmental Ethics 25(2003):411-412. (EE)

Thomaspellicer, R., "Review of: Andrea Lenschow (Ed.), Environmental Policy Integration: Greening Sectoral Policies in Europe," Environmental Politics 12(no. 2, 2003): 167.

Thompson, Adeyinka Christopher, Ethics in International Politics? The Contradictions and Ethical Implications of Foreign Aid in Africa, Ph.D. thesis, Michigan State University, 2000. Independence brought, for many African peoples, a return not only to repressive government, but also to economic decline and hardship. Some have blamed the international community--primarily the Western or developed nations. I make an ethical analysis of the relationship between African nations and the developed world--with specific reference to foreign aid. Normative questions are central to international relations; actors in international relations cannot but raise normative questions. There is an obligation for Western developed nations to assist poor under-developed Third world (in particular African) nations. A case study of aid to Somalia. Three key issues facing African nations--(1) what type of democracy is suitable; (b) corruption; and (c) compromising sovereignty by allowing intervention. This complexity reinforces the need for ethics in international politics. Without morality to evaluate our actions we will be unaware of what we are doing. The advisor was Martin Benjamin.

Thompson, Allen, "The Geographers' Ethical Interests," Philosophy and Geography 5 (No. 1, 2002): 119-122. Book review of James D. Proctor & David M. Smith (Eds), "Geography and Ethics: Journeys in a Moral Terrain," New York: Routledge, 1999. (P&G)

Thompson, Allen. Review of The Ecological Life: Discovering Citizenship and a Sense of Humanity. By Jeremy Bendik-Keymer. Environmental Ethics 29(2007):431-434. (EE)

Thompson, C., B. Thompson and M. Burgman, "Risks From Competitively Inferior Immigrant Populations: Implications of Mass Effects for Species Conservation," Conservation Biology 17(no. 3, 2003): 901-905. (v 14, #3)

Thompson, Charis M., "Ranchers, Scientists, and Grass-roots Development in the United States and Kenya," Environmental Values 11(2002):303-326. Two initiatives in community-based biodiversity conservation are examined. I describe key aspects of the formation in the mid 1990s of the Malpai Borderlands Group of the Southwest US, and the reorganization of the Kenya Wildlife Service during 1994-6 and their legacies since then. I review how history, ownership, membership, and valuation were appealed to, created, maintained, and contested in defining what should be saved, by and for whom, and how in each. I also suggest the central role of science and relatively mundane technologies in coordinating these parameters. Success or "best practice" as applied to the conjunction of biodiversity conservation and development depends upon this work in contesting and establishing history, ownership, membership and valuation. (EV)

Thompson, D. B., "Review of: Global Emissions Trading: Key Issues for Industrialized Countries, edited by

Suzi Kerr," Natural Resources Journal 41(no.3, 2001): 755-65. (v.13,#2)

Thompson, DB, "Valuing the Environment: Courts' Struggles with Natural Resource Damages," Environmental Law 32(no.1, 2002):57-90. (v.13, #3)

Thompson, Gary L.; Shelley, Fred M.; and Wije, Chand, eds. Geography, Environment, and American Law. Niwot, CO: University Press of Colorado, 1996. The rapidly growing interface between geography and the American legal system resolving problems associated with land use, water resources, mineral development, and related issues. Geography as a useful framework for analyzing complex human-environmental challenges. Thompson is in geography at the University of Oklahoma, Shelley in geography and planning at Southwest Texas State University, Wije is a dean for research at Austin Community College, Texas. (v7, #3)

Thompson, Gary L, Fred M. Shelley, and Chand Wije, eds., Geography, Environment, and American Law. Niwot, CO: University Press of Colorado, 1996. 216 pages. Cloth, \$ 39.95. The interface between geography and the American legal system. The interpretive and analytical skills of professional geographers applied to environmental issues as these complement the analyses of legal scholars in resolving problems associated with land use, water resources, mineral development, and related issues. Thompson is in geography at the University of Oklahoma, Shelley in geography at Southwest Texas State University in San Marcos. Wije is a dean for research at Austin Community College, Austin, Texas. (v7,#2)

Thompson, J. William, and Sorvig, Kim. Sustainable Landscape Construction: A Guide to Green Building Outdoors. Covelo, CA: Island Press, 2000. 448 pages. Paper \$45. "Green" landscape work: More than 100 projects from around the world are described and illustrated. Lists of resources, tools for implementing these ideas, adapting them to local conditions. (v.11,#4)

Thompson, Janna, "A Refutation of Environmental Ethics," Environmental Ethics 12(1990):147-160. Environmental ethics as practiced by Taylor, Routley, and Rolston is a dead end. It is not a true ethic because it fails to provide a consistent account of value. The central problem is the level of value application---individuals, systems, etc. Thompson believes that any arguments for one kind of value entity can be applied to all entities, including parts of entities or machines. Thompson's alternative is a value based on sentience and point-of-view, but this position seems similarly arbitrary. (Katz, Bibl # 2)

Thompson, Janna. "Aesthetics and the Value of Nature." Environmental Ethics 17(1995):291-305. Like many environmental philosophers, I find the idea that the beauty of wildernesses makes them valuable in their own right and gives us a moral duty to preserve and protect them to be attractive. However, this appeal to aesthetic value encounters a number of serious problems. I argue that these problems can best be met and overcome by recognizing that the appreciation of natural environments and the appreciation of great works of arts are activities more similar than many people have supposed. Thompson is in philosophy, La Trobe University, Bundora, Victoria, Australia. (EE)

Thompson, Janna. "Towards a Green World Order: Environment and World Politics." Environmental Politics 4(Winter 1995):31

Thompson, Janna. "A Refutation of Environmental Ethics." Environmental Ethics 12(1990):147-60. An environmental ethic holds that some entities in nature or in natural states of affairs are intrinsically valuable. I argue that proposals for an environmental ethic either fail to satisfy requirements which any ethical system must satisfy to be an ethic or they fail to give us reason to suppose that the values they promote are intrinsic values. If my arguments are correct, then environmental ethics is not properly ethics at all. Thompson is in the philosophy department, La Trobe University, Victoria Australia. (EE)

- Thompson, Janna. "Environment as Cultural Heritage." Environmental Ethics 22(2000):241-258. Arguments for the preservation of natural objects and environments sometimes appeal to the value of those objects as cultural heritage. Can something be valuable because of its relation to the historical past? I examine and assess arguments for preservation based upon heritage value and defend the thesis that we have an obligation to appreciate what our predecessors valued and to value those things that have played an important role in our history. I show how this conception of our obligations can be used to defend the preservation of natural objects and environments including wilderness areas. (EE)
- Thompson, John, O. J. Reichman, and Sharon Y. Strauss, "Frontiers of Ecology," Bioscience 51(no.1, Jan. 2001): 15-.
- Thompson, Jr., Barton H., "Judicial Takings," Virginia Law Review 76(1990):1449-1544. More than you ever wanted to know about "takings" legislation and history, also a good introduction to a topic of increasing interest in environmental conservation. Thompson concludes that takings jurisprudence is quite muddled, and variously applied in legislative, administrative, and judicial branches of government. The concept of private property has undergone steady change in recent decades and courts are often disinclined to intervene when government uses its power to limit the permissible actions of private property holders, as, for instance, in environmental regulations. Burton is at the Stanford Law School. (v5,#4)
- Thompson, JR; Elmendorf, WF; McDonough, MH; Burban, LL, "Participation and Conflict: Lessons Learned From Community Forestry," Journal of Forestry 103 (no. 4, June 2005): 174-178.
- Thompson, M; Homewood, K, "Entrepreneurs, Elites, and Exclusion in Maasailand Trends in Wildlife Conservation and Pastoralist Development," Human Ecology 30(no.1, 2002):107-138. (v.13, #3)
- Thompson, Mary. "Wisconsin Dairy Pricing Gives Nation's Farmers a Sour Taste." The Christian Science Monitor, vol. 89, 17 Dec. 1996, p. 3.
- Thompson, Paul B. "The Legacy of Positivism and the Role of Ethics in the Agricultural Sciences," in Perspectives in World Food and Agriculture 2004. C. G. Scanes and J. A. Miranowski, Eds. Ames, IA: 2004, Iowa State University Press, pp. 335-351. (v. 15, # 3)
- Thompson, Paul B., "Ethics in Agricultural Research", Journal of Agricultural Ethics 1(1988):11-20. Utilitarian ethics provides a model for evaluating moral responsibility in agricultural research decisions according to the balance of cost and benefits accruing to the public at large. Given the traditions and special requirements of agricultural research planning, utilitarian theory is well adapted to serve as a starting point for evaluating these decisions, ut utilitarianism has defects that are well documented in the philosophical literature. Administrators who are sensitive to the strengths and weaknesses of utilitarian ethics are equipped to make a better allocation of research effort. Thompson is in agricultural economics at Texas A&M University, College Station.
- Thompson, Paul B., "Animals in the Agrarian Ideal", Journal of Agricultural and Environmental Ethics 6(1993). Thomas Jefferson, Ralph Waldo Emerson and other American intellectuals of the 18th and 19th century created an agrarian ideal for farming that stressed the formation of moral virtue, citizenship values and personal character. This agrarian ideal provides a contrast to utilitarian norms, which value farming in terms of efficiency in producing food commodities. Thus, while efficiency criteria might be used to justify production practices that minimize management costs in animal agriculture, the agrarian ideal instead stipulates a role relationship between humans and animals as the norm for evaluating a farmer's use of animals. An anecdotal account of the agrarian ideal in modern times is presented using

children's literature. Thompson is in the Center for Biotechnology Policy and Ethics, Institute for Biosciences and Technology, Department of Philosophy, Department of Agricultural Economics, Texas A&M University, College Station, TX 77843-4355.

Thompson, Paul B., "Food Biotechnology's Challenge to Cultural Integrity and Individual Consent," Hastings Center Report 27 (no. 4, July-August 1997):34-38. Consumer response to genetically altered foods has been mixed in the United States. While transgenic crops have entered the food supply with little comment, other foods, such as the bioengineered tomato, have caused considerable controversy. Objections to genetically engineered food are varied, ranging from the religious to the aesthetic. One need not endorse these concerns to conclude that food biotechnology violates procedural protections of consumer sovereignty and religious liberty. Consumer sovereignty, a principle especially valued in this country, requires that information be made available so each individual or group may make food choices based on their own values. As yet, there is no policy provision for informing consumers about the degree to which food has been genetically engineered. Thompson is in philosophy and agricultural economics at Texas A&M University. (v8,#3)

Thompson, Paul B. Review of Risk Analysis and Scientific Method. By Kristin S. Shrader-Frechette. Environmental Ethics 8(1986):277-85.

Thompson, Paul B., "Report of the NABC (National Agriculture Biotechnology Council) Ad-Hoc Committee on Ethics," Journal of Agricultural and Environmental Ethics 10(1997/1998):105-125. ABSTRACT. The National Agriculture Biotechnology Council appointed an ad-hoc subcommittee on ethics, March 1995. Their report: 1. Each NABC member institutions should ensure that subject matter on ethical issues associated with food and agricultural biotechnology is systematically integrated into the curriculum of their institution. The pattern of implementation will vary at each institution, but we expect that some combination of the following three strategies will be employed at most institutions.

- a) Modules Included in Basic and Applied Science Courses
 - b) Modules Included in General Courses on Applied Ethics
 - c) Special courses on Ethics and Food Biotechnology
2. Each NABC member institution should develop an institutional mechanism for supporting faculty interest and research on ethical issues. Again, implementation will vary. In some institutions, an informal network of interested colleagues will fulfill this function, but in many places an annual workshop or a formal faculty/center will be needed to carry this out.
 3. Each NABC institution should include information on ethical issues in its public education programs on biotechnology. Extension and public policy education materials should be developed and NABC institutions should actively disseminate materials on ethical issues beyond the campus.
 4. NABC should support these efforts of member institutions by sponsoring regular workshops or conferences on ethical issues, aiding in the development of modules and teaching materials, and aiding in the dissemination of materials in both printed and electronic form. In particular, NABC should support these efforts by raising funds from member institutions, from foundations and government agencies, and from the private sector, including commercial biotechnology companies. (JAEE)

Thompson, Paul B. "Ethical Issues in Livestock Cloning," Journal of Agricultural and Environmental Ethics 11(1999):197-217. Although cloning may eventually become an important technology for livestock production, four ethical issues must be addressed before the practice becomes widespread. First, researchers must establish that the procedure is not detrimental to the health or well-being of affected animals. Second, animal research institutions should evaluate the net social benefits to livestock producers by weighing the benefits to producers against the opportunity cost of research capacity lost to biomedical projects. Third, scientists should consider the indirect effects of cloning research on the larger ethical issues surrounding human cloning. Finally, the market structure for products of cloned animals should protect individual choice, and should recognize that many individuals find the prospect of cloning

(or consuming cloned animals) repugnant. Analysis of these four issues is complicated by spurious arguments alleging that cloning will have a negative impact on environment and genetic diversity. (JAEE)

Thompson, Paul B. "Uncertainty Arguments in Environmental Issues." Environmental Ethics 8(1986):59-75. A large part of environmental policy is based upon scientific studies of the likely health, safety, and ecological consequences of human actions and practices. These studies, however, are frequently vulnerable to epistemological and methodological criticisms which challenge their validity. Epistemological criticisms can be used in ethical and political philosophy arguments to challenge the applicability of scientific knowledge to environmental policy, and, in turn, to challenge the democratic basis of specific environmental policies themselves. Uncertainty arguments thus draw upon philosophy of science, epistemology, ethics, and political philosophy to establish conclusions of practical relevance to environmental quality. A theory of how and when uncertainty arguments ought to be given credence in environmental decision making requires an account of how scientific research ought to be integrated into environmental policy generally, plus an account of how public environmental policy is to be set in a democracy. Thompson is in the department of Agricultural Economics, Texas A & M University, College Station, TX. (EE)

Thompson, Paul B. "Conceptions of Property and the Biotechnology Debate." BioScience 45 (no. 4, April, 1995): 275-282. Philosophical concepts of property applied to biotechnology can help evaluate the relative strengths and weaknesses of arguments offered to justify alternative political positions. Two broad philosophical approaches to property are: (1) one in terms of rules to produce ethical goals such as social welfare or personal liberty, and (2) one that treats the property status of an entity as an ontological question. Natural law and labor theories are ontological approaches, the former influential in Europe. Protection through patents and copyrights has largely been defended on instrumental grounds, such as enhancing economic growth, especially in the United States. Thompson is in philosophy at Texas A & M University. (v6,#1)

Thompson, Paul B. Review of Risk-Benefit Analysis in Decisions Concerning Public Safety and Health. By Mark Sagoff. Environmental Ethics 8(1986):277-85.

Thompson, Paul B., The Spirit of the Soil: Agriculture and Environmental Ethics. Reviewed by Hugh Lehman. Journal of Agricultural and Environmental Ethics 9(1996):89. (JAEE)

Thompson, Paul B. "The Reshaping of Conventional Farming: A North American Perspective." Journal of Agricultural and Environmental Ethics 10(2001):217-229. Debates over the future of agriculture in North America establish a dialectical opposition between conventional, industrial agriculture and alternative, sustainable agriculture. This opposition has roots that extend back to the 18th century in the United States, but the debate has taken a number of surprising turns in the 20th century. Originally articulated as a philosophy of the left, industrial agriculture has utilitarian moral foundations. In the US and Canada, the articulation of an alternative to industrial agriculture has drawn upon three central themes: the belief that agriculture is, in some way, tied to democracy; the belief that complex bureaucratic organizations are inherently opposed to human interests; and the belief that the family farms characteristic of 19th century North America tend to produce people of superior moral character. It has proved difficult to weave these themes into a coherent vision of agriculture for the 21st century. Often, risk and health-based concerns are the basis for public criticism of conventional agriculture, but these do not conflict with the utilitarian orientation of the industrial model, and are easily incorporated into it. If there is to be a philosophical debate over the future of agriculture, we must find some way to rehabilitate the quasi-Aristotelean view of agriculture that emerges from the three critical themes noted above. Keywords: agrarianism, industrial agriculture, sustainable agriculture, US agricultural history, virtue ethics. Thompson is in Department of Philosophy, Purdue University, West Lafayette, IN. (JAEE)

- Thompson, Paul B., "Uncertainty Arguments in Environmental Issues," Environmental Ethics 8(1986):59-75. An interesting discussion of the use and misuse of uncertainty arguments in the formation of public policy regarding the environment. (Katz, Bibl # 1)
- Thompson, Paul B., and Hilde, T., eds. The Agrarian Roots of Pragmatism. Nashville, TN: Vanderbilt University Press, 2000. Papers on Jefferson, Thoreau, Emerson, Dewey and Steinbeck, among others. (v.12,#2)
- Thompson, Paul B. "Need and Safety: The Nuclear Power Debate." Environmental Ethics 6(1984):57-69. Many arguments for and against nuclear power can be analyzed according to a matrix of logically competing claims on the need and safety of nuclear power. Logical analysis of the arguments reveals their philosophical basis and contributes to an understanding of their explanatory appeal. The evidential value of claims made in the arguments of both supporters and opponents depends upon familiar issues in the philosophy of language and the philosophy of science. Thompson is in the department of Agricultural Economics, Texas A & M University, College Station, TX. (EE)
- Thompson, Paul B. Review of Risk. By Nicholas Rescher. Environmental Ethics 9(1987):91-95.
- Thompson, Paul B., T.A. Ten Eyck, S.H. Priest. "Biotechnology in the United States: Mad or Moral Science?" Biotechnology 1996-2000: The Years of Controversy. G. Gaskell and M.W. Bauer, eds. London: The Science Museum, 2001, pp. 307-318. (v.13,#2)
- Thompson, Paul B., "Ethics and the Genetic Engineering of Food Animals," Journal of Agricultural and Environmental Ethics 10(1997):1-23. Biotechnology applied to traditional food animals raises ethical issues in three distinct categories. First are a series of issues that arise in the transformation of pigs, sheep, cattle, and other domesticated farm animals for purposes that deviate substantially from food production, including for xenotransplantation or production of pharmaceuticals. The second series of issues relate to animal welfare. The principle of welfare conservation prohibits dysfunctional genetic engineering of food animals, but would permit altering animal's biological functions, especially when to do so improves an individual animal's well being. (JAEE)
- Thompson, Paul B. Review of Sociobiology: Sense or Nonsense? By Michael Ruse. Environmental Ethics 2(1980):173-77.
- Thompson, Paul B., Review of Hobbelink, Henk, Biotechnology and the Future of World Agriculture. Environmental Values Vol.2 No.1(1993):83.
- Thompson, Paul B., "Why Food Biotechnology Needs an Opt Out." Pages 27-44 in B. Bailey and M. Lappé, eds., Engineering the Farm: Ethical and Social Aspects of Agricultural Biotechnology. Washington, DC: Island Press, 2002. Thompson is in philosophy, Purdue University West Lafayette, IN. (v.13,#4)
- Thompson, Paul B., Food and Agricultural Biotechnology: Incorporating Ethical Considerations. Ottawa: Canadian Biotechnology Advisory Committee, 2000. 40 pp. Also available in French: Intthique biotechnologie alimentaire et agricole. Ottawa: 2000. (v.12,#2)
- Thompson, Paul B. "Land." Pages 169-190 in G. Comstock, ed., Life Science Ethics Ames, IA: Iowa State Press, 2002. Thompson is in philosophy, Purdue University West Lafayette, IN.
- Thompson, Paul B. "The Reshaping of Conventional Farming: A North American Perspective," Journal of Agricultural and Environmental Ethics 14(2001):217-229. (v.13,#2)

- Thompson, Paul B. "Risk, Consent and Public Debate: Some Preliminary Considerations for the Ethics of Food and Safety," International Journal of Food Science and Technology 36(2001):833-843. (v.13,#2)
- Thompson, Paul B. "Animal Welfare and Livestock Production in a Postindustrial Milieu," Journal of Applied Animal Welfare Science 4(No.3, 2001):191-205. (v.13,#2)
- Thompson, Paul B. Review of Acceptable Risk. By Baruch Fischhoff et al. Environmental Ethics 8(1986):277-85.
- Thompson, Paul B. "Sustainable Agriculture: Philosophical Framework," in Encyclopedia of Plant and Crop Science. R. M. Goodman, Ed. New York: 2004, Marcel Dekker, pp. 1198-2000. Online at www.dekker.com. (v. 15, # 3)
- Thompson, Paul B. "Getting Pragmatic about Farm Animal Welfare," in Animal Pragmatism: Rethinking Human-Nonhuman Relationships. E. McKenna and A. Light, Eds. Bloomington, IN: 2004, Indiana University Press, pp. 140-159. (v. 15, # 3)
- Thompson, Paul B. "The Ethics of Molecular Silviculture," in The Bioengineered Forest: Challenges for Science and Society. S. H. Strauss and H. D. Bradshaw, Eds. Washington, D.C.: 2004, Resources for the Future, pp. 101-111. (v. 15, # 3)
- Thompson, Paul D., Book Review: Scott L. Pratt, Native Pragmatism: Rethinking the Roots of American Philosophy (2002), Newsletter of the Society for the Advancement of American Philosophy #98, June 2004, pp. 73-76.
- Thompson, Paul B., "Animal Rights, Animal Welfare and Animal Well-being: How to Communicate with the Outside World," in Local and Global Considerations in Animal Agriculture: The Big Picture, R. Reynnells, Ed. Washington, DC: 2004, USDA/CSREES/PAS, pp. 22-31.
- Thompson, Paul B., "Sustainable Agriculture: Philosophical Framework," in Encyclopedia of Plant and Crop Science. R. M. Goodman, Ed. New York: 2004, Marcel Dekker, pp. 1198-2000. Online at www.dekker.com. Thompson is in philosophy, Michigan State University.
- Thompson, Paul B., "Unnatural Farming and the Debate over Genetic Manipulation," In Galston, W. A., ed., Genetic Prospects: Essays on Biotechnology, Ethics, and Public Policy. Lanham, MD: Roman and Littlefield Publishers, 2003.
- Thompson, Paul B., "Animal Agriculture and the Welfare of Animals," Journal of the American Veterinary Medical Association 226 (2005): 1325-1327.
- Thompson, Paul B., "Ecological Risks of Transgenic Crops: A Framework for Assessment and Conceptual Issues." In R. E. Hester and R. M. Harrison, eds., Sustainability in Agriculture, in Issues in Environmental Science and Toxicology, vol. 21 (Cambridge, UK: Royal Society of Chemistry, 2005), 16-31.
- Thompson, Paul B., "Agricultural Ethics." In Carl Mitcham, ed., Encyclopedia of Science, Technology and Ethics, Vol. 1. (Detroit: Thomson Gale, 2005) 41-47.
- Thompson, Paul B., Review of: Phillip Cafaro, Thoreau's Living Ethics: Walden and the Pursuit of Nature (2004), Newsletter of the Society for the Advancement of American Philosophy #101, June 2005, pp. 29-34.

- Thompson, Paul B., "Justice, Human Rights and Ethics Issues in Science and Technology Policy," *Encyclopedia of Life Support Systems* (EOLSS). Developed under the Auspices of the UNESCO, EOLSS Publishers, Oxford, UK. 12 pages. Online at: <http://www.eolss.net>.
- Thompson, Paul B., *Food Biotechnology in Ethical Perspective*. Reviewed by Ronald Sandler, *Environmental Values* 16(2007):544-547.
- Thompson, Paul B. *The Spirit of the Soil: Agriculture and Environmental Ethics*. New York: Routledge, 1995. 196 pages. \$14.95 paper. Environmentalists should think more deeply about the ethical dimensions of agriculture's impact on the environment. Environmental problems in industrial agriculture such as the use of chemical pesticides and biotechnology. Four worldviews that frame these issues: productionism, economics, stewardship, and holism. Potential responses in environmental ethics according to differing philosophical priorities. An open-ended account of sustainability designed to minimize hubris and help recapture the spirit of the soil. Thompson teaches philosophy at Texas A & M University. (v6,#1)
- Thompson, Paul B., "Norton's *Sustainability* : Some Comments on Risk and Sustainability," *Journal of Agricultural and Environmental Ethics* 20(2007):375-386. Bryan Norton's 2005 book *Sustainability* describes a pragmatic approach to environmental philosophy that stresses philosophy's role as one of mediating between scientific and ordinary language. But on two topics, Norton's approach is not pragmatic enough. In the case of his discussion of risk, he accedes to a scientific notion that fails to acknowledge the way that ordinary usage of the word risk involves pragmatic links to human action and moral responsibility. With respect to the word sustainability, his analysis fails to acknowledge important scientific work that characterizes the functional integrity of system cycling, opting instead for usage grounded either in economic accounting or in an even less substantive sense of a broad social movement for environmental improvement. On each of these topics, adherence to the pragmatic orientation of Norton's philosophy results in a different analysis of the concepts in question.
- Thompson, Paul B., "The Agricultural Ethics of Biofuels: A First Look," *Journal of Agricultural and Environmental Ethics* 21(2008):183-198. A noticeable push toward using agricultural crops for ethanol production and for undertaking research to expand the range of possible biofuels began to dominate discussions of agricultural science and policy in the United States around 2005. This paper proposes two complementary philosophical approaches to examining the philosophical questions that should be posed in connection with this turn of events. One stresses a critique of underlying epistemological commitments in the scientific models being developed to determine the feasibility of various biofuels proposals. The second begins with a broader set of questions about the philosophical goals of agriculture, then queries the place that a turn to biofuels might have within the philosophy of agriculture. Both are portrayed as viable and important. The paper itself is a preliminary stage-setting reflection on the need for these two types of philosophical inquiry.
- Thompson, Paul B. "Commodification and Secondary Rationalization." *Democratizing Technology: Andrew Feenberg's Critical Theory of Technology*. Tyler J. Veak, ed. Albany: State University of New York Press, 2006.
- Thompson, Paul B. Review of Sarah Franklin, *Dolly Mixtures: The Remaking of Genealogy* (Durham, NC: Duke University Press, 2007). *Journal of Agricultural and Environmental Ethics* 21(2008):385-388.
- Thompson, Paul B. *Food Biotechnology in Ethical Perspective*, 2nd ed. Dordrecht: Springer, 2007. Thompson is in agricultural, food and community ethics at Michigan State University.

- Thompson, Paul B. "Should We Have GM Crops?" *Santa Clara Journal of International Law* Vol. 4, no. 1 (2006): 75-95. Thompson evaluates the title question by discussing consumer rights of exit with respect to consumption of GM crops, environmental risk from GM crops, and the effectiveness of the scientific community in addressing non-technical issues that have been raised by GM crops. Three key theses are argued: (1) U.S. labeling policy for GM crops provides only tenuous protection for consumers' ethical right to eat a diet that conforms to religious, cultural or politically based values; (2) environmental risks, though real, have been overstated by critics of GM crops, who have ignored significant environmental risks from non-GM agricultural technologies; and (3) although scientific bodies have done a credible job of addressing many technical issues on GM crops, their poor handling of human, social and other non-technical issues has tended to undermine public confidence in their willingness or ability to engage even the technical issues. As such, skepticism about GM crops is neither surprising nor entirely unjustified.
- Thompson, Paul B., Reviews of *Albert Howard, The Soil and Health: A Study of Organic Agriculture* (Lexington, KY: The University Press of Kentucky) and *Julie Guthman, Agrarian Dreams: The Paradox of Organic Farming in California* (Berkeley, CA: The University of California Press, 2004). *Journal of Agricultural and Environmental Ethics* 21(2008):297-301.
- Thompson, Paul B. "Mark Sagoff's Kantian Environmental Philosophy." *Ethics, Place and Environment* Vol. 9, no. 3 (2006): 344-50. Sagoff replies on pp. 365-72.
- Thompson, Paul. Review of Carolyn Raffensperger and Joel Tickner, Eds. Protecting Public Health and the Environment: Implementing the Precautionary Principle, *Journal of Agricultural and Environmental Ethics* 10(2001):351-354. (JAEE)
- Thompson, Peter, Strohm, Laura A. "Trade and Environmental Quality: A Review of the Evidence," The Journal of Environment and Development 5(no.4, 1996):363. (v8,#2)
- Thompson, Richard P., "Compensated Takings and Negotiated Solutions," Journal of Forestry 91 (no. 4, April 1993):14-18. The author claims that increased regulations of what private landowners may and may not do on their forest lands amounts to partial takings, and finds that courts are increasingly recognizing this, although they still lean too much to extend police powers protecting from harm in environmental cases. There is a limited ability of regulatory law to impart respect and stewardship for natural resources; one cannot legislate morality. Landowners must be given incentive. One simple method is to compensate landowners for legitimate losses from takings due to environmental regulation. But one should also view landowners as partners with society in conservation and negotiate with them directly on mutual issues. Thompson is in natural resource management, California Polytechnic State University, San Luis Obispo. (v5,#4)
- Thompson, Stewart, Anna Larcom, and Lee, John T., "Restoring and Enhancing Rare and Threatened Habitats Under Agri-environment Agreements: A Case Study of the Chiltern Hills Area of Outstanding Natural Beauty, UK." Land Use Policy 16(no. 2, April 1999):93- . (v.11,#1)
- Thomson, KJ, "World agriculture: towards 2015/2030: an FAO perspective," Land Use Policy 20(no.4, 2003):375. (v.14, #4)
- Thomson, Maryl "Fed Up With the Feds, Locals Take On Great Lakes Cleanup." The Christian Science Monitor, vol. 89, 2 Dec. 1996, p. 3.
- Thorbjarnarson, John, "Crocodile Tears and Skins: International Trade, Economic Constraints, and Limits to the Sustainable Use of Crocodilians." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 3, June 1999):465- . (v10,#4)

- Thorburn, C., "Regime Change-Prospects for Community-Based Resource Management in Post-New Order Indonesia," Society and Natural Resources 15(no.7, 2002): 617-28. (v.13,#4)
- Thoreau, Henry David, Wild Fruits. New York: W. W. Norton, 2000. \$ 30. Previously unpublished and little known Thoreau materials, recovered and edited by Bradley Dean. Dean is with the Thoreau Institute, Lincoln, Massachusetts. (v10,#4)
- Thoreau, Henry David, Faith in a Seed. Washington, DC: Island Press/Shearwater Books, 1993. Edited by Bradley P. Dean. The first publication of Thoreau's last manuscript. "Though I do not believe that a plant will spring up where no seed has been, I have great faith in a seed. Convince me that you have seen a seed there, and I am prepared to expect wonders." (v4,#1)
- Thoreau, Henry David. Journal, Volume 4: 1851-1852. Edited by Leonard N. Neufeldt and Nancy Craig Simmons. Princeton: Princeton University Press, 1992. 787 pages. \$ 39.50. Daily records, observations, thoughts, showing how Thoreau rejoiced in particulars, turning over a stone in midwinter to find crickets and ants, feeling that a white pine tree (which loggers targeted) "seems the emblem of my life--it stands for the west--the wild" (p. 480), his botanical studies, his bird lists, his aesthetic recommendations to make a landscape picturesque, and much more. Appreciation of the natural world is encouraged by the spatial and temporal scale provided by the nearly lost pastime of walking with leisure to poke. Thanks to Jerome A. Stone, William Rainey Harper College, Palatine, IL. (v5,#2)
- Thorndike, Elizabeth, "New York's Adirondack Park: Where U.S. Wilderness Preservation Began," International Journal of Wilderness 5(no. 1, 1999):9-14. Protected since 1894 as "forever wild" under the New York State Constitution, a summary history of Adirondack conservation, and present issues. (v.10,#2)
- Thornemiller (Thorne-Miller), Boyce. The Living Ocean: Understanding and Protecting Marine Biodiversity: Second Edition. Covelo, CA: Island Press, 1999. 200 pp. \$29.95 cloth, \$17.95 paper. Marine biodiversity and how it can be protected. (v.10,#1)
- Thornhill, R., "Darwinian Aesthetics," pages 543-572 in C. Crawford and D. Krebs, eds., Handbook of Evolutionary Psychology (Mahway, NJ: L. Erlbaum, 1998). We are emotionally attracted to features of the physical and social environment that are likely to increase our fitness, which we experience as beautiful. (v.13,#4)
- Thornhill, Randy, "Darwinian Aesthetics." Pages 543-572 in Crawford, Charles, and Krebs, Dennis L., eds., Handbook of Evolutionary Psychology: Ideas, Issues, and Application. Mahwah, NJ: Lawrence Erlbaum, Associates, 1998. "Beauty is in the adaptations of the beholder" (p. 557). Humans aesthetically prefer in their natural environments what historically helped them to outreproduce other humans; but only scientists have been able to figure this out. "Beauty is the moving experience associated with information processing by aesthetic judgment adaptations when they perceive information of evolutionary historical promise of high reproductive success" (p. 557). "A beautiful thing is one that has high personal, evolutionary historical reproductive value, but this value is totally out of reach of introspection. Only the scientific method can identify the cues involved in aesthetic judgment and the evolutionary function of the judgment" (p. 557)
- "One can conclude with great confidence that beauty and ugliness were important feelings in the lives of the evolutionary ancestors of humans (i.e. those individuals who outreproduced others in human evolutionary history). The existence of human aesthetic value distinguished our evolutionary ancestors from the other individuals present in human evolutionary history who failed to reproduce or reproduced less. A beautiful idea of evolutionary psychology is that the discipline allows discovery of how human ancestors felt about various aspects of their environment; the discipline allows discovery of our emotional

roots" (p. 549). So the scientific truth is: the more biophilia, the more babies. Thornhill is in biology at the University of New Mexico, Albuquerque.

Thornton, Alex and McAuliffe, Katherine, "Teaching in Wild Meerkats," Science 313(2006):227-229. Teaching is ubiquitous in humans but has been difficult to demonstrate in animals. Most attempts to find it involve primates, with little or no clear success. A usual definition of teaching involves intent to teach and ideas passing from mind to mind, with teacher correcting pupil. These authors use a similar, but importantly different definition: "Teaching is characterized by the active involvement of experienced individuals in facilitating learning by naive conspecifics." (If so, a mother hen scratching, finding food, and calling her chicks to eat and imitate her is teaching). These authors find, interestingly, that wild meerkats (an African rodent) teach. Meerkats live in demanding environments and catch and eat scorpions (about 4.5% of what they eat). These scorpions have stingers on their tails that can kill meerkats; they also have harmful pincers. Adult meerkats will first kill scorpions and feed them to their young. When the young are older, they maim the scorpions and let the young catch them. It seems that the adults differentially maim the scorpions depending on the advancing skills of the juveniles. Adults remove the stinger for the naive young, but with more experienced young they do not. So they gradually introduce pups to live prey. The authors do not think this involves a theory of mind, but such "teaching can be based on simple mechanisms without the need for intentionality and the attribution of mental states." In fact, they think this kind of teaching may be present in ants. The authors are in zoology, Cambridge University.

Thornton, Joe, Pandora's Poison: Chlorine, Health, and a New Environmental Strategy. Cambridge, MA: The MIT Press, 2000. Global build-up of organochlorine pollution is already contributing to infertility, immune suppression, cancer, and development disorders in humans and wildlife. 1,000 references. Environmental, scientific, industrial, political, regulatory, and ethical issues. (v.12,#4)

Thorpe, Richard. "On Yankee Farms, Firs Supplant Spuds." The Christian Science Monitor, vol. 89, 8 Jan. 1997, p. 4.

Thorsheim, P, Book Review: I. G. Simmons, An Environmental History of Great Britain: From 10,000 Years Ago to the Present, Environmental History 7(no.2, 2002):319- . (v.13, #3)

Throop, Bill, "Humans and the Value of the Wild," Human Ecology Review 3 (no. 1, Autumn, 1996): 3-7. (v.9,#3)

Throop, Bill, "Humans and the Value of the Wild," Human Ecology Review 3(no. 1, 1996):3-7. An account of wildness according to which a human trait is wild to the extent it is not caused by humanized environments. (v.13,#1)

Throop, Bill. "Humans and the Value of the Wild," Human Ecology Review 3, 1 (Autumn 1996): 3-7. Throop teaches philosophy at Green Mountain College in Vermont. (v8,#1)

Throop, William, ed., Environmental Restoration: Ethics: Theory, and Practice. Amherst, NY: Humanity Books (Prometheus Books), 2000. Part I. Cases and Questions. Part II. Fakes or Artifacts. Part III. Ends and Means. Part IV. New Paradigm or Old Problem. Sample articles:

--Susan Power Bratton, "Alternative Models of Ecosystem Restoration."

--Robert Elliot, "Faking Nature."

--William Throop, "Eradicating the Aliens: Restoration and Exotic Species."

--William R. Jordan, III, "'Sunflower Forest': Ecological Restoration as the Basis for a New Environmental Paradigm."

Throop is chair of environmental studies at Green Mountain College in Poultney, VT. (v.11,#3)

- Throop, William. Review of Faking Nature: The Ethics of Environmental Restoration. By Robert Elliot. Environmental Ethics 21(1999):329-332.
- Thrower, Alex W. and Martinez, J. Michael, "Reconciling Anthropocentrism and Biocentrism Through Adaptive Management: The Case of the Waste Isolation Pilot Plant and Public Risk Perception," Journal Of Environment And Development 9 (No. 1, Mar 01 2000): 68- . (v.11,#2)
- Thurman, Skip. "Water-Saving Measure Creates New Contraband: Commodities." The Christian Science Monitor, vol. 89, 23 Jan. 1997, p. 3.
- Thurman, Skip. "Harsh Winter Sends Produce Prices Higher." The Christian Science Monitor, vol. 89, 30 Jan. 1997, p. 3.
- Thurston, Harry, "Last Look at Paradise?" (Galápagos Islands), International Wildlife 27(no. 3, May/June 1997):12-21. The primordial world of the Galápagos is under siege from people. In the past thirty years, the number of people who reside on the islands has risen seven-fold, putting pressures on the vulnerable wildlife. The government in Ecuador faces a tough battle trying to preserve the unique animals while responding to citizens' demands for an improved standard of living. Newcomers from the mainland have a gold-rush mentality that would exploit wildlife rather than protect it. Many disregard protection laws and are overfishing the islands' rich oceans. About 50,000 tourists come each year, but do little harm because Ecuador manages tourists closely. (v8,#2)
- Thurston, Harry, "When It Became a New Species, a Tiny Songbird Was Thrust into the Limelight," National Wildlife 36, no. 4, June/July 1998, pp. 18-19. Bicknell's thrush in New England has been declared a new bird species in a taxonomic revision by ornithologists. The bird, known since 1881, was previously classified a subspecies of the more widespread gray-cheeked thrush. Henri Ouellet, a researcher at the Canadian Museum of Nature (the thrush is also found in parts of Canada) discovered that the breeding and wintering ranges of the two thrushes do not overlap, the songs are decidedly different, and no interbreeding occurs. The decision has brought the bird into intense study, with conservation versus development implications. (v9,#2)
- Thwaites, Vivonne, "Karra: Karrawirraparri-river red gum-Eucalyptus camaldulensis," Ethics and the Environment 8(no. 1, 2003):51-60. Karra was a visual arts project devised for the 2000 Adelaide Festival in Australia. Its focus was the River Red Gum, quite justifiably an Australian icon, and once the most widespread tree in south eastern Australia. The project comprised an installation by three artists and a forty-page publication with essays and visual material from many contributors. The intention of the project (which I developed and oversaw as curator) was twofold. First, I hoped that an examination of the River Red Gum from a number of points of view might help people connect with the tree itself, and more broadly with this place non-Aboriginal Australians so uneasily inhabit. Second, given the tree's central place in Australia's inland waterways; I wanted the art to help people consider the urgent problems facing this ecosystem, such as increased salinity, diminished water flow and environmental degradation. This subject had particular relevance for South Australians, as our state is so dependent on the Murray-Darling River system. For example, in February 1999 the Commonwealth Scientific and Industrial Research Organisation published a media release on "Salt: Australia's Greatest Battle," declaring that we stand to lose a large fraction of our native biodiversity to salinity, and that native trees "remain the front line answer." Thwaites is a freelance curator in Adelaide, Australia. (E&E)
- Tian Haijian. "Exploring the Animal Ethic of Confucianism." Confucius Studies No.3 (2007): 56-59.

Tian Haiping, "Who can follow eco-ethic", Nanjing Industry University 2002(1)

Tian Haiping. "The Environmental Ethics and Human Civilization in the 21st Century." *Journal of Southeast University* No. 5 (2004): 25-29.

Tian Wenfu. "The Contemporary Meanings of Environmental Ethics and the Construction of the Chinese Environmental Ethics System." *Tribune of Study* No. 7 (2006): 55-58.

Tiberghien, Gilles, Land Art. New York: Princeton Architectural Press, 1995. 311 pages. ISBN 1-56898-040-X. Originally published in French, Éditions Carré, 1993 under ISBN 2-908393-18-2. A coffee table size and style book detailing earthworks, photographs, sketches, with accompanying text, interpretation, criticism. "In seeking to find new parameters that allow a definition of what art is, the Land Art artists have produced new objects. Their move away from museums and galleries is also a desire to reinvent art, in a certain sense. But moving away from these spaces is also extending them. ... In using earth as a medium and material, they have not attempted to make nature into a new museum, ... Land Art is not primarily an art of landscape. ... The earth, dirt, on the other hand, with its power of provocation (simply from the troubling effect of its presence) ... is what gives Land Art acts their radicalism. ... The deserts, the quarries, the abandoned mines, the distant plains, and the mountainous summits give us the sense of a world where art takes on a new meaning, where museums disappear, and humanity is eclipsed." For philosophical commentary, see Peter Humphrey, "The Ethics of Earthworks," Environmental Ethics 7(1985):5-21; Allen Carlson, "Is Environmental Art an Aesthetic Affront to Nature?", Canadian Journal of Philosophy 16(1986):635-50. (v7,#4)

Tickell, Crispin, "The Quality of Life: What Quality? Whose Life?" Environmental Values Vol.1 No.1(1992):65-76. ABSTRACT: As a consequence of industrialization, we face unprecedented pressures on the carrying capacity of the earth. Desertification, pollution and global climate changes can only increase these pressures, and will cause vast increases in the number of refugees and widespread risks to human health. Increasing inequalities between rich and poor nations are potential causes of conflict. Since the industrial countries are mainly responsible for our economic problems, they must give a lead in global arrangements to alleviate them. A major change in our habitual patterns of thought is essential, in which we reassess how we perceive values, and how we measure wealth and well-being. This must be accompanied by governmental action: on population numbers and the refugee problem; on the efficient use of energy; on new methods of land use, and on regulation of damaging industrial activities. To act in these ways, governments must reorganize their domestic policies and increase international co-operation. KEYWORDS: Climate change, economic values, environmental policy. Green College, Woodstock Road, Oxford, UK.

Tiegs, Scott; O'leary, John; Pohl, Molly; Munill, Carrie, "Flood disturbance and riparian species diversity on the Colorado River Delta," Biodiversity and Conservation 14(no.5, May 2005):1175-1194(20).

Tierney, John, "And on the Eighth Day, God Went Green," New York Times, Feb. 11, 2006. Op-Ed Column. "We may as well acknowledge that America has only one truly national religion: environmentalism."

Tigas, L. A., Van Vuren, D. H., and Sauvajot, R. M., "Behavioral Responses of Bobcats and Coyotes to Habitat Fragmentation and Corridors in an Urban Environment," Biological Conservation 108(no.3, 2002): 299-306. (v.13,#4)

Tillman, David, and John A. Downing. "Biodiversity and Stability in Grasslands." Nature 367(1994):363-365. In a manipulated study of grasslands, which increased diversity by adding nitrogen, more diverse plant communities were more resistant to and recovered more fully from drought. Evidence for the often contested diversity-stability hypothesis, though not the alternative hypothesis that most species are

functionally redundant. The preservation of biodiversity is essential for the maintenance of stable productivity in ecosystems. Tillman is in ecology at the University of Minnesota; Downing in biology at the University of Montreal. (v6,#3)

Tilzey, Mark, "Natural Areas, the whole countryside approach and sustainable agriculture," Land Use Policy 17(no.4, OCT 01 2000):279- . (EE v.12,#1)

Timber Wolf Alliance, Beyond Little Red Riding Hood: A Resource Directory for Teaching about Wolves. Ashland, WI: Timber Wolf Alliance, 1994. \$ 5. Available from Timber Wolf Alliance, Sigurd Olson Environmental Institute, Northland College, Ashland, WI 54806. Phone 715/682-1223. Perhaps the best short list of resources, videos, children's and youth literature, technical reports, journal articles, curriculum guides, newsletters and magazines, personal presentations, workshops, seminars, organizations. (v7,#1)

Timbrell, John, The Poison Paradox: Chemicals as Friends and Foes. Oxford: Oxford University Press, 2005. Natural and manufactured chemicals to which humans are exposed, how they are toxic and the differing reactions humans can have to them. Timbrell claims to debunk the myth that natural is good and man-made is bad. Timbrell is at King's College London.

Time, "A Sizzling Scientific Debate," April 30, 1990. Skeptics say evidence for the greenhouse effect is not so hot. But many scientists counter that failure to curb CO₂ emissions amounts to a dangerous experiment with the atmosphere. (v1,#3)

Time, "Owl vs. Man," June 25, 1990. "The timber industry says that saving this spotted owl will cost 30,000 jobs. It isn't that simple." "There is no way to avoid hard choices. The U. S. will have to recognize that no society can have it all at all times--unfettered harvesting of natural resources, full employment and a healthy and rich environment. The soft hoot of the owl, an ancient symbol of wisdom and foresight, beckons us to resolve both its future and our own." (v1,#3)

Time, "Where the Sky Stays Dark," May 28, 1990. The lifting of the Iron Curtain reveals the planet's most polluted region. Central Europe especially is an environmental disaster, with substantial percentages of the population afflicted with environmental diseases. (v1,#3)

Time, April 3, 2006, (vol. 167, no. 14) is a special issue on Global Warming. "Be worried. Be very worried. Climate change isn't some vague future problem--it's already damaging the planet at an alarming pace. "Earth and the Tipping Point." "How it Threatens Your Health." "How China and India Can Help Save the World--or Destroy it." "The Climate Crusaders." And more.

Time, Earth Day 2000. Special issue, April-May 2000, vol. 155, no. 17. How to save the Earth, and the heroes for the planet who are making it happen. (v.11,#2)

Time. "The Rape of Siberia." Cover story, Sept. 4, 1995. Siberia is an epic landscape steeped in tragedy, a tortured land. Siberia suffered greatly under communism. Now the world's capitalists covet its riches and that may be worse for the conservation of a majestic landscape. (v6,#3)

Time. January 15, 1990, contains a cover story on Antarctica. Once inaccessible and pristine, the white continent is now threatened by spreading pollution, budding tourism, and the world's thirst for oil. Many environmentalists believe the only way to preserve the continent's wonders is to set up a world park, where most development would be barred. But the first priority is to get an agreement to curb minerals exploration. (v1,#1)

- Time. October 16, 1989, contains a cover story on the slaughter of elephants for ivory. Elephants face a grim struggle against greed and deceit. Whole families are an increasingly rare sight. The older animals have been wiped out in many herds, and younger ones are now the targets. Poachers must take more tusks to get the same amount of ivory. From the bloody hands of poachers into the stashes of smugglers, ivory moves across Africa under the noses of often corrupt officials. By many routes, some direct and some devious, much of the trade flows to Hong Kong. The final destination is most often Japan, where exquisite carving is a tradition. (v1,#1)
- Timmer, Vanessa, Review of Pralle, Sarah B., *Branching Out: Digging in: Environmental Advocacy and Agenda Setting* (Washington, DC: Georgetown University Press), *Environmental Values* 17(2008):547-549.
- Tinch, Rob. Review of Lemons, Westra, Goodland, Ecological Sustainability and Integrity: Concepts and Approaches. *Environmental Values* 9(2000):394.
- Tinker, Carherine, "A 'New Breed' of Treaty: The United Nations Convention on Biological Diversity," Pace Environmental Law Review 13 (no. 1, 1995):191-218. From a legal standpoint, there are a number of theoretical questions underpinning the language of the Treaty which remain unanswered and unanalyzed, which may plague efforts to interpret or implement the Convention. Tinker is in law, Chapman University School of Law, Orange, CA. (v8,#2)
- Tinker, DB; Romme, WH; Despain, DG, "Historic range of variability in landscape structure in subalpine forests of the Greater Yellowstone Area, USA," Landscape Ecology 18(no.4, 2003):427-439. (v.14, #4)
- Tinker, George E. "The Integrity of Creation: Restoring Trinitarian Balance." Ecumenical Review 41 (October 1989): 527-36.
- Tinker George E., "An American Indian Theological Response to Ecojustice," Ecotheology No 3 (July 1997):85-109.
- Tisch, Sarah J. and Michael B. Wallace. Dilemmas of Development Assistance: The What, Why, and Who of Foreign Aid. Boulder, CO: Westview Press, 1994. 182 pages. \$49.95; \$13.95 paper. (v5,#2)
- Tischendorf, L., Fahrig, L., "How Should We Measure Landscape Connectivity?" Landscape ecology 15(no. 7, Oct. 1, 2000):633- . (v.12,#2)
- Tisdell, C., and Wilson, C., "Ecotourism for the Survival of Sea Turtles and Other Wildlife," Biodiversity and Conservation 11(no.9, 2002): 1521-38. (v.13,#4)
- Tisdell, Clem; Wilson, Clevo, "The publics knowledge of and support for conservation of Australias tree-kangaroos and other animals", Biodiversity and Conservation 13(no.12,November 2004):2339-2359(21).
- Tittley, Emmanuelle, "Greening the Ivory Tower," Alternatives 26 (No. 3, 2000 Summer): 34- . North American universities learn to apply environmental wisdom. (v.11,#4)
- Toadvine, Ted, "Naturalizing Phenomenology," Philosophy Today 43, SEEP Supplement (1999):124-131. "Most of us would like to find a secure home somewhere between uncritical nostalgia for the pristine wilderness that never was and those strands of social constructionism that deny the plausibility of any reference to reality apart from human interpretation" (p. 124) "Environmental thinking needs phenomenology, but also ... phenomenology needs environmental thinking, ... it requires the insights

inspired by our current ecological consciousness to revise its own methodological procedures." This requires a "naturalized phenomenology" (p. 125. Toadvine is in philosophy, Emporia State University, Emporia, KS.

Toadvine, Ted. "Limits of the Flesh: The Role of Reflection in David Abram's Ecophenomenology." Environmental Ethics 27 (2005):155-170. David Abram's The Spell of the Sensuous: Perception and Language in a More-Than-Human-World convincingly demonstrates the contribution that phenomenology, especially the work of Maurice Merleau-Ponty, can make to environmental theory. But Abram's account suffers from several limitations that are explored here. First, although Abram intends to develop an "organic" account of thinking as grounded in the sensible world, his descriptions castigate reflection and reverse, rather than rethinking, the traditional hierarchy between mind and body. Second, Abram's emphasis on perceptual reciprocity as the basis for an environmental ethic underplays the importance of the symbolic level of our interaction with others. Merleau-Ponty's later work, in particular his account of the reversibility of flesh, offers a fruitful alternative to Abram's methodology. (EE)

Tober, James A., Who Owns the Wildlife?: The Political Economy of Conservation in Nineteenth-century America. Westport, Conn: Greenwood Press, 1981. 330 pages. Especially concerned with the fact that wildlife has never been owned by private landowners, also tensions between state and federal management of wildlife.

Tobias, Michael, Nature's Keepers: On the Front Lines of the Fight to Save Wildlife in America. New York: John Wiley, 1998. (v.11,#1)

Tobias, Michael, Life Force: The World of Jainism. Berkeley, CA: Asian Humanities Press, 1992. Paper, about \$ 10. With much attention to Tobias' experience with Jainism and ecology. (v4,#2)

Tobias, Michael, ed., Deep Ecology. San Diego, Avant Books, 1985. Pp. viii, 295. This book gives the Deep Ecology movement a bad name. The central problem of the Deep Ecology movement is its lack of a specific program or ideology. It remains a hodgepodge of Eastern religions, ecological science, process philosophy, feminism, and any other radical critique of Western technological thought. This book throws together several poor philosophy essays--often by nonphilosophers--with works of anthropology, fiction, poetry, and personal reminiscence. Of some interest is George Sessions, "Ecological Consciousness and Paradigm Change," (pp. 28-44) which is a distillation of some of his book on Deep Ecology. Also Arne Naess, "Identification as a Source of Deep Ecological Attitudes," (pp. 256-270), in which he argues for an expanded vision of the self--but he admits that his view rests on an intuition, not an argument (p. 266). Garrett Hardin's article, "Discriminating Altruisms" (pp. 182-205) is the best paper in the book. Hardin argues for a limited "self-interested" altruism based on biological kinship. It is symptomatic of the Deep Ecology movement (and of this collection) that Hardin's essay appears here--he is not a proponent of Deep Ecology. (Katz, Bibl # 1)

Tobias, Michael, Fitzgerald, J. Patrick, and Rothenberg, eds., A Parliament of Minds: Philosophy for a New Millennium. Albany, NY: State University of New York Press, 2000. 309 pages. \$ 22. Contains, among others:

--Greene, Marjorie, "The Trials and Tribulations of Philosophy and Farming"

--Rothenberg, David, "Wild Thinking: Philosophy, Ecology, and Technology" (v10,#4)

Tobias, Michael and Georgianne Cowan, eds., The Soul of Nature: Visions of a Living Earth. New York: Continuum, 1994. 299 pages. 32 contributions on spirit and nature. Part I. Earth Sapiens (sense of place), including Gretel Ehrlich, "Island"; Annie Dillard, "Tinker Creek.:" Part II. For the Love of All Animals, including Barry Lopez, "Apologia"; Joel Monture, "The Boy Who Lived with the Bears." Part III, Living Every Day, including Wendell Berry, "People, Land, and Community"; David Steindl-Rast, "Belonging to the Universe." Part IV: The Future of Nature, including Petra Kelly (German woman, co-

founder of the Green Party, who was mysteriously murdered in 1992), "Creating an Ecological Economy"; B. D. Sharma, "On Sustainability"; and many more. Tobias is an author and film producer, including the miniseries, Voice of the Planet. Cowan is director of the Spirit and Nature Program at the Earth Trust Foundation. (v5,#4)

Tobin, Richard, The Expendable Future: U. S. Politics and the Protection of Biological Diversity, Duke University Press, 1990. Cloth \$ 45.00, paper, \$ 17.95. A comprehensive and critical evaluation of the politics of biological diversity in the United States. (v1,#4)

Todd Anne Marie, "The Aesthetic Turn in Green Marketing: Environmental Consumer Ethics of Natural Personal Care Products," Ethics and the Environment 9(no. 2, 2004):86-102. Green consumerism is on the rise in America, but its environmental effects are contested. Does green marketing contribute to the greening of American consciousness, or does it encourage corporate greenwashing? This tenuous ethical position means that eco-marketers must carefully frame their environmental products in a way that appeals to consumers with environmental ethics and buyers who consider natural products as well as conventional items. Thus, eco-marketing constructs a complicated ethical identity for the green consumer. Environmentally aware individuals are already guided by their personal ethics. In trying to attract new consumers, environmentally minded businesses attach an aesthetic quality to environmental goods. In an era where environmentalism is increasingly hip, what are the implications for an environmental ethics infused with a sense of aesthetics?

Todd, Helen and Christos Zografos, "Justice for the Environment: Developing a Set of Indicators of Environmental Justice for Scotland," Environmental Values 14(2005):483-501. This paper explores the context of environmental justice (EJ) in Scotland, and presents a case study whereby the main attributes for an indicator of EJ were identified, encompassing procedural and distributive aspects of justice. Through a participatory process, weights were assigned using a Multi-Criteria Analysis tool, the Analytical Hierarchy Process (AHP). Results show that overall, environmental injustices are mostly associated by respondents to unequal distribution of health burdens due to pollution, yet greater weight is attached to procedural justice by community environmental activists. The paper suggests that AHP may be applied to many situations and could form a basis for the development of tools to address and deliver EJ in Scotland. Todd is based in Edinburgh and Zografos is with the Land Economy Research Group, Scottish Agricultural College, Edinburgh. (EV)

Todd, Ivan, Phenomenological Fragments in a Year of Roads Protests, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Todd, Ivan, Phenomenological Fragments in a Year of Roads Protests, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Tokar, Brian, ed., Redesigning Life: The Worldwide Challenge to Genetic Engineering. London: Zed Books, 2001. (v.14, #4)

Tokar, Brian. "Biotechnology vs. Biodiversity." Wild Earth 6, no.1 (1996): 50. (v7, #3)

Toke, D, "Wind Power in UK and Denmark: Can Rational Choice Help Explain Different Outcomes?," Environmental Politics 11(no.4, 2002): 83-100.

Toke, D, "Ecological Modernisation and GM Food," Environmental Politics 11(no.3, 2002): 145-163.

Toke, D., "GM Crops: Science, Policy and Environmentalists," Environmental Politics 10(no.4, 2001): 115-20. (v.13,#2)

- Tol, Richard S.J., "Why Worry About Climate Change? A Research Agenda," *Environmental Values* 17(2008):437-470. Estimates of the marginal damage costs of carbon dioxide emissions suggest that, although climate change is a problem and some emission reduction is justified, very stringent abatement does not pass the cost-benefit test. However, current estimates of the economic impact of climate change are incomplete. Some of the missing impacts are likely to be positive and others negative, but overall the uncertainty seems to concentrate on the downside risks and current estimates of the damage costs may have a negative bias. The research effort on the economic impacts of climate change is minute and lacks diversity. This field of study should be strengthened, with a particular focus on the quantification of uncertainties; estimating missing impacts, estimating impacts in developing countries; interactions between impacts and higher-order effects; the valuation of biodiversity loss; the implications of extreme climate scenarios and violent conflict; and climate change in the very long term. I discuss these particular gaps in research, and speculate on possible sign and size of the impacts of climate change.
- Tolba, Mostafa K., Saving our Planet: Challenges and Hopes. London and New York: Chapman and Hall, 1992. 287 pages. \$ 20, paper. Also in Spanish as: Salvemos El Planeta: Problemas y Esperanzas. The state of the environment, human well-being, perceptions and attitudes, challenges and priorities for actions. Tolba is Director of the United Nations Environment Programme. (v4,#2)
- Tolman, Charles. "Karl Marx, Alienation, and the Mastery of Nature." *Environmental Ethics* 3(1981):63-74. Donald Lee's account in "The Marxian View" is inaccurate in asserting the centrality of an abstract conception of alienation based on a speculative understanding of human nature. This was precisely the view rejected by Marx in 1845. The development of Marx's materialist conception of human nature is traced in order to show the importance to his analysis of the forces and relations of production. Some specific difficulties in Lee's account are discussed, and the broad implications of Marxist theory regarding environmental problems and the mastery of nature are presented. Tolman is in the department of psychology, University of Victoria, Victoria, B.C. (EE)
- Toman, Eric; Shindler, Bruce; Brunson, Mark, "Fire and Fuel Management Communication Strategies: Citizen Evaluations of Agency Outreach Activities," *Society and Natural Resources* 19 (no.4, Number 4/April 2006): 321-336 (16).
- Toman, Michael, "Values in the Economics of Climate Change," *Environmental Values* 15(2006):365-379. Economics has played an important role in assessing climate change impacts, and the effects of various individual and policy response strategies. Proponents of a key role for economics in analysis of climate change policies and goals argue that its capacity to incorporate and compare a variety of costs and benefits makes it uniquely useful for normative assessment. Critics of economic analysis of climate change have questioned not only its empirical capacities, but also its fundamental usefulness given some of the important but often implicit assumptions on which it is based. After reviewing this debate and its implications for public policy on climate change, the paper sketches a way in which more technical economic analysis and public dialogue might be combined. (EV)
- Tomasello, Michael, and Call, Josep, Primate Cognition. New York: Oxford University Press, 1997. 517 pages. "The experimental foundation for claims that apes are 'more intelligent' than monkeys is not a solid one, and there are few if any naturalistic observations that would substantiate such broad-based, species-general claims" (pp. 399-400). (v.8,#4)
- Tomasini, Floris J-W., Sublime and the Ridiculous, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)
- Tomasini, Floris J-W., Sublime and the Ridiculous, Master's Thesis, Department of Philosophy, Lancaster

University, September 1995.

- Tomassi, Paul, "On the Metaphysics of Informed Environmental Concern," American Philosophical Quarterly 40(no. 4, 2003):333-343. "The main aim of this paper is to show that the metaphysical questions which bear upon environmental thinking are equally as 'classical' in character as those which bear upon any other area of discourse." "The issue here is not merely the nature of environmental concern but the nature of the metaphysical grounds which could underpin such concern." "One traditional metaphysical dispute which prima facie is likely to impinge upon environmental concern [is] realism vs. anti-realism." "Informed environmental concern is consistent with much stronger, more robustly metaphysical, realist positions." "The kinds of intuitions which most naturally lend themselves to explaining the forward-looking character of informed environmental concern are consistent with scientific realism but inconsistent with scientific anti-realism." "If environmental concern does involve objective modal elements then it seems likely that only realism will be adequate to providing an account of the metaphysical grounds underpinning such concern." "It would appear that the questions of environmental philosophy do indeed have properly metaphysical teeth." Tomassi is at the University of Aberdeen. (v. 15, # 3)
- Tonge, Peter. "Composting Puts More Squirm in the Worm." The Christian Science Monitor, vol. 89, 24 Feb. 1977, p. 13.
- Tonge, Peter. "Tiptoe Through the Travails and Travels of Tulips." The Christian Science Monitor, vol. 88, 16 Oct. 1996, p. 15.
- Tonge, Peter. "The Bigger the Bulb, the Bolder the Blossom." The Christian Science Monitor, vol. 88, 16 Oct. 1996, p. 15.
- Tongjin, Yang, "Some Updates from China (in Environmental Ethics)," 2008, 19, no. 2, Spring/Summer, pp. 29-36. Includes recent articles and books in Chinese environmental philosophy, also English books translated into Chinese. These are also found as separate entries in this website bibliography.
- Tookey, Douglas L. "Sustainable Development in Laos: Prospects for a Green Future," The Journal of Environment and Development 6(no.2, 1997):170. (v8,#2)
- Toolan, David S., "Nature Is a Heraclitean Fire: Reflections on Cosmology in an Ecological Age," Studies in the Spirituality of Jesuits 23/5, November 1991. Address: 3700 West Pine Blvd., St. Louis, MO 63108. Phone 314/652-5737. (v2,#4)
- Topfer, Klaus, "Whither After The Hague," Science 292(2001):2095-2096. Although the Hague conference on climate change failed about what action to take, the talks did succeed in building an almost unanimous conviction among governments that potential climate change is a serious problem. Taking no action at all will be more expensive than taking preventative action now. Töpfer is Executive Director, United Nations Environment Programme, Nairobi, Kenya. (v.12,#2)
- Topping Jr., John C., Qureshim Ata, Dabi, Christopher. "Building on the Asian Climate Initiative: A Partnership to Produce Radical Innovation in Energy Systems," The Journal of Environment and Development 5(no.1, 1996):4. (v8,#2)
- Torgerson, Douglas, "The Paradox of Environmental Ethics." Alternatives Vol. 12, no. 2 (Winter 1985):26-36. The paradox is that man is at once dethroned from his supreme position in the hierarchy of nature, but he still remains the valuer, the judge of environmental morality. A look at the metaethical basis of environmental ethics, based on a new conception of reason and value as developed by the theory of

communicative ethics. (Katz, Bibl # 1)

Torgerson, Douglas, "The Paradox of Environmental Ethics," Alternatives (Faculty of Environmental Studies, University of Waterloo, Ontario) 12 (no. 2, Winter 1985):26-36. The paradox of environmental ethics is that it de-centers the human and, at the same time, places humanity at the center of things. Grouped together in social artifice, people typically take for granted their peculiarly human world. Ecological sensitivity would involve a transformation in the human perception of nature. Environmental ethics is possible, but it remains all-too-human. Torgerson teaches policy studies at Trent University, Peterborough, Ontario.

Torrance, John, ed., The Concept of Nature. New York: Oxford University Press, 1993. 138 pages. Six authors on Greek, medieval, and modern conceptions of nature. Includes Elliott Sober on Darwinism, Roger Penrose on physical nature, and Robert May on molecular and population biology. Torrance is at Hertford College, Oxford. (v4,#1)

Torrance, John, ed., The Concept of Nature. Oxford, UK: Oxford University Press, 1992.

Torrance, John R., ed. The Concept of Nature. Oxford: Oxford University Press, 1992. 186 pp. Originally the Herbert Spencer lectures at Oxford University, in 1989. Contents include:

--Lloyd, Geoffrey E. R., "Greek Antiquity: The Invention of Nature," pages 1-24.

--Murray, Alexander, "Nature and Man in the Middle Ages," pages 25-62.

--Westfall, Richard S. "The Scientific Revolution of the Seventeenth Century: The Construction of a New World View," pages 63-93.

--Sober, Elliott R., "Darwin's Nature," pages 94-116.

--Penrose, Roger, "The Modern Physicist's View of Nature," pages 117-166.

--May, Robert M., "The Modern Biologist's View of Nature," pages 167-182. "I believe that we should cherish and conserve diversity primarily for the ethical reason that we now recognize we are no more, though no less, than a part of it" (p. 182). (v.10,#1)

Torrance, Robert M., ed., Encompassing Nature: A Sourcebook. Nature and Culture from Ancient Times to the Modern World. Washington, DC: Counterpoint, 1998. Paper, 1999. \$ 25.00. A huge anthology, 1,224 pages. Children's stories; tribal ritual and myth, aboriginal peoples, the Hebrew Bible, Mesopotamia, India, China, Japan, Classical Greece, the Hellenistic World and Rome, Late Antiquity and the Middle Ages, the Renaissance, the Scientific Revolution, the Enlightenment, 17th and 18th century British thought. Ends at the turn of the 19th century. Three thousand years of "nature writing." Torrance teaches comparative literature at the University of California, Davis, and is a founding member of the Nature and Culture Program there. (v.10,#3)

Torres, Bob. *Making a Killing: The Political Economy of Animal Rights*. Oakland: AK Press, 2007. Torres uses Marxist political economy, social anarchist theory, and an abolitionist approach to animal rights to examine the intersections between animal and human oppressions in relation to the exploitative dynamics of capitalism. He argues that we need to simultaneously fight animal exploitation and capitalism and that social justice movements for people must also take stock of domination, hierarchy, and power in human-animal relationships to liberate both people and animals.

Torres, Gerald. "Taking and Giving: Police Power, Public Value, and Private Right." Environmental Law 26, no.1 (1996): 1. A discussion of the relationship between property as a social artifact and law, and why this relationship is misunderstood. The political and narrative techniques used by property rights advocates and the current state of takings jurisprudence. Torres voices strong concern regarding the political and social values at stake in the struggle to define "property rights."

Totman, Conrad. The Green Archipelago. Reviewed in Environmental Ethics 12(1990):91-93.

Toulmin, Stephen. The Return to Cosmology. Reviewed in Environmental Ethics 7(1985):277-81.

Tovey, Hilary, "Theorising Nature and Society in Sociology: The Invisibility of Animals," Sociologia Ruralis (European Society for Rural Sociology) 43(no. 3, 2003):196-215. Despite an increasing intellectual and social interest in the animals question in recent decades, animals remain largely invisible in social science texts. Even in environmental sociology texts, animals figure largely as biodiversity or wild species. Sociology tends to absorb animals into wild nature with virtually nothing to say about the huge numbers of domestic, service, or function animals; and it tends to recognize animals only in the form of generic types, without individual character or experience. In rural life, animals, especially domestic animals, are central to human society in a range of ways. Relations between farms and their animals are important for the formation of farmer identity and local farming culture. Animals are a key element in rural-urban relationships. Rural sociology needs to start developing its own approach to including animals in theorising society. Tovey is in sociology, Trinity College, Dublin.

Towery, Twyman L., The Wisdom of the Wolves: Nature's Way to Organizational Success. Franklin, TN: Wessex House Publishing (P. O. Box 681753, Franklin, TN 37068-1753). The wolves as a moral tutor, or at least as a provocative symbol. So much for the big bad wolf! The wolf credo: Respect the elders. Teach the young. Cooperate with the pack. Play when you can. Hunt when you must. Rest in between. Share your affections. Voice your feelings. Leave your mark. The strength of the wolf is the pack, and the strength of the pack is the wolf. First there was the woman who runs with the wolves, and now, for the men, maybe women too, there is the wisdom of the wolves. Twyman is a Nashville, Tennessee, counseling psychologist and organizational management consultant. (v7,#1)

Towner, W. Sibley, "The Future of Nature" Interpretation: A Journal of Bible and Theology 50 (no. 1, January 1996):27-35). Bible and biology agree: Human beings cast the biggest shadow over the future of nature. At the end of the millennium we face a choice: We can continue to overuse and exploit our ecosphere or we can exercise tender "dominion" in the world, as God's agents here.

Townley, Cynthia, "Intellectual Property and Indigenous Knowledge," Philosophy and Public Policy Quarterly 22 (no. 4, Fall 2002):21-26. Westerners see indigenous knowledge as property to be obtained and used as a commodity. Indigenous peoples are more likely to see knowledge as a gift. But receiving such a gift involves respect for the giving persons and traditions, not just treating the knowledge as a commodity separable from the givers. Townley is in philosophy, University of Nevada at Las Vegas.

Townsend, C.R. "Invasion Biology and Ecological Impacts of Brown Trout Salmo trutta in New Zealand", Biological Conservation 78(no.1/2, 1996):13.

Townsend, Ellen, "Ecological Modernisation in Poland," Environmental Politics 8 (No. 4, 1999 Winter): 211- . (v.11,#4)

Townsend, M., "'Environmental Refugees" Ecologist 32(no.6, 2002): 22-25. Despite the UN's refusal to grant them refugee status, the numbers of people being forced to leave their homes because their environments are uninhabitable is increasing by the year. (v.13,#4)

Toynbee, Arnold, "The Religious Background of the Present Environmental Crisis," International Journal of Environmental Studies 3(1972):45-49.

Trachtenberg, Zev, ed., Symposium: Environmental Protection and the Politics of Property Rights, a theme issue of the Oklahoma Law Review, vol. 50, Fall 1997, no. 3. Contains:

- Trachtenberg, Zev, "Introduction: How Can Property Be Political?" pages 303-310. Although the goal of protecting the natural environment has gained increasing importance over the last generation, in recent years there is the charge that this is inconsistent with respect for property rights. The conflict between environment and property has emerged as one of the thorniest political issues of the day, one which is national in scope but which has immediate meaning for every community.
- Sawyer, Andrew H., "Changing Landscapes and Evolving Law: Lessons from Mono Lake on Takings and the Public Trust," pages 311-349.
- Echeverria, John D., "The Politics of Property Rights," pages 351-375.
- Huffman, James L., "The Public Interest in Private Property Rights," pages 377-390.
- Kershen, Drew L., "An Oklahoma Slant to Environmental Protection and the Politics of Property Rights," pages 391-398, response to the preceding papers.
- Trachtenberg, Zev, "The Environment: Private or Common Property?", pages 399-403, response to the preceding papers. Trachtenberg teaches philosophy at the University of Oklahoma. (v9,#2)

Trachtenberg, Zev, "The Takings Clause and the Meanings of Land," Philosophy and Geography 1 (1997): 63-90. Trachtenberg is assistant professor of philosophy at the University of Oklahoma. (P&G)

Tracy, C. Richard, and Brussard, Peter F. "The Importance of Science in Conservation Biology." Conservation Biology 10, no.3 (1996): 918. (v7, #3)

Train, Russell E., "Religion and the Environment," Renewable Resources Journal, Summer 1990. Environmental concerns have been "one of the most fundamental concerns to agitate human society within living memory" and yet there has been an "almost total obliviousness of organized religion toward the environment." An article based on an address to the North American Conference on Religion and Ecology, May 18, 1990 in Washington, D.C. (v1,#4)

Trainer, Ted, The Conserver Society. Review by Tim Cooper, Environmental Values 7(1998):249.

Trainer, Ted. Towards a Sustainable Economy. Reviewed by Anthony Clayton. Environmental Values 8(1999):527. (EV)

Trainor, Sarah Fleisher, "Realms of Value: Conflicting Natural Resource Values and Incommensurability," Environmental Values 15(2006): 3-29. Divergent values are often at the heart of natural resource conflict. Using discord over the Grand Staircase-Escalante National Monument in southern Utah, U.S.A. as a case study, I propose that values are perceived as incommensurate because they reflect different realms, with which there exist distinct concepts of what it means to value and distinct, irreducible forms of value expression. I further argue that collaborative, discursive processes are one way to account for plural values in policy and decision making without requiring a common metric, yet they are not without theoretical and practical challenges. (EV)

Tranger, Bruce, "Environmentalism and Education in Australia," Environmental Politics (Summer 1997):123-. (v.8,#4)

Trani, M. K., "Terrestrial Ecosystems and Wildlife Conservation," Journal of Forestry 100(no.7, 2002): 35-41. (v.13,#4)

Transactions of the 57th North American Wildlife and Natural Resources Conference, 1992, contains the papers from two sessions of interest. Special Session 5: Biological Diversity in Wildlife Management, nine papers, for example: genetic diversity in captive breeding and reintroduction programs, international issues, faunal mixing and faunal integrity. This session is available in reprint from U. S. Fish and Wildlife Service, National Ecology Research Center, 4512 McMurray Avenue, Fort Collins, CO 80525.

Special Session 6: Biological Diversity in Aquatic Management, ten papers, including Edwin P (Phil) Pister, "Ethical Considerations in the Conservation of Biodiversity," papers on degradation caused by introduced fishes, on the reintroduction of native species, and on public policy as this affects fish conservation. This has also been reprinted by the American Fisheries Society. (Thanks to Phil Pister). (v3,#4)

Travis, Lee A. and Oliver F. Williams, eds., The Pharmaceutical Corporate Presence in Developing Countries. Notre Dame, IN: University of Notre Dame press, 1993. 488 pages. \$ 34.95 cloth. 33 contributors. All aspects of the issue, including intellectual property rights. The ethical concerns of multinational corporations in the production, distribution, and use of pharmaceuticals in Africa, Asia, and Latin America. The authors teach business at Notre Dame. (v4,#1)

Treanor, Brian. "Narrative Environmental Virtue Ethics: Phronesis without a Phronimos." *Environmental Ethics* 30(2008):361-379. It is increasingly clear that virtue ethics has an important role to play in *Environmental Ethics*. However, virtue ethics—which has always been characterized by a degree of ambiguity—is faced with substantial challenges in the contemporary “postmodern” cultural milieu. Among these challenges is the lure of relativism. Most virtue ethics depend upon some view of the good life; however, today there is no unambiguous, easily agreed-upon account of the good life. Rather, we are presented with a bewildering variety of conflicting accounts of the good life. Narrative—in particular Paul Ricoeur’s account of narrative identity—has much to contribute to virtue ethics, including resources that can help us respond to the challenges presented by the postmodern context. Narrative constitutes an “ethical laboratory” by providing us with an “as if” experience through which we can try out various ethical alternatives. Two sorts of environmental narratives, working in concert, further help to limit relativist objections: (1) narratives of environmental survival (which identify dispositions, such as simplicity, necessary for our long-term survival) and (2) narratives of environmental flourishing (which make a virtue of necessity by pointing out those dispositions necessary for our survival often contribute to our flourishing beyond mere survival). (EE)

Trefil, James, Human Nature: A Blueprint for Managing the Earth--by People, for People. New York: Times Books/Henry Holt Co., 2004. Trefil is concerned about the state of the Earth, but only for the sake of people. His bottom line, often repeated, is that the global ecosystem should be managed for the benefit of humans. Forget about caring for animals, plants, species, or ecosystems for any good of their own, or intrinsic values. If we like them, they are ours to keep. If we don't like them, who cares if they vanish. We might even need to get them out of our way. Trefil has an optimistic view of the power of technology to transform the Earth into a more useful place for us humans. Trefil is a physicist at George Mason University. Reviewed by Michael Ruse, "My World, and Welcome to It," New York Times Book Review, July 4, 2004, p. 22. (v. 15, # 3)

Trefil, James, "Modeling Earth's Future Climate Requires both Science and Guesswork," Smithsonian, Dec. 1990. "Predictions of global warming, catastrophic or otherwise, depend on both what we do know and our assumptions about what we don't. I have seen a piece of the 21st century and I don't like it very much. We are going to face serious problems, and we will have to face them while the scientific evidence for the seriousness (and even the existence) of the problems is clouded by doubt and controversy. Worse, the aspects of scientific knowledge presented to the public will appear contradictory and ambiguous, and will give us little on which to make our decisions." Useful article, readable by undergraduates, and sets the stage for discussion of the ethical puzzles of decisions made on incomplete scientific knowledge, probabilities, involuntary risks, and so on. James Trefil is a well-known physicist and author at George Mason University. (v1,#4)

Trefil, James S., Are We Unique: A Scientist Explores the Unparalleled Intelligence of the Human Mind. New York: Wiley, 1997. 242 pp. Trefil claims that animal minds are not only different in degree of

intelligence but in the kinds of consciousness they are capable of. Also, despite the achievements of computer designers, no computer of any kind will ever be able to replicate the human intelligence. Trefil teaches physics at George Mason University and is science commentator for National Public Radio. (v8,#2)

Tremmel, Joerg Chet, ed. *Handbook of Intergenerational Justice*. Williston, VT: Edward Elgar Publishing, 2006. Contents include: (1) "Introduction" by Joerg Chet Tremmel, (2) "Responsibility for Future Generations Scope and Limits" by Dieter Birnbacher, (3) "Principles of Generational Justice" by Christoph Lumer, (4) "The Impossibility of a Theory of Intergenerational Justice" by Wilfred Beckerman, (5) "John Rawls on the Rights of Future Generations" by Claus Dierksmeier, (6) "Justice Between Generations: The Limits of Procedural Justice" by Michael Wallack, (7) "Rule Change and Intergenerational Justice" by Axel Gosseries and Mathias Hungerbühler, (8) "The Economic Sustainability Indicator" by Peer Ederer, Philipp Schuller and Stephan Willms, (9) "Protecting Future Generations: Intergenerational Buck-passing, Theoretical Ineptitude and a Brief for a Global Core Precautionary Principle" by Stephen M. Gardiner, (10) "Institutional Determinants of Public Debt: A Political Economy Perspective" by Bernd Süßmuth and Robert K. von Weizsäcker, (11) "Establishing Intergenerational Justice in National Constitutions" by Joerg Chet Tremmel, (12) "A Constitutional Law for Future Generations The 'Other' Form of the Social Contract: The Generation Contract" by Peter Häberle, (13) "The French Constitutional Charter for the Environment: An Effective Instrument?" by Dominique Bourg, (14) "Commission for Future Generations in the Knesset: Lessons Learnt" by Shlomo Shoham and Nira Lamay, (15) "Institutional Protection of Succeeding Generations Ombudsman for Future Generations in Hungary" by Benedek Jávor, (16) "The Role of CPB in Dutch Economic Policy" by Rocus van Opstal and Jacqueline Timmerhuis, and (17) "Intergenerational Justice" by Emmanuel Agius.

Trenberth, KE, "Stronger evidence of human influences on climate: The 2001 IPCC assessment," Environment 43(no.4, 2001):8-19. (v.12,#4)

Treves, A; Naughtontreves, L; Harper, EK; Mladenoff, DJ; Rose, RA; Sickley, TA; Wydeven, AP, "Predicting Human-Carnivore Conflict: A Spatial Model Derived from 25 Years of Data on Wolf Predation on Livestock", Conservation Biology 18 (no.1, 2004): 114-125.

Trewavas, Anthony. "Aspects of Plant Intelligence." *The Deep Structure of Biology* edited by Simon Conway Morris. West Conshohocken, PA: Templeton Foundation Press, 2008. This is a long article with much detail by a well-known English botanist who argues that plants are quite intelligent. From the article: "The picture of plants that has emerged in the last decade is of a complex and sensitive information-processing organism. But this behavior is largely invisible to us because the different time scale makes observation difficult" (p. 70). "They perceive their environment in considerable detail, make meaningful assessments of that information, and institute adaptive phenotypic responses designed to improve competitive ability and resource acquisition" (p. 93).

Trickett, David G. Review of Man and Nature. Edited by George F. McLean. Environmental Ethics 3(1981):177-80.

Trickett, David G. Review of The Liberation of Life: From the Cell to the Community. By Charles Birch and John B. Cobb, Jr. Environmental Ethics 5(1983):91-93.

Trimble, Stephen, and Terry Tempest Williams, compilers, Testimony: Writers of the West Speak on Behalf of Utah Wilderness. Minneapolis, MN: Milkweed Editions (430 First Avenue North, Suite 400, Minneapolis, MN 55401), 1996. ISBN 1-57131-212-0. \$ 6.96. 115 pages. Originally created and presented as a limited edition to Congress, as an effort to communicate through literary art the urgent need to preserve threatened lands. Literature for a land ethic. The historical and spiritual importance of

public lands, and how, if we value wilderness, we must take action to preserve it. Selections from William Kittredge, Barry Lopez, John McPhee, Scott Momaday, Margaret E. Murie, Gary Paul Nabhan, T. H. Watkins, Charles Wilkinson, Terry Tempest Williams, Ann Zwinger, and others. "If writing itself can be an act of public service, then this collection is it." - Bill Bradley, U. S. Senator.

Troesken, Werner. *The Great Lead Water Pipe Disaster*. Cambridge, MA: MIT Press, 2006. In the early 1900s, drinking water contaminated by lead pipes was the main source of human-ingested lead in the U.S. and Europe, bringing illness and death to millions of people. In areas where the waters were corrosive, such as Massachusetts and northern England, tap water contained a hundred times more lead than modern standards allow. This work surveys the discovery of this problem, unheeded evidence, disputed links, social factors leading to denial of the problem, court compounded problems about who was responsible, and political neglect. A well-intended change in water treatment and supply had the undesired consequences of increasing the water contamination. There could be lessons for contemporary environmentalism. Troesken's book is reviewed by Rebecca Renner in "Plumb Crazy," *Science* Vol. 315, no. 5819 (23 March 2007): 1669.

Trombulak, Stephen C., "How to Design an Ecological Reserve System," paper published by Wild Earth, 1997. \$ 5.00 from Wild Earth, P. O. Box 455, Richmond, VT 05477. Detailed guidance for nonscientists on how to design science-based ecological reserves. Trombulak teaches biology and environmental science at Middlebury College, Vermont. (v8,#3)

Tropical Resources Institute, The, Yale School of Forestry and Environmental Studies, publishes a newsletter, Tri News, with short articles reporting conservation issues, usually by their Ph.D. candidates who are working internationally. For example: Vasant Saberwal, "Lion-Human Conflicts in the Gir Forest and Adjoining Areas (a Wildlife Sanctuary and National Park in India)" in the Spring 1991 issue. There were 70 human injuries and 16 deaths in the last year in this area, much escalated from previous years. Part of the problem is baiting lions for tourist viewing, which decreases lion wariness; part of the problem is compassionate feeding and medically assisting old or wounded animals, rather than letting them starve, again decreasing lion wariness. Saberwal concludes that lions need to be culled and hunted to make them more wary. Tropical Resources Institute, Yale School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT 06511. (v2,#2)

Troster, Lawrence. "The Mountain and the River Valley: Environmentalism as the Foundation of Dialogue between Civilizations." *Earth Letter* (Spring 2007) 8-9. In a speech given in Tehran, Iran, a rabbi argues that the environment is a universal human crisis that demands a universal human response, and is an issue on which people of all faiths can and must start a dialogue.

Troughton, Michael. "A System that is Anything but Sustainable", Environments 24(no. 1, 1996):129.

Trout, Paul A. Review of Garrett Hardin. Living within Limits: Ecology, Economics, and Population Taboos: (New York: Oxford University Press, 1993). (EE)

Troyer, James R., Nature's Champion: B. W. Wells, Tar Heel Ecologist. Chapel Hill, NC: University of North Carolina Press, 1993. B. W. Wells (1884-1978) was a pioneering ecologist at then North Carolina State College (now University), through whom thousands of North Carolinians learned to appreciate and protect nature, long before ecology and conservation became popular causes. Troyer teaches biology at North Carolina State University. (v7,#1)

Trudgill, Stephen, "Psychobiogeography: Meanings of Nature and Motivations for a Democratized Conservation Ethic," Journal of Biogeography 28(2001):677-698. The language of ecosystem science is pervaded by value-laden terms such as pristine, fragile, disturbance, balance, dominance and alien

species. Such terms have high status and are often used in the rhetoric of the conservation ethic. Here, I consider the possibility of the use of less value-laden terms such as change, increase, decrease and so on. This would distinguish between values and perceived trends or states and leave ecosystem science to deal with what is verifiable. However, I also consider the opposite point of view, in that the value-laden terms, like "the balance of nature", relate to how a wide range of people feel about nature and are effective emotive motivators of the conservation ethic in society, providing a common language for a discourse between ecosystem scientists and other people. Trudgill teaches biogeography, Department of Geography, Cambridge University. (v.13, #3)

Trudgill, Steve, The Terrestrial Biosphere: Environmental Change, Ecosystem Science, Attitudes, and Values. Harlow, UK: Pearson Education/Prentice Hall, 2001. A British humanistic geographer's effort to blend nature and culture, science and values. A repeated theme is that "ecosystems are renewable but not repeatable" so "if we can't improve predictability, we have to increase adaptability" (p. ix). We need "ecology for people." "'The Greens' have often used an evangelical zeal which doesn't work as it alienates many people; it would be better to try for a 'win-win' where ecology is for people in a combined ecological, economic and social justice context" (p. 3).

Trudgill accentuates social constructions. "One might say that reality is defined by our concepts of reality or even that illusion is the only reality. If this is so, then it is important to examine our constructs and concepts, as this book attempts to do, because our concepts about ecosystems act to influence the way we treat the world and indeed the way we imagine and manage the terrestrial biosphere... 'A man looks at reality and brings to it his own limitations' [quoting Steinbeck]. In other words, our concepts both facilitate and limit our outlook" (p. 21).

"Science has a great deal to contribute in the simpler, mechanical, verifiable systems, but in the 'loose', less tangible and unverifiable constructions like ecosystem and landscape, science is a foundation but it has little to offer in the sense that it can't decide what views people will hold and how they will act" (p. 41). "Nature conservation should perhaps be re-named species conservation, habitat conservation, diversity conservation, or even preferred state conservation, because it does not seem to be much about conserving nature, that is leaving nature to get on with itself" (p. 130)." In result, Trudgill takes a dim view of wilderness conservation; 'wilderness is a concept as much as a place. His outlook much better fits the British landscape. "Green spaces in cities and gardens are the 'acceptable' face of nature, involving elements of (therapeutic) involvement but with control of nature" (p. 105).

Trudgill is in Biogeography and Environmental Management, Department of Geography, Cambridge University. (v.13, #3)

Trueheart, Charles, "Canal Plan in France Stranded," Washington Post (7/30/97): A18. Planned French canal would link the North Sea with the Mediterranean. A 143-miles long canal with 15 dams, 24 locks and hundreds of bridges would link the Rhine River that flows to the North Sea with the Saone and Rhone Rivers that flow South into the Mediterranean. Promoted for nearly 40 years by the French government, the canal would be three times as long as the Panama Canal and would cut some villages in two with 25-foot dikes. Local politicians who supported the canal were recently thrown out of office and replaced with canal opponents. While the French government buys up land in the path of the canal, locals split ownership of the land to make it more difficult to acquire or expropriate. One member of anti-canal forces said that if the project is not killed, "We are ready to fight. This canal would make us terrorists." (v8,#3)

Truesdale, Al. "Preface to Bioethics: Some Foundations for a Christian Approach to Bioethics", Perspectives on Science and Christian Faith 48(no.4,1996):224.

Trumbo, C. W. and O'Keefe, G. J., "Intention to Conserve Water: Environmental Values, Planned Behavior, and Information Effects. A Comparison of Three Communities Sharing a Watershed," Society and Natural Resources 14(no.10, 2001): 889-900. (v.13,#2)

Trumbo, C; O'Keefe, G, "Intention to Conserve Water: Environmental Values, Reasoned Action, and Information Effects Across Time," Society and Natural Resources 18 (no. 6, July 2005): 573-585.

Trumbull, Mark and Mark Clayton. "Clear-Cutting of Rain Forests Faces Restraints." The Christian Science Monitor, July 12, 1995, pp. 1, 8. (v6,#2)

Trumbull, Mark. "Fisheries Crisis Stretches Across the Globe." The Christian Science Monitor, 6 July 1994, p. 8. (v5,#2)

Trumbull, Mark. "Competition Is Watchword at Conference of Utilities." The Christian Science Monitor, 17 June 1994, p. 8. Deregulation is encouraging competition, especially from alternative technologies such as wind generators. (v5,#2)

Trumbull, Mark. "Conservationists Criticize Logging in Private Forests." The Christian Science Monitor, 1 July 1994, p. 9. (v5,#2)

Trumpeter, Fall 1990, is a special issue on "Wild Animals and Human Life." Twelve short articles. (v1,#4)

Trumpeter, The 7:2, Spring 1990, is a special issue devoted to ecosophic practices in forestry and farming. Address: P. O. Box 5853 Stn B, Victoria, B. C. V8R 6S8, Canada. (v1,#2)

Trumpeter, The, Summer 91, features a dozen and a half short articles on the environmental crisis, education, and deep ecology. Some examples: Anthony Weston, "Non-Anthropocentrism in a Thoroughly Anthropocentrized World"; J. Donald Hughes, "The Psychology of Environmentalism: Healing Self and Nature"; Bob Henderson, "Nature as Self: The Spiritual Dimensions of Outdoor Education." (v2,#3)

Trumpeter, The, volume 15, is an electronic journal, now on website:
<http://trumpeter.athabasca.ca>.

Bruce Morito is editor, Global and Social Analysis, Athabasca University, 1 University Drive, Athabasca, AB T9S 3A3, Canada. Phone: (780) 675-6143; fax: (780) 675-6186. (v10,#4)

Trumpeter, The, Spring 92, vol. 9, no. 2, is a special issue on "The Long Range, Deep Ecology Movement and Arne Naess." Sixteen articles. Also a comprehensive bibliography of works by Arne Naess. Alan Drengson, Editor of The Trumpeter, seeks a new editor for the journal. For suggestions, contact him at Lightstar Press, P. O. Box 5853 Stn B, Victoria BC V8R 6S8, CANADA. (v3,#3)

Trumpeter, The, vol. 8, spring 1991, no. 2, is on the theme "Meaning, Ecocentrism, and Ecosophy," featuring five articles on ecofeminism. (v2,#2)

Trumpeter, The: Journal of Ecosophy. PO Box 5853 Stn B, Victoria, B.C. V8R 6S8 Canada. This is a major source of material from the perspective of deep ecology, or as editor Alan Drengson now terms it, "ecosophy (ecological harmony and wisdom)." From both a scholarly and nonscholarly perspective, the focus of the journal is interdisciplinary. Articles are generally short, and are often reprints from other academic journals. (Katz, Bibl # 2)

Trzyna, Thaddeus C., "Linking Values and Policy for Sustainable Development: An International Strategy to Build the Sustainability Ethic into Decision-Making." 1995. Working Paper No. 6 of the IUCN Commission on Environmental Strategy and Planning. 20 pages. Proponents of sustainable development often call for a new global ethic. But how will a new ethic translate into policies and decisions? Copies from Thaddeus C. Trzyna, Chair, CESP, International Center for the Environment and Public Policy, P. O. Box 189040, Sacramento, CA 95818. Phone 916/442-2472. Fax 916/442-2478

- Trzyna, Thaddeus, C. ed. A Sustainable World: Defining and Measuring Sustainable Development. Sacramento: International Center for the Environment and Public Policy, 1995. Published for IUCN. Fourteen articles: sections: Sustainability and Sustainable Development: What Do They Mean? Measuring Progress. Indicators of Sustainability. Sample articles: David A. Munro, "Sustainability: Rhetoric or Reality?"; Denis Goulet, "Authentic Development: Is it Sustainable?"; Calvin Nhira, "Poverty Alleviation and Sustainability: The Case of Zimbabwe" (In Zimbabwe, the environmental crisis has become worse in the period of independence; the elite care for themselves at the expense of the poor; "poverty alleviation measures in Zimbabwe have not been sustainable" (p. 236). Trzyna is Chair of the IUCN Commission on Environmental Strategy and Planning, and at the Center for Politics and Economics of The Claremont Graduate School. (v6,#3)
- Trzyna, Thaddeus C., Elizabeth Margold, and Julia K. Osborn, World Directory of Environmental Organizations, 5th ed. Sacramento, CA: California Institute of Public Affairs (P. O. Box 189040, Sacramento, CA 95818), 1996. 232 pages. \$50.00 Published in cooperation with IUCN, the Sierra Club, and Earthscan. 2,600 organizations in over 200 countries (--so it is claimed, but are there 200 countries?). (v7,#2)
- Tsur, Y., and Zemel, A., "The Regulation of Environmental Innovations," Journal of Environmental Economics and Management 44(no.2, 2002): 242-60. (v.13,#4)
- Tuan, Yi-Fu, Passing Strange and Wonderful: Aesthetics, Nature, and Culture. Washington, DC: Island Press/Shearwater Books, 1993. 288 pages. Aesthetic needs are basic, not secondary, essential parts of life and society. The aesthetic is not one aspect of culture but its central core. Starting with the building blocks of aesthetic experience--sight, hearing, smell, touch, taste--Tuan gradually expands his analysis to include art, architecture, literature, philosophy, music, and landscape. How can the aesthetic become a moral and political force? How the aesthetic operates in four widely disparate cultures: Australian aboriginal, Chinese, medieval European, and modern American. Tuan is professor of geography at the University of Wisconsin, Madison. (v4,#1)
- Tuan, Yi-Fu. Space and Place: The Perspective of Experience. Minneapolis: University of Minnesota Press, 1977. Sense of place. (v8,#1)
- Tuchman Mathews, Jessica, ed., Preserving the Global Environment: The Challenge of Shared Leadership (New York: W. W. Norton, 1991). A collection from The American Assembly, Columbia University and The World Resources Institute, Washington. Twelve contributors. \$22.95. 363 pages. (v2,#1)
- Tucker, Catherine M., "Community Institutions and Forest Management in Mexico's Monarch Butterfly Reserve," Society and Natural Resources 17(no.7, August 2004):569-587(19). (v. 15, # 3)
- Tucker, Evelyn and Berthrong, John, eds., Confucianism and Ecology: The Inter-relation of Heaven, Earth, and Humans. Cambridge: Ma: Harvard University Center for the Study of World Religions, 1998. 378 pages. ISBN 0945454155. (v.9,#3)
- Tucker, G., M. Heath, L. Tomialojc, and R. Grimmett, Birds in Europe: Their Conservation Status. Washington, DC: The Smithsonian Institution Press, 1994. 625 pages, with 344 maps. \$ 40.00. Includes Turkey and Greenland. (v6,#4)
- Tucker, Gene M. "Rain on a Land Where No One Lives: The Hebrew Bible on the Environment." Journal of Biblical Literature 116, no. 1 (Spring 1997): 3-17. This is the Presidential Address delivered 23 November 1996 at the Annual Meeting of the Society of Biblical Literature in New Orleans, Louisiana.

The article is exegetical and in response to the deluge of materials resulting from Lynn White's "The Historical Roots of Our Ecological Crisis." Tucker's footnotes to that literature are especially helpful. Tucker concludes that the biblical texts, as with all biblical interpretation, contain both problems and possibilities. All of the Hebrew traditions assume that human beings are both in and of the world, and that humans have a distinctive place in creation. Some texts attack hierarchical structures, and some emphasize humankind's identification with the rest of the world. Their distinction is that humans are "the ones addressed by God (Job) or speak to God (Psalm 104)" (p. 16). Tucker is Prof. of Hebrew Bible at Emory University, Atlanta, GA. (v8,#2)

Tucker, Mary Evelyn. Review of J. Baird Callicott. Earth's Insights: A Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback: (Berkeley: University of California Press, 1994). Environmental Ethics 17(1995):321-325. (EE)

Tucker, Mary Evelyn and John A. Grim, eds., Worldviews and Ecology. Lewisburg, PA: Bucknell University Press, 1993. 242 pages. Cloth, \$ 22.00. This is a scholarly book journal, a hardbound issue of the Bucknell Review. Order from Associated University Presses, 440 Forsgate Drive, Cranbury, NJ 08512. Republished, Marknoll, NY: Orbis Books, 1994, 2000.

Tu Wei-Ming, "Beyond the Enlightenment Mentality"; J. Baird Callicott, "Toward a Global Environmental Ethic"; John A. Grim, "Native North American Worldviews and Ecology"; Eric Katz, "Judaism and the Ecological Crisis"; Jay McDaniel, "The Garden of Eden, the Fall, and Life in Christ: A Christian Approach to Ecology"; Roger E. Timm, "The Ecological Fallout of Islamic Creation Theology"; Robert A. White, "A Baha'i Perspective on an Ecologically Sustainable Society"; Christopher Key Chapple, "Hindu Environmentalism: Traditional and Contemporary Resources"; Brian Brown, "Toward a Buddhist Ecological Cosmology"; Michael Tobias, "Jainism and Ecology: Views of Nature, Nonviolence, and Vegetarianism"; Mary Evelyn Tucker, "Ecological Themes in Taoism and Confucianism"; Ralph Metzner, "The Emerging Ecological Worldview"; Larry L. Rasmussen, "Cosmology and Ethics"; Charlene Spretnak, "Critical and Constructive Contributions of Ecofeminism"; David Ray Griffin, "Whitehead's Deeply Ecological Worldview"; George Sessions, "Deep Ecology as a Worldview"; Thomas Berry, "Ecological Geography"; Brian Swimme, "Cosmogogenesis." With a foreword by Noel J. Brown of UNEP. Both authors are in religious studies at Bucknell University. (v4,#4)

Tucker, Mary Evelyn and Duncan Ryuken Williams, eds. Buddhism and Ecology: The Interconnection of Dharma and Deeds. Cambridge, MA: Center for the Study of World Religions and Harvard University Press, 1998. Reviewed by John C. Powers. Environmental Ethics 22(2000):207-210.

Tucker, Mary Evelyn, Moral and Spiritual Cultivation in Japanese Neo-Confucianism: The Life and Thought of Kaibara Ekken (1630-1714) (Albany: SUNY Press, \$ 16.95 paper. A study that reflects the possible basis for an environmental ethics in Neo-Confucian thought. The author is in the Department of Religion at Bucknell University and is teaching a course on Religion and Ecology. She has a particular interest in religious attitudes towards nature in Buddhism, Confucianism, Taoism, and Shinto. (v1,#3)

Tucker, Mary Evelyn and John Berthrong. Confucianism and Ecology: The Interrelation of Heaven, Earth, and Humans. Cambridge, MA: Center for the Study of World Religions and Harvard University Press, 1998. Reviewed by John C. Powers. Environmental Ethics 22(2000):207-210.

Tucker, Mary Evelyn, "The Emerging Alliance of Ecology and Religion" Worldviews: Environment, Culture, Religion, vol.1, no.1. (v8,#2)

Tucker, Mary Evelyn. "An Ecological Cosmology: The Confucian Philosophy of Material Force." In Christopher Key Chapple, ed., Ecological Prospects: Scientific, Religious and Aesthetic Perspectives. Albany: State University of New York Press, 1994. Tucker teaches religious studies at Bucknell

University. (v6,#3)

Tucker, Mary Evelyn, and Grimm, John, "Religions of the World and Ecology: Discovering Common Ground," Religious Studies News (American Academy of Religion), May 1999, page 11. A report of ten conferences held at the Center for the Study of World Religions at Harvard University, between May 1996 and July 1998. Several published volumes are resulting from the conferences, and there is an ongoing Forum on Religion and Ecology. Tucker and Grimm are at Bucknell University and coordinated the series of conferences. (v.10,#2)

Tucker, Mary Evelyn, and Grimm, John, eds., Evolving Values for an Earth Community, theme issue of Earth Ethics, vol. 10, no. 1, Fall 1998. Washington, DC: Center for Respect of Life and Environment. A series of ten conferences was held at the Center for the Study of World Religions at Harvard University from May 1996 until July 1998 sponsored by CSWR in collaboration with the Center for Respect of Life and Environment and Bucknell University. This issue includes short articles written by area specialists to summarize key resources of the religious traditions featured in the conference series.

--Tucker, Mary Evelyn, and Grim, John, "Religions of the World and Ecology: Discovering the Common Ground."

--Fink, Daniel B., "Judaism and Ecology: A Theology of Creation."

--Hessel, Dieter T., "Christianity and Ecology: Wholeness, Respect, Justice, Sustainability."

--Denny, Frederick M., "Islam and Ecology: A Bestowed Trust Inviting Balanced Stewardship."

--Grim, John, "Indigenous Traditions and Ecology."

--Chapple, Christopher Key, "Hinduism, Jainism, and Ecology."

--Swearer, Donald K., "Buddhism and Ecology: Challenge and Promise."

--Tucker, Mary Evelyn, "Confucianism and Ecology: Potential and Limits."

--Miller, James, "Daoism and Ecology."

--Bernard, Rosemarie, "Shinto and Ecology: Practice and Orientations to Nature." (v.10,#2)

Tucker, Mary Evelyn, "The Relevance of Chinese Neo-Confucianism for the Reverence of Nature," special issue: The Moral Sense of Nature, Environmental History Review, vol. 15, no. 2, Summer 1991. (v2,#3)

Tucker, Mary Evelyn, and Grim, John A., eds., Religion and Ecology: Can the Climate Change, Daedalus 130, no. 4, Fall 2001. Theme issue. Contents:

-Mary Evelyn Tucker and John A. Grim, "Introduction: The Emerging Alliance of World Religions and Ecology"

-George Rupp, "Religion, Modern Secular Culture, and Ecology"

-Michael B. McElroy, "Perspectives on Environmental Change: A Basis for Action"

-Donald A. Brown, "The Ethical Dimensions of Global Environmental Issues"

-J. Baird Callicott, "Multicultural Environmental Ethics"

-Hava Tirosh-Samuelson, "Nature in the Sources of Judaism"

-Sallie McFague, "New House Rules: Christianity, Economics, and Planetary Living"

-S. Nomanul Haq, "Islam and Ecology: Toward Retrieval and Reconstruction"

-Vasudha Narayanan, "Water, Wood, and Wisdom: Ecological Perspectives from the Hindu Traditions"

-Christopher Key Chapple, "The Living Cosmos of Jainism: A Traditional Science Grounded in Environmental Ethics"

-Donald K. Swearer, "Principles and Poetry, Places and Stories: The Resources of Buddhist Ecology"

-Tu Weiming, "The Ecological Turn in New Confucian Humanism: Implications for China and the World"

-James Miller, "Envisioning the Daoist Body in the Economy of Cosmic Power"

-Jack D. Forbes, "Indigenous Americans: Spirituality and Ecos"

-Bill McKibben, "Where Do We Go from Here?" (v.12,#4)

Tucker, Mary Evelyn and John Grim, series editors, Religions of the World and Ecology, General Editor,

Lawrence Sullivan. Published by the Center for the Study of World Religions at Harvard University and distributed by Harvard University Press. The series volumes are:

- Tucker, Mary Evelyn and Duncan Ryuken Williams, eds., Buddhism and Ecology: The Interconnection of Dharma and Deeds. 1997.
- Tucker, Mary Evelyn and John Berthrong, eds., Confucianism and Ecology: The Interrelation of Heaven, Earth and Humans. 1998.
- Hessel, Dieter T., and Rosemary Radford Ruether, eds., Christianity and Ecology: Seeking the Well-Being of Earth and Humans. 2000.
- Girardot, N. J., James Miller, and Liu Xiaogan, Daoism and Ecology: Ways Within a Cosmic Landscape. 2001.
- Chapple, Christopher Key and Mary Evelyn Tucker, eds., Hinduism and Ecology: The Intersection of Earth, Sky and Water. 2000.
- Foltz, Richard C., Frederick M. Denny and Azizan Baharuddin, eds. Islam and Ecology: A Bestowed Trust. 2003.
- Grim, John A., ed., Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community. 2001.
- Chapple, Christopher Key, ed., Jainism and Ecology: Non-violence in the Web of Life. 2001.
- Tirosh-Samuelson, Hava, ed., Judaism and Ecology: Created World and Revealed Word. 2002.

Tucker, Mary Evelyn, and John Grim. "The Greening of the World's Religions." *Chronicle of Higher Education, The Chronicle Review*. February 9, 2007. Although religions have often turned from the turbulent world in a redemptive flight to a serene, transcendent afterlife, new emphases are appearing that will energize and support a new generation of leaders in the environmental movement. Tucker is currently a visiting scholar in the Bioethics Institute at Yale University.

Tucker, Mary Evelyn. "Ecology, Religion and Policymaking: Survey of the Field." *Bulletin of the Boston Theological Institute* Vol. 6, no. 2 (2007): 8-15. Tucker is currently at the Yale School of Forestry and Environmental Studies and Yale Divinity School.

Tucker, Mary Evelyn, and John Grim. "The Greening of the World's Religions." *Chronicle of Higher Education*, February 9, 2007. This is a summary of recent interest in the environment across world faiths. The article is reprinted in *Religious Studies News*, May 2007.

Tucker, William. Progress and Privilege. Reviewed in Environmental Ethics 7(1985):181-83.

Tudge, C., Last Animals at the Zoo: How Mass Extinction Can be Stopped. Washington, DC: Island Press, 1992.

Tudge, C., "The Rise and Fall of Homo sapiens sapiens," Philosophical Transactions of the Royal Society, London, B 325 (1989):479-488. Human beings have broken the ecological 'law' that says that big, predatory animals are rare. Two crucial innovations have enabled us to alter the planet to suit ourselves and thus permit unparalleled expansion: speech and agriculture. However, natural selection has not equipped humans with a long-term sense of self-preservation. Our population cannot continue to expand at its present rate for much longer, and the examples of many other species suggest that expansion can end in catastrophic collapse. Survival beyond the next century in a tolerable state seems most unlikely unless all religions and economies begin to take account of the facts of biology. If this occurred, it would be a step in cultural evolution that would compare in import with the birth of agriculture. "I take it also to be self-evident that ours is not the only important species; that other creatures have a 'right' to occupy this planet, and that we at times have to bow to their needs, even at cost to ourselves." (v2,#3)

Tuler, Seth, and Webler, Thomas. "Voices from the Forest: What Participants Expect of a Public

Participation Process." Society & Natural Resources 12(no. 5, July 1999):437- . (v.11,#1)

Tulibacki, W., "Naturalizm etyczny a problem genezy moralności (Ethical Naturalism and the Problem of Origin of Morality)", in: H. Korpikiewicz (ed.), Człowiek - Zwierzę - Cywilizacja. Aspekt humanistyczny (Human - Animal - Civilization. Humanistic aspect), ProDRUK Publishers, Poznań, 2001. (v.13,#4)

Tulibacki, W., Etyka i naturalizm (Ethics and Naturalism), ART Publishers, Olsztyn, 1998. (v.13,#4)

Tulibacki, W., Etyka i nauki biologiczne (Ethics and Natural Sciences), ART Publishers, Olsztyn, 1994. (v.13,#4)

Tullock, Gordon, The Economics of Non-Human Societies. Tucson, AZ: Pallas Press, 1994. 87 pages. The author offers a general theory of "bioeconomics" encompassing both human and non-human societies. His strategy is to apply to non-human societies the tools that have developed in economics. Specifically, the behavior of the social insects can be thought of as the interaction of preference functions and the environmental consequences of individual behavior. Insects have their preferences instinctively, but are selected for reciprocal cooperation doing what is in the self-interest of each. An "invisible hand" naturally selects the most efficient hive. Humans have their preferences with options in choice but act in their self-interests; Adam Smith's "invisible hand" selects for economic efficiency. From this, Tullock develops a theory that, in principle, is capable, he claims, of predicting whether a given species will survive in a particular niche. Nevertheless, he adds, "I do not think that studying the non-human societies is of help to the student of human societies" (p. 83). For a review see Clarence C. Morrison, "The Economics of Non-Human Societies," Atlantic Economic Journal 23(1995):318-322. Tullock is an economist at the University of Arizona known for his application of economic theory to problems in political science. (v7,#1)

Tunnard, Christopher. A World with a View: An Inquiry into the Nature of Scenic Values. Reviewed in Environmental Ethics 1(1979):375-78.

Tunstall, Daniel B. and van der Wansem, Mieke, ed., 1993 Directory of Country Environmental Studies: An Annotated Bibliography of Environmental and Natural Resource Profiles and Assessments. World Resources Institute, International Institute for Environment and Development, and IUCN--The World Conservation Union, 1993. A previous edition was in 1990. Features Africa, Central America, Caribbean, South America, Asia, Oceania. Listings on 129 countries, 354 studies. (v6,#2)

Turco, Richard P. Earth Under Siege: From Air Pollution to Global Change. New York: Oxford University Press, 1996. 544pp. \$21.95 paper, \$50 cloth. Based on the author's popular course at UCLA, this text introduces the non-science major to a basic understanding of how the physical environment surrounding us functions, and why human activities are affecting it, while simultaneously providing sufficient supporting details to hold the interest of science majors. (v8,#1)

Turkovic, Vera, "A Dialogue between Nature and Culture in the Fine Arts" (in Croatian), Socijalna Ekologija (Social Ecology) 11(no. 4, 2002):317-329. A representative article from a journal that continues now more than a decade as the leading journal dealing with environmental ethics from Croatian scholars. There are abstracts of articles in English. ISSN 1330-0113.

Turner, Andrew M., Joel C. Trexler, and Loftus, William F. "Targeting Ecosystem Features for Conservation: Standing Crops in the Florida Everglades." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 4, August 1999):898- . (v10,#4)

Turner, B. L., II; Clark, William C.; Kates, Robert W.; Richards, John F.; Mathews, Jessica T.; and Meyer, William B. Adams, eds. The Earth as Transformed by Human Action: Global and Regional Changes in the Biosphere Over the Past 300 Years. New York: Cambridge University Press, 1993. 729 pages. \$44.95 cloth. "An highly laudable undertaking by geographers to put it all together. It will be used by all scholars, teachers, and students concerned with the environment and its management--or mismanagement--by humans everywhere on our planet."

Turner D.P.; Ollinger S.V.; Kimball J.S., "Integrating Remote Sensing and Ecosystem Process Models for Landscape-to-Regional-Scale Analysis of the Carbon Cycle," BioScience 54(no.6, 1 June 2004):573-584(12). (v. 15, # 3)

Turner, Derek D., "Are We at War with Nature?" Environmental Values 14(2005): 21-36. A number of people, from William James to Dave Foreman and Vandana Shiva, have suggested that humans are at war with nature. Moreover, the analogy with warfare figures in at least one important argument for strategic monkeywrenching. In general, an analogy can be used for purposes of (1) justification; (2) persuasion; or (3) as a tool for generating novel hypotheses and recommendations. This paper argues that the analogy with warfare should not be used for justificatory or rhetorical purposes, but that it may nevertheless have a legitimate heuristic role to play in environmental philosophy. Turner is in philosophy, Connecticut College, New London, CT. (EV)

Turner, Derek D., "Monkeywrenching, Perverse Incentives and Ecodefence," Environmental Values 15(2006): 213-232. By focusing too narrowly on consequentialist arguments for ecosabotage, environmental philosophers such as Michael Martin (1990) and Thomas Young (2001) have tended to overlook two important facts about monkeywrenching. First, advocates of monkeywrenching see sabotage above all as a technique for counteracting perverse economic incentives. Second, their main argument for monkeywrenching - which I will call the ecodefence argument - is not consequentialist at all. After calling attention to these two under-appreciated aspects of monkeywrenching, I go on to offer a critique of the ecodefence argument. Finally, I show that there is also a tension between the use of cost/benefit analysis to justify particular acts of ecosabotage and the clandestine nature of those acts. (EV)

Turner, Derek and Lauren Hartzell "The Lack of Clarity in the Precautionary Principle," Environmental Values 13(2004):449-460. The precautionary principle states, roughly, that it is better to take precautionary measures now than to deal with serious harms to the environment or human health later on. This paper builds on the work of Neil A. Manson in order to show that the precautionary principle, in all of its forms, is fraught with vagueness and ambiguity. We examine the version of the precautionary principle that was formulated at the Wingspread Conference sponsored by the Science and Environmental Health Network in 1998. That version fails to indicate who must bear the cost of precaution; what constitutes a threat of harm; how much precaution is too much; and what should be done when environmental concerns and concern for human health pull in different directions. Whether this vagueness is a strength or weakness of the principle, depends on what purpose(s) the precautionary principle is supposed to serve. Turner is in philosophy Connecticut College, New London, CT. Hartzell is in philosophy, Stanford University, Stanford, CA. (EV)

Turner, Frederick, Rebirth of Value: Meditations on Beauty, Ecology, Religion and Education (Albany: SUNY Press, 1991). 188 pages. \$ 12.95 paper. A holistic approach, with an emphasis on universalism. The common features of myths and works of art the world over militate against relativistic, historicist interpretations of culture. The experience of beauty is a feedback from nature. Turner is professor of arts and humanities at the University of Texas at Dallas. (v2,#2)

Turner, J. M., "From Woodcraft to 'Leave No Trace': Wilderness, Consumerism, and Environmentalism in

Twentieth-Century America," Environmental History 7(no.3, 2002): 462-84. (v.13,#4)

Turner, Jack, The Abstract Wild. Tucson: University of Arizona Press, 1996. 136 pages. Turner takes on the mantle of cantankerous iconoclast, reminiscent of Edward Abbey. The issue of wildness versus domestication is the central issue for the future of both humans and nonhumans on Earth. The central trouble is the human desire for management and control. Our relationship with the nonhuman world must be a spiritual one. The nonessential manipulation and management of wild ecosystems by biologists and others is unacceptable. Wildlife biologists introducing wolves to Yellowstone, with collars on the wolves, tracking them on the internet, are instances of this management mentality; these are not wild wolves at all. Most outdoor recreation is superficial and destructive, resulting from human desires use wilderness for their recreational pleasures.

The dominant economic paradigm must be marginalized for the good of both humans and nonhumans. Commercializing everything, including the natural environment, merely feeds into the paradigm that's causing the problem. "We must examine processes at the heart of modernity that are only vaguely understood, however pernicious their consequences for the wild earth, processes that not only destroy the wild but diminish our experience of the wild" (p. xiii). "What we need now is a culture that deeply loves the wild earth" (p. xvii). Turner lives in a remote ranch on the Mexican border during the winter and in Grand Teton National Park in the summer, where he is a mountain guide. He once taught philosophy at the University of Illinois. But he now finds of little importance "the byzantine world of environmental philosophy -- (one of the) elements, I believe, of 'shallow' ecology" (p. xv). He has a book on the Tetons, published by Henry Holt.

There is an interview with Turner in Wild Duck Review (Nevada City, CA), December 1996, and a discussion in the February 1997 issue, including a response by George Sessions, particularly to Turner's claim that deep ecology contains no first rate thinkers (although Turner concedes that Arne Naess influenced him greatly, enough to persuade him to leave philosophy, p. xv). Sessions also speaks to Turner's intense dislike of management in conservation biology. (v.9,#3)

Turner, Jack. The Abstract Wild. Reviewed by Eric Katz. Environmental Ethics 22(2000):105-108.

Turner, James Morton, "Charting American Environmentalism's Early (Intellectual) Geography, 1890-1920," Wild Earth 10(no. 2, Summer 2000):18- . (v.12,#2)

Turner, John H. "The Selective Prosecution Defense to Environmental Enforcement After *United States v. Armstrong*", Journal of Environmental Law & Practice 4(no.3, 1996):5. The extent to which selective enforcement claims can be successfully raised in environmental enforcement proceedings.

Turner, John A., "A Realizable Renewable Energy Future," Science 285(1999):687-689. A choice in energy policy is whether to continue to burn fossil fuels and find technologies to sequester the CO₂, or to find alternative, renewable energy sources. The former is rather like discovering that smoking is bad for you, and taking up running for exercise, while continuing smoking. A more intelligent choice is available renewable energy. Taylor is with the National Renewable Energy Laboratory, Golden, CO. In a series of articles on "Powering the Next Century" in this issue of Science. (v.10,#3)

Turner, Keith, producer. Crépeau, Alexandra, director. "From the Ground Up: Green and Growing." Video, 1994. Reviewed by Ian Howard in Journal of Agricultural and Environmental Ethics 8(1995):198. (JAEE)

Turner, Kerry, Review of Helm, Dieter, ed., Economic Policy Towards the Environment. Environmental Values Vol.1 No.4(1992):372.

Turner, Matthew D., "Conflict, Environmental Change, and Social Institutions in Dryland Africa: Limitations

of the Community Resource Management Approach," Society & Natural Resources 12(no. 7, Oct 01 1999):643- . (Africa). (v.11,#1)

Turner, MG; Pearson, SM; Bolstad, P; Wear, DN, "Effects of land-cover change on spatial pattern of forest communities in the Southern Appalachian Mountains (USA)," Landscape Ecology 18(no.5, 2003):449-464. (v.14, #4)

Turner, MG; Collins, SL; Lugo, AE; Magnuson, JJ; Rupp, TS; Swanson, FJ, "Disturbance Dynamics and Ecological Response: The Contribution of Long-Term Ecological Research", Bioscience 53(no.1, 2003):46-56.

Turner, Monica G., William H. Romme, Robert H. Gardner, Robert V. O'Neill, and Timothy K. Kratz, "A Revised Concept of Landscape Equilibrium: Disturbance and Stability on Scaled Landscapes," Landscape Ecology 8(1993):213-277. (v7,#2)

Turner, Monica, Gary Barrett, Robert Gardner, Louis Iverson, Paul Risser, John Wiens, and Jianguo Wu. "In memoriam: Frank B. Golley (1930-2006)." Landscape Ecology Vol. 22, no. 1 (2007): 1-3.

Turner, N. J., Davidsonhunt, I. J. and O'Flaherty, M., "Living On the Edge Ecological and Cultural Edges As Sources of Diversity for Social?Ecological Resilience," Human Ecology 31(no. 3, 2003): 439-461.

Turner, R. Kerry, Button, Kenneth, and Nijkamp, Peter, eds. Ecosystems and Nature: Economics, Science and Policy. Cheltenham, Gloucester, UK: Edward Elgar Publishing Co., 1999. 38 articles. Not cheap: £\$125.00, \$ 205.00. Brings together the work of leading authorities in biodiversity research. Provides readers with a broad interdisciplinary perspective on major issues in biodiversity, including economics, natural science, management and ethics. Part I introduces some fundamental scientific and socio-economic concepts and analysis in order to illustrate the complexities involve. Part II deals with the valuation of ecosystems with special emphasis on the main biomes, wetlands, marine systems, grasslands and agriculture. Part III covers the problem of value appropriation and the relevant constraints and available policy instruments. Part IV focuses on the difficult ethical issues that surround use and conservation of biodiversity. Contributors include:

- * Arrow, Kenneth, et al., "Economic Growth, Carrying Capacity, and the Environment."
- * Bockstael, N., Constanza, Robert et al., "Ecological Economic Modeling and Valuation of Ecosystems."
- * Holling, C.S., "Resilience and Stability of Ecological Systems."
- * Norton, Bryan G. "Evaluating Ecosystem States: Two Competing Paradigms."
- * Perrings, Charles, and Pearce, David, "Threshold Effects and Incentives for the Conservation of Biodiversity."
- * Pimm, S.L., et al, "The Future of Biodiversity."
- * Rolston, Holmes, "Valuing Wildlands."
- * Gadgil, Madhav, "Conserving Biodiversity as if People Matter: Case Study from India."
- * Randall, Alan, "The Value of Biodiversity."

Turner is Director of the Centre for Social and Economic Research on the Global Environment (CSERGE), University of East Anglia and University College London, UK. Button is Professor of Public Policy, Institute of Public Policy, George Mason University, US. Peter Nijkamp, is Professor in Regional, Urban, and Environmental Economics, Free University, Amsterdam, The Netherlands. (v.11,#3)

Turner, R., and N. Rabalais, "Linking Landscape and Water Quality in the Mississippi River Basin for 200 Years," Bioscience 53(no. 6, 2003): 563-572. (v 14, #3)

Turner, Robin Lanette, and Diana Pei Wu, Environmental Justice and Environmental Racism: An Annotated Bibliography and General Overview, Focusing on U.S. Literature, 1996-2002. Berkeley, Ca: University

of California, Berkeley, Institute of International Studies, 2002. Available online at:
<http://globetrotter.berkeley.edu/EnvirPol/Bib/B07-TurnerWu/pdf>
Extensive annotated bibliography, 135 pages. (v.14, #4)

Turner W.R.; Nakamura T.; Dinetti M., "Global Urbanization and the Separation of Humans from Nature," BioScience 54(no.6, 1 June 2004):585-590(6). (v. 15, # 3)

Turnhout, Esther, Matthijs Hisschemöller and Herman Eijsackers, "The Role of Views of Nature in Dutch Nature Conservation: The Case of the Creation of a Drift Sand Area in the Hoge Veluwe National Park," Environmental Values 13(2004):187-198. Nature conservation requires choices about what sort of nature should be protected in what areas and includes value judgments on what nature is and/or should be. This paper studies the role of differing views of nature in nature conservation. A case study on the creation of a drift sand area in the Netherlands illustrates how nature conservation disputes can be understood as a conflict in views of nature. The authors are in earth and life sciences, Institute of Ecological Science, Vrije Universiteit, Amsterdam. (EV)

Turnock, D., "Ecoregion-Based Conservation in the Carpathians and the Land-Use Implications," Land Use Policy 19(no.ER1, 2002): 47-63. (v.13,#2)

Turpie, J. K., Beckley, L.E. and Katua, S.M., "Biogeography and the Selection of Priority Areas for Conservation of South African Coastal Fishes," Biological Conservation 92(no. 1, 2000):59- . (Africa). (v.11,#1)

Turpin, Jennifer and Lois Ann Lorentzen, eds., The Gendered New World Order: Militarism, the Environment, and Development. New York: Routledge, 1996. 264 pages, Hardback and paper. Ecological security seems increasingly precarious and battles over land and models of economic development now lead to military conflicts. This volume addresses the compelling issue of how gender connects the global problems of militarism, underdevelopment, and environmental decay. Scholars from around the world make connections between such seemingly disparate issues as refugees, polluted waters, bombed villages, massive dam projects, starving children, deforestation, nuclear arms buildup, and the rights of women. (v7, #3)

Turpin, Jennifer, and Lorentzen, Lois Ann, eds., The Gendered New World Order: Militarism, Development and the Environment. New York: Routledge, 1996. Includes:
--Elliott, Lorraine M., "Women, Gender, Feminism and the Environment"

Turton, David, "The Mursai and National Park Development in the Lower Omo Valley." Pages 169-186 in Anderson, David and Grove, Richard, eds. Conservation in Africa: People, Policies and Practice. Cambridge: Cambridge University Press, 1989. The Mursai people, in Ethiopia, are wedged in between the Omo and Mago National parks and have negative effects on the wildlife in the parks. Some argue that they should be relocated to form a larger national park.

Tweeten, Luther, "The Costs and Benefits of bGH Will Be Distributed Fairly," Journal of Agricultural and Environmental Ethics 4(1991):108-120. In a debate, with others arguing the contrary.

Tweeten, Luther, "Public Policy Decisions for Farm Animal Welfare", Journal of Agricultural and Environmental Ethics 6(1993). The highly divergent attitudes of people in the United States regarding animal welfare versus human welfare inhibit formulation and legislative approval of a consensus policy. The lack of consensus is a matter both of divergent values and of inadequate knowledge. This paper makes a case that the policy process presents a major hurdle to animal rights proponents because the agricultural committees through which legislation must pass are controlled by legislators favourable to producers' interests. This report briefly reviews animal welfare policies in the U.S. The conclusion is

that animal welfare legislation has been rather freely extended to transport, slaughter, and experimentation but has not yet been extended to animals on farms. Many recommendations made by animal welfare advocates are consistent with conventional standards of good farm management and profit. At issue is to what extent these recommendations should be made legally enforceable mandatory rules. It is important to separate potential animal welfare reform into two categories: (1) legislation which is economically profitable to producers; and (2) legislation which is economically unprofitable. The former ordinarily will not require the force of law, since a program of education by the Cooperative Extension Service, other agencies, and the media ordinarily will suffice. Tweeten is in the Department of Agricultural Economics and Rural Sociology, The Ohio State University, 228 Agricultural Administration Building, Columbus, OH. 43210-1066.

Twine, Richard T., "Ma(r)king Essence--Ecofeminism and Embodiment," Ethics and the Environment 6(no. 2, 2001):31-58. Ecofeminism can consolidate its tradition of elucidating the interconnections between different oppressions by expanding upon its philosophy of the body. By looking at the ways in which particular bodies become 'marked', and so devalued, ecofeminism can point towards various unexpected and creative coalitions. Here I concentrate especially upon two intertwined sets of markings, namely those related to aesthetic discourses and those related to discourses of Western reason. I argue that both of these ultimately revolve around notions of control of the body as being constitutive of Western ideas of human identity. Moreover, I want to affirm that those ideas which encourage us to devalue certain bodies stem from discourses related to nature and animality. Through considering how ecofeminism might re-think embodiment, I argue for an alternative conception which stresses the inherent vulnerability and agency of human embodiment. Twine is finishing a Ph.D. in sociology, Manchester Metropolitan University, UK. (E&E)

Twine, Richard, Review of Warren, Karen, ed., Ecological Feminism. (London: Routledge, 1994). Environmental Values 6(1997):370-371. (EV)

Twine, Richard. Review of: Plumwood, Val, Imperial Culture: The Ecological Crisis of Reason. London: Routledge, 2002. Environmental Values 12(2003):535-537. (EV)

Twumbarima (Twum-Barima), Rosalind, Campbell, Laura B. Protecting the Ozone Layer through Trade Measures: Reconciling the Trade Provisions of the Montreal Protocol and the Rules of the GATT. Geneva: United Nations Environmental Program - Environment and Trade, # 6, 1994. 116 pp. An overview of the history of the Montreal Protocol on Substances that Deplete the Ozone Layer, the necessity and effectiveness of the Protocol's trade measures, and the measures for consistency with the trade rules of the General Agreement on Trade and Tariffs. The monograph also examines possible mechanisms for settling disputes which may arise as a result of the interpretation and implementation of the Protocol's trade measures. (v8,#2)

Tybirk, K, H. F. Alroe, and P. Frederiksen, "Nature Quality in Organic Farming: A Conceptual Analysis of Considerations and Criteria in a European Context," Journal of Agricultural and Environmental Ethics 17(2004):249-274. Nature quality in relation to farming is a complex field. It involves different traditions and interests, different views of what nature is, and of valuing nature. Furthermore there is a general lack of empirical data on many aspects of nature quality in the farmed landscape. In this paper we discuss nature quality from the perspective of organic farming, which has its own values and goals in relation to nature - the "Ecologist View of Nature." This is in contrast to "Culturist View" characteristic of much conventional agriculture and the "Naturalist View" characteristic of the traditional biological approach to nature quality. This

threefold distinction forms a framework for exploration of nature quality criteria in the farmed landscape. The traditional work on nature quality has mainly focussed on biological interests based on a Naturalist View of Nature. In this paper we will explore how criteria for nature quality based on the Ecologist View

can be developed and thereby feed into the ongoing discussion of the development of the organic farming practices. We suggest additional criteria for nature quality based on an Ecologist View of Nature: biodiversity, habitat diversity, extent and structure, functional integrity of habitats and agro-ecosystems, landscape integrity, accessibility, and experientiality. The larger set of Naturalist and Ecologist criteria can provide a wider and more balanced basis for developing nature quality indicators that are relevant in the farmed landscapes. This broader approach to nature quality is also expected to benefit the general societal discussions and decisions on farming and nature. Keywords: accessibility, aesthetics, agriculture, biodiversity, biological integrity, conservation, functional integrity, habitat, landscape, view of nature. Tybirk is with the National Environmental Research Institute, Department of Wildlife Ecology and Biodiversity, Denmark. Alroe is at the Danish Research Centre for Organic Farming, Tjele, Denmark. Fredericksen is at the National Environmental Research Institute, Department of Policy Analysis, Roskilde, Denmark. (JAEE)

Tybout, Richard A. Review of The Politics of the Solar Age: Alternatives to Economics. By Hazel Henderson. Environmental Ethics 5(1983):71-82.

Tyburski, W., (ed.), ETYKA DRODOWISKOWA - teoretyczne i praktyczne implikacje (Environmental Ethics - theoretical and practical implications), Instytut Filozofii UMK & Oddzia» Kujawsko-Pomorski PKE (TOP KURIER Publishers) Toru½, 1998

Tyburski, W., Etyka a ekologia (Ethics and Ecology), Toru½: PKE - Oddzia» Pomorsko-Kujawski (Polish Ecological Club - Pomerania-Kujawy Division Publishers), 1995

Tyburski, W., (ed.), ETYKA DRODOWISKOWA - teoretyczne i praktyczne implikacje (Environmental Ethics - theoretical and practical implications), Instytut Filozofii UMK & Oddzia» Kujawsko-Pomorski PKE (TOP KURIER Publishers) Toru½, 1998 (v.13,#1)

Tyburski, W., Etyka a ekologia (Ethics and Ecology), Toru½: PKE - Oddzia» Pomorsko-Kujawski (Polish Ecological Club - Pomerania-Kujawy Division Publishers), 1995 (v.13,#1)

Tyburski, Włodzimierz (ed.), Ekofilozofia i Bioetyka (Ecophilosophy and Bioethics - Proceedings of the 6th Polish Congress of Philosophy, Bioethics & Ecophilosophy Section), Toru½, 1996. In Polish. (v9,#2)

Tyburski, Włodzimierz, Pojednac się z Ziemią. W kregu zagadnień humanizmu ekologicznego (To Become Reconciled with Earth. Within the Scope of Ecological Humanism Issues), IPIR, 1993. In Polish.

Tyburski, Włodzimierz (ed.), Człowiek i środowisko. Dyscypliny humanistyczne i ekologia (The Human and the Environment. The Humanities and Ecology), UMK, 1995. In Polish. (v9,#2)

Tyburski, Włodzimierz, Etyka i ekologia (Ethics and Ecology), PKE, 1995. In Polish. (v9,#2)

Tylecote, A. and van der Straaten, J. Environment, Technology and Economic Growth: The Challenge to Sustainable Development. Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 1997. Review by Jon Erickson, Environmental Values 10(2001):137. (EV)

Tymieniecka, Anna-Teresa, "Analecta Husserliana Volume XLIV: The Elemental Passion for Place in the Ontopoiesis of Life: Passions of the Soul in the Imaginatio Creatrix" and "Analecta Husserliana Volume LI: Passion for Place Book II Between the Vital Spacing and the Creative Horizons of Fulfillment," Philosophy and Geography 4 (No. 2, 2001): 239-243. Books reviewed by Backhaus, Gary. (P&G)

Tynon, Joanne F.; Chavez, Deborah J., "Crime in National Forests: A Call for Research," Journal of Forestry

104 (no.3, March 2006): 154-157 (4).

Tyrvaainen, Liisa and Miettinen, Antti, "Property Prices and Urban Forest Amenities," Journal of Environmental Economics And Management 39 (No. 2, Mar 01 2000): 205-. (v.11,#2)

Tyson, Ann Scott. "Budget Cuts Jeopardize Discovery of Better Seeds." The Christian Science Monitor, 29 June 1994, p. 8. (v5,#2)

Tyson, Ann Scott. "Farmers Free to Hoe Their Own Row - And Take More Risks." The Christian Science Monitor 89.100 (18 April 1997): 1.

Tyson, Ann Scott."Urban Sprawl's Appetite for Rich Farmland." The Christian Science Monitor 89.80 (21 March 1997): 1.

Tyson, Ann Scott. "Urban Farms: How Green is My Barrio?" The Christian Science Monitor, vol. 89, 4 Dec. 1996, - 4.

Tyson, Ann Scott. "A Kansas Detective is Hot on the Trail of Global Warming." The Christian Science Monitor, vol. 88, 25 Sept. 1996, p. 1, 4.

Tyson, CB; Worthley, TE, "Managing Forests within a Watershed: The Importance of Stewardship," Journal of Forestry 99(no. 8, 2001):4-10. (v.13,#1)

Tyson, James L. "Farm Communities in U.S. Enjoy `Period of Exuberance.'" The Christian Science Monitor, vol. 88, 6 Nov. 1996, pp. 1-9.

Tyson, James. "Tilling Middle Ground of Property-Rights Debate." The Christian Science Monitor, June 27, 1995, p. 4. (v6,#2)

Tyson, L. James. "States Feud With EPA Over Regulations." The Christian Science Monitor, vol. 89, 19 Feb. 1997, p. 4.

Tyson, Scott Ann. "Playing `Mom' to a Bouncing Baby Orang." The Christian Science Monitor, vol. 89, 18 Feb. 1997, p. 16.

Tzilivakis, J., Broom, C. and Cook, R., "A Strategic Environmental Assessment Method for Agricultural Policy in the UK," Land Use Policy 16(no. 4, Oct 01 1999):223- . (v.11,#1)

Ucelli, Juliet, "Drugs, Women's Work and Ecology: Three Burning Questions for our Movement," Socialism and Democracy Spring/Summer 1990. (v1,#2)

Uekoetter, F, "Review of: David Hancocks, A Different Nature: The Paradoxical World of Zoos and Their Uncertain Future," Environmental History 7(no.4, 2002): 689-690.

Uekoetter, F., "Review of: Vaclav Smil, Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production," Environmental History 7(no.3, 2002): 532-33. (v.13,#4)

Uhl, Christopher, Kulakowski, Dominik, Cochrane, Mark. "Sustainability: A Touchstone Concept for University Operations, Education, and Research", Conservation Biology 10(no.5,1996):1308. (v7,#4)

Uhl, Christopher, and Amy Anderson, "Green Destiny: Universities Leading the Way to a Sustainable Future," Bioscience 51(no.1, Jan. 2001): 36-. (v.12,#3)

Uhl, Christopher. "Natural Resource Management in the Brazilian Amazon," Bioscience 47(no.3, 1997):160. An integrated research approach. (v8,#2)

Ulanowicz, Robert E., "Life after Newton: An Ecological Metaphysic," Biosystems 50(1999):127-142. (v.14, #4)

Ulanowicz, Robert E., "Ecosystem Dynamics: a Natural Middle," Theology and Science 2(no. 2, 2004):231-253. Theology and Science is the new journal of the Center for Theology and Natural Science, Graduate Theological Union, Berkeley. Ecosystem science offers opportunities for reconciling science and religion. Conflicts between science and religion revolve about fundamental assumptions more than they do facts or theories. The key postulates that have guided science since the Enlightenment (particularly the determinism and reductionism) appear to be wholly inadequate to describe the development of ecosystems (which are more open and holistic). An emended set of tenets adequate to the ecological narrative also significantly ameliorates the adversarial nature of the dialogue between scientists and theists. Thoughtful account by a well-known ecologist. Ulanowicz is at the University of Maryland Center for Environmental Science. (v.14, #4)

Ulfelder, Jay. "Natural-Resource Wealth and the Survival of Autocracy." *Comparative Political Studies* Vol. 40, no. 8 (2007): 995-1018. Does natural-resource wealth impede transitions to democracy? This article revisits this question with an event history design that differs from the approach used in other recent statistical tests of rentier state theory. The research confirms that autocracy is typically more durable in countries with substantial resource wealth, and the author finds this effect is robust to other measures proposed to explain the dearth of democracy in the Middle East or the Muslim world.

Umezaki, Masahiro, Kuchikura, Yukio and Ohtsuka, Ryutaro, "Impact of Population Pressure on Food Production: An Analysis of Land Use Change and Subsistence pattern in the Tari Basin in Papua New Guinea Highlands," Human Ecology 28(no.3, SEP 01 2000):359- . (EE v.12,#1)

Undercurrents: A Journal of Critical Environmental Studies is produced annually by the Faculty of Environmental Studies, York University, Ontario. The 1991 theme is "The Representation and Domination of Nature." \$5.00. Contact: Faculty of Environmental Studies, York University, 4600 Keele Street, North York, Ontario M3J 1P3, Canada. (v2,#1)

Undercurrents: A Journal of Critical Environmental Studies is a journal produced by graduate students of the Faculty of Environmental Studies, York University, 4700 Keele Street, North York, Ontario M3J 1P3, Canada, now in its fourth issue. (v3,#2)

Undercurrents: A Journal of Critical Environmental Studies. An annual publication of graduate students in the Faculty of Environmental Studies, York University, 4700 Keele Street, North York, Ontario M3J 1P3. The theme of volume 1 (1989) was "Human Interaction with the Natural Environment," and the theme for Volume 2 (1990) was "Nature, Culture, Self." Of special interest are several papers on deep ecology and feminism. (Katz Bibl #2)

UNESCO, World Directory of Academic Research Groups in Science Ethics. Science Policy Studies and Documents, No. 73. Paris: UNESCO, 1993. 168 pages. Listings and details of 250 such groups throughout the world, including (no. 233) the International Society for Environmental Ethics. United Nations Educational, Scientific, and Cultural Organization, 7, place de Fontenoy, 75700 Paris, France. With an index of researchers as well as of research groups. Also lists publications of these groups. (v4,#2)

Ungar, Sheldon. "Social Scars and Global Warming: Beyond the Rio Convention," Society & Natural Resources 8(no.5, Sept. 1995):443- . (v6,#4)

United Kingdom. Some notes on environmental philosophy in the United Kingdom are in the ISEE Newsletter, vol. 4, no. 3, Fall 1993.

United Nations Commission on Human Rights, Human Rights and the Environment. Document E/CN.4/Sub.2/1994/9. July 6, 1994. 92 pages. This is the final report from a four-year study on human rights and the environment to the U.N. Subcommission on Prevention of Discrimination and Protection of Minorities, a subcommission of the UN Commission on Human Rights, to which subcommission this assignment was delegated. The report was prepared by special rapporteur Fatma Zohra Ksentini and discusses the many ways in which environmental degradation interferes with the enjoyment of recognized human rights and confirms widespread legal recognition of this linkage. The report asks the Commission to appoint authorized persons to monitor situations that involve human rights and the environment, though the Commission has stopped short of doing so, asking for further comment by governments and NGO's. The document is also available in French and Spanish. Of some interest is Annex III, which summarizes constitutional provisions relative to environmental protection in over sixty nations. A U.S. contact monitoring these developments is the Sierra Club Legal Defense Fund, 180 Montgomery St., Suite 1400, San Francisco, CA 94104-4209. (v6,#4)

United Nations Educational, Scientific, and Cultural Organization (UNESCO), "Ethics of Space." Online at: <http://www.unesco.org/opi2/ethics/space.htm>

Space is for the use of all human beings on earth, part of the common heritage of humankind, to which all persons ought to have equal access. (v.13,#4)

University of Illinois Law Review, vol. 1986, no. 2, is a symposium, Stewardship of Land and Natural Resources, with 14 articles, all relevant to environmental ethics. The three main areas are philosophy of resource control, distribution of water rights, and land and urban growth. Some representative articles:

--Charles E. Little, "Has the Land Ethic Failed in America? An Essay on the Legacy of Aldo Leopold"

--Lynda L. Butler, "Defining a Water Ethic Through Comprehensive Reform: A Suggested Framework for Analysis"

--Eric T. Freyfogle, "Water Justice"

--James M. Caragher, "The Wilderness Ethic of Justice William O. Douglas"

--Lynton Keith Caldwell, "Land and the Law: Problems in Legal Philosophy"

The issue is available for \$ 7.00 from the College of Law, 76 Law Building, 504 East Pennsylvania Ave., Champaign, IL 61820. (v1,#3)

Unruh, JD, "Poverty and property rights in the developing world: not as simple as we would like," Land Use Policy 19(no.4, 2002): 275-276.

Unterberger, Glenn L. "Let's Make a Deal: Transferring Pollution-Reduction Credits." Natural Resources and Environment 10, no.4 (1996): 28. (v7, #3)

Unwin, David J. "Geographical Information Systems and the Problem of 'Error and Uncertainty'." Progress in Human Geography 19(no.4, 1995):549- .

Upbin, Bruce, "Don't Tell the Whale Lovers," Forbes, October 20, 1997, pp. 153-154. The 2-inch long Antarctic krill, Euphausia superba, is waiting to be exploited, one of the world's last untapped resources. Schools of krill extend up to fifty miles square, the diet of great whales, seals, and penguins. A Canadian entrepreneur, David Saxby, has founded Biozyme Systems to exploit the resource. Aquaculture is a \$ 34 billion industry, and farmed fish have to be fed. If fed a diet laced with krill, fish eat better and more than

with the present foods, often laced with anchovy. Bixby sold \$ 3 million worth of krill in 1997, and hopes for \$ 45 million worth next year. (v.8,#4)

Upreti, B. R., and Upreti, Y. G., "Factors Leading to Agro-Biodiversity Loss in Developing Countries: The Case of Nepal," Biodiversity and Conservation 11(no.9, 2002): 1607-21. (v.13,#4)

Upreti, D. K. "Loss of Diversity in Indian Lichen Flora." Environmental Conservation 22, no.4 (1995): 361. (v7, #3)

Urban, Michael, "Values and Ethical Beliefs Regarding Agricultural Drainage in Central Illinois, USA," Society and Natural Resources 18(no.2, February):173-189(17).

Urbanik, Julie. Review of Mary Mellor, "Feminism and Ecology", Organization and Environment 14 (No. 1, March 2001) pp.116-7. Urbanik works for the Southwest Institute for Research on Women at the University of Arizona. (v.13,#2)

Urbanska, K. M. and K. Grodzinska. Restoration Ecology in Europe. Zurich: Geobotanisches Institute SFIT Zurich, 1994. \$50. (Zurichbergstrasse 38, CH 8044, Switzerland). Restoration at site, population, community, and landscape levels. (v6,#1)

Urbanska, Krystyna, Webb, Nigel, and Edwards, Peter, eds., Restoration Ecology and Sustainable Development. New York: Cambridge University Press, 1998. 414 pages. \$ 75. (v9,#2)

Urbina, Ian, "Lake Cleanup To Be Ordered in Syracuse," New York Times, November 29, 2004, p. A21. Honeywell is being ordered by New York state authorities to dredge Onondaga Lake, because of mercury pollution there (and other toxics) going back to pollution caused by Allied Chemical, since merged with Honeywell. Estimated cost \$ 448 million. But the cleanup standards are less stringent than would be imposed by the Environmental Protection Agency, which might cost \$ 2.3 billion. (v.14, #4)

Uriarte, Maria, Holly A. Ewing, Valerie T. Eviner, and Kathleen C. Weathers. "Constructing a Broader and More Inclusive Value System in Science." BioScience Vol. 57, no. 1 (2007): 71-8. A scientific culture that welcomes a diversity of participants and addresses a broad range of questions is critical to the success of the scientific enterprise and essential for engaging the public in science. By favoring behaviors and practices that result in a narrow set of outcomes, our current scientific culture may lower the diversity of the scientific workforce, limit the range and relevance of scientific pursuits, and restrict the scope of interdisciplinary collaboration and public engagement. The scientific community will reach its full intellectual potential and secure public support through thorough, multi-tiered initiatives that aim to change individual and institutional behaviors, shift current reward structures to reflect a wider set of values, and explicitly consider societal benefits in the establishment of research agendas. We discuss some shortcomings and costs of the current value system and provide some guidelines for the development of initiatives that transcend such limitations.

Urie, Matthew C. "Share and Share Alike? Natural Resources and Hazardous Waste Under the Commerce Clause," Natural Resources Journal 35(no.2, Sprg.1995):309- . (v6,#4)

Urquhart, Stephen, "Protecting Access to Federal Lands: The Roads Less and Less Traveled," Natural Resources & Environment 15(no.3, 2000 Wint): 192-. (v.12,#3)

US Fish and Wildlife, Endangered and Threatened Wildlife and Plants: Animal Candidate Review, 1991. In Federal Register 55 (no. 225):58804-58836, November 21, 1991. A list of about 1700 animal candidates for listing as endangered species in the United States. Many are subspecies or populations. (v3,#2)

- US Forest Service, Managing Air Resources in the Rocky Mountain Region. July 1993. Contains a section on "Wilderness Air Resource Management Philosophy" with fourteen premises of the study. "1. Wilderness is not merely a commodity for human use and consumption. Wilderness ecosystems have intrinsic values other than user/public concerns. 2. The objective of Wilderness management is to offer a natural user experience, rather than an enjoyable one. 3. All Wilderness components are equally important; none are of lesser value than others. 4. A Wilderness component is important even if users of the Wilderness are unaware of its existence. 5. All life forms are equally important. For example, microorganisms are as essential as elk or grizzly bears. 6. The goal of Wilderness management is to protect not only resources with immediate aesthetic appeal (i.e. sparkling clear streams) but also unseen ecological processes (such as natural biodiversity and gene pools." And more. Contact Dennis Haddow, Air Program Manager, U.S. Forest Service, Rocky Mountain Region, Box 25127, Lakewood, CO 80225-0127. (v4,#3)
- US Forest Service, Final Supplement to the Environmental Impact Statement for an Amendment to the Pacific Northwest Regional Guide, vols 1, 2. USDA Forest Service, Portland, Oregon, 1988. (v1,#3)
- Ustin S.L.; Roberts D.A.; Gamon J.A.; Asner G.P.; Green R.O., "Using Imaging Spectroscopy to Study Ecosystem Processes and Properties," BioScience 54(no.6, 1 June 2004):523-534(12). (v. 15, # 3)
- Utah Wilderness Coalition. Wilderness at the Edge: A Citizen Proposal to Protect Utah's Canyons and Deserts. Salt Lake City: Utah Wilderness Coalition, 1990. (v8,#2)
- Utton, Albert E. "Regional Cooperation: The Example of International Waters Systems in the Twentieth Century", Natural Resources Journal 36(no.2, 1996):151.
- Utton, Albert E. "Coping with Drought on an International River under Stress: The Case of the Rio Grande/Rio Bravo." Natural Resources Journal 39(No. 1, Winter 1999):27- . (v10,#4)
- Uvin, Peter. "Tragedy in Rwanda: The Political Ecology of Conflict." Environment 38, no.3 (1996): 110. Resource scarcity and a history of ethnic conflict came to a head in 1994, creating a political, social, and economic climate sadly well suited to the construction of extreme violence. (v7, #3)
- Uyeki, Eugene S. and Lani J. Holland. "Diffusion of Pro-Environment Attitudes?" American Behavioral Scientist 43(No.4, 2000). Environmental justice. (v.11,#1)
- Uzzell, D., Pol, E. and Badenas, D., "Place Identification, Social Cohesion, and Environmental Sustainability," Environment and Behavior 34(no.1, 2002): 26-53. (v.13,#2)
- Vaaarst, Mette, Lis Alban, Lisbeth Mogensen, Stig Milan, Thamsborg and Erik Steen Kristensen. "Health and Welfare in Danish Dairy Cattle in the Transition to Organic Production: Problems, Priorities and Perspectives." Journal of Agricultural and Environmental Ethics 10(2001):367-390. During the past few years, organic dairy farming has grown dramatically in Denmark. Consequently, an increasing number of people are encountering this method of production for the first time. Amongst these, many veterinarians have suddenly had to deal with organic herds in their home district, and, meeting examples of poor animal welfare, they have recently started to express some concerns. Against this background, a so-called "Synthesis of Knowledge" project was initiated to examine the health and welfare of dairy cattle and the use of medication in the transition to organic production. The aim of the project was to investigate associated problems from the point of view of the dairy herd. Based on qualitative research interviews with vets and agricultural advisors, as well as focus group interviews with farmers who had recently converted from conventional to organic farming, an expert panel attempted

to identify problem areas and possible solutions. The problems related to (a) the adjustment to new and unknown practices, (b) poor management in general, and (c) inappropriate legislation for organic farming.

One problem area was the rearing of dairy calves, particularly with regard to the establishment of postpartum relationships between cow and calf, group housing, and the grazing of young animals. A "natural life" was identified as being fundamental to organic animal husbandry. In terms of animal welfare, this concept can be understood as a way of living in which the calf is allowed to express its natural behavior and satisfy its natural needs. Essentially, the conditions needed for good calf welfare require the compatibility and interplay of elements from "nature" (the natural life; including opportunities to satisfy natural needs) and "culture" (farmer management skills; exercise of care). These elements should be balanced to ensure animal welfare in organic herds. Keywords: animal welfare, conversion, dairy calves, natural, organic dairy farming. The authors are in the Department for Animal Health and Welfare Danish Institute of Agricultural, Sciences Research Centre, Foulum, Tjele, Netherlands. (JAEE)

Vacation Trends." The Christian Science Monitor 89 (11 July 1997): 10-11. Interesting statistics on vacationing. "Outdoors" accounts for 17%, of which 85% is camping; "State/National Parks," 10%. Travel is a \$460 billion industry in the U.S., the third largest. Americans will make 230 million trips this summer. (v8,#2)

Vadnjaj, Dan, and O'Connor, Martin, "What is the Value of Rangitoto Island?" Environmental Values 3(1994):369-380. Contingent Valuation has been promoted as a catch-all approach to environmental valuation. While there have been numerous attempts in recent years to place monetary values on environmental amenities, studies have often reported a high frequency of protest, zero, or inordinately large dollar-value responses. This paper reports on the results of a survey designed to obtain information on how people actually interpret questions of paying to avoid changes in their views of Rangitoto Island. Evidence suggests that the meaning respondents attach to the actual dollar values they offer or bid are inconsistent with the conventional logic that underlies Contingent Valuation. Instead, respondents might be seen to be expressing views about how things ought to be in society, and that is simply not right to develop Rangitoto Island. Vadnjaj is at Darwin College,

Cambridge. O'Connor is in the Department of Economics, University of Auckland, New Zealand. (EV)

Vadnjaj, Dan T., Review of Caldwell, Lynton Keith, Shrader-Frechette, Kristen, Policy for Land: Law and Ethics. (Lanham, MD: Rowman and Littlefield, 1993). Environmental Values 6(1997):365-366. (EV)

Vail, Jeffrey. "Our National Parks and Forests: What Can Their Foundations Do To Help Them," Natural Resources & Environment 12(no.1,1997):8. (v8,#3)

Vaitheeswaran, Vijay V., *Power to the People: How the Coming Energy Revolution Will Transform an Industry, Change our Lives, and Maybe Even Save the Planet*. New York: Farrar, Straus and Giroux, 2003. The filthy and inefficient way we now use energy and the need to modernize our outmoded energy system. Vaitheeswaran is the environment and energy correspondent for The Economist.

Vale, Thomas, "The Myth of the Humanized Landscape: An Example from Yosemite National Park, " Wild Earth 9(no. 3, Fall 1999):34- .

Vale, Thomas, "The Myth of the Humanized Landscape: An Example from Yosemite National Park," Natural Areas Journal 18(1998):231-236. "The once-popular view that the United States before European settlement was a 'pristine' natural landscape has been largely replaced by the view that the precontact landscape was 'humanized' by native peoples. While having merit, the contemporary emphasis on ubiquitous human agency is overstated: large parts of the United States, particularly in the American West, may have been essentially natural, their landscapes characterized by processes of nature rather than

people. Yosemite National Park is used here as an example to illustrate this point. The desire to visualize humanized landscapes in the pre-European era derives from social ideologies, rather than from careful assessment of ecological facts. Furthermore, those ideologies also monolithically stigmatize wilderness enthusiasm as superficial. The model of the pristine landscape has merit--its applicability in any given locale being an empirically testable proposition--and it should serve as a guide for management of natural areas" (Abstract, p. 231). In the Yosemite case, based on ecological and archaeological evidence, "even given the most generous interpretation of what was 'humanized,' much of the park was 'natural'--in the sense that its landscape characteristics were determined by natural processes" (p. 234). Vale is in geography, University of Wisconsin. For an opposite view see: Bonnicksen, Thomas M., America's Ancient Forests: From the Ice Age to the Age of Discovery (New York: John Wiley and Sons, 2000). (v.12,#4)

Valente, Christina M., and William Valente, Introduction to Environmental Law and Policy: Protecting the Environment through Law. St. Paul, MN: West Publishing Co., 1994. Chapters on environmental problems, environmental regulation, insecticides, toxic substances, solid waste, superfund, water pollution, air pollution, federal lands, federal facilities, Indian lands. The senior author is a Senior Assistant Regional Counsel with the Environmental Protection Agency, Philadelphia Region. (v5,#4)

Valente, Christina M., and William D. Valente. Introduction to Environmental Law and Policy: Protecting the Environment through Law. St. Paul, MN: West Publishing Co., 1995. 441 pages. Hardcover. An excellent introduction that is half the length of the Plater et al volume (also by West Publishing), suitable for semester-length course. Both Valentines are at Villanova University; Christina Valente is also with the U.S. Environmental Protection Agency. (v6,#1)

Valentine, G, "Geography and ethics: moral geographies? Ethical commitment in research and teaching," Progress in Human Geography 29 (no. 4, August 2005): 483-487.

Valentine, G., "Geography and Ethics: in Pursuit of Social Justice - Ethics and Emotions in Geographies of Health and Disability Research," Progress in Human Geography 27(no. 3, 2003): 375-380.

Valentine G., "Geography and ethics: questions of considerability and activism in environmental ethics," Progress in Human Geography 28(no.2, 1 April 2004):258-263(6). (v. 15, # 3)

Valiela, I., Bowen, J. L. and York, J. K., "Mangrove Forests: One of the World's Most Threatened Major Tropical Environments," Bioscience 51(no.10, 2001): 807-16. (v.13,#2)

Valiulis, J, "Mountain Lions and Humans in Changing Landscapes," Landscape Ecology 20 (no. 7, November 2005): 893-894.

Vallely, Paul, Bad Samaritans: First World Ethics and Third World Debt. Maryknoll, NY: Orbis Books, 1992. Examines aid programs, World Bank, and International Monetary Fund reforms, and uses the Christian tradition for a new economics. (v3,#1)

van Bogaert, Louis-Jacques, "Sentience and Moral Standing," South African Journal of Philosophy 23(no. 3, 2004):292-301. Sentience is often used in the advocacy of animal rights and welfare, but sentience is not a simple but a complex phenomenon and requires closer analysis. Sentience is more than feeling pleasure and pain and pain is an inborn protection required to fit into the world rather than the substance of evil. Various accounts of the nature of sentience. Sentience is often altered or reduced by advocates to fit the argument. Sentience comes across a spectrum and in degrees. The emphasis on pain in sentience leads to misunderstanding. The paper also addresses issues in abortion. van Bogaert is in philosophy, University of Stellenbosch, South Africa.

van Wensveen, Louke, "Attunement: An Ecological Spin on the Virtue of Temperance," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):67-78. Within an environmental virtue ethic belongs moderation for the sake of ecojustice. Named attunement, this virtue both resembles and differs from Aristotelian and Thomistic articulations of temperance. Principally expressed as frugality and moderation in diet, it includes: sensitivity to limits, acceptance of limits, joyous contentment, creativity, and readiness to sacrifice. Van Wensveen is in the Department of Theological Studies, Loyola Marymount University, Los Angeles. (v.13,#2)

Van de Pitte, M. M. "'The Female is Somewhat Duller': The Construction of the Sexes in Ornithological Literature." Environmental Ethics 20(1998):23-39. I review ornithological literature in order to demonstrate that conventions of description and illustration, as well as some aspects of biological theory relating to birds, put a strong focus on male birds. I criticize the sexist aspects of ornithology from the standpoint of recent feminist philosophy of science, establishing connections between the ways in which we view animals and the ways in which we view ourselves and arguing that it is costly to humans, specifically women, to suggest that females of the nonhuman species are biologically inadequate in relation to their male counterparts. Finally, I note that failure to notice and excise residual sexism in animal science also encourages people to be inattentive to and less considerate of a large and significant part of nature. I conclude with some suggestions for reform. Van de Pitte is in Philosophy, University of Alberta, Edmonton. (EE)

Van Den Bergh, JCJM; Rietveld, P, "Reconsidering the Limits to World Population: Meta-analysis and Meta-prediction", BioScience 54 (no.3, 2004): 195-204(10). We performed a meta-analysis on the basis of 69 past studies that have assessed a limit to the world population. The estimates of this limit range from 0.5 billion to 1 x 10²¹ billion people. A meta-analysis allows us to see what overall picture emerges when different methods, limiting factors, levels of aggregation, and data are taken into account. Limiting factors for the world population include water availability, energy, carbon, forest products, nonrenewable resources, heat removal, photosynthetic capacity, and the availability of land for food production. Methods employed in the population studies include spatial extrapolation, modeling of multiple regions, temporal extrapolation, actual supply of a resource, hypothetical modeling, and dynamic systems modeling. Many studies rely on important assumptions about the level of technology, the energy intake per person, and the available arable land. The meta-analysis employs both descriptive statistics and regression analysis. We used the findings of these analyses to propose a number of meta-estimates of limits to world population. When taking all studies into account, the best point estimate is 7.7 billion people; the lower and upper bounds, given current technology, are 0.65 billion and 98 billion people, respectively. We offer a range of other conditional estimates as well. An important conclusion of this study is that recent predictions of stabilized world population levels for 2050 exceed several of our meta-estimates of a world population limit.

Van Dyke, Fred. *Conservation Biology: Foundations, Concepts, Applications*, 2nd ed. New York: Springer, 2008.

Van Dyke, Fred. *Conservation Biology: Foundations, Concepts, Applications*, 2nd ed. New York: Springer, 2008.

Van Horn, Joe. "GPS and the Internet: Possible Effects for the Protection of Remote Areas and Wilderness." *International Journal of Wilderness* Vol. 13, no. 3 (2007): 7-10. Is the wilderness experience different with a GPS tracking your every step? Is it different if you are texting your experiences to your blog, to your friends, or to the world? Does this increase concern for wilderness conservation?

Van Langevelde, F., Schotman, A., and Sparenburg, G., "Competing land use in the reserve site selection

problem," Landscape Ecology 15 (No. 3, Apr 01 2000): 243- . (v.11,#2)

Van Putten, M, "Rebuilding a Mainstream Consensus for Environmentalism," BioScience 55 (no. 6, June 2005): 468-269.

Van Putten, M., "Toward a New Environmental Insurgency," Bioscience 55(no.9, September 2005): 789-794.

Van Til, Kent A. *Two Dollars a Day: A Christian View of World Poverty*. Grand Rapids, MI: Wm. B. Eerdmans, 2007. We cannot assume that the free market will provide basic sustenance for all. The problem with the free market is that it distributes goods on only one basis: desert. You get what you earn, or you get what you can pay for. Most goods should be exchanged via the free market, but the justice of the marketplace is not sufficient. To argue against every form of redistribution of goods based on justice and benevolence is to ignore both history and the reality of power. Van Til is in religion at Hope College, Holland, MI.

Van Wensveen, Louke, Dirty Virtues: The Emergence of Ecological Virtue Ethics. Prometheus Books, 2000. Careful attempt to marry environmental ethics and virtue ethics. Van Wensveen argues that there already exists a flourishing "virtue language" among environmental writers and activists. Her book attempts to describe this discourse and clarify its logic of justification. Particularly interesting is the way such an ecological virtue ethics ("EVE") both builds on and challenges traditional notions of virtue. Separate chapters focus on Murray Bookchin and Thomas Berry, representing two very different attempts to develop an EVE. Aristotelian, Thomistic and feminist perspectives on virtue are thoroughly canvassed. Van Wensveen insists that any viable ecological virtue ethics must be non-anthropocentric: human flourishing and non-human flourishing must both be taken into account in our actions. Indeed, these cannot be separated, since flourishing ecosystems provide the physical, intellectual and spiritual resources for true human flourishing.

Van Wensveen insists that any viable ecological virtue ethics must be non-anthropocentric: human flourishing and non-human flourishing must both be taken into account in our actions. Indeed, these cannot be separated, since flourishing ecosystems provide the physical, intellectual and spiritual resources for true human flourishing. (v.11,#1)

VanAarde (Van Aarde), AG 1991. Natuurwonders, mens en omgewing (Mat 17:24-27). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 216-236. (Africa)

VanBueren (Van Bueren), Edith T. Lammerts and Paul C. Struik, "Integrity and Rights of Plants: Ethical Notions in Organic Plant Breeding and Propagation," Journal of Agricultural and Environmental Ethics 18(2005):479-493. Organic farming acknowledges the integrity of plants as an essential element of its natural approaches to crop production. For cultivated plants, integrity refers to their inherent nature, wholeness, completeness, species-specific characteristics, and their being in balance with their (organically farmed) environment, while accomplishing their natural aim. We argue that this integrity of plants has ethical value, distinguishing integrity of life, plant-typic integrity, genotypic integrity, and phenotypic integrity. We have developed qualitative criteria to ethically evaluate existing practices and have applied these criteria to assess whether current plant breeding and propagation techniques violate the integrity of crop plants. This process has resulted in a design of a holistic, scientific approach of organic plant breeding and seed production.

Our evaluation has met considerable criticism from mainstream crop scientists. We respond to the following questions: (1). Can ethics be incorporated into objective crop sciences? (2). What is the nature of the intrinsic value of plants in organic farming? We argue that criteria to take integrity into account can only be assessed from a holistic perspective and we show that a holistic approach is needed to design such ethical notions in a consistent way. Key words: integrity - intrinsic value - natural aim - naturalness - organic breeding - organic plant propagation - plant rights - respect. Van Bueren is at the Louis Bolk

Institute, Driebergen, LA, The Netherlands. Struik is with the Plant Sciences Group, Crop and Weed Ecology, Wageningen University, Wageningen, The Netherlands. (JAEE)

vanBuren (van Buren), John. "Critical Environmental Hermeneutics." Environmental Ethics 17(1995):259-275. Local, national, and international conflicts over the use of forests between logging companies, governments, environmentalists, native peoples, local residents, recreationalists, and others--e.g., the controversy over the spotted owl in the old-growth forests of the Northwestern United States and over the rain forests in South America--have shown the need for philosophical reflection to help clarify the basic issues involved. Joining other philosophers who are addressing this problem, my own response takes the form of a sketch of the rough outlines of a critical environmental hermeneutics. I apply hermeneutics, narrative theory, and critical theory to environmental ethics, and use this hermeneutical theory as a method to illuminate the "deep" underlying issues relating to the perception and use of forests. In applying this method, I first take up the analytical problem of identifying, clarifying, and ordering the different interpretive narratives about forests in terms of the underlying epistemological, ethical, and political issues involved. I then address the critical problem of deciding conflicts between these different interpretations of forests by working out a set of legitimation criteria to which all parties concerned would ideally be able to subscribe. van Buren is in the philosophy department, Fordham University. (EE)

Vance-Borland, Ken, Noss, Reed, and Nawa, Rich. "A Biodiversity Conservation Plan for the Klamath/Siskiyou Region," Wild Earth 5, no. 4 (Winter 1995): 52- . (v6,#4)

Vanclay, JK; Nichols, JD, "What Would a Global Forest Convention Mean for Tropical Forests and for Timber Consumers?" Journal of Forestry 103 (no. 3, April/May 2005): 120-125.

vandenBELT (van den Belt), Henk, and Gremmen, Bart, "Between Precautionary Principle and "Sound Science": Distributing the Burdens of Proof," Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):103-122. Opponents of biotechnology often invoke the Precautionary Principle to advance their cause, whereas biotech enthusiasts prefer to appeal to "sound science." Public authorities are still groping for a useful definition. A crucial issue in this debate is the distribution of the burden of proof among the parties favoring and opposing certain technological developments. Indeed, the debate on the significance and scope of the Precautionary Principle can be fruitfully re-framed as a debate on the proper division of burdens of proof. In this article, we attempt to arrive at a more refined way of thinking about this problem in order to escape from the existing polarization of views between "guilty until proven innocent" and "innocent until proven guilty." This way of thinking also enables a critical review of current demarcations between risk assessment and risk management, or science and politics, and of the morally laden controversy on the relative importance of type-I and type-II errors in statistical testing. KEY WORDS: biotechnology, burden of proof, Precautionary Principle, type-1 and type-II errors. The authors are with Applied Philosophy, Wageningen, Netherlaqnds. (JAEE)

VandenBergh (Van den Bergh), Jeroen C. J. M. and Jan van der Straaten. Toward Sustainable Development: Concepts, Methods, and Policy. Island Press, 1994. 302 pages, \$30. Papers presented at a meeting of the International Society for Ecological Economics, slanted toward theoretical economic dimensions of sustainable development. (v6,#1)

VandenBorn (van den Born), Riyan J.G., "Rethinking Nature: Public Visions in the Netherlands," This study addresses two questions: (1) what visions of nature do lay people subscribe to? (2) to what extent do these visions reflect those of professional philosophers? Four philosophical images of the human-nature relationship were discussed with respondents; Master, Steward, Partner and Participant. Respondents recognise these images, but prefer to construct their own. Elements of their images are (1) that humans are part of nature, but (2) that they are responsible for nature as well. This study indicates that empirical philosophy can contribute to the further development of environmental philosophy. Through an empirical

turn we can discover people's own voice.

Vandenkoornhuyse, Phillippe et al, "Extensive Fungal Diversity in Plant Roots," Science 295(15 March 2002):2051. More biodiversity in surprising places, this time an extraordinary diversity of species inhabiting the roots of plants, from every major fungal group, including many unidentified species, and often involved in symbiotic relationships with the plants. The lead author is at the University of York, UK. (v.13,#2)

Vandergeest, P, "Racialization and Citizenship in Thai Forest Politics," Society and Natural Resources 16(no.1, 2003): 19-38.

Vandergeest, Peter. "Mapping Nature: Territorialization of Forest Rights in Thailand." Society and Natural Resources 9, no.2 (1996): 159. (v7, #3)

Vanderheiden, Steve. "Two Shades of Green: Food and Environmental Sustainability." Environmental Ethics 28(2006):129-145. The politics of food illustrates an enduring tension within environmental ethics and green political theory: the oft-assumed division between those thinkers for whom humanitarian goals remain prominent but who situate them within a normative framework stressing environmental sustainability and those thinkers who reject any distinctively humanitarian interests as untenably anthropocentric. In posing the problem as a moral dilemma between feeding people and saving nature, light and dark green value theories are made to appear in stark contrast, with the former prescribing the delivery of food aid to relieve hunger-related suffering, and the latter rejecting that call. This supposed dilemma between feeding people and saving nature is a false one. The real problem is a moral elitism on the part of developed countries where an insidious form of selfishness overemphasizes the role of population and obscures the roles of highly variable rates of consumption upon current environmental ills. An examination of the exemplary case of food politics shows that the exaggerated differences in policy implications of these two value theories can be diminished and that there is potential for common cause. (EE)

Vanderheiden, Steve. "Rousseau, Cronon, and the Wilderness Idea." William Cronon has recently argued that the current debate concerning justifications for protecting wilderness relies upon conceptions of natural value premised upon a nature/society dualism that originated in older nature writing but which still animates contemporary thinking. This dualism, he argues, prevents adequate realization of the human and social places in nature, and is ultimately counterproductive to the task of articulating the proper relationship between humans and the natural world. While the origin of one of these conceptions of natural value (the frontier) can be traced back to Rousseau, I argue that Rousseau's writings reveal a far more complex and nuanced treatment of the value of nature in and for society (and the persons that compose it) than has thus far been acknowledged. Moreover, by unpacking several arguments made by Rousseau on behalf of the stewardship and accessibility of natural areas, one can not only gain a more accurate view of Rousseau's environmental thought than is ordinarily recognized by authors who focus on his primitivism and anti-modern critique, but also some insights that may help bridge the nature/society dualism plaguing contemporary environmental ethics and noted by Cronon. Environmental Ethics 24(2002):169-188. (EE)

Vanderheiden, Steve. Book Review of *One World: The Ethics of Globalization*. By Peter Singer. Environmental Ethics 26(2004):209-212. (EE)

Vanderheiden, Steve. Review of *Understanding Environmental Policy*. Environmental Ethics 29(2007):443-444. (EE)

Vanderheiden, Steve. *Atmospheric Justice: A Political Theory of Climate Change*. Oxford: Oxford University

Press, 2008. Vanderheiden addresses the challenge of mitigating climate change via conceptual frameworks of equality, justice, and responsibility. He discusses how climate change raises issues of international and intergenerational environmental justice by expanding on the work of John Rawls, and he argues that climate change policy can offer insights into resolving contemporary controversies within political theory.

vanderHeijden (van der Heijden), Hein-Anton, "Ecological Restoration, Environmentalism and the Dutch Politics of 'New Nature'," Environmental Values 14(2005):427-446. 'New nature' refers to the current practice in which ten thousands of hectares of superfluous agricultural lands are 'given back to nature', compensating for the loss of 'old nature' in other parts of the Netherlands. Around the issue of 'new nature' two discourses have emerged. In each discourse different environmental values are emphasised: about what nature is or could be; about the relationship between nature, agriculture and development; about ecological mitigation, and so on. Whereas the Dutch branch of WWF is the most active promoter of the sectorial nature development discourse, environmental groups like Friends of the Earth try to weigh these sectorial interests against the background of increasing environmental degradation. van der Heijden is in political science, University of Amsterdam, The Netherlands. (EV)

vanderHeijden (vander Heijden), H. A., "Risk Management or Environmental Politics?," Environmental Politics 11(no.2, 2002): 187-92. (v.13,#4)

vanderHeijden, HA, "Dutch Environmentalism at the Turn of the Century," Environmental Politics 11(no.4, 2002): 120-130.

Vandermeer, John, and Perfecto, Ivette. "The Agroecosystem: A Need for the Conservation Biologist's Lens," Conservation Biology 11(no.3, 1997):591. (v8,#2)

Vandermeer, John, Reconstructing Biology: Genetics and Ecology in the New World Order. New York: John Wiley, 1996. 478 pages. \$ 35.00. (v8,#2)

Batisse, Michel. "Biosphere Reserves: A Challenge for Biodiversity Conservation and Regional Development," Environment 39(no.5, 1997):6. Biosphere reserves offer a way to combine conservation with local economic development. When linked as a world network, they create the possibility of a truly global approach to biodiversity research and preservation. (v8,#2)

vanderMerwe (van der Merwe), W. L., "African Philosophy and Multiculturalism," South African Journal of Philosophy / Suid-Afrikaanse Tydskrif vir Wysbegeerte 16(no. 3, August 1997):73-78. African philosophy is multicultural and, though not unique in this respect, is significant as it exemplifies in a paradigmatic way the historical and cultural contingency or contextual particularity of philosophy. The increasing globalization of modern culture does not mean increasing cultural homogeneity; rather there is the extension of cultural differences and multicultural as a common feature of societies. This is a theme issue on identity, difference, and community. van der Merwe is at the University of Stellenbosch and editor of this journal. (Africa)

VanderMerwe (Van der Merwe), CF 1990. Justice, Peace and the integrity of creation and the involvement of the church. Word and context 1:1, 16-25. (Africa)

VanderMerwe (Van der Merwe), P. and Saayman, M., "Game farms as sustainable ecotourist attractions," Koedoe (Research Journal, South African National Parks) 48(no. 2, 2005):1-10. Ecotourism is important in

South Africa, including that on game farms, with about 7,000 in South Africa. Some 80% of wildlife conservation is taking place on private lands. Operators are concerned about sustainability. But they often do not work closely with the local community to develop partnerships in which the local community

has a stake, and they often do not use local entrepreneurs in the development of their initiatives. The authors are in Tourism and Leisure Studies, North-West University, Potchefstroom Campus, Potchefstroom, South Africa.

vanderMey (van der Mey), Leo M. "Sustainable Development in Dutch Policy: A National Response to an International Appeal," The Journal of Environment and Development 4, no. 2 (Summer 1995): 205- . (v6,#4)

vanderPloeg (van der Ploeg), S.W.F. and Vlum, F., "Ecological Evaluation, Nature Conservation and Landscape Planning with Special Reference to Methods Used in the Netherlands," Biological Conservation 14(1978):197-221. "Naturalness" is an anthropocentric value.

Vanderpoorten, A; Engels, P, "Patterns of bryophyte diversity and rarity at a regional scale", Biodiversity and Conservation 12(no.3, 2003):545-553.

VanderRyn (Van der Ryn), Sim, and Stuart Cowan, Bringing Design to Life. Washington: Island Press, 1996. Case studies, images, and theory to envision how the living world and the humanly designed world can be rejoined by taking ecology as the basis for design. (v6,#4)

vanderSteen (van der Steen), Wim J. "The Demise of Monism and Pluralism in Environmental Ethics." Environmental Ethics 17(1995):209-220. Peter Wenz has recently distinguished various forms of moral pluralism in an effort to dissolve the controversy over monism and pluralism. I argue that the distinctions are not really helpful once the methodology and the substance of science are brought to bear on ethics. Theories in ethics and science alike are subject to context-dependent methodological trade-offs. Hence, the category of theories should be heterogeneous. Monism and pluralism are at cross-purposes since they endorse different unanalyzed notions of theory. Awareness of heterogeneity among theories is helpful in dismissing the controversy. van der Steen is in biology, Free University, Amsterdam. (EE)

Vanderstraaten (Van Der Straaten), Jan, Review of DuPuis and Vandergeest, eds. Creating the Countryside: The Politics of Rural and Environmental Discourse (Philadelphia: Temple University Press, 1996). Environmental Values 6(1997):242-243. (EV)

vanderWal (van der Wal), G. A., De omkering van de wereld; Achtergronden van de milieucrisis en het zinloosheidsbesef [in Dutch: Inverting the world; Backgrounds on the environmental crisis and the sense of loss of meaning], Baarn: Ambo, 1996. An investigation the deeper causes of the environmental crisis and other problems to which modernity has given rise. Van de Wal is professor in environmental philosophy at the Erasmus University of Rotterdam, Netherlands. (v.11,#1)

VanderWatt (Van der Watt), JG. Gelowige en omgewing (Open 20:1-21:8). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 257-265. (Africa)

VanderWeele (Van der Weele), Cor. "Images of Development: Environmental Causes in Ontogeny." Doctoral thesis, Vrije Univeriteit of Amsterdam, 1995. Supported by the Foundation for Research in Philosophy and Theology, Netherlands Organization for Scientific Research. (v6,#3)

Vandestraaten (van der Straaten), Jan. Review of F.A. Wilson, Towards Sustainable Project Development, Cheltenham: Edward Elgar, 1997, Environmental Values 10(2001):133. (EV)

VanDeVeer, Donald, "Interspecific Justice," Inquiry 22(1979):55-79. What treatment of animals is morally acceptable cannot be decided in any straightforward way by appeals to equal consideration of interests or to animal rights. One must survey a variety of proposals as to how we ought to adjudicate interspecific conflicts of interests--proposals that are both "speciesist" and "non-speciesist." A proposal is here

defended as the most reasonable: two-factor egalitarianism, which incorporates (1) the level of importance (basic or peripheral) to each being in a conflict of interests, and (2) the psychological capacities of the parties whose interests conflict. This view is compared with the views of Tom Regan and Peter Singer. The view provides a non-anthropocentric basis for discounting the interests of sentient animals. VandeVeer is in philosophy at North Carolina State University.

VanDeVeer, Donald, and Pierce, Christine, The Environmental Ethics and Policy Book. Wadsworth, 1998. Second edition. The editors have incorporated numerous suggestions from instructors using the book. The revision is significant. There are 29 new readings and new sections on Future Generations, Sustainability, and Corporate Responsibility. New "Sidelights" include: Obstacles to Reasoned Discussion, On Mt. Mitchell, Overpopulation or Over Consumption, Let's Transform the Military, A Resistance Movement of One's Own. Also new are an internet environmental resources section, glossary, and a geological timechart. This edition is in paperback and hopefully not as expensive as other Wadsworth titles. The editors are in philosophy at North Carolina State University. (v8,#2)

VanDeVeer, Donald, and Pierce, Christine, eds., The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics. 3rd ed. (Belmont, CA: Thomson-Wadsworth, 2003). The third edition of a long popular classroom anthology, which features the interaction between environmental ethics and policy. New topics in the third edition include: marine environmental ethics, genetically modified foods, transgenic organisms, the impact of fast food production, patenting life, Judaism and environmental ethics, diverse Christian environmental ethics, traditional ecological knowledge, and evolution and the place of humans. Both editors are at North Carolina State University. (v.13, #3)

VanDeVeer, Donald and Christine Pierce, eds. People, Penguins, and Plastic Trees. First ed., Belmont, CA: Wadsworth, 1986. Reviewed in Environmental Ethics 9(1987):373-75. Second edition 1995.

VanDeVeer, Donald and Christian Pierce, eds., The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics. Belmont, CA: Wadsworth Publishing Co., 1994. 649 pages. Hardcover. \$ 40.50. Features interdisciplinary crossovers between philosophy and politics and economics more than some of the others. Sections: I. An Introduction to Ethical Theory. II. Western Religions and Environmental Attitudes. III. The Other Animals. IV. Constructing an Environmental Ethic, divided into A: The Broader, Biotic Community, B: Approaches to Conflict Resolution, C: Deep Ecology and Social Ecology, and D. Ecofeminism. V. Economics, Ethics, and Ecology, divided into A. Letting the Market Decide, B. Cost-Benefit Analysis, and C. Ecological Sustainability. VI. Problems and Environmental Policies, divided into A. Human Population and Pressure on Resources, B. From the Commons to Property, C. Preserving Biodiversity, D. Forests and Wilderness, and E. Degrading the Planet. VII. Varieties of Activism. A wide ranging and well conceived text. Also a useful bibliography of medium length, with directions to more extensive bibliographies. One drawback is the price. It is only in hardcover at a list price of \$ 40.50. Both authors are philosophers at North Carolina State University, and also the editors of People, Penguins, and Plastic Trees. (v4,#3)

VanDierendonck (Van Dierendonck), Machteld C., and De Vries, Michiel F. Wallis. "Ungulate Reintroductions: Experiences with the Takhi or Przewalski Horse (*Equus ferus przewalskii*) in Mongolia." Conservation Biology 10, no.3 (1996): 728. (v7, #3)

vanDommelen (van Dommelen), A., "Precaution and the Methodological Status of Scientific (Un)certainly." Journal of Agricultural and Environmental Ethics 15(no. 1, 2002):123-139. An effective application of the Precautionary Principle (PP) hinges on the stipulation that, "a lack of scientific certainty shall not be used as a reason for postponing measures." The practical consequences of this expression are presently not clear enough in most contexts of use to enable constructive communication and therefore the PP is not sufficiently operational now. A pragmatic and fundamental methodology for understanding scientific

(un)certainty in different practical contexts needs to be put in place to create a communicative basis for effective precaution. Lack of clarity about problem definition and problem ownership creates artificial controversies that will obstruct a precautionary approach. Given the fact that different practical contexts of scientific (un)certainty exist, it may seem from one context as if no precaution is warranted whereas concerns from another relevant context may suggest otherwise. Therefore, an integrative methodological framework for communicating about scientific (un)certainty is sorely needed in international policy-making. By putting a focus on the relevance of specified research questions for the objective of taking precaution, a communicative methodology may be adopted that is dedicated to the design properties of a sustainable future. Precaution cannot be operationalized without a methodological basis that allows for effective transparency and evades the stalemates of artificial controversy. Existing debate methodologies have so far not managed to accommodate these pressing demands. KEY WORDS: communication, controversy, debate, methodology, Precautionary Principle, transparency, uncertainty. van Dommelen is with the Institute for Environmental Studies, Amsterdam, The Netherlands. (JAEE)

vanDommelen (van Dommelen), Ad van, ed. Coping with Deliberate Release: The Limits of Risk Assessment. Tilburg, The Netherlands: International Centre for Human and Public Affairs, 1996. 256 pages, index. ISBN 90-802139-4-2. Dfl 69,- (Dutch guilders). The fifteen chapters of this volume are the concerted attempt of internationally distinguished authors from Europe, the United States and Japan to map promises and perils in the emerging social and political landscape of modern biotechnology. The limits of risk assessment in relation to the deliberate release of genetically modified organisms are addressed with regard to the 'Scientific Backgrounds' (Part I), the 'Regulatory Practice' (Part II), and the 'Political Conditions' (Part III). Contributions by Philip Regal, Sheldon Krimsky, Christine von Weizsacker, Les Levidow, and others. (v7, #3)

VanDriesche (Van Driesche), Jason, and Van Driesche, Roy. Nature Out of Place: Biological Invasions in the Global Age. Covelo, CA: Island Press, 2000. 352 pages. Cloth \$29.95. The invasive species crisis, its causes and consequences, and what can be done about it. (v.11,#4)

VanDrunen (Van Drunen), M. A., R. Kasage, and C. Corlands, Climate Change in Developing Countries. New York: Oxford University Press, 2006.

VanDyke (Van Dyke), Fred, "Between Heaven and Earth-Evangelical Engagement in Conservation." Conservation Biology 19 (no. 6, 2005), 1693-1696.

VanDyke (Van Dyke), Fred. Redeeming Creation: The Biblical Basis for Environmental Stewardship. Downers Grove: InterVarsity Press, 1996. A Christian approach to environmental ethics. (v7,#4)

VanDyke (Van Dyke), Fred, Mahan, David C., Sheldon, Joseph K., and Brand, Raymond H., Redeeming Creation: The Biblical Basis for Environmental Stewardship. Downers Grove, IL: InterVarsity Press, 1996. Four Christian biologists address the ecological crisis. (v.8,#4)

VanDyke, Jon M. (Van Dyke), Durwood Zaelke, and Grant Hewison, eds., Freedom for the Seas in the Twenty-first Century: Ocean Governance and Environmental Harmony. Washington, DC: Island Press, 1993. 430 pages. \$ 27.50, paper. The contributors want to change the prevailing concept of freedom of the seas to that of freedom for the seas, where the primary goal is the protection of ecological vitality in ocean systems. Van Dyke is professor of law at the University of Hawaii, Zaelke and Hewison are at the Center for International Environmental Law in Washington. (v4,#2) (v4,#3)

VanDyke (Van Dyke), Fred, Mahon, David C., Sheldon, Joseph K., and Brand, Raymond H., Redeeming Creation: The Biblical Basis for Environmental Stewardship. Downers Grove, IL: InterVarsity Press, 1996.

- Vane-Wright, R. I., C. J. Humphries and P. H. Williams, "What to Protect?--Systematics and the Agony of Choice," Biological Conservation 55(1991):235-254. Note that this is a different journal from Conservation Biology; it is published in the UK. The authors propose an index of taxic diversity. This index is superior to the usual counts of species richness and abundance, because it incorporates factors of taxonomic distinctness and information encoded by cladistic relationships. Two species of rats contain less taxic diversity than a one species of rat and a panda. The index also gives attention to faunal and flora regions from which diversity originates. The index can be quantitatively expressed. Such an approach can be of vital importance in deciding what to protect and how to protect it, especially where we cannot protect everything and often have to act swiftly. The authors are with the Biodiversity Programme, Departments of Botany and Entomology, The Natural History Museum, London. (v3,#4)
- Vangemerden, B., G. Shu and H. Olff, "Recovery of Conservation Values in Central African Rain forest After Logging and Shifting Cultivation," Biodiversity and Conservation 12(no. 8, 2003): 1553-1570. (v 14, #3)
- vanHeerden (van Heerden), J., ed. Lions and Leopards as Game Ranch Animals. Proceedings of a Symposium, October 1997. Wildlife Group of the South African Veterinary Association. Onderstepoort, South Africa. 265 pages. Rand 110.00. U.S. \$ 45.00. ISBN 1-875088-1. Ecotourism is a major and burgeoning industry in southern Africa, and tourists want to see the "Big Five": lion, leopard, elephant, buffalo, and rhino. "Game ranches," as they are called, offer tourists an opportunity to see them, with some puzzles about keeping wild animals within reasonably likely view of their customers. Twenty-six contributions to this issue. Biology of the predators and prey, interactions of predators with humans, capture and care techniques, diseases, and conservation issues. (v.9,#3)
- vanHeere, Daan, (van Heere) "Ecological Worries, Europe 1992," One World (World Council of Churches), No. 167, July 1991. Environmental concerns are still playing second fiddle to economic issues in the coming integration of Europe. The Single European Act comes into effect in full force in 1992 and brings with it ecological concerns, since the emphasis is on growth rather than sustainable development in a Europe already rather badly straining its environment. Plants are becoming extinct; polluted rivers and polluted air are the rule rather than the exception; in many places the land has been poisoned; the variety of animals is decreasing. The low priority given to environmental concerns in the process of European integration does not at all reflect European public opinion, however. One particular concern is that free traffic in a Europe without boundaries will greatly increase automotive pollution, including acid rain. (v2,#3)
- Vanin, Cristina, "The Significance of the Incarnation for Ecological Theology: A Challenging Approach," Ecotheology Vol 6 (Jul 01/Jan 02):108-122. cdvanin@uwaterloo.ca In this paper I will examine James Nelson's work in sexual ethics, particularly his attention to the significance of the incarnation for human thinking about the body (James Nelson is professor of Christian Ethics at United Theological Seminary of the Twin Cities, Minnesota, USA). Nelson argues that what the incarnation implies for an adequate understanding of human sexuality, in fact, extends beyond human beings to include the whole of the created order. I will indicate briefly that his work on the experience of embodiment is in keeping with work done on the body by other Christian writers, such as Sallie McFague. While Nelson's work is situated within the larger conversation on the meaning of the body, I argue that his methodological insights offer a unique way to develop a theology that responds to the contemporary ecological crisis. Because it attends to the immediate and personal experience of alienation from the body, it can provide strong roots for the growth of an extensive ecological worldview.
- VanKooten (Van Kooten), G. Cornelis, Land Economics and Sustainable Development: Economic Policies and the Common Good. Vancouver, BC: University of British Columbia Press. 450 pages. \$ 49.95 Canadian, cloth. Much policy is not chosen to maximize the common welfare but for a mixture of policy goals. Van Kooten strongly favors market solutions to public policy problems, where these can be

arranged. Government can only serve to facilitate such solutions; venturing further into the fray, government is likely to make things worse rather than better. The last section discusses ethics, religion, and philosophy in relation to natural resource management. (v5,#3)

VanLare (Van Lare), Paula, Growing Toward More Efficient Water Use: Linking Development, Infrastructure, and Drinking Water Policies. US. Environmental Protection Agency, Development, Community, and Environment Division (DCED), 2006. EPA 230-R-06-001. For a copy send e-mail to smartgrowth@epa.gov. Online at <www.epa.gov/smartgrowth>. Water and growth. I. The challenges of meeting demand for drinking water (requiring \$263 billion over the next 20 years). II. Accommodating growth and minimizing its effects on water consumption and distribution. III. What water policies can support the wisest growth? The U.S. West, poor in water, is often the most consumptive, using per capita twice the national average. But cities in the East are finding themselves increasingly short of water, often limiting their growth. Well-written and researched, though with the expected EPA tendency to keep growth sacrosanct (i.e. "smart").

VanManen (van Manen), Frank T., Pelton, Michael R. "A GIS Model to Predict Black Bear Habitat Use," Journal of Forestry 95(no.8, 1997):6. (v8,#3)

VanNijnatten, DL, "Review of: International Encyclopedia of Environmental Politics John Barry and E. Gene Frankland, eds", Environments 31 (no.3, 2003): 83-84.

VanRensburg (Van Rensburg), PAJ 1991. Die planetêre stelsel. In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 21-39. (Africa)

VanRensburg (Van Rensburg), PAJ 1991. Perspektiewe op die heelal. In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 40-5. (Africa)

VanRooijen (Van Rooijen), Jeroen, "Backgrounds of Students of Behavior in Relation to their Attitude Toward Animal Well-Being", Journal of Agricultural Ethics 2(1989):235-240. Knowledge of the backgrounds of students of behavior working in the field of applied animal behavior science may help to recognize their influence on conclusions reached in a particular study and on more general points of view. Some types considered are eco-ethologists, behaviorists, behavior physiologists, ethologists, and zootechnicians. Van Rooijen is the Netherlands.

VanRoon (Van Roon), Marjorie, and Stephen Knight, Ecological Context of Development: New Zealand Perspectives. New York: Oxford University Press, 2005. Environmental planning in New Zealand, with attention to ecological principles. The authors are at the University of Auckland.

VanRossum (Van Rossum), Mary Lou. Reinhabiting the Earth: Biblical Perspectives and Eco-Spiritual Reflections. Liguori, Missouri: Triumph Books, 1994. 198 pages, \$17 hardbound. Hebrew and Christian scriptures highlight ecological concerns. (v6,#1)

vanTatenhove (van Tatenhove), Jan P.M., and Leroy, Pieter, "Environment and Participation in a Context of Political Modernisation," Environmental Values 12(2003): 155-174. This article discusses the relation between environment and participation in the context of different stages of political modernisation. We focus on the dynamics of environmental policy on the one hand, and the organisation of political participation on the other. The central argument is that participation is inextricably linked to environmental issues, but that their relation differs substantially over the various stages of the institutionalisation of environmental policy. While in the 1970s supplementary forms of participation dominated, the societalisation and marketisation of environmental policies from the late 1980s has given rise to new opportunities for participation, implying a more rule-altering potential. (EV)

- VanWensveen (van Wensveen), Louke. Dirty Virtues: The Emergence of Ecological Virtue Ethics. Amherst, NY: Humanity Books, 1997. 200 pages. \$49.95. An overview of current "green" virtue language and the basic elements of a matching ecological virtue theory. (v10,#4)
- VanWilgen (Van Wilgen), Brian W., Cowling, Richard M., Burgers, Chris J., "Valuation of Ecosystem Services", Bioscience, 46(No.3, 1996):184- . A case study from South African fynbos ecosystems. (v7,#1)
- vanWyck (van Wyck), Peter C., Primitives in the Wilderness: Deep Ecology and the Missing Human Subject. Albany, NY: State University of New York Press, 1997. Deep ecology encounters contemporary social and cultural theory. van Wyck claims critically to expose deep ecology's essentialist and foundationalist commitments involving the Enlightenment, modernity, systems theory, anthropocentrism, the figure of wilderness, the trope of the primitive, and the imagined promise of posthistoric primitivism. Deep ecology (and much of contemporary environmental thought) has remained blind to the lessons (and possibilities) of contemporary social and poststructural theory. Haraway's figure of the cyborg and situated knowledges, Deleuze's conception of an image of thought, Foucault's panopticon, Trinh on ethnographic authority, Lingis on the "other," Torgovnick and Clastre on the primitive and power, and Vattimo's "weak thought"--all with a view to a better understanding of the human subject in environmental philosophy. van Wyck is a doctoral candidate at McGill University. (v8,#2)
- VanWyk (Van Wyk), JJP 1973. Die probleem van omgewingsbesoedeling. Instituut vir die bevordering van Calvinisme Studiestuk nr 73. Potchefstroom: IBC. (Africa)
- VanZyl (Van Zyl), DC 1991. Cosmology, ecology, and missiology: a perspective form Genesis 1. Missionalia 19:1, 203-14. (Africa)
- Varady, R. G., "Book Review: The Basin of Mexico: Critical Environmental Issues and Sustainability by Exequiel Ezcurra, Marisa Mazari-Hiriart, Irene Pisanty, and Adrian Guillermo Aguilar," Natural Resources Journal 42(no.1, 2002): 230-32. (v.13,#4)
- Varady, Robert G., Moote, Margaret Ann, and Merideth, Robert, "Water Management Options for the Upper San Pedro Basin: Assessing the Social and Institutional Landscape," Natural Resources Journal 40(no. 2, Spring 2000):223- . (v.12,#2)
- Varandas Martins da Silva, Maria José, O Valor da Natureza: Caminhos para uma Ética Ecocentrada (Values in Nature: Toward an Ecocentric Morality). Faculdade de Letras da Universidade Clássica de Lisboa, 2000. M. A. thesis. In Portuguese. A semantic analysis of the concepts of intrinsic value, inherent value, and instrumental value in nature, within Greek philosophy, the Judeo-Christian tradition, and modern philosophy. Nature is conceived as a "dominium" and humans are entities apart from nature. The contemporary environmental crisis is a consequence of this worldview. Philosophy must rethink the relations between humans and nature and leave this closed anthropocentrism. Among environmental ethicists, Holmes Rolston, III and Baird Callicott have responded to the need for a genuine environmental ethics in which nature has intrinsic value. The "land ethic" is an ethic that can reconcile humans and nature, understanding humans as "being with" all that is. Authentic humanity has sensibility, sympathy, and compassion, qualities that are the basis of a genuine moral sense and an ethic of responsibility. (v.12,#4)
- Vardy, Peter, and Grosch, Paul, The Puzzle of Ethics. Armonk, NY: M. E. Sharpe, Inc., 1997. 238 pages. \$ 18.95. Chapter 16 is Animal Rights; Chapter 17 is Environmental Ethics. Vardy is at the University of London. Grosch is at the College of St. Mark and St. John, Plymouth, UK. (v9,#1)

Vardy, Peter, and Grosch, Paul, The Puzzle of Ethics. Armonk, NY and London, UK: M. E. Sharpe, 1997. Earlier published in the UK in 1994 by Fount Paperbacks. A summary introduction to ethics. Chapter 16, "Animal Rights," is a short but competent introduction, featuring Peter Singer, and Bernard Williams in reply. Chapter 17 is "Environmental Ethics," the is/ought controversy, three categories of environmental ethics: (1) humanist theories, (2) biocentric theories, and (3) eco-holistic theories; Bernard Williams' account. Vardy and Grosch conclude: "Any talk of environmental ethics is bound, to a greater or lesser extent, to be anthropocentric, or human-centered, for the simple reason that philosophy in general and moral reasoning in particular are straightforward human activities. ... Therefore our concern for the environment is bound to be human-centered" (p. 224). Vardy is in philosophy at Heythrop College, London University. Grosch is in philosophy at the College of St. Mark and St. John, Plymouth, UK. (v9,#2)

Varghese, J, "Using Academic Web Sites for Researching Society and Natural Resource Issues," Society and Natural Resources 14(no. 7, 2001):635-636. (v.13,#1)

Varner, G. E., John Lemons, and Donald A. Brown. "Congress, Consistency, and Environmental Law." Environmental Ethics 12(1990):311-27. In passing the National Environmental Policy Act of 1969 (NEPA), Congress committed the nation to an ethical principle of living in "productive and enjoyable harmony" with the natural environment. Thus understood, NEPA can be given either (1) a technology-forcing interpretation or (2) an intelligent decision-making interpretation. We argue that in its subsequent decision to site a high-level nuclear waste repository at Yucca Mountain, Nevada, Congress acted inconsistently with this principle under either interpretation. We conclude that for the foreseeable future, the only way to handle the nation's nuclear wastes consistent with the environmental goal enunciated in NEPA is to leave them in temporary surface storage facilities, prohibit the licensing of any new nuclear power plants, and take all appropriate steps to reduce the nuclear weapons industry. Varner is in the philosophy department, Texas A & M University, College Station, TX. (EE)

Varner, Gary E. Review of Overtapped Oasis. By Marc Reisner and Sarah Bates. Environmental Ethics 14(1992):93-94.

Varner, Gary, In Nature's Interests? Interests, Animal Rights, and Environmental Ethics. New York: Oxford University Press, 1998. 154 pages. \$ 39.95. Varner characterizes "two dogmas of environmental ethics": the assumptions that animal rights philosophies and anthropocentric views are each antithetical to sound environmental policy. Beginning from the view that all and only entities with interests have moral standing, Varner defends a biocentric individualist stance with affinities to both animal rights and anthropocentric views. He argues that every living organism has interests which ought, other things being equal, to be protected, but that some interests take priority over others. In particular, he defends a sentientist principle giving priority to the lives of animals with conscious desires and an anthropocentric principle giving priority to certain very inclusive interests which only humans have. He then shows that these principles are not only consistent with, but provide significant support for, the goals on the environmentalist agenda. Along the way, Varner surveys problems facing attempts to develop a holistic environmental ethic, provides a careful analysis of the notion of desire and its scope in the animal kingdom, and improves upon available arguments for the claim that nonconscious organisms possess morally significant interests. (v.9,#3)

Varner, Gary E., "What's Wrong With Animal By-Products?", Journal of Agricultural and Environmental Ethics 7(1994):7-18. The question, "What (if anything) is wrong with animal by-products?" cannot always be adequately answered by looking at the conditions under which animals live out their productive lives. If we look beyond the conditions under which milk cows live, we can better understand some animal rights activists' reasons for objecting to dairy products. Today, beef slaughter is vastly more

humane than poultry slaughter, but if beef slaughter industry is judged immoral, the contemporary dairy industry should be judged similarly immoral, because the two are wedded. Varner is in philosophy and humanities at the Center for Biotechnology Policy and Ethics, Texas A&M University, College Station.

Varner, Gary E. "No Holism without Pluralism." Environmental Ethics 13(1991):175-79. In his recent essay on moral pluralism in environmental ethics, J. Baird Callicott exaggerates the advantages of monism, ignoring the environmentally unsound implications of Leopold's holism. In addition, he fails to see that Leopold's view requires the same kind of intellectual schizophrenia for which he criticizes the version of moral pluralism advocated by Christopher D. Stone in Earth and Other Ethics. If it is plausible to say that holistic entities like ecosystems are directly morally considerable--and that is a very big if--it must be for a very different reason than is usually given for saying that individual human beings are directly morally considerable. Varner is in the philosophy department, Texas A & M University, College Station, TX. (EE)

Varner, Gary E., Review of A Wolf in the Garden: The Land Rights Movement and the New Environmental Debate. Environmental Ethics 20(1998):441-43.

Varner, Gary E., "Biological Functions and Biological Interests," Southern Journal of Philosophy 28 (Summer 1990): 251-271. Varner defends the empirical claim that plants have needs in some sense in which simple artifacts do not, and the normative claim that those needs qualify plants for direct moral consideration. Using the concept of a biological function, we can specify, in a nonarbitrary way, what is and is not in the "biological interests" of a plant, and we can say that plants have interests without implying that simple artifacts do. Certain inadequacies of the dominant mental state theory of individual welfare suggest that such "biological interests" are morally genuine interests, which qualify their possessor for direct moral consideration. Varner critiques and attempts to improve on work by Goodpaster, Taylor, and others, showing that these authors have not paid sufficient attention to the philosophy of biology and as a consequence none has as yet identified a genuine distinction consistent with contemporary philosophy of biology that allows us to attribute interests to a non-conscious organism without implying that simple artifacts do also. Varner is Visiting Assistant Professor in the Department of Philosophy at Texas A & M University. (v1,#3)

Varner, Gary E., Interests: Their Nature, Scope, and Significance, 1988, University of Wisconsin-Madison, Ph.D. thesis. Moral agents have direct, prima facie duties toward any entity that has interests. Preference interests are probably present in all animals with a functional prefrontal cortex, and probably not present in any non-mammalian creature. Having desires does not require having true language of the kind that humans have. All and only individual living organisms have welfare interests, analyzed on the model of needs. Such a view is not impracticable but there are practicable means of adjudicating such interests. Desires ought to be given preference over biologically defined needs and the "ground projects" of humans ought to be given precedence over all interests of non-human beings. Still, humans as moral agents can, on consideration of the interests of non-human creatures, sometimes accommodate these interests. The thesis advisor was Jon H. Moline. Varner teaches philosophy at Texas A and M University.

Varner, Gary E., "The Takings Issue and the Human-Nature Dichotomy," Human Ecology Review 3 (no. 1, Autumn, 1996): 12-15. (v.9,#3)

Varner, Gary, "The Prospects for Consensus and Convergence in the Animal Rights Debate," Hastings Center Report 24 (no. 1, 1994):24-28. Those who conduct research on animals and those who advocate on behalf of animals have more in common than is generally supposed. The apparent intransigence of opposing parties is more a function of political posturing than theoretical necessity, and continuing to paint the situation as a standoff serves the interests of neither side. A critical look at the philosophical bases of the animal rights movement reveals surprising potential for convergence (agreement at the level

of policy despite disagreement at the level of moral theory) and, in some cases, consensus (agreement at both levels. Recognizing this should make defenders of animal research take animal rights views more seriously and could refocus the animal rights debate in a constructive way. Varner is in philosophy at Texas A & M University.

Varner, Gary E. "Do Species Have Standing?" Environmental Ethics 9(1987):57-72. In a recent article Christopher D. Stone has effectively withdrawn his proposal that natural objects be granted legal rights, in response to criticism from the Feinberg/McCloskey camp. Stone now favors a weaker proposal that natural objects be granted what he calls legal considerateness. I argue that Stone's retreat is both unnecessary and undesirable. I develop the notion of a de facto legal right and argue that species already have legal rights as statutory beneficiaries of the Endangered Species Act of 1973. I conclude that granting certain nonhuman natural entities legal rights is both more important and less costly than Stone and his critics have realized, and that it is not Stone's original proposal which needs rethinking, but the concept of interests at work in the Feinberg/McCloskey position. Varner is in the philosophy department, University of Wisconsin, Madison, WI. (EE)

Varner, Gary E. "The Schopenhauerian Challenge in Environmental Ethics." Environmental Ethics 7(1985):209-29. Environmental holism and environmental individualism are based on incompatible notions of moral considerability, and yield incompatible results. For Schopenhauer, every intelligible character--every irreducible instance of formative nature--defines a distinct moral patient, and for him both holistic entities and the individual members of higher species have distinguishable intelligible characters. Schopenhauer's neglected metaethics thus can be used to generate an environmental ethics which is complete in the sense of synthesizing holism and individualism while simultaneously meeting Tom Regan's (implicit) demand that an environmental ethics make moral patients of natural objects. Varner is in the philosophy department, University of Wisconsin, Madison, WI. (EE)

Varner, Gary E. Review of Earth and Other Ethics. By Christopher Stone. Environmental Ethics 10(1988):259-65.

Varner, Gary E., "Environmental Law and the Eclipse of Land as Private Property," in Frederick Ferré and Peter Hartel, eds., Ethics and Environmental Policy (Athens, GA: University of Georgia Press, 1994), pages 142-160. As environmental laws and regulations proliferate, we increasingly treat land as a public resource owned in common and held by individuals only a stewardship or trust capacity. With particular discussion of Lucas v. South Carolina Coastal Commission. Also discussion of the takings controversy. The notion that ecological processes ought to be regarded as public goods like air, oceans, and wildlife, which all individuals have a right to use, allows us to construe environmental regulation as an exercise of police power, as designed to prevent harm. But what is really left of the concept of land as private property after we have done this? Varner is in philosophy and humanities at the Center for Biotechnology Policy and Ethics, Texas A&M University, College Station.

Varner, Gary E., "In Defense of the Vegan Ideal: Rhetoric and Bias in the Nutritional Literature", Journal of Agricultural and Environmental Ethics 7(1994):29-40. Much of the scientific literature on vegetarian nutrition leaves one with the impression that vegan diets are significantly more risky than omnivorous ones, especially for individuals with high metabolic demands (such as pregnant or lactating women and children). But nutritional researchers have tended to skew their study populations toward "new vegetarians", members of religious sects with especially restrictive diets and tendencies to eschew fortified foods and medical care, and these are arguable the last people we would expect to thrive on vegan diets. And, in spite of these methodological and rhetorical biases, for every nutrient which vegans are warned to be cognizant of, there is reason to believe that they are not significantly greater risk of nutritional deficiency than omnivores. Varner is in philosophy and humanities and biotechnology policy/ethics at Texas A&M University, College Station.

Varner, Gary E., "Rejoinder to Kathryn Paxton George", Journal of Agricultural and Environmental Ethics 7(1994):83-86.

Varner, Gary E. Nature's Interests? Interests, Animal Rights, and Environmental Ethics. Reviewed in Environmental Ethics 21(1999):433-436.

Varner, Gary E., "The Takings Issue and the Human-Nature Dichotomy," Human Ecology Review 3(no. 1, 1996):12-15. The wise-use movement's position on takings compensation depends on an implausible separation of humans from the ecosystems on which we depend. They call for compensation when environmental regulation is forced upon them, even when such regulation is protecting ecosystemic goods and preventing their harm to others. Environmentalists (advocating regulation) are insisting on harmonious human relationships with nature. Varner is in philosophy, Texas A&M. (v.13,#1)

Varner, Gary E. Review of The Animal Rights/Environmental Ethics Debate: The Environmental Perspective. Edited by Eugene C. Hargrove. Environmental Ethics 15(1993):279-82.

Varner, Gary. "The Takings Issue and the Human-Nature Dichotomy," Human Ecology Review 3, 1 (Autumn 1996): 12-15. Environmentalists are sometimes criticized for implausibly separating human beings from nature. However, in the debate between the "wise-use" and environmental movements, it is the proponents of "wise-use," not the environmentalists, who implausibly divide human beings from nature. The "wise-use" movement calls for landowners to be compensated whenever environmental regulations reduce the economic value of their land. However, a well-established principle of Constitutional law is that compensation is not required if the regulations prevent harm to others. Insofar as they can plausibly be construed as preventing harm to others, then, environmental regulations can be enforced without running afoul of the just compensation clause of the Fifth Amendment. Varner argues that while the public trust doctrine of U.S. common law can be extended to cover ecological processes on which the long-term well-being of the nation and its people depend, environmentalists must do a better job of articulating how this is so. In doing so, environmentalists will show that the wise use movement's position depends on an implausible separation of humans from the ecosystems on which they depend. Varner teaches philosophy at Texas A&M University. (v8,#1)

Varner, Gary. Review of Nicholas Agar. Life's Intrinsic Value. Environmental Ethics 25(2003):413-416. (EE)

Varner, Gary. Review of Sustainability: A Philosophy of Adaptive Ecosystem Management. By Bryan G. Norton. Environmental Ethics 29(2007):307-312. (EE)

Varner, Gary. "The Environmentalists' Conception of Harm to Others." In Larry D. White, ed., Private Property Rights and Responsibilities of Rangeland Owners and Managers, pp. 55-59. College Station, Texas: Texas A&M University, 1995. Proceedings from a conference of the Texas Section of the Society for Range Management. Eminent domain is used to secure some public good. Police power is used to prevent harm to others. Wetlands and endangered species legislation can be construed as designed to prevent harm to others, but some conceptual work here remains to be done. There is a need to draw better analogies with traditionally recognized public goods put in jeopardy by adverse land uses, also a need to stress the way general trends in land management can adversely affect ecological processes when the actions of private individuals would not. Varner teaches philosophy at Texas A&M University. (v6,#3)

Varner, Gary E. In Nature's Interests? Interests, Animal Rights, and Environmental Ethics, review by Jon Jensen, Ethics and the Environment 4(1999):235-240. (E&E)

Varzi, Achille C., "Vagueness in geography," Philosophy and Geography 4 (No. 1, 2001): 49-65. Some have

argued that the vagueness exhibited by geographic names and descriptions such as 'Albuquerque', 'the Outback', or 'Mount Everest' is ultimately ontological: these terms are vague because they refer to vague objects, objects with fuzzy boundaries. I take the opposite stand and hold the view that geographic vagueness is exclusively semantic, or conceptual at large. There is no such thing as a vague mountain. Rather, there are many things where we conceive a mountain to be, each with its precise boundary, and when we say 'Everest' we are just being vague as to which thing we are referring to. This paper defends this view against some plausible objections. Varzi is Associate Professor of philosophy at Columbia University. (P&G)

Vasan, S., "Book Review: In the Time of Trees and Sorrows: Nature, Power, and Memory in Rajasthan, By Ann Grodzins Gold and Bhoju Ram Gujar.," Human Ecology 31(no. 2, 2003): 322-325. (v 14, #3)

Vasey, Lloyd. "Collision in the China Sea: World oil and shipping lanes at stake in multination dispute." The Christian Science Monitor, June 22, 1995, p. 19. (v6,#2)

Vasilenko, L. I., "Ecological Ethics, from Naturalism to Philosophical Personalism" (in Russian), Voprosy Filosofii (Questions of Philosophy), Issue 3, 1995, pages 37-42. (v.10,#3)

Vasilenko, L. I., "The Search for a Foundation and Sources of Ecological Ethics" (in Russian), Voprosy filosofii, no. 2, 1986, pp. 145-152.

Vasilenko, L. I. and V. E. Ermolaeva, eds., Globalniye Problemy i Obshchechelovecheskiye Tsennosti (Global Problems and Human Values). Moscow: Progress Publishers, 1990. ISBN 5-01-001586-2. 496 pages. Hardbound. Articles translated from English and French into Russian. This volume contains Russian translations of Holmes Rolston, "Is There an Ecological Ethic?"; J. Baird Callicott, "Conceptual Resources for Environmental Ethics in Asian Traditions of Thought," Robin Attfield, selections from his Ethics of Environmental Concern; Kenneth Inada, "Environmental Problematics in the Buddhist Context," a selection from Albert Schweitzer. Vasilenko was in the Institute of Philosophy, Russian Academy of Sciences, and is recently deceased; Ermolaeva is a researcher with that Institute. (v4,#3)

Vaske, J. J., Donnelly, M. P., Williams, D. R. and Jonker, S., "Demographic Influences on Environmental Value Orientations and Normative Beliefs about National Forest Management," Society and Natural Resources 14(no.9, 2001): 761-76. (v.13,#2)

Vaske, Jerre J., Donnelly, Maureen P., Williams, Daniel R., and Jonker, Sandra, "Demographic Influences on Environmental Value Orientations and Normative Beliefs about National Forest Management," Society and Natural Resources 14(2001):761-776. In a survey of Colorado residents, a biocentric/anthropocentric value orientation continuum predicts respondents' norms toward national forest management. Individuals who have lived longer in the state and those with more income tend to be more anthropocentric. Females and those with higher education levels tend to be more biocentric. Donnelly, and Jonker are in the Department of Natural Resource Recreation and Tourism, Colorado State University. Williams is at the Rocky Mountain Research Station, US Forest Service, Fort Collins, CO. (v.13, #3)

Vaske, Jerry J. and Donnelly, Maureen P. "A Value-Attitude-Behavior Model Predicting Wildland Preservation Voting Intentions." Society & Natural Resources 12(No. 6, Sept. 1999):523- . (v10,#4)

Vaske, Jerry J., and Donnelly, Maureen P., "A Value-Attitude-Behavior Model Predicting Wildland Preservation Voting Intentions," Society and Natural Resources 12(1999):523-537. A survey of Colorado residents. The biocentric/anthropocentric value orientation continuum predicts a respondent's attitude toward the preservation of wildlands. The attitude fully mediated the relationship between value

orientation and behavioral intention to vote for wildland preservation. The authors are in Natural Resource Recreation and Tourism, Colorado State University.

Vatn, Arild, Review of Mick Common and Sigrid Stagl, Ecological Economics: An Introduction, Environmental Values 15(2006):527-529.

Vatn, Arild. "The Environment as a Commodity." Environmental Values 9(2000):493-509. Abstract: This paper addresses problems related to transferring market concepts to non-market domains. More specifically it is about fallacies following from the use of the commodity concept in environmental valuation studies. First of all, the standard practice tends to misconstrue the ethical aspects related to environmental choices by forcing them into becoming ordinary trade-off problems. Second, the commodity perspective ignores important technical interdependencies within the environment and the relational character of environmental goods. These are all properties that have made many such goods escape the commoditisation pressure of markets in the first place. Further, it is shown that these interdependencies are the source of some of the ethical dilemmas observed. Finally, inherent characteristics of the environment tend to make the concept of the margin, so indispensable to economic calculus, either difficult or irrelevant to define. The commodity 'fiction' twists the perception of the environment from systems preservation to items use or transformation. This is a problem of increased importance as we approach potential systems perturbations. Keywords: Economic theory, environmental ethics, systems theory, valuation. Arild Vatn is in the Department of Economics and Social Sciences, Agricultural University of Norway, Postbox 5033, 1432 Aas, Norway. (EV)

Vatn, Arold. Review of: Young, Oran R., The Institutional Dimension of Environmental Change: Fit, Interplay, and Scale. Environmental Values 13(2004):135-137. (EV)

Vaughan, Ray, Essentials of Environmental Law. Rockville, Md: Government Institutes, 1994. 182 pages. Paper. \$ 42. Good book but considerably overpriced. Federal statutes that limit government and industry action. Natural resource laws. Wildlife laws. State laws and regulations. Toxic torts. How to identify and resolve environmental problems. "In essence, the most fundamental measure of any environmental legal system will be how we human beings view our fellow earthlings and what we are willing to do for them and their survival even when there is no readily apparent corresponding benefit for ourselves. Even in the one law most designed to address the decline of other species, the Endangered Species Act, we have not truly attempted to address what value a species is in and of itself and what value another species may put on us. The fundamental ethics of an honest and open relationship with the Earth, other species, and even our fellow human beings have not been attempted in environmental laws, and so, those laws fail to truly protect the environment and other beings. Consequently, those laws also fail to protect human beings at anything more than a rudimentary level of insuring survival of our species and of insuring the economic vitality of society" (Preface). Vaughan is an environmental lawyer in Alabama. This publisher also publishes state environmental law handbooks to almost all of the states. (v5,#4)

Vaughan, S, "How Green is NAFTA? Measuring the Impacts of Agricultural Trade", Environment 46 (no.2, 2004): 26-42.

Vaux, H, "A U.S. Water Research Agenda For The Twenty-First Century," Environment 44(no.4, 2002):32-43.

Väyrynen, Kari, "Virtue Ethics and the Material Values of Nature," Philosophy in the Contemporary World 8 (Number 2, Fall-Winter 2001):137-148. For Aristotle, man is part of nature, a "political animal" with the faculty of reason. In this sense, Aristotelian virtue ethics can be said to relate virtues to nature. On the one

hand, virtues lean on the natural dispositions of man as a social animal. On the other hand, virtues are connected to praxis, that is, with man's active realization of his inherent biological, social and cultural potential. Recently, the material value ethics of Max Scheler and Nicolai Hartmann developed the Aristotelian tradition in a naturalistic direction, posing the problem of the value of life and connecting this question to the question of virtue. Virtues sensitize us to values and are, therefore, especially important for ethical praxis. I claim that precisely because of its historical and cultural concreteness, virtue ethics can be successfully applied to environmental issues. In critical connection with common mentalities, naturalistic virtue ethics can be a politically effective way of ethical thinking. Vayrynen is in the Department of History, Academy of Finland, Oulu, Finland. (v.13,#2)

Vázquez, Luis-Bernardo, and Kevin Gaston. "People and mammals in Mexico: conservation conflicts at a national scale." *Biodiversity and Conservation* Vol. 15, no. 8 (2006): 2397-2414.

Veak, Tyler, "Environmental History of New England: William Cronon's 'Changes in the Land'", Organization and Environment, 15, (No. 3, 2002): 296-300. The author argues that publication of William Cronon's 'Changes in the Land' (1983) presaged a radical turn in environmental thought by dramatically reconstructing our view of precolonial New England. By wholly dismissing the received history that portrayed precolonial America as an uninhabited pristine wilderness, Cronon gave Native Americans agency and forever blurred the line between humans and nature in American thought. Veak is an assistant professor of philosophy at St. Andrews College, North Carolina and a PhD candidate in science and technology studies at Virginia Tech.

Veatch, Robert M., Gaylin, Willard, Steinbock, Bonnie. "Can the Moral Commons Survive Autonomy?", The Hastings Center Report 26(no.6, 1996):41. (v7,#4)

Vecsey, Christopher and Robert W. Venables, eds., American Indian Environments: Ecological Issues in Native American History. Syracuse, NY: Syracuse University Press, 1994. 236 pages. \$ 16.00. Earlier published in 1980. Native American religions and the environment. Indians as ecologists. Justifying dispossession of the Indian. Navajo natural resources. Federal, state, and tribal sovereignty. And more. (v8,#2)

Velayos, Carmen. *Ética y cambio climático [Ethics and Climate Change]*. Paris: Desclée De Brouwer, 2007. No es demasiado tarde, pero la humanidad necesita empezar a actuar colectivamente para poner freno a la crisis climática que padecemos y que, sin duda, es uno de los más graves retos sociales que jamás hayamos padecido. Organismos internacionales reconocen que el cambio climático es un problema eminentemente *ético*. En primer lugar, su origen es humano: el aumento global de emisiones de gases de efecto invernadero. Se ha de comenzar a entender la crisis climática como un daño producido y no como un *mal* inevitable. En segundo lugar, ni su generación ni su desenlace han sido ni serán equitativos. No todos hemos contaminado en la misma medida ni resultamos igualmente vulnerables a sus efectos. Los países que menos han contribuido al cambio climático seguramente se verán más afectados. Todo esto genera importantes cuestiones éticas que inciden en el reparto de la responsabilidad, en la salvaguarda de derechos humanos básicos, en la precaución colectiva frente a los riesgos, en la pregunta por nuevos hábitos o por la búsqueda de la felicidad.

Velde, Hein Te, Aarts, Noelle and van Woerkum, Cees, "Dealing With Ambivalence: Farmers' and Consumers' Perceptions of Animal Welfare in Livestock Breeding," Journal of Agricultural and Environmental Ethics 15(no. 2, 2002):203-219. (JAEE)

Velin, Jo-Anne. "Norway's Native Northerners Dig In to Defend Land, Lifestyle, Language." The Christian Science Monitor, vol. 89, 29 Jan. 1997, pp. 1-7.

Vellela, Toni. "Music Meets Environment at Clearwater Revival Festival: Pete Seeger's Hudson River

cleanup project turns 30." The Christian Science Monitor, June 23, 1995, p. 12. (v6,#2)

Verbeek, Bernhard: "Kultur: Die Fortsetzung der Evolution mit anderen Mitteln (in German: Culture: The Continuation of Evolution with different means), Natur und Kultur 1 (No. 1, 2000):3-16. Genetic programmes generate human brains; these induce psyches which interact and produce a new type of evolutionary phenomenon: culture. It is true that the existence of culture depends on genetic programmes, which are hostile to alteration, but changes in culture neither depend strictly on new generations nor on changes in genes. A result of this is the breathtaking alteration of planet earth. The tree of those parts of culture which are the same all over the world still blossoms, but it will saw itself off its roots, if the accelerated culture continues processing in blind haste as the organismic evolution. (v.11,#2)

Verburg, Rudi M. and Vincent Wiegel. "On the Compatibility of Sustainability and Economic Growth." Environmental Ethics 19(1997):247-265. It is generally assumed that sustainable development and economic growth are compatible objectives. Because this assumption has been left unspecified, the debate on sustainability and growth has remained vague and confusing. Attempts at specification not only involve clarification of the interrelation of the two concepts, but also, we argue, require a philosophical approach in which the concepts of sustainability and economic growth are analyzed in the context of our frame of reference. We suggest that if the notion of sustainability is to be taken seriously, the conflicting conceptual and normative orientations between the two concepts require the reconsideration of our frame of reference. Verburg and Wiegel are both in economics and philosophy at Erasmus University, Rotterdam, The Netherlands. (EE)

Verchick, Robert R.M., "Dust Bowl Blues: Saving and Sharing the Ogallala Aquifer," Journal of Environmental Law and Litigation 14 (No. 1, 1999): 13 - . (v.11,#4)

Verhoog, H. "The Concept of Intrinsic Value and Transgenic Animals", Journal of Agricultural and Environmental Ethics 5(1992):147-160. Much has already been written on the concept of "intrinsic value", but until now not in connection with biotechnology in general and the creation of so-called "transgenic organisms" in particular. I will concentrate on transgenic animals in this paper. The creation of transgenic animals by means of modern techniques of genetic manipulation is evaluated in the light of different interpretations of the concept of intrinsic value: zoocentric interpretation, biocentric or ecocentric approach. Verhoog is in the Institute of Theoretical Biology, Leiden University, The Netherlands.

Verhoog, Henk, Matze, Mirjam, Van Bueren, Edith Lammerts, and Baars, Ton,

"The role of the concept of the natural (naturalness) in organic farming," Journal of Agricultural and Environmental Ethics 16(2003):29-49. Producers, traders, and consumers of organic food regularly use the concept of the natural (naturalness) to characterize organic agriculture and or organic food, in contrast to the unnaturalness of conventional agriculture. Critics sometimes argue that such use lacks any rational (scientific) basis and only refers to sentiment. In our project, we made an attempt to clarify the content and the use of the concepts of nature and naturalness in organic agriculture, to relate this conception to discussions within bioethical literature, and to draw the implications for agricultural practice and policy. We conclude that the idea of "naturalness" can be used to characterize organic agriculture and to distinguish it from conventional agriculture, but only if naturalness not only refers to not using chemicals but also to ecological principles and respect for the integrity of life. Thus perceived, the principle of naturalness can also serve as a guide to future developments in the field of organic agriculture. As part of the holocentric ethics of organic farming the value of naturalness has three dimensions: a cognitive one, an emotive one, and a normative one. KEY WORDS: concept of nature and naturalness, environment, ethics, farm ecology, integrity of life, organic agriculture and food. (JAEE)

Verissimo, Adalberto, Cochrane, Mark A., and Sousa, Jr., Carlos, "National Forests in the Amazon," Science 297(20 August 2002):1478. Brazil has vast natural resources and a great need for economic development.

The Brazilian government is planning to balance Amazonian development with a new forest policy involving managed timber production and a greatly expanded system of National Forests (Flonas). By 2010, 40 million hectares of new Flonas will be created, an areas as large as Spain. The scale of this initiative is equivalent to the 1908 establishment of the U.S. National Forest system and is unprecedented in the tropics. The authors are with the Instituto do Homen e Meio Ambiente da Amazônia, Belém, Brazil. (v.13,#4)

Vermeij, G.J. "An Agenda for Invasion Biology", Biological Conservation 78(no.1/2, 1996):3.

Vermeij, Geerat J., Nature: An Economic History. Princeton, NJ: Princeton University Press, 2004, 2006. The universal truth on Earth is that organisms compete for scarce resources, and this universal truth unites three disciplines: economics, evolution, and cultural history, disciplines that otherwise have developed in mutual isolation. All three competitive processes develop cooperation, adaptation, and feedback. Historical patterns in both human and nonhuman evolution follow from this principle. Vermeij is in geology, University of California, Davis.

Vermeir, Iris, and Wim Verbeke, "Sustainable Food Consumption: Exploring the Consumer 'Attitude - Behavioral Intention' Gap," Journal of Agricultural and Environmental Ethics 19(2006):169-194. Although public interest in sustainability increases and consumer attitudes are mainly positive, behavioral patterns are not univocally consistent with attitudes. This study investigates the presumed gap between favorable attitude towards sustainable behavior and behavioral intention to purchase sustainable food products. The impact of involvement, perceived availability, certainty, perceived consumer effectiveness (PCE), values, and social norms on consumers' attitudes and intentions towards sustainable food products is analyzed. The empirical research builds on a survey with a sample of 456 young consumers, using a questionnaire and an experimental design with manipulation of key constructs through showing advertisements for sustainable dairy. Involvement with sustainability, certainty, and PCE have a significant positive impact on attitude towards buying sustainable dairy products, which in turn correlates strongly with intention to buy. Low perceived availability of sustainable products explains why intentions to buy remain low, although attitudes might be positive. On the reverse side, experiencing social pressure from peers (social norm) explains intentions to buy, despite rather negative personal attitudes. This study shows that more sustainable and ethical food consumption can be stimulated through raising involvement, PCE, certainty, social norms, and perceived availability.

Keywords: attitude - behavior - consumer - food - sustainable consumption. Vermeir is in Department of Business Administration, Hogeschool Gent, Gent, Belgium. Verbeke is in the Department of Agricultural Economics, Ghent University, Gent, Belgium.

Versfeld, Martin (Marthinus) (1909-1995), "The Egology of Ecology," pp. 221-230 in Versfeld, Sum: Selected Works. Cape Town: The Carrefour Press, 1991. What it means to be an "ego" in an "eco-system." The ego is an unreal self, a self-enclosed inner world; but the self is in reality always in an environment, which contains other humans and their artifacts, but also a natural world. "Real conservation is the freeing of Being, and it has its source and end in the freeing of inner being." "It will not profit us to gain the whole world if we do not creatively conserve ourselves." "When you chop down a tree, make sure that you are not chopping down the tree of life, the Paradise Tree." "Realize that you are not in the body, but the body in you, and the outer world, which is continuous with your body, shares in your salvation." Versfeld taught philosophy for many years at the University of Cape Town.

Vorster, W. S., ed. Are We Killing God's Earth? Pretoria: University of South Africa, 1987. Proceedings of the Institute for Theological Research held at the University of South Africa in Pretoria, September 1987. Contains: R. F. Fuggle, "Convergence between Religion and Conservation: A Review of the Assisi Celebrations"; J. A. Loader, "Image and Order: Old Testament Perspectives on the Ecological Crisis"; P. J. Le Roux, "Environment Conservation: Why and How?"; K. Nürnberger, "Ecology and Christian Ethics

in a Semi-industrialized and Polarised Society"; D. F. Toerien, "Water: The Limiting Resource"; I. J. Van Eeden, "Ethical Questions Pertaining to the 'Soft Explosion'"; N. Boegman and C. J. Els, "Air Pollution: Is It Serious?"; D. F. Olivier, "'God's Rest': The Core and Leitmotif of a Christian Holistic View of Reality?" ISBN 0 86981 525 3. (v6,#3)

Versfeld, Martin (Marthinus) (1909-1995), "On the Rights of Man and the Rights of Rocks," pp. 199-209 in Versfeld, Sum: Selected Works. Cape Town: The Carrefour Press, 1991. (The title: Sum is from Descartes' Cogito, ergo sum). Earlier, privately printed. "We were to hear a lot about the rights of man the developer and nothing about the rights of rocks. But this attitude to nature does not seem to me to make sense. It is highly artificial. In our ordinary experience, rocks have character and individuality and answer back. I know a sandstone wall where every rock speaks out its name. Stones sparkle with a manifold difference ... I submit that one can't write off the whole tradition of sacred stones and places ... as though it were simply due to a pre-scientific ignorance. ... Rocks, then, have enjoyed a good deal of reverence. If you see them at Stonehenge or Carnac the word 'enjoy' does not seem entirely misplaced. Perhaps it is not so much a case of anthropomorphism as of symbiosis, a kind of life in rocks which our ancestors sensed when they maintained that some megaliths walked." Versfeld taught philosophy for many years at the University of Cape Town. (v6,#3)

Vesilind, P. Aarne, "Vestal virgins and engineering ethics," Ethics and the Environment 7(2002):92-101. Professional engineers are bound, by their code of ethics to place paramount the health, safety, and welfare of the public. If the "public" includes future people, then the engineer is also morally responsible for not destroying the supporting environment that will make future generations possible. In this essay I suggest that the present engineering codes of ethics are inadequate in addressing the problem of maintaining environmental quality. Engineers can, while staying well within the bounds of the present codes of ethics, destroy or modify the environments that support the global ecosystem and in such manner kill future humans on a grand scale. The moral responsibilities of engineers must therefore include the commitment to provide a high quality and sustainable environment for future generations and this requires that the engineering codes of ethics be modified to encourage engineers to make decisions that promote environmental stability and sustainability. (E&E)

Vesilind, P. Aarne and Alastair S. Gunn, Engineering, Ethics and the Environment, Chinese translation, translator: Wu Xiaodong and Wong Rui. Publisher: Tsinghua Uni. Press, 2003.

Vesilind, P. Aarne. "What Is and What Is Not Natural." Environmental Ethics 1(1979):379.

Vest, Jay Hansford C. "The Philosophical Significance of Wilderness Solitude." Environmental Ethics 9(1987):303-30. With the enactment of the Wilderness Act, wilderness solitude has become a major issue in the assessment and designation of wilderness areas. Interpreting this solitude criterion to mean loneliness, federal agencies have judged wildlands according to their "isolation potential." This perspective is highly inaccurate given the etymological derivation of solitude--"soul-mood." Wilderness solitude is in fact a communion with wild nature. Philosophically it reflects a wilderness episteme and land aesthetic grounded in organicism. The natural aesthetic categories of Sole--the rare or unique --and the Sublime properly reflect the intent of wilderness solitude in cognitive experience. The result of this experience is an "at-one-ment" with wild nature affirming religious rapture and ecological egalitarianism. Consequently, federal agencies ought to employ wilderness review criteria grounded in natural aesthetic theory. Vest is a visiting scholar in the department of religious studies, University of Montana, Lolo, MT. (EE)

Viagem Filosofica--Uma Redescoberta da Amazônia. Philosophical Journey--A Rediscovery of the Amazon, 1792-1992. Rio de Janeiro: Associação Promotora de Instrução, Editoria Index, 1992. ISBN 85-7083-036-X. Six essays commemorating the extensive, nine-year naturalist expedition of Alexandre

Rodrigues Ferreira (1756-1815), 200 years ago, who was already concerned about conservation, and using this to document changes since in the Amazon, all in reflection over its future. With particular reference to biodiversity and the human responsibility to conserve it. Parallel text in Portuguese and English. Nicely illustrated. (v4,#3)

Vickery, Jim Dale, "A Necessary Violence," Backpacker, October 1993. The author lives in a lakeside cabin near the Boundary Waters Canoe Area in Minnesota. There are deer near his cabin, whom he has given names, and one afternoon he watches a wolf attack a deer but fail to kill it. Thinking about the deer's suffering, sixteen hours later he decides to mercy-kill it. "'It's okay,' I said softly to the yearling, then cocked my gun and aimed it at her forehead. Her eyes were clear and soft, resigned yet aware of our mutual recognition of imminent death. She never took her eyes off mine as I apologized in my heart. A connection was made, some heightened pack deep and everlasting, one we alone would know, as I followed through with what I had to do." He follows those who eat the carcass. "The yearling was becoming raven and wolf, flowing back into the land." (v4,#4)

Victor, David G., The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming. Princeton, NJ: Princeton University Press, 2004. A devastating critique of the international negotiations on global warming.

Victor, David G., Raustiala, Kal, Skolnikoff, Eugene B., eds. The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice. Cambridge, MA: MIT Press, 1998. 686 pp. Paper \$25, Cloth \$50. Contributors examine how international environmental agreements are put into practice. Their main concern is effectiveness--the degree to which such agreements lead to changes in behavior that help to solve environmental problems. Their focus is on implementation--the process that turns commitments into action. (v.9,#4)

Victor, David, Raustiala, Kal and Skolnikoff, Eugene, eds. The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice. Cambridge: MIT Press, 1998. (v.9,#3)

Victorin-Vangerud, Nancy M., "The Sacred Edge: Seascape as Spiritual Resource for an Australian Eco-eschatology," Ecotheology Vol 6 (Jul 01/Jan 02):167-185. n.victorin-vangerud@central.murdoch.edu.au In the Australian context, the desert or bush landscape has provided the primary sense of place for spiritual and ecotheological reflection. But what is it about Australians and the sea? This exploration makes the case that a spiritual sense of place as seascape can inform the constructive work of Australian eco-eschatology. By shifting perspectives from desert fathers to ocean mothers, an alternative spiritual map can be imagined that renames the geographical margins as a sacred edge. Through the ocean-wisdom of life's risk, fluidity and dynamic openness, the article explores the critical construction of an eco-eschatology of dis/closive possibility

Vidart, Daniel. Filosofia ambiental. Reviewed in Environmental Ethics 10(1988):271-73.

Vig, Norman J. and Michael E. Kraft, eds., Environmental Policy in the 1990s: Toward a New Agenda. Washington, DC: CQ Press, 1990. A Division of Congressional Quarterly, Inc. (1414 22nd Street, N. W., Washington, DC 20037). Vig is at Carleton College; Kraft is at the University of Wisconsin, Green Bay. 17 articles. Sections: Environmental Policy and Politics in Transition; Public Policy Dilemmas; Toward a Global Environmental Policy; Ethics, Values, and the Future of Environmental Politics. Some sample titles: Geoffrey Wandersforde-Smith, "Moral Outrage and the Progress of Environmental Policy: What Do We Tell the Next Generation about How to Care for the Earth?"; Richard N. L. Andrews, "Risk Assessment: Regulation and Beyond"; "Daniel Mazmanian and David Morell, "The 'NIMBY' Syndrome: Facility Siting and the Failure of Democratic Discourse." (v1,#3)

Vileisis, Ann. Discovering the Unknown Landscape: A History of America's Wetlands. Covelo, CA: Island Press, 1997. 440 pp. \$27.50. A synthesis of social and environmental history and an examination of how cultural attitudes shape the physical world. (v9,#2)

Vilkka, Leena, The Intrinsic Value of Nature. Amsterdam & Atlanta: Rodopi, 1997. ISBN 90-420-0325-1. 168 pages. This was the first Ph.D. done in Finland in environmental philosophy, now available in print (in English). Chapter titles: What is Intrinsic Value? Goodness in Nature. The Forms of Intrinsic Value. Zoocentrism. Biocentrism. Ecocentrism. The Origin of Value. Anthropocentrism and the Problem of Priorities. The Rights of Animals and Nature. Vilkka develops a naturalistic or naturocentric theory of value based on ethical extensionism and pluralism. She is quite well read in the American, British, Continental, and Scandinavian literature and an effective critic of other positions as she forges her own. An earlier book by Vilkka is Ympäristöetiikka (Environmental Ethics) in Finnish. She is researcher at the Academy of Finland and University Lecturer in Environmental Philosophy. (v9,#1)

Vilkka, Leena, ed., Ympäristöongelmat ja tiede: ympäristötutkimuksen filosofiaa (Environmental Problems and Science: The Philosophy of Environmental Sciences). Helsinki: Yliopistopaino (University Press), 1994. 201 pages. Nine articles by Finnish philosophers and scientists. Includes Leena Vilkka, "Can Applied Sciences Be Built on Ecological, Aesthetic, and Ethical Values?" (in Finnish); Markku Oksanen, "Nature and Moral Values" (in Finnish); and Stephen Condit, "Ecological Responsibility in Emerson's Transcendental Philosophy" (in Finnish). Phenomenological approaches, analytical approaches, transcendental approaches, represented by Kant and Emerson, and postmodern trends. (v5,#2) (Finland)

Vilkka, Leena, The Varieties of Intrinsic Value in Nature: A Naturalistic Approach to Environmental Philosophy (in English). Ph.D. thesis at the University of Helsinki, November 1995. The thesis examines the varieties of intrinsic value in nature proposed by various philosophers and then progressively defends an animal-centered philosophy (zoocentrism), a life centered-philosophy (biocentrism) and an ecosystem-centered philosophy (ecocentrism), culminating in a defense of objective intrinsic value in nature and of the rights of animals. The thesis has been published in Finland, in a limited edition, and was published in 1997 by Editions Rodopi (Amsterdam/Atlanta) in their Value Inquiry Book Series, Robert Ginsburg, editor. This is the first Ph.D. thesis in Finland in environmental philosophy. (v7,#1)

Vilkka, Leena, et al, Matsän tulevaisuuskuvia (The Future of Forests). Helsinki: Painatuskeskus and Opetusministeriö (Ministry of Environment), 1993. 68 pages. Puts together three different groups: the academic level, government professionals, and politicians, asking what Finnish forests might be in fifty years. Forests as related to Finnish social development. Short articles. Statistics. A section on the aesthetic value of forests, on the Finnish national identity and their forests, forests and economics, and the multiple values in forests. (v5,#2) (Finland)

Vilkka, Leena, Ympäristöetiikka (Environmental Ethics): Vastuu Luonnosta, Eläimistä ja Tulevista Sukupolvista (Responsibilities to Nature, Animals, and Future Generations). Helsinki: Yliopistopaino (University Press of Helsinki), 1993. (Address: Vuorikatu 3 A, SF-00100 Helsinki, Finland) ISBN 951-570-154-6. 238 pages, paper. The first book in Finnish in environmental ethics. Chapter titles: What is Environmental Ethics?; The Scope of Ethics; Main Trends in Environmental Philosophy; Attitudes to Nature; Values in Nature; The Rights of Nature, Animals, and Future Generations. Vilkka is a researcher at the Academy of Finland, Helsinki, and teaches at the Department of Philosophy, University of Helsinki. Her address is Department of Philosophy, P. O. Box 44 (Jyrängöntie 2), SF-00014 University of Helsinki, Finland. (v5,#2) (Finland)

Vilkka, Leena, Ympäristöetiikka (Environmental Ethics): Vastuu Luonnosta, Eläimistä ja Tulevista Sukupolvista (Responsibilities to Nature, Animals, and Future Generations). Helsinki: Yliopistopaino (University Press of Helsinki), 1993. (Address: Vuorikatu 3 A, SF-00100 Helsinki, Finland) ISBN 951-

570-154-6. 238 pages, paper. The first book in Finnish in environmental ethics. Chapter titles: What is Environmental Ethics?; The Scope of Ethics; Main Trends in Environmental Philosophy; Attitudes to Nature; Values in Nature; The Rights of Nature, Animals, and Future Generations. Vilkka is a researcher at the Academy of Finland, Helsinki. Her address is Department of Philosophy, P. O. Box 44 (Jyrängöntie 2), SF-00014 University of Helsinki, Finland. (v4,#3)

Vilkka, Leena, "Respect for Animals: A Zoocentric Theory of Animals' Rights." Paper presented at the World Vegetarian Congress, August 8-13, 1994, in Holland. There are three basic attitudes to nature: technocentrism, anthropocentrism, and naturocentrism. There are three nature-centered positions: zoocentrism, stressing sentience, biocentrism, stressing respect for all life, and physiocentrism, stressing the well-being of the planet Earth. Zoocentrism requires respect for animals, and takes animal suffering into moral account, though one ought also morally to consider the well-being of nonsentient nature. Copy available from the author, address above. (v5,#2) (Finland)

Vilkka, Leena, Animal Rights and Consciousness (in Finnish), a M. A. thesis at the University of Helsinki, 1988. (v5,#2) (Finland)

Vilkka, Leena, "Should We Preserve Intrinsic Values in Wilderness?" Pages 160-175 in Anna-Liisa Sippola, Pirjo Alaraudanjoki, Bruce Forbes and Ville Hallikainen, eds., Northern Wilderness Areas: Ecology, Sustainability, Values (Rovaniemi, Finland: University of Lapland, Arctic Centre, 1995). In a volume resulting from the International Conference on Northern Wilderness Areas held there in December 1994. According to anthropocentrism, humans can value wilderness for its own sake, but nature is valueless without human valuers. From the naturocentric point of view, the value of a wilderness area is discovered in the natural history of the area. Naturocentrism is the objective intrinsic value of wilderness, according to which wild animals and plants should at least sometimes win, their intrinsic values having priority over human instrumental values. Vilka is with the Environmental Philosophy Project, P. O. Box 12, Fin-00014, University of Helsinki, Finland. (v7,#4)

Vilkka, Lena, Environmental Ethics: A Conceptual Analysis (in Finnish), a licentiate at the University of Helsinki, 1991. (v5,#2) (Finland)

Villena, Marcello. Review of Marco Janssen, Modelling Global Change: The Art of Integrated Assessment Modelling, Cheltenham: Edward Elgar, 1998, by Marcello Villena Environmental Values 10(2001):272. (EV)

Villena, Marcello. Review of Marco Janssen Modelling Global Change, Environmental Values 10(2001):272. (EV)

Villena, Marcello. Review of Antonia Cornwell and John Creedy Environmental Taxes and Economic Welfare: Reducing Carbon Dioxide Emissions, Cheltenham: Edward Elgar, 1997, Environmental Values 10(2001):272. (EV)

Vincent, Andrew, "Liberalism and the Environment," Environmental Values 7(1998): 443-459. The article scrutinises the complex relation between late twentieth century liberal and environmental thought. It concludes that if the key values of contemporary liberal and environmental thought are compared then the prognosis looks gloomy. There are implicit and deep tensions over most value questions. In order to provide a coherent focus for this analysis, the paper addresses the issue of liberal justice, namely, can liberal theories of justice be sensitively applied to environmental questions? The answer to this question is that for much environmental thought, it is the very values and practices implicit within liberal justice theory which now constitute the key environmental danger. KEYWORDS: liberalism, environmentalism, distributive justice, procedural justice, individualism, value theory. Andrew Vincent is at the University

of Wales Cardiff. (EV)

- Vincoli, Jeffrey W. A Basic Guide to Environmental Compliance. New York: Van Nostrand Reinhold, 1993. 258 pages. \$ 45. A guide to the labyrinth of federal, state, and local requirements and controls (in the U.S). But the labyrinth must be decoded to do business, since the cost of noncompliance is steadily increasing. Further, the pressure is increased by the trend toward individual personal liability, both civil and criminal. The National Environmental Policy Act, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Emergency Planning and Community Right to Know Act, and on and on. (v9,#2)
- Vining, Joanne, ed., Social Science and Natural Resource Recreation Management. The mixture of natural science and social science, managing nature and managing people, the conceptual foundations of natural recreation resource management. 330 pages, \$ 29.50. Boulder, CO: Westview Press, 1990. (v1,#2)
- Vining, Joanne, "Review of: Clayton, Susan and Opatow, Susan (Eds.). Identity and the Natural Environment," Society and Natural Resources 19 (no.5, May-June 2006) :475-478 (4).
- Vinogradov, Sergei. "Transboundary Water Resources in the Former Soviet Union: Between Conflict and Cooperation", Natural Resources Journal 36(no.2, 1996):393. (v7,#4)
- Vira, Bhaskar, Rights, Property Rights and their Protection: Implications for the Analysis of Environmental Policy. OCEES Research Paper No. 2. Oxford: Oxford Centre for the Environment, Ethics and Society, Mansfield College, 1995. 35 pp. A survey of the theoretical basis of the concepts of "rights" and "property." Nine possible varieties of property right, dealing with possession, use, consumption, management, etc. This plurality of property rights is important in many cases of environmental conflict, where, for example, villagers' traditional rights to gather fuel-wood conflict with government-granted timber concessions. In the application of property rights to the environment, it is difficult to construe existence value in such way that it could be the subject of a property right. (v8,#1)
- Virginia Environmental Law Journal, "Symposium: Eastern Water Law," vol. 9, no. 2, Spring 1990. Seven articles on the struggle to evolve Eastern water laws that protect the integrity of the environment. (v1,#3)
- Virtanen, P, "Local Management of Global Values: Community-Based Wildlife Management in Zimbabwe and Zambia", Society and Natural Resources 16(no.3, 2003):179-190.
- Virtanen, Pekka, "The Role of Customary Institutions in the Conservation of Biodiversity: Sacred Forests in Mozambique," Environmental Values 11(2002): 227-241. Recently the role of customary local institutions in the conservation of biological diversity has become a topic of widespread interest. In this paper the conservation value of one such institution, traditionally protected forest, is studied with regard to its ecological representativity and institutional persistence. On the basis of a case study from Mozambique the paper concludes that traditionally protected forests do have a practical conservation value, especially as fire refuges and in the preservation of metapopulations of endangered species. However, it is also important to recall their spiritual aspect, which is crucial for their continuing appreciation and upholding. Even though customary institutions are still strong in the study area, they are subject to power struggles at both local and national levels. In the present context of political transition, any outside interventions regarding such local institutions as sacred forests, which have high symbolic value, should be considered carefully. (EV)
- Vischer, Lukas, ed., Rights of Future Generations, Rights of Nature: Proposal for Enlarging the Universal Declaration of Human Rights. Study No. 19 from the World Alliance of Reformed Churches. May 1990.

A group of European theologians has proposed that the World Alliance of Reformed Churches enlarge a 1976 declaration of human rights with a similar declaration extended to future generations and to nature.

The proposal reads in part:

"We support the attribution of rights not only to humans but also to nature, God's creation, and we reject the view that animate and inanimate nature are mere objects which stand at the arbitrary disposal of the human. ...

1. Nature--animate or inanimate--has a right to existence, that is, to preservation and development.
2. Nature has a right to the protection of its ecosystems, species, and populations in their interconnectedness.
3. Animate nature has a right to the preservation and development of its genetic inheritance.
4. Organisms have a right to a life fit for their species, including procreation within their appropriate ecosystems.
5. Disturbances of nature require a justification. They are only permissible
 - when the presuppositions of the disturbance are determined in a democratically legitimate process and with respect of the rights of nature,
 - when the interests of the disturbance outweigh the interests of a complete protection of the rights of nature, and
 - when the disturbance is not inordinate.

Damaged nature is to be restored whenever and wherever possible.

6. Rare ecosystems, and above all those with an abundance of species, are to be placed under absolute protection. The driving of species to extinction is forbidden."

The proposal is argued in five accompanying papers, including one by Jurgen Moltmann. In German and also in English. Available from the World Alliance of Reformed Churches, 150, route de Ferney, CH-1211 Geneva 20, Switzerland. Phone 22 916237. (v1,#2)

Viscusi, W. Kip. "Equivalent Frames of Reference for Judging Risk Regulation Policies," New York University Environmental Law Journal 3(no.2, 1995):431- . (v6,#4)

Visgilio, Gerald R., and Whitelaw, Diana M., eds., Our Backyard: A Quest for Environmental Justice. Lanham, MD: Rowman and Littlefield, 2003. Environmental hazards in poor and minority communities, waste disposal, risk evaluation, Native Americans, Mexican women, healthy and liveable communities. Ten contributors. Visgilio is in economics, Whitelaw in conservation and environment studies, at Connecticut College. (v.14, #4)

Visions of America: Landscape as Metaphor in the Late Twentieth Century. Denver, CO: The Denver Art Museum and Columbus, OH: The Columbus Museum of Art, publishers. Distributed by Harry N. Abrams, Inc., 1994. ISBN 0-8109-3925-8. With essays by Martin Friedman, John Beardsley, Lucinda Furlong, Neil Harris, Rebecca Solnit, John R. Stilgoe. Though the idyllic landscapes of nineteenth-century painting linger in the modern consciousness, for today's artists, the definition of landscape has undergone radical modification, to the point where it includes all visible--and myriad invisible--aspects of nature. While the scenic wonders of the continent have not lost their power to stir the imagination, the troubled state of America's natural resources has caused concern nationwide. The accelerated disappearance of wilderness lands and other crisis-level environmental concerns have made it impossible to continue to regard the American landscape as inviolable and unchanging. Against this background of uneasy awareness, the American landscape assumes a particular urgency for many contemporary artists. Thirteen artists were commissioned for the exhibition that this book records, and they display landscape as an all-encompassing theme affected by many aspects of contemporary American culture, and not just a vehicle for aesthetic exploration. Landscape is, more profoundly, a metaphoric means of eloquently expressing their social, psychological, and technological concerns. The sculptures of Mel Chin, for instance, often evoke nature under siege and a nagging concern for the planet's endangered ecology.

Visvader, John, "Natura Naturans: Remarks on the Nature of the Natural," Human Ecology Review 3 (no.

1, Autumn, 1996): 16-18. (v.9,#3)

Visvader, John, "Natura Naturans: Remarks on the Nature of the Natural," Human Ecology Review 3(no. 1, 1996):16-18. "We need to understand both the 'natural' and the 'wild' in such a way that we can imagine giving more to the world around us than the gift of our mere absence." Visvader is at the College of the Atlantic, Maine. (v.13,#1)

Visvader, John. "Natura Naturans: Remarks on the Nature of the Natural," Human Ecology Review 3, 1 (Autumn 1996): 16-18. "We need to understand both the 'natural' and the 'wild' in such a way that we can imagine giving more to the world around us than the gift of our mere absence." Visvader teaches philosophy at the College of the Atlantic. (v8,#1)

Vitali, Theodore R. "Sport Hunting: Moral or Immoral?" Environmental Ethics 12(1990):69-82. Hunting for sport or pleasure is ethical because (1) it does not violate any animal's moral rights, (2) it has as its primary object the exercise of human skills, which is a sufficient good to compensate for the evil that results from it, namely the death of the animal, and (3) it contributes to the ecological system by directly participating in the balancing process of life and death upon which the ecosystem thrives, thus indirectly benefiting the human community. As such, hunting is not only a natural good, but also a moral good. Vitali is in the philosophy department, St. Louis University, MO. (EE)

Vitek, William, "Working Landscapes: People, Places, Partners," Chrysalis 8(no. 2, 1993):102-107. An analysis of landscapes that people make a living on, and on which they also dwell. "Working landscapes ... feed the soul, the heart, and the body." "It is not enough for us to attend to our work. We must attend to our communities. It is not enough to improve our individual lives. We must work to improve our working landscapes. ... We must make peace with the land and its rhythms." With special reference to the Racquette River watershed in northern New York state. Vitek teaches philosophy at Clarkson University, Potsdam, NY. (v5,#3)

Vitek, William, "Teaching Environmental Ethics," Teaching Philosophy 15 (no. 2):151-173. June 1992. An advocacy approach to teaching environmental ethics, interpreting the pedagogy of Vitek's course in environmental ethics. Vitek is professor of Philosophy at Clarkson University, Potsdam, NY. (v3,#3)

Vitek, William, Jackson, Wes, eds. Rooted in the Land: Essays on Community and Place. New Haven: Yale University Press, 1996. 352 pp. \$35 cloth, \$17 paper. The editors contend that a deeper understanding of communities is critical for the health of the planet and the human spirit. Thirty-five contributors, new and classic writings, many in the form of personal narrative, extending E. F. Schumacher's ideas about the importance of human scale, and Aldo Leopold's concept of biotic citizenship. Vitek teaches philosophy at Clarkson University; Jackson is director of the Land Institute, Salina, Kansas. (v7,#4)

Vitousek, Peter, Orians, Gordon, and May, R. M., Uses of Ecological Knowledge in Environmental Decision-Making. National Research Council, 1986

Vitousek, Peter M., Harold A. Mooney, Jane Lubchenko, and Jerry M. Melillo, "Human Domination of Earth's Ecosystems," Science 277(1997): 494-499. See under theme issue, Science, 25 July 1997, on "Human-Dominated Ecosystems," for this and related articles.

Vitousek, Peter M., "Beyond Global Warming: Ecology and Global Change," Ecology 75(1994):1861-1876. Three well-documented global changes are: increasing carbon dioxide in the atmosphere; alterations in the global nitrogen cycle; and ongoing land use/cover change. The carbon dioxide increase since 1800 is unique in the past 160,000 years, and likely to have climatic consequences and direct effects on biota in all Earth's ecosystems. More nitrogen is fixed annually by humans (primarily for

fertilizer, also by legume crops and as a byproduct of fossil fuel consumption) than by all natural pathways combined. This alters aquatic ecosystems, contributes to eutrophication of the biosphere, and affects biological diversity. Land use has transformed one-third to one-half of Earth's ice free surface, with major effects even on otherwise pristine areas downwind and downstream. There is little uncertainty that serious changes are impending. Ecologists should speak out to help effective discussion about what can and should be done. Vitousek is in biology at Stanford University. (v5,#4)

Vitug, Marites Danguilan. "The Politics of Community Forestry in the Philippines," The Journal of Environment and Development 6(no.3, 1997):334. (v8,#3)

Vivanco, L, "Escaping from Reality: The Dangers Lurking behind the 'Sustainable' Facade of the International Year of Ecotourism," Ecologist 32(no.2, 2002):26-31. (v.13, #3)

Vivian, DJ, "Daniel S. Pierce, The Great Smokies: From Natural Habitat to National Park," Environmental History 6(no.2, 2001):331-332. (v.12,#4)

Vlavianos-Arvanitis, Agni, ed., Biopolitics: The Bio-Environment. Vol. II: Bios in the Next Millennium. Published by the Biopolitics International Organisation, 10, Tim Vassou, 115 21 Athens, Greece. 1989. Phone 643-2419. With sections on theology, ethics, and philosophy, literature, youth, women, law, education, media, urban planning and architecture, international cooperation, and bio-diplomacy and culture. Dozens of articles. Andrew Brennan, Philosophy, University of Stirling, Scotland, contributes an article on ecological humanism. (v1,#2)

Vodopianov, P. A., and V.S. Kryeachenko. The Great Day of Wrath (Ecology and Eschatology). Minsk, Bielorussia. Chapters: "An Eschatological Dimension of Traditional World Views," "Oikumena and Natural Conditions of Human Activities," "Man and Natural World," and "Strategy of Human Survival." The authors propose their own interpretation for a number of acute problems of the contemporary world and a strategy of stable and secure social development. (v6,#3)

Vogel, Gretchen, "Finding Life's Limits," Science 282(1998):1399. The smallest life can be is a more or less spherical cell about 200 nanometers in diameter, because anything smaller would not leave enough room for functioning amounts of DNA and some ribosomes. Anything smaller would involve a radically different kind of biology, so far unknown. (v.9,#4)

Vogel, Gretchen, "FDA Report Scores Chimp Research Lab," Science 286(12 November 1999):1269-1271. The Coulston Foundation, a private chimp breeding and research facility in Alamogordo, New Mexico, has been severely criticized by a U.S. Food and Drug Administration report for violating many procedures, resulting in sloppy science, and in some cases leading to chimpanzee deaths. (v.11,#1)

Vogel, Gretchen, "Conflict in Congo Threatens Bonobos and Rare Gorillas," Science 287(31 March, 2000):2386-2387. Conflict in the Congo Threatens Bonobos and Rare Gorillas. The war that has gripped the Democratic Republic of Congo for the past eighteen months, killing thousands and displacing more, is also taking a devastating toll on great apes. The front lines of the war, which involve troops from a half-dozen central Africa nations, cut through the heart of the range of bonobos, the pygmy chimpanzees. Further east, more than half of the 240 eastern lowland gorillas known in one study area have been killed by poachers. The animals are mostly killed for meat to eat by poachers and hungry troops. (v.11,#1)

Vogel, Gretchen, "Cloned Gaur a Short-Lived Success," Science 291(19 January 2001):409. Cloned Gaur a short-lived success. A baby gaur, a wild ox native to and endangered in Southeast Asia, cloned and given birth by an ordinary cow at a genetics center in Iowa, died a day after birth. But the death may be unrelated to the cloning process. (EE v.12,#1)

Vogel, Gretchen, "FDA Report Scores Chimp Research Lab," Science 286(12 November 1999):1269-1271. The Coulston Foundation, a private chimp breeding and research facility in Alamogordo, New Mexico, has been severely criticized by a U.S. Food and Drug Administration report for violating many procedures, resulting in sloppy science, and in some cases leading to chimpanzee deaths. (v10,#4)

Vogel, Joseph Henry, Genes for Sale: Privatization as a Conservation Policy. New York: Oxford University Press, 1994. 155 pages. \$29.95, hardcover. "The thesis of this book is that the creation of property rights over genetic information can make habitat preservation compete with alternative land uses" (33). This is "the baseline ethic assumed in the policy: those who benefit pay the costs associated with the benefits" (5). Vogel proposes "a gargantuan database" that can track what plants grow on whose land, with "genestealers" who protect such land from development, and share the royalties when useful finds are made. The proposal raises all the issues of ownership of genetic diversity, plus issues of whether landownership tied to genetic diversity rights is likely to produce a just distribution of costs and benefits. He deplores the idea of a common good of mankind.

One of Vogel's provocative illustrations. Chimpanzees know what species of plants to eat when they are sick. Jane Goodall discovered this "monkey know how" (43). Some 27 species are under investigation. What if a pharmaceutical company, alerted by this chimp behavior, uses one of these plants to make a new drug? Jane Goodall should establish a property right to these plants; pharmaceutical companies should pay her when they use such plants. "The economic advice to Goodall is that she keep her findings secret until privatization eventuates" (43). But, since Jane Goodall doesn't own the land on which the chimpanzees live, nor does she own the chimpanzees, perhaps neither Goodall nor the pharmaceutical companies have a right to steal the chimp's knowledge without compensating them. This could be the solution to chimp conservation! Vogel teaches economics at the Facultad Latinoamericana de Ciencias Sociales, Quito, Ecuador. Reviewed by Holmes Rolston, III, in Conservation Biology 9(1995):1659-1660. (v6,#2)

Vogel, Lawrence. "Does Environmental Ethics Need a Metaphysical Grounding?" The Hastings Center Report 25(no.7, 1995):30. (v7,#1)

Vogel, Steven, Against Nature: The Concept of Nature in Critical Theory. Albany: State University of New York Press, 1996. 288 pages. \$ 20.95 paper. The history of the concept of nature in Critical Theory, with chapters on Lukács, Horkheimer and Adorno, Marcuse, and Habermas. The tradition has been marked by serious difficulties with respect to the concept of nature. These problems are relevant to contemporary environmental philosophy as well. A solution to them requires taking seriously--and literally--the idea of nature as socially constructed. Vogel teaches philosophy at Denison University. (v6,#4)

Vogel, Steven . "Environmental Philosophy after the End of Nature." I call for "postnaturalism" in environmental philosophy—for an environmental philosophy that no longer employs the concept nature. First, the term is too ambiguous and philosophically dangerous and, second, McKibben and others who argue that nature has already ended are probably right—except that perhaps nature has always already ended. Poststructuralism, environmental history, and recent science studies all point in the same direction: the world we inhabit is always already one transformed by human practices. Environmental questions are social and political ones, to be answered by us and not by nature. Many will worry that this conclusion leads to environmentally pernicious consequences, and to problems of relativism and idealism, but I argue that it does not. Practices are real, not ideal, and not all practices are equal: those that acknowledge human responsibility for transforming the world are preferable to those that don't. Environmental harm results when we do not recognize our own responsibility for the world our practices create. Environmental Ethics 24(2002):2339. (EE)

Vogel, Steven, "Nature as Origin and Difference: On Environmental Philosophy and Continental Thought," Philosophy Today 42 (SPEP Supplement, 1998):169-181. Four accounts of nature in contemporary continental thought, and the difficulties each face, and what each might provide in terms of a philosophically adequate environmental theory.

(1) Nature as origin. "Nature on this account functions as an immense and complex and organic whole, a massive order in which humans are embedded and out of which they emerged" (p. 169). "Nature on this first account is where we came from; it is the origin or foundation on which everything else is built, and we ignore this at our peril" (p. 170).

(2) Nature critiqued. Nature is a social construction. "The unmistakable implication of this line of argument is that nature doesn't exist" (p. 170). "The way we see and think of it never reveals to us a nature-an-sich, but always a nature from our particular social and historical perspective" (p. 171).

(3) Nature as difference. Nature "appears now as the name we might give to the otherness of the world, to that which is always left out of any attempt to grasp the world as a whole and bring it entirely into the light. This is the radical form a postmodern anti-foundationalism takes" (p. 172).

(4) Nature as practice (the alternative preferred by Vogel). "We know the real world because we are involved in constituting it, ... taking the idea of 'construction' literally. It is through our practices, which are in the first instance above all laboring practices, that the world around us is shaped into the world it is." "A philosophy of practice, then, directs our attention to the built environment, which for most of us is the environment--and it is with this environment, I would argue, that 'environmental theory' ought to begin" (p. 175). "The whole environment in a certain sense is a built environment. ... There is no deep ontological difference between cities and parks" (p. 176). "There is no way nature really is, and so naturalistic attempts to find the solution to environmental problems by reading them off from nature are doomed to fail" (p. 177). Vogel is in philosophy, Denison University, Granville, OH.

Vogel, Steven, "The Silence of Nature," Environmental Values 15(2006): 145-171.

In claiming that 'nature speaks', authors such as Scott Friskics and David Abram implicitly agree that language use is linked to moral considerability, adding only that we need to extend our conception of language to see that non-humans too use it. I argue that the ethical significance of language use derives from its role in dialogue, in which speakers make truth-claims, question and potentially criticise the claims of others, and provide justifications for the claims they raise themselves. Non-human entities (as a contingent matter) seem not to engage in dialogue in this sense, and none of the examples Friskics and Abram offer suggest that they do. Thus the conception of language such authors employ is too weak to support the ethical conclusions they implicitly wish to defend. (EV)

Vogel, Steven. Review of John Bellamy Foster. Marx's Ecology: Materialism and Nature. Environmental Ethics 25(2003):313-315. (EE)

Vogel, Steven. Against Nature: The Concept of Nature in Critical Theory. Reviewed by Andrew Brennan, Environmental Ethics 20(1998):207-10.

Vogel, Steven. Review of Natural Causes: Essays in Ecological Marxism. By James O'Connor. Environmental Ethics 22(2000):315-318.

Vogel, Steven. Review of Denaturalizing Ecological Politics: Alienation from Nature from Rousseau to the Frankfurt School and Beyond. By Andrew Biro. Environmental Ethics 29(2007):103-106. (EE)

Vogel, Steven. "The Nature of Artifacts." Environmental Ethics 25(2003):149-168. Philosophers such as Eric Katz and Robert Elliot have argued against ecological restoration on the grounds that restored landscapes are no longer natural. Katz calls them "artifacts," but the sharp distinction between nature and artifact doesn't hold up. Why should the products of one particular natural species be seen as somehow escaping nature? Katz's account identifies an artifact too tightly with the intentions of its creator: artifacts

always have more to them than what their creators intended, and furthermore the intention behind some artifacts might explicitly be to allow things to happen unpredictably. Indeed, to build any artifact is to employ forces that go beyond the builder: in this sense all artifacts are natural. Recognizing the naturalness of artifacts can help encourage the key environmental virtues of self-knowledge and humility. (EE)

Voges, F.W.J. (Ian), Sustainable Development and the Socially Embedded Firm. An Inquiry into the Nature, Causes and Transformation of Structural Unsustainability in Contemporary Liberal Capitalism. D.Phil. Dissertation at the University of Stellenbosch, South Africa, 1999. Voges argues that unsustainability is not an incidental consequence, but rather a structural feature of contemporary liberal capitalism. Sustainable development can be adequately conceptualised as intra- and intergenerational justice within the framework of Rawlsian constitutional liberalism. However, the Anglo-American model of capitalism that drives economic globalization does not represent the optimal institutional configuration for implementing intra- and intergenerational justice in the economy and corporations. The theory of associative democracy and contemporary political economics indicate that liberal capitalism can accommodate intra- and intergenerational justice if institutionally supplemented with empowered associations that play a visible role in economic and corporate governance. Promotor: Johan P. Hattingh, Co-promotor: Wouter Achterberg, University of Amsterdam. Voges is now in the office of Health and the Environment, Shell Oil Company, The Hague, Netherlands. (v.10,#1)

Voges, Ian F., "Environmental Management: Implementing the Paradigm Shift," Global Strategies for Environmental Issues, NAEP 19th Annual Conference Proceedings. Washington, DC: NAEP (National Association of Environmental Professionals) Publications, 1994, pages 266-276. Environmental managers can only incorporate efficiency under their current management paradigm; they are unable to handle the recent values of sustainability and equity. This will require a new paradigm, one that places cost/benefit analyses in this larger perspective. Voges is in philosophy at the University of Stellenbosch, South Africa. (v5,#4)

Vogt, Kristiina A., et al., Forest Certification: Roots, Issues, Challenges, and Benefits. Boca Raton, FL: Lewis Publishers, 1999. 384 pages. \$ 90. Forest certification is widely accepted as a tool for identifying environmentally acceptable management of forests, both industrial and non-industrial. Five issues are typically missing: the scientific basis for certification standards; incorporation of social and natural system sustainability; the rationale for differing standards currently used to certify governmental, industrial, and non-industrial uses; the success of certification; the difficulty of certifying small landowners. All authors are at the Yale University School of Forestry and Environmental Studies. (v10,#4)

Vogt, Kristiina, et al., Forests and Society: Sustainability and Life Cycles of Forests in Human Landscapes. New York: Oxford University Press, 2006. Vogt is at University of Washington, Seattle.

Voice, Paul. "What Do Animals Deserve?" South African Journal of Philosophy 14 (no. 1, February 1995): 34-38. The failure of contractarianism to assign substantive moral weight to the interests of non-human animals does not count against contractarianism as a moral theory. I show why contractarianism excludes animals from the moral domain, and go on to argue that, when proper attention is to paid to the scope of moral theory, it is easily seen why animals lack full moral standing. Voice is in philosophy at the University of South Africa (UNISA), P.O. Box 392, Pretoria 0001, Republic of South Africa. (v6,#1)

Volger, John, The Global Commons: A Regime Analysis. New York: John Wiley, 1995. 248 pages. \$69.95 £ 35. The global commons--the oceans, Antarctica, outer space, the atmosphere--present key problems for global environmental management. "Regime theory" applied to these areas that are beyond national control, with a critical review of these concepts. The Third Law of the Sea Convention, recent developments in the rules for Antarctica, the protection of the stratospheric ozone layer and the

development of a climate change regime. The author is at Liverpool John Moores University, UK. (v6,#4)

Volk, Tyler, Gaia's Body: Toward a Physiology of Earth. Springer-Verlag, 1998. \$ 27.00. Cycles, interactions in and between atmosphere, oceans, earth, and living organisms, in support of Lovelock's Gaia hypothesis. (v.9,#4)

Volk, Tyler. *CO₂ Rising: The World's Greatest Environmental Challenge*. Cambridge, MA: The MIT Press, 2008. Volk discusses the global carbon cycle in relation to global warming and climate change. He argues that addressing issues such as projections of future levels of CO₂, energy systems and processes that will supply future power, relationships among the wealth of nations, and global equity in per capita emissions will constitute the greatest environmental challenge we have ever faced.

Vollman, Tim. "The Endangered Species Act and Indian Water Rights", Natural Resources & Environment 11(no.2, 1996):39. (v7,#4)

Volpe, John P., "Dollars without Sense: The Bait for Big-Money Tuna Ranching around the World," BioScience 55(no.4, April 2005):301-302(2).

vonBonsdorff (von Bonsdorff), Pauline, and Haapala, Arto, eds. Aesthetics in the Human Environment, 1999 (ISBN 952-5069-07-09, ISSN 1239-193x). Vol. 6, International Institute of Applied Aesthetics Series. Contributions from North America, UK, Finland. Available from: International Institute of Applied Aesthetics, Kannaksenkatu 22, 15140 Lahti, Finland. Tel. +358 3 782 7858. (v.10,#2)

vonBonsdorff (von Bonsdorff), Pauline, The Human Habitat--Aesthetic and Axiological Perspectives, 1998 (ISBN 952-5069-06-0, ISSN 1239-193x), Vol. 5, International Institute of Applied Aesthetics Series: A phenomenological approach to the consideration of the built environment. Available from: International Institute of Applied Aesthetics, Kannaksenkatu 22, 15140 Lahti, Finland. Tel. +358 3 782 7858. (v.10,#2)

vonDroste (von Droste), Bernd, Plachter, Harald, and Rössler, Mechtild, eds., Cultural Landscapes of Universal Value: Components of a Global Strategy. Jena, Germany: Gustav Fischer, 1995, in cooperation with UNESCO. Some thirty contributors. Includes: McNeeley, Jeffrey A. and Keeton, William S., "The Interaction between Biological and Cultural Diversity," pp. 25-37; Plachter, Harald and Rössler, Mechtild, "Cultural Landscapes: Reconnecting Culture and Nature," pp. 15-18; with sections on Africa and Arab States, Asia, Australia and the Pacific, the Americas, and Europe, for example: Hegard, Tonte, "Nature and Culture--Two Aspects of the Same Story. Norwegian Landscape Management in the 1990's," pp. 374-377; Henne, Eberhard, "The Schorfheide-Chorin Biosphere Reserve, Germany: Unique Species Diversity in a Centuries-Old Cultivated Landscape" pp. 333-349; and many more. Since 1992, outstanding cultural landscapes can be protected under the World Heritage Convention, the first international legal instrument recognizing and safeguarding such landscapes for future generations. Many of the authors feature the cultural landscapes but many also consider the integration of nature and culture, and biological conservation on such landscapes. von Droste and Rössler are with the UNESCO World Heritage Centre, Paris. Plachter is in biology at the University of Marburg. (v.8,#4)

Vonhof, Sarah. "Green Confusion," Wild Earth 6(1996):57. (v8,#1)

vonMoltke (von Moltke), Konrad, "Taking Stock in Europe," Environment 43(no. 1, Jan. 1, 2001):36- . State of the environment reports in the United States have been extremely useful in assessing environmental pressures. Now the European Union is facing the complications and challenges of assembling similarly effective reports. (v.12,#2)

vonWeizsäcker (von Weizsäcker), Ernst Ulrich, Lovins, Amory B., and Lovins, L. Hunter, Factor Four: Doubling Wealth--Halving Resource Use: The New Report to the Club of Rome. London: Earthscan, 1997. Originally in German. Resource productivity can and should grow fourfold. We can live twice as well yet use half as much. A problematic work that lures readers with the promise of doubling their affluence while cutting resource use in half. No need to feel guilty about consumption, if you are clever about it. von Weizsäcker is at the Wuppertal Institute for Climate, Environment, and Energy in the North Rhine/Westphalian Science Centre, Germany. The Lovins are at the Rocky Mountain Institute in Aspen, Colorado.

Voorhees, John, Camarota, Anton G., Woellner, Robert A. Corporate Environmental Risk Management: ISO 14000 and the Systems Approach. Boca Raton, FL: Lewis Publishers, 1997. 320 pp. \$59.95. This gives readers an extensive analysis of practical applications of ISO 14000 and environmental compliance management systems. It offers a mixture of technical engineering advice, legal guidance, and commonsense business. (v8,#3)

Vorster, W. S., ed. Are We Killing God's Earth? Pretoria: University of South Africa, 1987. Proceedings of the Institute for Theological Research held at the University of South Africa in Pretoria, September 1987. Contains: R. F. Fuggle, "Convergence between Religion and Conservation: A Review of the Assisi Celebrations"; J. A. Loader, "Image and Order: Old Testament Perspectives on the Ecological Crisis"; P. J. Le Roux, "Environment Conservation: Why and How?"; K. Nürnberger, "Ecology and Christian Ethics in a Semi-industrialized and Polarised Society"; D. F. Toerien, "Water: The Limiting Resource"; I. J. Van Eeden, "Ethical Questions Pertaining to the 'Soft Explosion'"; N. Boegman and C. J. Els, "Air Pollution: Is It Serious?"; D. F. Olivier, "'God's Rest': The Core and Leitmotif of a Christian Holistic View of Reality?" ISBN 0 86981 525 3.

Vorster, WS (ed) 1987. Are we killing God's earth? Pretoria: University of South Africa. (Africa)

Vos, C & Müller, J (eds) 1991. Mens en omgewing. Pretoria: Orion.

Vos, CJA 1991. Die wagwoord by die poort (Ps 24). In: Vos, C & Müller, J (eds): Mens en omgewing. Halfway House: Orion, 114-125. (Africa)

Voss, Michael, "Resource Conservation: The Central and Southern Florida Project Comprehensive Review Study: Restoring the Everglades," Ecology Law Quarterly 27(no.3, 2000):751- . (EE v.12,#1)

Vossler, C., and J. Kerkvliet, "A Criterion Validity Test of the Contingent Valuation Method: Comparing Hypothetical and Actual Voting Behavior for a Public Referendum," Journal of Environmental Economics and Management 45(no. 3, 2003): 631-649. (v 14, #3)

Vreeland, Russell H., Rosenzweig, William D., and Powers, Dennis, W., "Isolation of a 250 Million-year-old Halotolerant Bacterium from a Primary Salt Crystal," Nature 407(19 October, 2000):897-900; and commentary, Parkes, R. John, "A Case of Bacterial Immortality?" Nature 407(19 October 2000):844-845. Immortal bacterium? Well, anyway, the oldest living organisms known. Researchers claim to have isolated bacteria 250-million-years old from tiny water inclusions in salt crystals in what was an inland sea, now New Mexico. The bacterium, in the genus Bacillus, was revived and cultured, even DNA sequenced. It is related to present day bacteria in the Dead Sea. Earlier reports have been of bacteria in bees in amber, 25-40 million years ago; other, older claims had been doubted, due to contamination. Mechanisms by which the biopolymers within it were kept from degeneration are unknown, nor, with discovery, whether bacteria need to die at all. (EE v.12,#1)

Waage, S, "Collaborative Salmon Recovery Planning: Examining Decision Making and Implementation in Northeastern Oregon", Society and Natural Resources 16(no.4, 2003):295-308.

Waanders, Jason. "Growing a Greener Future? USDA and Natural Resource Conservation." Environmental Law 29(no. 1, 1999):235- . The United States Department of Agriculture (USDA) spent much of this century evolving into a giant group of agencies whose flawed mandates and organizational problems led to policies that often damaged the nation's soil and water resources. Recent changes in its mandates and structure, however, offer reason to hope that USDA may ultimately become a leader in the conservation of those resources. (v.11,#1)

Wackernagel, Mathis, Our Ecological Footprint: Reducing Human Impact on the Earth. Gabriola Island, BC: New Society Publishers, 1996. 160 pages. (v.10,#1)

Wackernagel, Mathis, and Giljum, Stefan, "Der Import von oekologischer Kapazitaet: globaler Handel und die Akkumulation von oekologischen Schulden (The import of ecological capacity: global trade and the accumulation of ecological debts)." In German. Natur und Kultur 2 (no. 1, 2001):33-54. Abstract: In a sustainable world, we should live on the interests of the planet's natural capital. However, increasing evidence suggests that humanity's ecological demand is exceeding the regenerative capacity of the biosphere. The expanding global economic activities exacerbate this trend, particularly since they allow the rich countries to overcome the constraints imposed by the limited productivity of their national ecosystems. This path of ecologically unbalanced globalization, however, will lead humanity into an impasse, since not all nations can be net-importers of ecological capacity. (v.12,#2)

Wade, Nicholas, "Wasp Works Its Will on a Captive Spider," New York Times (7/25/00). Parasitic wasp larva gets spider to build web for it. A parasitic wasp lays its egg on the abdomen of an orb-weaving spider. For two weeks the growing larva sucks juices that drip from small punctures in the spider's body as the spider continues to rebuild each day its fragile circular web. On the night before the wasp larva kills its host, the spider builds a totally different web that is much stronger and serves as a platform from which the larva can safely hang its cocoon. When scientists remove the larva from the spider on what would have been the final evening, the spider builds the platform-style web for two nights and then resumes making its usual orb. (v.11, #4)

Wade, Nicholas, "From Ants to Ethics: A Biologist Dreams of Unity of Knowledge," New York Times, May 12, B9, B10. A promotion piece for Edward O. Wilson's new book, Consilience. "The kind of unification he (Wilson) proposes is the outright intellectual annexation that occurs when one field of knowledge becomes explainable in terms of a more fundamental discipline." "Dr. Wilson has resurrected it (consilience) as the slogan for a program of unrivaled ambition: to unify all the major branches of knowledge--sociology, economics, the arts and religion (and ethics and philosophy) under the banner of science and in particular of the biology that has shaped the human mind." (v9,#2)

Wadley R.L.; Colfer C.J.P., "Sacred Forest, Hunting, and Conservation in West Kalimantan, Indonesia," Human Ecology 32(no.3, June 2004):313-338(26). (v. 15, # 3)

Wadley, Reed L., Colfer, Carol J. Pierce, Hood, Ian G. "Hunting Primates and Managing Forests: The Case of Iban Forest Farmers in Indonesian Borneo," Human Ecology 25(no.2 1997):243. (v8,#3)

Waelbers, Katinka, Frans Stafleu and Frans W.A. Brom, "Not All Animals Are Equal: Differences in Moral Foundations for the Dutch Veterinary Policy on Livestock and Animals in Nature Reservations," Journal of Agricultural and Environmental Ethics 17(2004):497-515. The Netherlands is a small country with many people and much livestock. As a result, animals in nature reservations are often living near cattle farms. Therefore, people from the agricultural practices are afraid that wild animals will infect

domestic livestock with diseases like Swine Fever and Foot and Mouth Disease. To protect agriculture (considered as an important economic practice), very strict regulations have been made for minimizing this risk. In this way, the practice of animal farming has been dominating the practices of nature management completely.

If, for instance, Foot and Mouth Disease strikes an agricultural area, all wild pigs and cattle living in the nearby nature reservations have to be killed, whether infected or not. This dominant position of one practice over the other has now become problematic. While the morality of the practice of nature management seems to be very different from the morality of agriculture and agriculture has become less important from an economic point of view, the public as well as those involved in nature management no longer seem to accept the dominant position of agriculture. Accompanied by a field study with in-depth interviews. Keywords: animal welfare, foot and mouth disease, nature management, wilderness. The authors ate at the Centre for Bio-ethics and Health Law, Utrecht University, The Netherlands,

Waggener, TR, "Ken Drushka, Tie Hackers to Timber Harvesters: The History of Logging in British Columbia's Interior," Environmental History 6(no.2, 2001):321-322. (v.12,#4)

Wagle, Subodh. "TNCs as Aid Agencies? Enron and the Dabhol Power Plant", The Ecologist (1979) 26(no. 4,1996):179. TNCs are increasingly trying to portray themselves as the most efficient vehicles for achieving "development". Public money allotted for development assistance, they assert, should be provided instead as loans to the private sector. The case has been put most explicitly by the Enron Corporation, the US multinational now building the controversial Dabhol Power Plant in Maharashtra, India. Far from "bringing development", however, the TNCs are standard bearers for a new colonialism.

Wagner, Andreas, Robustness and Evolvability in Living Systems. Princeton, NJ: Princeton University Press, 2005. Wagner will convince even the most skeptical reader that robustness to perturbation is a pervasive aspect of biology. A cautionary note for those enamored with all the disequilibrium, chaos, and other upsets in ecosystems. The routes to such stability may differ, and some stable solutions may be impossible, since they cannot be reached without instability. Wagner is a computation and theoretical evolutionary biologist at the University of New Mexico.

Wagner, FH, "Freeing Agency Research from Policy Pressures: A Need and an Approach," Bioscience 51(no. 6, 2001):445-450. (v.13,#1)

Wagner, Frederic H., Ronald Foresta, R. Bruce Gill, Dale R. McCullough, Michael R. Pelton, William F. Porter, and Hal Salwasser, Wildlife Policies in the U.S. National Parks. Washington, DC: Island Press, 1995. (v8,#2)

Wagner, Frederic H., et al., Wildlife Policies in the U.S. National Parks. Washington, DC: Island Press, 1995. Includes a discussion of the problems of defining "nature" and "natural" (pp. 22-28, pp. 141-152). One difficulty is that the authors accept the pre-1492 native American population at 100 million. Reviewed by Sam McNaughton in Journal of Wildlife Management 60 (no. 3, 1996):685-687, a thoughtful and entertaining review.

Moore, Bud, The Lochsa Story: Land Ethics in the Bitterroot Mountains. Missoula, MT: Mountain Press Publishing Co., 1996. The Lochsa country is a region of the Bitterroot Mountains, Idaho. Moore is a forester with the U.S. Forest Service. (v8,#3)

Wagner, Frederic H., with contributions by Wayne L. Hamilton and Richard B. Keigley, Yellowstone's Destabilized Ecosystem: Elk Effects, Science, and Policy Conflict. Oxford: Oxford University Press, 2006. The authors claim perennial mismanagement of the elk in Yellowstone. They claim elk were historically rare in the region, but that under park management enlarging elk herds have been overgrazing and seriously degrading the ecosystem. An argument heard often before, but here with new supporting

data. Wagner is at Utah State University.

Wagner, Frederic H. "Ethics, Science, and Public Policy," Bioscience 46(no.10, 1996):765. (v7,#4)

Wagner, HH; Edwards, PJ, "Quantifying habitat specificity to assess the contribution of a patch to species richness at a landscape scale," Landscape Ecology 16(no.2, 2001):121-131. (v.12,#4)

Wagner, Michael R., Block, William M. and Wenger, Karl F., "Restoration Ecology: A New Forest Management Paradigm, or Another Merit Badge for Foresters," Journal of Forestry 98(no.10, OCT 01 2000):22- . If ecological restoration means finding the best outcome for a specific site based on ecological knowledge and the diverse perspectives of interested stakeholders, then foresters have earned a new merit badge as "ecological restorationist"--with 100 years of experience. (EE v.12,#1)

Wagner, Peter J., Matthew A. Kosnik, and Scott Lidgard. "Abundance Distributions Imply Elevated Complexity of Post-Paleozoic Marine Ecosystems." *Science* Vol. 314, no. 5803 (24 November 2006): 1289-91. Commentary on "Life's Complexity Cast in Stone" by Wolfgang Kiessling (*Science* Vol. 314, no. 5803 (24 November 2006): 1254-55.) The fossil record shows that since the end of the Paleozoic era, the structure of marine communities has become more complex. Biologists have the general impression that ecological communities get more complex, but lack adequate ways of measuring objectively different kinds of complexity. These authors propose such measurements. Complex distributions are essentially those in which the dominant taxa add ecological opportunity space. The big surprise, they say, is a major difference between Paleozoic (older than 250 million years) and younger communities. Complexly structured assemblages are substantially more common in more recent times.

Wakeford, Tom, Meyer, Aubrey. "Valuing the Environment and Valuing Lives". Environmental Politics 5(no.2, 1996):363. (v7,#4)

Waks, Leonard J. "Environmental Claims and Citizen Rights," Environmental Ethics 18(1996):133-148. I propose a model for the development of citizen rights based on the advance of political and social rights and apply it to contemporary claims regarding environmental rights. In terms of this 'claims and attenuations' model, I sketch the roles of environmental philosophers and activists, the media and public opinion, and political insiders in the development of positive rights. I then predict a weakening of environmental claims and a marginalization of environmental philosophies as environmental claims are secured as positive rights. Waks is in Educational Leadership and Policy Studies, Temple University, Philadelphia. (EE)

Walck, Christa, Strong, Kelly C. "Using Aldo Leopold's Land Ethic to Read Environmental History: The Case of the Keweenaw Forest", Organization and Environment 14 (No. 3, September 2001) pp.261-89. Aldo Leopold's land ethic provides a useful conceptual framework for interpreting environmental histories, which may in turn be used to plan more effective future land use policies. The authors use a Leopoldian framework as a heuristic device to interpret the environmental history of the land in one small place – the Keweenaw Peninsula of Northern Michigan – where successive human purposes altered the landscape dramatically over time. This article identifies the historical role that power relations and the land ethic have played in land use and land health. The article concludes by identifying the need for community action based in a land ethic to maintain a healthy forest through sustainable use. Although it is unlikely the Keweenaw forest will return to its preindustrial state, the community can aim for a forest that exemplifies Leopold's qualities of integrity, stability, productivity and beauty. Walck and Strong are in management at Michigan Technological University. (v.13,#2)

Walck, Christa, "Healing the Divided Mind: Land as an Integrating Concept for Organizations and the Natural Environment", Organization and Environment 17 (no. 2, June 2004)

Waldau, Paul, and Kimberley Patton, eds. *A Communion of Subjects: Animals in Religion*. New York: Columbia University Press, 2006. Comparative and interdisciplinary study of human's conceptualization of animals in world religions. Thomas Berry insists that "the world is a communion of subjects, not a collection of objects." Using the implications of this statement as a starting point, the contributors to this collection treat animals as subjects and consider how major religious traditions have incorporated them into their belief systems, myths, and rituals. Results from a conference on world religions and animals, held at the Harvard Yenching Institute, and sponsored by the Forum on Religion and Ecology and the Center for Respect of Life and Environment of the Humane Society of the U.S.

Waldau, Paul, and Kimberley C. Patton, eds. *A Communion of Subjects: Animals in Religion, Science, and Ethics*. New York: Columbia University Press, 2006. Contents include: (1) "Heritage of the Volume" by Mary Evelyn Tucker, (2) "Prologue: Loneliness and Presence" by Thomas Barry, (3) "Introduction" by Paul Waldau and Kimberley Patton, (4) "'Caught with ourselves in the net of life and time': Traditional Views of Animals in Religion" by Kimberley Patton, (5) "Seeing the Terrain We Walk: Features of the Contemporary Landscape of 'Religion and Animals'" by Paul Waldau, (6) "Sacrifice in Ancient Israel: Pure Bodies, Domesticated Animals, and the Divine Shepard" by Jonathan Klawans, (7) "Hope for the Animal Kingdom: A Jewish Vision" by Dan Cohn-Sherbok, (8) "Hierarchy, Kinship, and Responsibility: The Jewish Relationship to the Animal World" by Roberta Kalechofsky, (9) "The Bestiary of Heretics: Imaging Medieval Christian Heresy with Insects and Animals" by Beverly Kienzle, (10) "Descartes, Christianity, and Contemporary Speciesism" by Gary Steiner, (11) "Practicing the Presence of God: A Christian Approach to Animals" by Jay McDaniel, (12) "'This she-camel of God is a sign to you': Dimensions of Animals in Islamic Tradition and Muslim Culture" by Richard Foltz, (13) "The Case of the Animals Versus Man: Towards an Ecology of Being" by Zayn Kassam, (14) "'Oh that I could be a bird and fly, I would rush to the Beloved': Birds in Islamic Mystical Poetry" by Ali Asani, (15) "Cows, Elephants, Dogs, and Other Lesser Embodiments of *Ātman*: Reflections on Hindu Attitudes Toward Nonhuman Animals" by Lance Nelson, (16) "Strategies of Vedic Subversion: The Emergence of Vegetarianism in Post-Vedic India" by Edwin Bryant, (17) "'A vast unsupervised recycling plant': Animals and the Buddhist Cosmos" by Ian Harris, (18) "Snake-kings, Boars' Heads, Deer Parks, Monkey Talk: Animals as Transmitters and Transformers in Indian and Tibetan Buddhist Narratives" by Ivette Vargas, (19) "Inherent Value without Nostalgia: Animals and the Jaina Tradition" by Christopher Chapple, (20) "Five-Sensed Animals in Jainism" by Kristi Wiley, (21) "'Of a tawny bull we make offering': Animals in Early Chinese Religion" by Roel Sterckx, (22) "Daoism and Animals" by E.N. Anderson and Lisa Raphals, (23) "Of Animals and Humans: The Confucian Perspective" by Rodney Taylor, (24) "Human Exceptionalism Versus Cultural Elitism (Or, 'Three in the morning, four at night')" by Roger Ames, (25) "Humans and Animals: The History from a Religio-Ecological Perspective" by Jordan Paper, (26) "A Symbol in Search of an Object: The Mythology of Horses in India" by Wendy Doniger, (27) "Animals in African Mythology" by Kofi Opoku, (28) "'Why Umbulka Killed His Master': Aboriginal Reconciliation and the Australian Wild Dog (*Canis lupus dingo*)" by Ian McIntosh, (29) "Knowing and Being Known by Animals: Indigenous Perspectives on Personhood" by John Grim, (30) "Animal Sacrifice: Metaphysics of the Sublimated Vision" by Kimberley Patton, (31) "Hunting the Wren: A Sacred Bird in Ritual" by Elizabeth Lawrence, (32) "*Ridiculus Mus*: Of Mice and Men in Roman Thought" by Christopher McDonough, (33) "Raven Augury from Tibet to Alaska: Dialectics, Divine Agency, and the Bird's-Eye View" by Eric Mortensen, (34) "On the *Dynamis* of Animals, or How *Animalium* Became *Anthropos*" by Diane Apostolos-Cappadona, (35) "Wild Justice, Social Cognition, Fairness, and Morality: A Deep Appreciation for the Subjective Lives of Animals" by Marc Bekoff, (36) "From Cognition to Consciousness" by Donald Griffin, (37) "Are Animals Moral Agents? Evolutionary Building Blocks of Morality" by Marc Hauser, (38) "Ethics, Biotechnology, and Animals" by Bernard Rollin, (39) "Animal Experimentation" by Kenneth Shapiro, (40) "Caring for Farm Animals: Pastoralist Ideals in an Industrialized World" by David Fraser, (41) "Agriculture, Livestock, and Biotechnology: Values, Profits, and Ethics" by Michael Fox, (42) "Agribusiness: Farming Without Culture" by Gary

Valen, (43) "Animal Law and Animal Sacrifice: Analysis of the U.S. Supreme Court Ruling on Santería Animal Sacrifice in Hialeah" by Steven Wise, (44) "'A very rare and difficult thing': Ecofeminism, Attention to Animal Suffering, and the Disappearance of the Subject" by Carol Adams, (45) "Interlocking Oppressions: The Nature of Cruelty to Nonhuman Animals and its Relationship to Violence Toward Humans" by Kim Roberts, (46) "Animal Protection and the Problem of Religion" by Peter Singer, (47) "Earth Charter Ethics and Animals" by Steven Rockefeller, (48) "Pushing Environmental Justice to a Natural Limit" by Paul Waldau, (49) "Conclusion: A Communion of Subjects and a Multiplicity of Intelligences" by Mary Evelyn Tucker, and (50) "Epilogue: The Dance of Awe" by Jane Goodall.

Waldhardt, R; Simmering, D; Otte, A, "Estimation and prediction of plant species richness in a mosaic landscape", Landscape Ecology 19 (no.2, 2004): 211-226(16).

Waldron, J. D., "Book Review, Francesco Di Castri and V. Balaji, Tourism, Biodiversity and Information (Leiden: The Netherlands: Backhuys, 2002)," Landscape Ecology 18(no. 2, 2003): 212-214.

Wales, C., and Mythen, G., "Risky Discourses: The Politics of Gm Foods," Environmental Politics 11(no.2, 2002): 121-44. (v.13,#4)

Walford, James, Phenomenology of the Sublime, Master's Thesis, Department of Philosophy, Lancaster University, September 1995.

Walford, James, Phenomenology of the Sublime, Master's Thesis, Department of Philosophy, Lancaster University, September 1995. (v7,#1)

Walford, N, "Agricultural adjustment: adoption of and adaptation to policy reform measures by large-scale commercial farmers," Land Use Policy 19(no.3, 2002): 243-257.

Wali, Mohan K., ed., Ecosystem Rehabilitation: Preamble to Sustainable Development. The Hague, Netherlands: SPB Academic Publishing, 1992. Vol. 1: Policy Issues. 230 pages. \$ 42.50. Vol. 2: Ecosystem Analysis and Synthesis. 388 pages. \$ 72.50. Restoration of degraded ecosystems--agricultural and grassland ecosystems, forests, wetlands--especially in Third World countries. With particular emphasis on how to mix policy and scientific issues. Wali is professor in the School of Natural Resources, The Ohio State University. (v3,#3)

Wali, Mohan K., "Does It Have to be a Faustian Bargain?" Pages 31-41 in K. P. Singh and J. S. Singh, eds., Tropical Ecosystems: Ecology and Management. New Delhi, India: Wiley Eastern Limited, 1992. "Modern man, with technological extravaganza, is mortgaging the future of natural resources for short-term gains." Adequate solutions to prevent a Faustian bargain require interdisciplinary effort from ecologists and other natural scientists, educators, economists, social scientists, media, politicians and statesmen. (v3,#3)

Walker, Brian and Henry Nix. "Managing Australia's Biological Diversity." Search (Australian and New Zealand Association for the Advancement of Science) 24(no. 6, July, 1993):173-178. Four particular gaps require attention: what and where is the biodiversity, what is its functional significance, what is needed for its persistence, and what are the appropriate management guidelines. Regional scale analyses of alternative combinations of land use can lead to policy decisions on an optimal land use target. Walker is with CSIRO Division of Wildlife and Ecology, Canberra; Nix is in environmental studies, Australian National University, Canberra. (v6,#3)

Walker, Brian, and Steffen, Will. Global Change and Terrestrial Ecosystems. New York: Cambridge University Press, 1996. 620 pages. \$120 cloth; \$44.95 paper. The early results of an international

scientific research program designed to address what will happen to our ability to produce food and fiber, and what effects there will be on biological diversity under rapid environmental change and how these changes to terrestrial ecosystems will feed back to further environmental change. (v7, #3)

Walker, Eric, "Dimensions of Philosophy: A Symposium on Albert Borgman's *Real American Ethics*," *Journal of Agricultural and Environmental Ethics* 21(2008):63-64.

The symposium papers are:

-Marion Hourdequin, "Reclaiming the Mundane: Comments on Albert Borgmann's *Real American Ethics*," 65-73.

-Paul B. Thompson, "Borgmann on Commodification: A Comment on *Real American Ethics*," pp. 75-84.

-Borgmann, Albert, "A Reply to my Critics," pp. 85-89.

Walker, Gregg B., Daniels, Steven E., "The Clinton Administration, the Northwest Forest Conference, and Managing Conflict: When Talk and Structure Collide", *Society and Natural Resources*, 9(No.1, 1996):77- .

Walker, J, Book Review: Vanishing Voices The Extinction of the World's Languages. By Daniel Nettle and Suzanne Romaine, Oxford University Press, 2000. Human Ecology 30(no.1, 2002):145-150. (v.13, #3)

Walker, Ken, and Crowley, Kate, ed., Australian Environmental Policy 2: Studies in Decline and Devolution. Sydney: UNSW PRESS University of New South Wales, 1999. 320 pp. ISBN 0 86840 673 2. Australian \$ 35.00 Twelve contributors: Examples: Crowley, Kate, "Explaining Environmental Policy: Challenges, Constraints and Capacity"; Adams, G., and Hine, M., "Local Environmental Policy Making in Australia"; Dovers, S., "Institutionalizing Ecological Sustainable Development: Promises, Problems, and Prospects." Walker is an analyst of environmental policy in Australia, author of The Political Ecology of Environmental Policy: An Australian Introduction. Crowley teaches environmental policy at the University of Tasmania. (v10,#4)

Walker, Kenneth, The Political Ecology of Environmental Policy: An Australian Introduction. Kensington, NSW: UNSW PRESS University of New South Wales, 1994. 349 pages. (v10,#4)

Walker, Laurence C., and Spicker, Monica I. "Mountains of Magadan: American Foresters Scout Siberia." Journal of Forestry 94, no.9 (1996): 16. (v7, #3)

Walker, Laurence C., "Bermuda: Island Paradise, Ecological Disaster," Journal of Forestry 96(No.11, 1999):36-. Bermuda was once covered with handsome forests of Juniperus but now has only remnant stands. Excessive harvesting, exotic escapes, and insect depredations have contributed to the decline of the species. (v.10,#2)

Walker, Laurence C. The North American Forests: The Geography, Ecology, and Silviculture. Boca Raton, FL: CRC Press, 1998. \$69.95. 464 pp. Thirteen chapters describe more than 100 forest cover types, involving several times that many species.

Walker, Martin J. "The Unquiet Voice of Silent Spring." The Ecologist 29(No. 5, August 1999):322- . Rachel Carson's 1962 book Silent Spring helped give birth to the modern environmental movement. But what was her real legacy? (v10,#4)

Walker, Mary L. "On Global Warming, No One is off the Hook." The Christian Science Monitor 89.81 (24 March 1997): 19.

Walker, PA, "Reconsidering 'regional' political ecologies: toward a political ecology of the rural

American West", Progress in Human Geography 27(no.1, 2003):7-24.

Walker, Paul A., and Faith, Daniel P. "DIVERSITY-PD: Procedures for Conservation Evaluation Based on Phylogenetic Diversity." Biodiversity Letters 2, no.5 (1994): 132. (v7, #3)

Walker, Peter A., "Political ecology: where is the policy?," Progress in Human Geography 30 (no.3, June 2006): 382-395 (14).

Walker, Peter A., "Political ecology: where is the ecology?," Progress in Human Geography 29(no.1, February 2005):73-82(10).

Walker, Richard. *The Country in the City: The Greening of the San Francisco Bay Area*. Seattle: University of Washington Press, 2007. Walker presents an environmental history of how the jigsaw geography of Bay area's greenbelt came into existence from the origins of recreational parks and coastal preserves in John Muir's time to contemporary conservation easements and movements to stop toxic pollution. Lessons can be drawn for fundamental debates in environmental history, geography, and urban planning.

Walker, Ruth, "US Seen as Slow to Join Cleanup of Earth's Air." The Christian Science Monitor, vol. 89, 10 March 1997, pp. 8.

Walker, Ruth. "World Airs Worries Over Pollution Cuts." Christian Science Monitor 89 (31 July 1997): 6. (v8,#3)

Walker, Ruth. "Germany's Greens See Red Over Nuclear-Waste Storage." The Christian Science Monitor, vol. 89, 6 March 997, p. 6.

Walker, Sam, "Kinder, Gentler Hens for the '90s," The Christian Science Monitor 86 (4 October 1994): 11. (v5,#3)

Walker, Sam. "New York Sludge Loses Charm in Texas Town." The Christian Science Monitor, vol. 89, 30 D3c. 1996, pp. 1-4.

Walker, Sam. "Cooper Lake's New Name Stirs Populist Ire of a Texas Town." The Christian Science Monitor, vol. 88, 30 Oct. 1996, p. 1, 18.

Walker, Sam. "A Story of Pluck, Pride, and Bags of Sand." The Christian Science Monitor 89.105 (25 April 1997): 1.

Walker, Sam. "Texas Officer Perfects Art of Lassoing Emus." The Christian Science Monitor, vol. 89, 6 March 1997, pp. 1, 18.

Walker, Stephen. Animal Thought. Reviewed in Environmental Ethics 6(1984):275-76.

Wall, D, "Review of: Roger Burbach, Globalization and Postmodern Politics: From Zapatistas to High-Tech Robber Barons," Environmental Politics 11(no.4, 2002).

Wall, D., "Review of: Matthew Gandy, Concrete and Clay: Reworking Nature in New York City," Environmental Politics 12(no. 2, 2003): 171-172.

Wall, D., "Review of: Joel Kovel, The Enemy of Nature," Environmental Politics 12(no. 1, 2003): 254. (v 14, #3)

Wall, Derek, ed., Green History: A Reader in Environmental Literature, Philosophy, and Politics. London: Routledge, 1994. 271 pages. Dozens of mostly quite short excerpts, from all over the spectrum of literature, philosophy, and politics. Ancient wisdom, ecology and early civilizations, Gaia, philosophical holism, the web of life, against growth, sustainable development, the Frankenstein factor (genetic engineering), peaceful protest, the city and the country, eco-feminism, spiritual awakenings, green revolutionaries, green politics, utopias. One theme is that today's environmental issues were already problems in the past. Wall teaches economics at the University of West England. (v7,#1)

Wall, Derek. Review of Ian Welsh, "Mobilising Modernity: The Nuclear Moment", Organization and Environment, 15, (No. 3, 2002): 342-4. Derek Wall is an honorary fellow at the Centre for the Study of Social and Political Movements, University of Kent at Canterbury, England. (v.13, #3)

Wall, Derek. Review of Robert J. Brulle, "Agency, Democracy and Nature: The US Environmental Movement from a Critical Theory Perspective", Organization and Environment, 15, (No. 4, 2002): 501-504. Wall is an honorary fellow at the Centre for the Study of Social and Political Movements, University of Kent at Canterbury, UK.

Wall, James M., "Expanding our Identification Horizons," Christian Century, August 7-14, 1991. We need to be able to empathize far beyond our immediate circle. One sign of this is the growing interest in environmentally friendly products. The Wall Street Journal, extrapolating from the sense of guilt over disposable diapers, predicts that by the year 2000 it will be very difficult to sell products that are not environmentally responsible. (v2,#3)

Wallace, Aurora, "Missing Twins," Philosophy and Geography 5 (No. 1, 2002): 13-17. Contribution to a symposium on the events of September 11, 2001 in New York City. Wallace is in the Department of Culture and Communications at New York University. (P&G)

Wallace, George N., "Law Enforcement and the `Authority of the Resource,'" Legacy: Journal of the National Association for Interpretation 1(no. 2, October/November, 1990):4-8. Moral and behavioral appeals based on the authority of law versus appeals based on respect for nature. "Wild nature can be said to have its own authority. Nature has her own rules, operates in certain ways; there are consequences when we violate that order. ... Desirable behavior is more likely to occur if people understand how their actions affect the way nature operates." "Once the person understands what is happening in nature, or in the wilderness experience of others, ... they will want to stop what is recognized as undesirable behavior." Wallace is in the Department of Recreation Resources at Colorado State University. (v2,#1)

Wallace, Mark I., "The Wild Bird Who Heals: Recovering the Spirit in Nature," Theology Today 50 (no. 1, 1993):13-28. The Bible's creation hymns teach us that we are earth creatures, mud people, molded by the cosmic potter out of the clay of earth. But many of us in the postmodern West construe ourselves differently as denizens of a shopping-mall, temperature-controlled, throw-away world in which we have little need for reidentification with the primitive soil of our ancestral origins. Others, however, hunger for a renaturalized Christianity where the palpable sense of divine presence can be touched and tasted and heard and smelled in the push and pull of natural beings and forces. Wallace is in religious studies at Swarthmore College. (v5,#4)

Wallace, Mark I. *Finding God in the Singing River: Christianity, Spirit, Nature*. Minneapolis: Fortress Press, 2005.

Wallace, Mart I., Fragments of the Spirit: Nature, Violence, and the Renewal of Creation. New York: Continuum, 1996. 237 pages. \$ 29.95. (v7,#2)

Wallace, Mary G., Cortner, Hanna J., and Burke, Sabrina, "Taming Nature: The Enlightenment's Legacy for the Future," Journal of Forestry 94(Nov., # 11, 1996):39-44. The very ideals of the Enlightenment--reason and science--at times have been destructive, especially in their treatment of the natural world. America's Western frontier was a geographic testing ground for Enlightenment thought. Forestry as applied science is overshadowed by this worldview. We need new theoretical principles that retain the best of the Enlightenment thought but discard its dark sides. Critical theory can greatly help. With much citation of M. Horkheimer and T. Adorno, J. Dryzek. Rather surprising to see critical theory applied to forestry. The authors are associated with the Water Resources Research Center, University of Arizona. (v9,#1)

Wallace, RL, "Social Influences on Conservation: Lessons from U.S. Recovery Programs for Marine Mammals", Conservation Biology 17(no.1, 2003):104-115.

Wallach, Bret, At Odds With Progress: Americans and Conservation (Tempe: University of Arizona Press, 1991). Conservation in America is a distinctively American expression of an almost universal uneasiness about the character of the modern world. Environmental conservation strikes far deeper than the technical concerns of specialists. Those who care about the natural world should confess it, instead of hiding forever behind the masks of utility or compassion or even science. Wallach is a geographer. (v2,#1)

Wallach, Bret, At Odds with Progress: Americans and Conservation. 255 pages, \$ 24.95. Tuscon: University of Arizona Press, 1991. How ambivalence toward progress is a distinctively American expression of uneasiness about the character of the modern world. (v2,#4)

Waller, Bruce N., The Natural Selection of Autonomy (Albany, NY: State University of New York Press, 1998). 193 pages. \$ 18.00 paper. Challenges the traditional assumption that autonomy, morality, and moral responsibility are uniquely human characteristics. Genuine open alternatives are valuable for providing adapted fit for both for humans and other animals, and human reason strengthens, rather than creates, autonomous behavior. Waller finds the evolution of autonomous moral behavior in many species, including but not limited to, human animals. Waller is in philosophy, Youngstown State University. (v.9,#3)

Waller, David, "A Vegetarian Critique of Deep and Social Ecology," Ethics and the Environment 2(1997):187-197. For all their antagonism, deep and social ecology do share at least this much: a lack of interest in the issues of animal rights, animal welfare, and vegetarianism. I argue that this disinterest is inconsistent with deep and social ecology's practical programs and philosophical foundations. Furthermore, while they ignore the animals' case for special moral recognition, both schools nevertheless exploit our special feelings (pro and con) toward animals in order to advance their own agendas concerning nature. Waller teaches philosophy at California State University, Fullerton. (E&E)

Waller, Donald. "Wilderness Redux," Wild Earth 6(1996):36. (v8,#1)

Waller, Michael. "Gepolitics and the Environment in Eastern Europe." Environmental Politics 7(no.1, Spring 1998):29- . (v10,#4)

Wallin, Luke, "The Stranger on the Green," Philosophy and Geography 2 (1998): 99-113. Wallin is an associate professor of English at the University of Massachusetts, a Senior Research Associate at the Center for Policy Analysis, and presently Visiting Fullbright Professor at University College Dublin. (P&G)

Wallinger, RS, "Whither the Future of US Forest Industry and American Forestry?," Journal of Forestry 103 (no. 7, Oct/Nov 2005): 368-369.

Wallington, Tabatha J., Richard J. Hobbs and Susan A. Moore, "Implications of Current Ecological Thinking for Biodiversity Conservation: A Review of the Salient Issues," Ecology and Society 10: 15 (1 September 2005). A paradigm shift has occurred in ecology, from equilibrium thinking to non-equilibrium thinking, but this is not represented in management decisions for conservation. Part of the problem is that field observations have yet to provide compelling evidence for many of the relationships suggested by non-equilibrium ecology. Part of the problem is how radical the new paradigm is, since many of the claims of old ecology are still true at certain times, places, and scales. Nevertheless, non-equilibrium ecology ought increasingly be applied to management. One result favors more hands-on management and recognition that humans and nature are more entwined than before. Wallington is in social science, University of Queensland, Moore in environmental science, Murdoch University, Australia. Online. URL: <http://www.ecologyandsociety.org/vol10/iss1/art15/>

Wallington, Tabatha J., Hobbs, RI, Moore, Susan A. "Implications of Current Ecological Thinking for Biodiversity Conservation: A Review of the Salient Issues. Ecology and Society 10 (2005): 15.

Wallington, Tabatha J. and Susan A. Moore, "Ecology, Values, and Objectivity: Advancing the Debate," BioScience 55(2005):873-878. The authors used a Delphi-based study of the role of values and their interpretations of ecological science in eight well-known ecologists. This involves several rounds of anonymous exchange of views looking at how empirical data is viewed differently depending on larger scientific and social contexts. Wellington is in social science, University of Queensland, Moore in environmental science, Murdoch University, Australia.

Walls, Margaret, and Karen Palmer, "Upstream Pollution, Downstream Waste Disposal, and the Design of Comprehensive Environmental Policies," Journal of Environmental Economics And Management 41(no.1, Jan. 2001): 94-. (v.12,#3)

Walls, Margaret Palmer, Karen, "Upstream Pollution, Downstream Waste Disposal, and the Design of Comprehensive Environmental Policies," Journal of Environmental Economics and Management 41(no.1, JAN 01 2001):94-. (v.12,#4)

Waloszcyk, Konrad, Planeta nie tylko ludzi (Not Only Humans' Planet), PIW, 1997. In Polish. (v9,#2)

Waloszcyk, Konrad, Kryzys ekologiczny w swietle ekofilozofii (The Ecological Crisis in the Light of Ecophilosophy), Wydawnictwo Politechniki Lodzkiej, 1996. In Polish. (v9,#2)

Walpole, Matthew J., Harold J. Goodwin, and Kari G.R. Ward, "Pricing Policy for Tourism in Protected Areas: Lessons from Komodo National Park, Indonesia," Conservation Biology 15(no.1, Feb. 2001): 218-. (v.12,#3)

Walpole, MJ; LeaderWilliams, N, "Tourism and flagship species in conservation," Biodiversity and Conservation 11(no.3, 2002):543-547. (v.13, #3)

Walter, Bob, Lois Arkin and Richard Crenshaw, Sustainable Cities: Concepts and Strategies for Eco-City Development. Los Angeles: Eco-Home Media, 1992. 354 pages. \$ 20. (v4,#1)

Walter, K. S., and Gillett, H. J., eds. 1997 IUCN Red List of Threatened Plants. Gland, Switzerland and Cambridge, U.K.: IUCN - The World Conservation Union, 1998. (v.10,#1)

Walter, Robert C., and Dorothy J. Merritts. "Natural Streams and the Legacy of Water-Powered Mills."

Science Vol. 319, no. 5861(18 January 2008): 299-304. New England streams were multithread channels before the Europeans built dams, contrary to the prevailing account that they were meandering single channels. Also the authors find much of the soil of New England stripped from upland farms and impounded behind mill dams. Situations may be similar elsewhere in the US and beyond. For commentary, see "Dreams of Natural Streams" by David R. Montgomery (*Science* Vol. 319, no. 5861 (18 January 2008): 291-92).

Walters, BB, "Local Management of Mangrove Forests in the Philippines: Successful Conservation or Efficient Resource Exploitation?", *Human Ecology* 32 (no.2, 2004): 177-195(19).

Walters, Kerry S. and Portmess, Lisa, eds. *Ethical Vegetarianism: From Pythagoras to Peter Singer*. Albany: State University of New York Press, 1999. Review by Alan Carter, *Environmental Values* 10(2001):270. (EV)

Walters, Kerry S., and Portmess, Lisa, eds., *Religious Vegetarianism: From Hesiod to the Dalai Lama*. Albany: SUNY Press, 2001. Both editors are in philosophy at Gettysburg College, Gettysburg, PA. (v.12,#2)

Walters, Kerry S., and Portmess, Lisa, eds., *Ethical Vegetarianism: From Pythagoras to Peter Singer*. Albany, NY: State University of New York Press, 1999. (v.11,#1)

Walters, Kerry S., and Portmess, Lisa, eds., *Ethical Vegetarianism: From Pythagoras to Peter Singer*. Albany, NY: State University of New York Press, 1999. (v10,#4)

Walters, Laurel Shaper, "Cleaning Out the World's Biggest Basement: After 180 Years of Tourism, the United States Park Service Takes Steps to Protect Mammoth Cave National Park," *The Christian Science Monitor* 86 (27 September 1994): 12-13. (v5,#3)

Walters, Laurel Shaper. "Rare Plants Are Stalked and Captured on Film." *The Christian Science Monitor*, 14 March 1995, p. 10. An exhibit of 35 rare, fragile, and beautiful plants, by photographer Maryl Levine, will be at the Missouri Botanical Garden, St. Louis, the Houston Museum of Natural Science, and the New Mexico Museum of Natural History and Science, Albuquerque. (v6,#1)

Walters, Laurel. "The Legacy of an Unnatural Disaster." *The Christian Science Monitor* 89.103 (23 April 1997): 4.

Walters, Laurel Shaper, "A Mississippi County Grows Casinos Instead of Cotton," *The Christian Science Monitor* 86 (13 September 1994): 10-11. (v5,#3)

Walters, R. D. M. and Samways, M. J., "Sustainable Dive Ecotourism on a South African Coral Reef," *Biodiversity and Conservation* 10(no.12, 2001): 2167-79. (v.13,#2)

Walters, Bradley B., Bonnie J. McCay, Paige West, and Susan Lees, eds. *Against the Grain: The Vayda Tradition in Human Ecology and Ecological Anthropology*. Lanham, MD: Rowman & Littlefield, 2008. Contents include: (1) "Introduction" by Bradley B. Walters and Bonnie J. McCay, (2) "An Intellectual History of Ecological Anthropology" by Bonnie J. McCay, (3) "Maori Warfare: Prefiguring Contemporary Directions in Ecological Science" by Richard Scaglione, (4) "Explaining Causes in Evolving Contexts: From Nepali Hill Farmers to Business Managers in Thailand" by Gunnar Haaland, (5) "Events, Politics, and Environmental Change" by Bradley B. Walters, (6) "Orthodoxy and Revision in West African Guinea Savanna Ecology" by A. Endre Nyerges, (7) "Looking for Cause with All the Small Changes: Using Event Ecology to Find Human Causes of Biological Invasions" by David J. Bart, (8) "Shell Games on the Water Bottoms of Louisiana: Investigative Journalism and Anthropological Inquiry"

by Thomas R. McGuire, (9) "Process in an Eventful Environment" by Christine Padoch, Miguel Pinedo-Vasquez, and Andrew Roberts, (10) "A New Guinea Culture-Bound Syndrome Revisited: Humility and Monological Authority in Anthropology" by Paul Roscoe, (11) "Deductive-nomological vs. Causal-mechanistic Explanation: Relative Strengths and Weaknesses in Anthropological Explanation" by Lawrence A. Kuznar and Kenneth Long, (12) "Vayda Blues: Explanation in Darwinian Ecological Anthropology" by Catherine Driscoll and Stephen Stich, (13) "What Kind of Anthropology for Successful Conservation Management and Development?" by Cristina Eghenter, (14) "Environmental Conservation and Social Life in Papua New Guinea" by Paige West, (15) "The Concept of Human Agency in Contemporary Conservation and Development Discourse" by Michael Dove, Andrew Mathews, Keely Maxwell, Jonathan Padwe, and Anne Rademacher, (16) "Using Progressive Contextualization to Understand a Rural Development Success Story in Indonesian Borneo" by Patricia Vondal, (17) "From Understanding to Action: Building on Anthropological Approaches to Influence Policymaking" by Carol J. Pierce Colfer, (18) "The Relevant Context: Environmental Consequences of Images of the Future" by Gerard A. Persoon and Padmapani L. Perez, (19) "Indigenous Knowledge and *In Situ* Crop Germplasm Conservation" by Indah Setyawati, and (20) "Causal Explanation as a Research Goal: A Pragmatic View" by Andrew P. Vayda.

Walters, Bradley B., Bonnie J. McCay, Paige West, and Susan Lees, eds. *Against the Grain: The Vayda Tradition in Human Ecology and Ecological Anthropology*. Lanham, MD: Rowman & Littlefield, 2008. Contents include: (1) "Introduction" by Bradley B. Walters and Bonnie J. McCay, (2) "An Intellectual History of Ecological Anthropology" by Bonnie J. McCay, (3) "Maori Warfare: Prefiguring Contemporary Directions in Ecological Science" by Richard Scaglione, (4) "Explaining Causes in Evolving Contexts: From Nepali Hill Farmers to Business Managers in Thailand" by Gunnar Haaland, (5) "Events, Politics, and Environmental Change" by Bradley B. Walters, (6) "Orthodoxy and Revision in West African Guinea Savanna Ecology" by A. Endre Nyerges, (7) "Looking for Cause with All the Small Changes: Using Event Ecology to Find Human Causes of Biological Invasions" by David J. Bart, (8) "Shell Games on the Water Bottoms of Louisiana: Investigative Journalism and Anthropological Inquiry" by Thomas R. McGuire, (9) "Process in an Eventful Environment" by Christine Padoch, Miguel Pinedo-Vasquez, and Andrew Roberts, (10) "A New Guinea Culture-Bound Syndrome Revisited: Humility and Monological Authority in Anthropology" by Paul Roscoe, (11) "Deductive-nomological vs. Causal-mechanistic Explanation: Relative Strengths and Weaknesses in Anthropological Explanation" by Lawrence A. Kuznar and Kenneth Long, (12) "Vayda Blues: Explanation in Darwinian Ecological Anthropology" by Catherine Driscoll and Stephen Stich, (13) "What Kind of Anthropology for Successful Conservation Management and Development?" by Cristina Eghenter, (14) "Environmental Conservation and Social Life in Papua New Guinea" by Paige West, (15) "The Concept of Human Agency in Contemporary Conservation and Development Discourse" by Michael Dove, Andrew Mathews, Keely Maxwell, Jonathan Padwe, and Anne Rademacher, (16) "Using Progressive Contextualization to Understand a Rural Development Success Story in Indonesian Borneo" by Patricia Vondal, (17) "From Understanding to Action: Building on Anthropological Approaches to Influence Policymaking" by Carol J. Pierce Colfer, (18) "The Relevant Context: Environmental Consequences of Images of the Future" by Gerard A. Persoon and Padmapani L. Perez, (19) "Indigenous Knowledge and *In Situ* Crop Germplasm Conservation" by Indah Setyawati, and (20) "Causal Explanation as a Research Goal: A Pragmatic View" by Andrew P. Vayda.

Waltner-Toews, David, "One Ecosystem, One Food System: the Social and Ecological Context of Food Safety Strategies", *Journal of Agricultural and Environmental Ethics* 4(1991):49-59. Eating is the most intimate relationship people can have with their environment. As people have migrated, in very large numbers, from various parts of the globe, as well as from the countryside to the city, they have brought to their new homes not only their intimate familial relationships, but also their intimate environmental relationships. Intra- and inter-national trade in human foods and animal feeds amounting to billions of dollars annually support these transplanted eating habits. Infectious disease agents, toxins and

environmental contaminants of all sorts are globally distributed along with these foods. Furthermore, the internationalization of a substantial portion of the food industry, along with urbanization, has resulted in unrealistic consumer perceptions of food, and fostered ecologically and socially unsound food production and food safety practices, which themselves are creating new food safety problems. Effective food safety strategies, which by necessity must account for the contamination of the environment in which the food is grown, as well as the environments through which it passes on the way to the consumer, need to be global in both breadth (socially and geographically) and depth (ecologically). As well, the desire for democratic social control now evident throughout the world, along with this diversity of culinary tastes, suggest that a successful global food safety strategy would do well to reflect the kinds of diversity and complex interactions seen in natural ecosystems.

Waltner-Toews, David, James J. Kay, and Nina-Marie E. Lister. *The Ecosystem Approach: Complexity, Uncertainty, and Managing for Sustainability*. New York: Columbia University Press, 2008. This book is directed toward engineers, scientists, and sustainable development scholars and practitioners who are sympathetic to the Resilience Alliance—an international group of scientists who adhere to a holistic view of ecology and environmental problem solving. Using a variety of case studies, the authors discuss ecosystems ecology, the relationship between science and values, governance in complex systems, participatory and systematic approaches to management, and the role of cultural diversity in global sustainability.

Waltner-Toews, David, James J. Kay, and Nina-Marie E. Lister. *The Ecosystem Approach: Complexity, Uncertainty, and Managing for Sustainability*. New York: Columbia University Press, 2008. This book is directed toward engineers, scientists, and sustainable development scholars and practitioners who are sympathetic to the Resilience Alliance—an international group of scientists who adhere to a holistic view of ecology and environmental problem solving. Using a variety of case studies, the authors discuss ecosystems ecology, the relationship between science and values, governance in complex systems, participatory and systematic approaches to management, and the role of cultural diversity in global sustainability.

Walton, Bryan; Bailey, Conner, "Framing Wilderness: Populism and Cultural Heritage as Organizing Principles," *Society and Natural Resources* 18(no.2, February):119-134(16).

Walton, J. S., Review of *Farm Animals and the Environment*, C. Phillips and J. Piggins, eds., *Journal of Agricultural and Environmental Ethics* 6(1993):217.

Walton, R. Brent, and Daniel J. Gunter, "United States v. Locke: The Supreme Court Preempts States from Protecting Their Navigable Waters and Marine Resources from Oil Tanker Spills," *Journal of Environmental Law And Litigation* 15(no.1, 2000): 37-. (v.12,#3)

Walton, W, "Liberating the land: the case for private land-use planning," *Land Use Policy* 19(no.4, 2002): 335-336.

Waltz, Daniel E. "Liability Under the Oil Pollution Act of 1990: Just How Limited Is It?" *Journal of Environmental Law and Practice* 3, no.2 (1995): 16. Understanding the subtleties of the OPA can help avert substantial penalties. (v7, #3)

Wan Dan, "Ecological ethic and cultural relativism", *Journal of Wuhan University*. 2001(5)

Wandén, Stig, *Etik och Miljö: De Svåra Vägvalen i ny Belysning (Ethics and Environment: New Light on Difficult Choices)*. (in Swedish) Stockholm: Norstedts Juridik, 1992. 176 pages. Paper. ISBN 91-38-50091-4. Hard environmental choices penetrate ever deeper into our everyday life--cars, containers, consumption, a richer life--and the problems are more acute abroad. The poor of developing nations have

to burn down rainforests to live. All this raises new and difficult ethical questions, that Wanden analyzes. Chapter titles, and some subsections: Chapter 1, Environmental Management and Ethics. Ethics in general, four types of theories of ethics. Chapter 2. Individualistic Ethics. Pure individualism, modified individualism. Social utilitarianism, just distribution, individualism and the environment, individualism as a methodological principle. Chapter 3. Social Ethics. Humanistic ethics, totalitarian ethics, social ethics and the environment, postmodernist criticism. Chapter 4. Ecological Ethics. Shallow ecology, deep ecology, fundamentalist ecology. Chapter 5. Religious Ethics. Nature as an object, divine nature. Chapter 6. Maximizing in Brief. Chapter 7. The Usefulness of Ethics. Which ethics is best? Applying ethics, ethics and environmental politics. Chapter 8. Ethics, Growth, and Environment. The friends of technique, the friends of nature, rosebud or cancerous tumor? Is there a final solution? Chapter 9. Philosophical Epilogue. Wandén is an economic analyst at the Naturvårdsverket (Directorate for Environmental Management) in Stockholm and he also has a philosophical background. (Thanks to Per Ariansen, Oslo, for the translation and to Getachew Woldemeskel, Swedish Collegium for Advanced Study in the Social Sciences - SCASS -, Uppsala, for obtaining the book.) (v4,#4)

Wang Chanbing, "Anthropocentrism and Environmental Ethics," Xiangtan Daxue Xuebao (Journal of Xiangtan University) 3(1999):31-33. In Chinese. (v.11,#1)

Wang Fengnian, Li Zhengfeng, "The eco-ethical implication of daoist consumption idea", Journal of Tsinghua University 2002(6)

Wang Fengzheng, "A Analysis of Anthropocentrism," Songliao Xuekan (Songliao Magazine) 2(1999):12-13. In Chinese. (v.11,#1)

Wang, Grace A., Anderson, Dorothy H., Jakes, Pamela J., "Legislating the Past: Cultural Resource Management in the U.S. Forest Service", Society and Natural Resources, 9(No.1, 1996):3- .

Wang, Guangyu, John L. Innes, Jiafu Lei, Shuanyou, and Sara W. Wu. "China's Forestry Reforms." *Science* Vol. 318, no. 5856 (7 December 2007): 1556-57. Forestry management policies in China have changed direction to encourage sustainability while balancing land-use, economic growth, and demand for forest products. Past government policies have favored economic growth over the environment, but the central government has now proposed a science-based approach designed to realize balanced sustainable development. However, in practice, local governments continue to put economic growth ahead of any concern for the environment, which has led critics to call for stronger governmental control.

Wang Guopin, "Protect the Vitality and Diversity of Planet Earth." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no.1 (March 30, 2000). In Chinese. (EE v.12,#1)

Wang Guopin. "Values Dimension of Ecological Civilization: Sustainable Orientation." *Journal of Nanjing Forestry University* No. 4 (2007): 12-17.

Wang Guoping, "The scientific foundation of environmental ethics and its principle", Journal of Nanjing Forest University 2002(1)

Wang Guoping, "The Wisdom of Eco-ethic in Chinese Traditional Culture," Kexuejishu yu Bianzhengfa (Science, Technology and Dialectics) 1(1999):33-37. In Chinese. (v.11,#1)

Wang Guoping, "The Historical Turn of Philosophy from Culture to Nature", Kexuejishu Yu Bianzhengfa (Science, Technology and the Dialectics of Nature) 5(2000): 1-5. In Chinese. (EE v.12,#1)

Wang Guoping, "Protecting the Vitality and Diversity of Planet Earth", Huanjing Yu Shehui

(Environment and Society) 1(2000): 1-7. In Chinese. (EE v.12,#1)

Wang Haiming. "On Intrinsic Value of Nature." *Journal of Renmin University of China* No. 6 (2002): 35-40.

Wang, Hua. "Treatment of "Don't-Know" Responses in Contingent Valuation Surveys: A Random Valuation Model," *Journal of Environmental Economics and Management* 32(1997):219. (v8,#1)

Wang Nanlin, "The sustainable development environmental ethics: a new environmental ethics theory", *Journal of Nankai University* 2001(4).

Wang, Seng, "One Hundred Faces of Sustainable Forest Management," *Forest Policy and Economics* 6(2004):205-213. Sustainable forest management is complex and includes much more than economics; different accounts are underlain by important philosophical differences on human relationships to nature. An adaptive, contextualized knowledge approach is desirable for operationalizing sustainable forest management. Wang is at the Pacific Forestry Centre, Canadian Forest Service, National Resources Canada, Victoria, BC.

Wang Taoyang, "Environmental justice: the trends of environmental ethics", *Academic Journal of Zhejiang*, 2002(5)

Wang Taoyang, "Substance with Difference and Different Imaginations of Environment Analysis of the Theses in Environmental Ethics from the Perspective of Environmental Justice." *Philosophical Research* No. 3 (2003): 68-72.

Wang Taoyang. "Environmental Justice Movement and Its Impacts on Contemporary Environmental Ethics." *Seeker* No. 5 (2003): 27-31.

Wang Xiaohua, "Constructing a Grand Ethics of Trans-Anthropocentrism," *Shenzheng Daxue Xuebao (Journal of Shenzheng University)* 2(1999):52-58. In Chinese. (v.11,#1)

Wang Xiuzhu & Liu Yi, "The Environmental Effects of Free Trade." *Huanjing yu Shehui*, a Quarterly, (Environment and Society), vol.3, no.1 (March 30, 2000). In Chinese. (EE v.12,#1)

Wang Yunmei, "Respect life and love nature: on the ecological ethics of Buddhism", *Journal of Southeast University* 2001(2)

Wang Yunxia, and Li Jianshan. "Is Environmental Ethics an Applied Ethics." *Journal of Shanxi Normal University* No.3 (2006): 86-90.

Wang, Z., Carpenter, C. and Young, S.S., "Bird distribution and conservation in the Ailao Mountains, Yunnan, China," *Biological Conservation* 92(no.1, 2000):45- . (v.11,#1)

Wang Zeying, " A outline of eco-economic ethics", *Jiangxi Social Sciences*, 2001(2)

Wang Zhengping, "The Development of the Relationship Between Man and Nature: The Progress of Modern Morality," *Fazhan Luntan (The Forum of Development)* 6(1999):42-43. In Chinese. (v.11,#1)

Wang Zhengping, "Deep Ecology: A New Kind of Environmental Values", *Shanghai Shifandaxue Xuebao (Journal of Shanghai Normal University)* 4(2000): 1-4. In Chinese. (EE v.12,#1)

Wang Zhengping. *Environmental Philosophy: A Transdisciplinary Study of Environmental*

Ethics. Shanghai: Shanghai People's Press, 2004.

Wang Ziyang, ed. *Environmental Ethics: Theory and Practice*. Beijing: People's Press, 2007.

Wann, David. Deep Design: Pathways to a Livable Future. Reviewed by Robert Mugerauer. *Environmental Ethics* 22(2000):109-110.

Waples, Kelly A., Stagoll, Clifford S. "Roundtable: Ethical issues in the Release of Animals from Captivity," *Bioscience* 47(no.2, 1997):115. (v8,#1)

Wapner, Paul, Environmental Activism and World Civic Politics. Albany: State University of New York Press, 1996. 238 pages. \$ 16.95 paper. A detailed examination of the actions of several leading environmental nongovernmental organizations (NGO's), such as Greenpeace, the World Wildlife Fund, and Friends of the Earth, the author finds that the activities of nonstate actors are giving rise to influential forms of global governance that operate partially or even wholly outside the states system. Wapner teaches in the School of International Service at the American University, Washington. (v6,#4)

Wapner, Paul. "Politics beyond the State Environmental Activism and World Civic Politics," *World Politics* 47, no.3 (April 1995): 311- . (v6,#4)

Ward, Barbara. "Justice in a Human Environment." *IDOC International/North American Edition* 53 (May 1973): 25-36.

Ward, Bruce K., "Christianity and the Modern Eclipse of Nature: Two Perspectives," *Journal of the American Academy of Religion* 63(1995):823-843. Fyodor Dostoevsky is compared with Albert Camus. Both have a shared affirmation of the spiritual significance of nature, but there are revealing differences. Dostoevsky affirms nature's sanctity and presents it as compatible with Christianity and inseparable from it. Camus claims that Christianity, far from containing within itself a possible corrective to the modern denaturation of the world, has contributed to it. There is a tension between love of beauty in nature and love of neighbor. Ward teaches religious studies at Thorneloe College, Laurentian University, Sudbury, Ontario.

Ward, G. C., "India's Wildlife Dilemma," *National Geographic* 181(no. 5, 1992):2-28.

Ward, Geoffrey C., "Making Room for Wild Tigers," *National Geographic* 192 (no. 6, December 1997):2-35. Perilous, but not hopeless, the future of the world's few thousand tigers hinges on providing them with land, prey, and protection. (v.9,#3)

Ward, Hugh, "Citizens' Juries and Valuing the Environment: A Proposal," *Environmental Politics* 8(no. 2, Summer 1999):75- . (v.11,#1)

Ward, K, "Geography and public policy: a recent history of 'policy relevance'," *Progress in Human Geography* 29 (no. 3, June 2005): 310-319.

Ward, N, "Review of: Hilary Tovey and Michel Blanc (eds.), Food, Nature and Society: Rural Life in Late Modernity," *Environmental Politics* 11(no.4, 2002): 146.

Ward, N., "Review of: Hans Michelmann, James Rude, Jack Stable and G. Storey (Eds.), Globalization and Agricultural Trade Policy," *Environmental Politics* 12(no. 1, 2003): 256. (v 14, #3)

Wargo, John. Our Children's Toxic Legacy: How Science and Law Fail to Protect Us From Pesticides.

New Haven: Yale University Press, 1996. 400 pages. \$30. Children are more heavily exposed to some pesticides than adults and are especially vulnerable to some adverse effects. Fundamental reforms of science and law are necessary to manage the distribution of risk and contain the health risks faced by children. (v7, #3)

Warneken, Felix and Michael Tomasello, "Altruistic Helping in Human Infants and Young Chimpanzees," Science 311 (3 March 2006): 1301-1303. Human toddlers, not yet speaking, readily help when they see that an adult needs something (as something accidentally dropped). Young chimps do something of the same, but not very effectively. Companion article is: Melis, Alicia P., Brian Hare, and Michael Tomasello, "Chimpanzees Recruit the Best Collaborators," Science 311 (3 March 2006): 1297-1300. Commentary: Silk, Joan B., "Who Are More Helpful, Humans or Chimpanzees?" Science 311 (3 March 2006): 1248-1249.

Warner, Daniel M., "No Place of Grace: Recognizing Damages for the Loss of Home-Place," 8/2 Wisconsin Environmental Law Journal 3 (Spring 2002). A significant cause of the present disastrous state of the environment is our culture's refusal to recognize the value of place. In this paper it is argued that the loss or taking of one's home-place by another is the disruption of a sustaining and nurturing relationship--that homesickness is real. The law recognizes that compensation for loss of consortium, for the loss of the "intangible elements of a marriage relationship" is appropriate--such a loss is a kind of emotional distress. Similarly, damages should be awarded in case of the loss of one's home-place, and those damages should not be limited to the market-value of the place. (v 14, #3)

Warner, Joan, et al., "The Atlantic Century?" Business Week, February 8, 1999, pp. 64-67, and related stories. Once again, the U.S. and Europe are the twin drivers of the world economy. Experts once predicted that the opening world markets would be global; capitalism would open up into a unified system, enriching all nations. But not so. North America and Europe are the global anchors of prosperity and stability, while the rest of the world struggles in economic limbo. Europe is emerging as an equal to the United States, especially with the euro, the common currency, and a market (\$ 6.5 trillion, 9,100 listed companies) nearly the size of the U.S. market (\$ 8 trillion, 9,900 listed companies). The euro will soon become the equal of the dollar. But while North America and Europe increasingly look like twin pillars of global growth, the former stars of the world economy are in a tailspin. Japan is no longer a growth engine for Asia; China is more self-obsessed and protectionist. Nor does it seem that North America and Europe need the rest of the world for growth, so much as was once thought. The new divide between the haves and the have nots could be self-perpetuating; the rich will get richer and the poor poorer. (v.10,#1)

Warner, Keith Douglass. "Are Life Patents Ethical? Conflict Between Catholic Social Teaching and Agricultural Biotechnology's Patent Regime." Journal of Agricultural and Environmental Ethics 10(2001):301-319. Patents for genetic material in the industrialized North have expanded significantly over the past twenty years, playing a crucial role in the current configuration of the agricultural biotechnology industries, and raising significant ethical issues. Patents have been claimed for genes, gene sequences, engineered crop species, and the technical processes to engineer them. Most critics have addressed the human and ecosystem health implications of genetically engineered crops, but these broad patents raise economic issues as well. The Catholic social teaching tradition offers guidelines for critiquing the economic implications of this new patent regime. The Catholic principle of the universal destination of goods implies that genes, gene sequences, and engineered crop varieties are ineligible for patent protection, although the processes to engineer these should be eligible. Religious leaders are likely to make a more substantive contribution to debates about agricultural biotechnology by addressing these life patents than by speculating that genetic engineering is "playing God." Keywords: agricultural biotechnology, Catholic social teaching, economic justice, genetically modified food, patents, patents on life, patent regimes, social ethics. Warner is in the Department of Environmental Studies, University of California, Santa Cruz, Santa Cruz, CA. (JAE)

Warner, Melanie, "California Wants to Serve a Warning With Fries," New York Times, Sept. 21, 2005. <http://www.nytimes.com/2005/09/21/business/21chips.html?pagewanted=print>

The California attorney general filed suit against McDonalds, Burger King, and Frito-Lay, saying that they should be forced to put labels on all fries and chips warning of danger to health. French fries are the most consumed food in restaurants, soaked with trans fats, loaded with sodium and full of simple carbs, the bad kind. They are also full of a chemical called acrylamide, known to cause cancer in rats and mice--but not known to cause cancer in humans at the levels in French Fries. The U.S. Food and Drug Administration (F.D.A.) opposes the labelling on grounds that its investigation of the issue is incomplete.

Warner, Sara, Down to the Waterline: Boundaries, Nature, and the Law in Florida. Athens: University of Georgia Press, 2005. Do our rights end--or begin--at the water's edge? Analysis of the boundary separating public waters from private uplands. How advances in science and environmental attitudes have led to a more complex encounter with this ancient boundary. Public access and private ownership limits on some of Florida's most valuable land in economic terms, waterfront real estate, and, in ecological terms, marshes and wetlands.

Warner, Sara. *Down to the Waterline: Boundaries, Nature, and the Law in Florida*. Athens: University of Georgia Press, 2007. The boundary separating public waters from private uplands is a flashpoint between proponents of property rights and proponents of public trust protection. Coasts and the interior shorelines, and the wildlife and birds, are caught in the controversy.

Warner, Stanley, "Reproductive Liberty and Overpopulation: A Response," Environmental Values 13(2004):393-399. This appraisal of Carol A. Kates' "Reproductive Liberty and Overpopulation" challenges her call for world-wide population control measures - using compulsory methods if necessary - to save the world's environment. The most successful part of Kates' paper is her argument that reproductive rights are not infeasible and nonnegotiable, but that like many rights, they are conditional and open to a balancing of individual freedom against collective community interests. But her advocacy of mandatory state population controls is flawed in several respects. First, she underestimates the force of the emerging consensus for voluntary population reductions through policies that empower women. Second, she walks on difficult ethical grounds. Are compulsory controls on reproduction ethically justified simply because humans are loathe to take the alternative route of curtailing their 'individualistic' 'materialistic' appetites for more economic growth and consumption? Third, Kates fails to recognise that her search for measures that immediately and directly reverse population growth would necessitate coercing an entire generation of women toward zero reproduction in order for death rates to have their effect. Lastly, problems with the feasibility of her plan and the absence of international support make it unlikely it will ever come to pass. Alternatives to Kates' policies are discussed at the close. Warner is in social science, Hampshire College, Amherst, Massachusetts. (EV)

Warner, Stanley; Feinstein, Mark; Coppinger, Raymond; and Clemence, Elisabeth, "Global Population Growth and the Demise of Nature," Environmental Values 5(1996):285-301. Global human population expansion is rooted in a remarkably successful evolutionary innovation. The Neolithic transformation of the natural world gave rise to a symbiosis between humans and their domesticated plant and animal partners that will expand from a current 20 per cent to 60 percent of terrestrial biomass by the middle of the coming century. Such an increase must necessarily be accompanied by a concomitant decrease in wildlife biomass. We suggest that current trends in population growth are unlikely to abate for three reasons: first, there are intrinsic biological pressures to reproduce regardless of social engineering. Second, the character of the domestic alliance makes it a formidable competitor to wildlife; and third, the time frame before population doubling is, from a biological perspective, virtually instantaneous. We neither condone nor endorse this picture of inexorable population increase. Rather, we appeal for a change in the nature of the discussion of population among environmentalists, to focus on the question of

how best to manage what wildlife will be left on the margins of a domesticated world. (EV)

Warnock, M., "What is Natural? And Should We Care?" Philosophy 78(2003):445-459.

Warren, John, and Stevens, David P. "The Role of Genetics in Conserving Small Populations." Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Warren, Karen J. "The Power and the Promise of Ecological Feminism." Environmental Ethics 12(1990):125-46. Ecological feminism is the position that there are important connections--historical, symbolic, theoretical--between the domination of women and the domination of nonhuman nature. I argue that because the conceptual connections between the dual dominations of women and nature are located in an oppressive patriarchal conceptual framework characterized by a logic of domination, (1) the logic of traditional feminism requires the expansion of feminism to include ecological feminism and (2) ecological feminism provides a framework for developing a distinctively feminist environmental ethic. I conclude that any feminist theory and any environmental ethic which fails to take seriously the interconnected dominations of women and nature is simply inadequate. Warren is in the philosophy department, Macalester College, St. Paul, MN. (EE)

Warren, Karen J. "Environmental Justice: Some Ecofeminist Worries about a Distributive Model." Environmental Ethics 21(1999):151-161. I argue that the framing of environmental justice issues in terms of distribution is problematic. Using insights about the connections between institutions of human oppression and the domination of the natural environment, as well as insights into nondistributive justice, I argue for a nondistributive model to supplement, complement, and in some cases preempt the distributive model. I conclude with a discussion of eight features of such a nondistributive conception of justice. (EE)

Warren, Karen J., ed. Ecological Feminist Philosophies. Bloomington: Indiana University, 1996. (v7, #3)

Warren, Karen J., Ecofeminist Philosophy: A Western Perspective on What It is and Why It Matters. Lanham. MD: Rowman and Littlefield, 2000. Chapters: Nature is a feminist issue: Motivating ecofeminism by taking empirical data seriously. What are ecofeminists saying? An overview of ecofeminist positions. Quilting ecofeminist philosophy: A Western perspective on what ecofeminist philosophy is. How should we treat nature? Ecofeminist philosophy and environmental ethics. Ethics in a fruit bowl: Ecofeminist ethics. Must everyone be vegetarian? Ecofeminist philosophy and animal welfarism. What is ecological about ecofeminist philosophy? Ecofeminist philosophy, ecosystem ecology, and Leopold's land ethic. With justice for all: Ecofeminist philosophy and social justice. Surviving patriarchy: Ecofeminist philosophy and spirituality. Warren is professor of philosophy at Macalaster College. (v.11,#4)

Warren, Karen, ed., Ecological Feminism. (London: Routledge, 1994). Reviewed by Richard Twine. Environmental Values 6(1997):370-371. (EV)

Warren, Karen J., and Cheney, Jim, "Ecological Feminism and Ecosystem Ecology," Hypatia 6(no. 1, Spring 1991):179-197. Warren is in the Philosophy Department, Macalaster College, St. Paul, MN. Cheney is at the University of Wisconsin-Waukesha, Waukesha, WI 53188.

Warren, Karen and Nancy Tuana, eds., and others, "Feminism and the Environment," in American Philosophical Association, Newsletter on Feminism and Philosophy, Issue no. 90:3. Fall 1991. Includes an overview of the issues by Karen Warren, with a long bibliography; an interview with Eco-feminist Susan Griffin; Roger J. King, "Noddings, Care, and Environmental Ethics" (a discussion of Nel

Noddings, Caring: A Feminist Approach to Ethics and Moral Education); Laura Westra, "Towards Integrity in the Great Lakes Region: Some Feminist Considerations"; Carol J. Adams, "Developing Courses that Integrate Animal Rights and Feminism," with long bibliography; sample courses: Stephanie Lahar, University of Vermont, "Ecology and Women: The Ecofeminist Movement (1989)"; Karen J. Warren, Macalaster College, "Environmental Ethics and Feminism (1989)"; Greta Gaard, University of Minnesota-Duluth, "Ecofeminist Theories and Practices"; Carol J. Adams and Karen J. Warren, "Feminism and the Environment: A Selected Bibliography," ten pages long; and abstracts of Hypatia issue on ecological feminism. A second issue of the newsletter devoted to ecofeminism will follow. (v2,#4)

Warren, Karen J., Ecofeminist Philosophy: A western Perspective on What it is and Why it Matters. Lanham, MD: Rowman and Littlefield, 2000. Reviewed by Julie Cook, Environmental Values 12(2003):131-133. (EV)

Warren, Karen J. Review of Environmental Ethics. By Kristin S. Shrader-Frechette. Environmental Ethics 6(1984):175-79.

Warren, Karen J. and Jim Cheney. "Ecosystem Ecology and Metaphysical Ecology: A Case Study." Environmental Ethics 15(1993):99-116. We critique the metaphysical ecology developed by J. Baird Callicott in "The Metaphysical Implications of Ecology" in light of what we take to be the most viable attempt to provide an inclusive theoretical framework for the wide variety of extant ecosystem analyses--namely, hierarchy theory. We argue that Callicott's metaphysical ecology is not consonant with hierarchy theory and is, therefore, an unsatisfactory foundation for the development of an environmental ethic. Warren is in the philosophy department, Macalester College, St. Paul, MN. Cheney is in the philosophy department, University of Wisconsin at Waukesha, WI. (EE)

Warren, Karen J. Review of Chinnagounder's Challenge: The Question of Ecological Citizenship. By Deane Curtin. Environmental Ethics 24(2002):99-102. (EE)

Warren, Karen J., "Ecofeminism" (Environmental Ethics), Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 690-94. (v6,#2)

Warren, Karen J., "Response to my critics," Ethics and the Environment 7(no. 2, 2002):39-59.

Warren, Karen J. "Feminism and Ecology: Making Connections." Environmental Ethics 9(1987):3-20. The current feminist debate over ecology raises important and timely issues about the theoretical adequacy of the four leading versions of feminism--liberal feminism, traditional Marxist feminism, radical feminism, and socialist feminism. I present a minimal condition account of ecological feminism, or eco-feminism. I argue that if eco-feminism is true or at least plausible, then each of the four leading versions of feminism is inadequate, incomplete, or problematic as a theoretical grounding for eco-feminism. I conclude that, if eco-feminism is to be taken seriously, then a transformative feminism is needed that will move us beyond the four familiar feminist frameworks and make an eco-feminist perspective central to feminist theory and practice. Warren is in the philosophy department, Macalester College, St. Paul, MN. (EE)

Warren, Karen, ed. Ecological Feminism. New York: Routledge, 1994. 224 pages. \$14.95. Focuses on the philosophical aspects of ecological feminism. The conceptual underpinnings of "women-nature connections" and the importance of seeing sexism and the exploitation of the environment as parallel forms of domination. Basic questions of conceptual analysis and justification concerning eco-feminism and its philosophical foundations. Contains: Victoria Davion, "Is Ecofeminism Feminist?"; Deborah Slicer, "Wrongs of Passage: Three Challenges to the Maturing of Ecofeminism"; Douglas J. Buege, "Rethinking Again: A Defense of Ecofeminist Philosophy"; Val Plumwood, "The Ecopolitics Debate and

the Politics of Nature"; Christine J. Cuomo, "Ecofeminism, Deep Ecology, and Human Population"; David Kenneth Johnson and Kathleen R. Johnson, "The Limits of Partiality: Ecofeminism, Animal Rights, and Environmental Concerns"; Lori Gruen, "Towards an Ecofeminism Moral Epistemology"; Philip Payne, "Restructuring the Discursive Moral Subject in Ecological Feminism"; Jim Cheney, "Ecofeminism and the Reconstruction of Environmental Ethics"; Karren J. Warren, "Toward an Ecofeminist Peace Politics." Warren teaches philosophy at Macalester College. (v6,#1)

Warren, Karen J. Review of Ethics and the Environment. Edited by Donald Scherer and Thomas Attig. Environmental Ethics 6(1984):277-82.

Warren, Marion E. with Mame Warren. Bringing Back the Bay: The Chesapeake in the Photographs of Marion E. Warren and the Voices of Its People. Baltimore: Johns Hopkins University Press, 1994. \$ 45. A coffee table book with an interwoven text that reveals the problems and promises of the Chesapeake as one of the world's great estuaries. Photography is black and white and the text is from residents in the region.

Warren, Mary Anne, "The Moral Status of Nonhuman Life." Pages 370-385 in James P. Sterba, ed., Social and Political Philosophy: Contemporary Perspectives (London: Routledge, 2001). Sterba bridges anthropocentric and biocentric forms of environmental ethics with a compromise. He accords moral status to all living organisms, as well as to species and ecosystems, but retains a limited preference for human over nonhuman interests. I agree with this strategy, but disagree with the way in which his principles treat all nonhuman organisms as having essentially the same moral status. I argue that organisms of different species often differ in moral status, both because of differences in their intrinsic value, and because of their different relationships to human beings and terrestrial ecosystems. Warren is in philosophy at San Francisco State University. (v.12,#3)

Warren, Mary Ann. Moral Status: Obligations to Persons and Other Living Things. Oxford: Clarendon, 1997. Reviewed by Lawrence Johnson. Environmental Values 8(1999):517. (EV)

Warren, W. A., "Review of: Eckersley, Robyn. The Green State: Rethinking Democracy and Sovereignty," Society and Natural Resources 19 (no.4, Number 4/April 2006): 377-380 (4).

Warrick, Joby, "A Growing Approach To Saving Songbirds," Washington Post (1/4/99). Shade-grown coffee protects songbirds. Your morning cup of coffee may be contributing to the demise of the birds you listen to as you sip. The latest in environmentally-correct consumption involves buying specialty coffee grown in the shade of trees that are important habitat for migratory songbirds such as the wood thrush, Baltimore oriole, and numerous species of warbler. The U.S. coffee demand has skyrocketed. The U.S. now consumes one-third of the world's coffee; it is the No. 3 import after oil and steel. In order to meet the increased demand, farmers have been cutting the trees under which coffee bushes have traditionally been grown and using direct sunlight and chemicals to increase the yield. With the decline in rainforests, coffee plantations have become an increasingly important habitat (accounting for half the land cover in some Central American provinces). Currently none of the larger national coffee chains or food retailers market bird-friendly, 100 percent shade-grown coffee. Starbucks' consumer hotline is: 1-800-23-latte. (v.10,#1)

Warrick, Joby, "White House Predicts Low Cost for Pact on Warming," Washington Post (3/4/98): A1. See write up under: Hamilton, Martha, "Global Warming Gets a 2nd Look," Washington Post (3/3/98): C1. (v9,#2)

Warrick, Joby, "120 Countries to Try to Reach Pact On Phaseout of Toxic Compounds," Washington Post (6/28/98): A3. Worldwide phaseout of some toxic chemicals? In early July, 120 countries met in

Montreal to work on a U.N. treaty to phase out 12 chemicals including DDT, dioxins, and PCBs. These "persistent organic pollutants" travel long distances and concentrate in animal tissues. They are found in the bodies of marine creatures and humans thousands of miles from industrial centers. Levels of the toxins have remained constant for more than a decade, even though production of most have been banned in Western Countries for a quarter-century. At high levels, the chemicals damage the central nervous system, suppress immune responses, and disrupt reproductive systems. The World Wildlife Fund recently published a study suggesting a possible link between these chemicals and the recent die-offs of marine mammals. In developing countries, DDT remains the pesticide of choice in the fight against malaria, a major public health threat that kills almost three million people a year. The World Health Organization continues to endorse DDT as a "most valuable tool" for controlling malaria. (v9,#2)

Warrick, Jody, "Whose Shade of Green?" Washington Post (4/21/97): A1. Critics of environmental education making headway. Critics who charge that much environmental teaching is biased are fighting back with a new book and with industry-sponsored seminars on environmental education. Michael Sanera's "Facts Not Fear: A Parent's Guide to Teaching Children About the Environment" makes the case that many who teach about the environment are engaged in advocacy rather than instruction and that environmental education in general is teaching children slogans and dogma, rather than getting them to think critically about the environment. Companies are presenting seminars that promote industry-developed classroom materials. One brochure produced by Exxon touted the advantages of gasoline powered over electric vehicles. In response to these criticisms, Arizona has abolished mandatory environmental study in public schools and turned control of funds for environmental education over to loggers's and cattlemen's associations. (v8,#2)

Warrick, Jody, "U.N. Summit Reaches an Ineffectual End," Washington Post (6/28/97) A3; and Peter Baker and Paul Blustein, "Discord on Pollution Strains United Front as Summit Concludes," Washington Post (6/23/97): A1. Rio Plus Five falls flat. A meeting in New York City of 180 countries and 44 heads of state convened to assess progress in meeting goals of the 1992 Rio de Janeiro Earth Summit was marked by charges that the North was refusing to honor aid commitments to poorer countries of the South and criticism of the U.S. for refusing to agree to specific targets for reducing emissions of CO₂, the major greenhouse gas. The leaders failed to agree on a final political statement expressing global resolve to fight pollution. Some developing countries were blocking the agreement to protest the West's failure to honor aid commitments. Fierce criticism was directed at the U.S. for refusing to go along with a European proposal to reduce CO₂ emissions by 15 percent below the world's 1990 output by the year 2010. At a meeting in Denver of the major industrial powers the previous week, French President Jacques Chirac said "The Americans are great polluters when it comes to carbon dioxide. The average American emits three times the amount of carbon dioxide pollution as the average Frenchman." (Overall, the U.S. produces a quarter of world's greenhouse gases.) The Clinton administration is suggesting that the European goal may not be realistic and says it will propose specific targets to be included in a global warming treaty to be signed at an international meeting scheduled for December in Kyoto, Japan. (v8,#2)

Warriner, G. K., McSpurren, K. and Nabalamba, A., "Social Justice and Environmental Equity: Distributing Environmental Quality," Environments 29(no.1, 2001): 85-98. (v.13,#2)

Warshall, Peter. "The Biopolitics of the Mt. Graham Red Squirrel (*Tamiasciurus hudsonicus grahamensis*)." Conservation Biology 8(1994):977-988. Specific administrative actions within the U.S. Forest Service and the U.S. Fish and Wildlife Service and special interest politics by the Arizona Congressional delegation and the University of Arizona, together with an astronomical consortium, prevented an accurate assessment of the status of the Mt. Graham red squirrel and implementation of alternatives to insure its survival and recovery. Two telescopes have been constructed in the squirrel's critical habitat. Warshall is with Scientists for the Preservation of Mt. Graham, Tucson, AZ. (v6,#1)

Warwick, Hugh, "Guilty as charged," The Ecologist 30(no.7, OCT 01 2000):52- . Hugh Warwick reports from India on a unique 'citizens' jury' project, set up to decide the fate of GM crops. (EE v.12,#1)

Warwick, Hugh, "Terminator too," The Ecologist 30 (No. 3, 2000 May 01): 50- . Monsanto's initial terminator technology may have been abandoned, but its successor may be worse. (v.11,#4)

Wasby, Stephen L., ed., "He Shall Not Pass this Way Again": The Legacy of Justice William O. Douglas (Pittsburgh: University of Pittsburgh Press, 1990). An assessment on the 50th anniversary of the appointment of Douglas to the U. S. Supreme Court, with a section on Douglas as an environmentalist. (v2,#1)

Washington, S. H., "Review of: David Naguib Pellow. Garbage Wars: the Struggle for Environmental Justice in Chicago," Environmental History 8(no. 3, 2003): 499.

Washington, Sylvia Hood, Paul C. Rosier, and Heather Goodall, eds. *Echoes from the Poisoned Well: Global Memories of Environmental Injustice*. Lanham, MD: Lexington Books, 2006. Contents include: (1) "Citizen Activism for Environmental Health: The Growth of a Powerful New Grassroots Health Movement" by Lois Gibbs, (2) "Gendered Approaches to Environmental Justice: An Historical Sampling" by Nancy C. Unger, (3) "Fond Memories and Bitter Struggles: Concerted Resistance to Environmental Injustices in Postwar Native America" by Paul C. Rosier, (4) "'My Soul Looked Back': Environmental Memories of the African in America, 1600-2000" by Sylvia Hood Washington, (5) "Indigenous Peoples, Colonialism, and Memories of Environmental Injustice" by Heather Goodall, (6) "Racist Property Holdings and Environmental Coalitions: Addressing Memories of Environmental Injustice" by Bill E. Lawson, (7) "Racialized Spaces and the Emergence of Environmental Injustice" by K. Animashaun Ducre, (8) "Wadin' in the Water: African American Migrant Struggles for Environmental Equality in Cleveland, Ohio, 1928-1970" by Sylvia Hood Washington, (9) "Memories of (No)Place: Homelessness and Environmental Justice" by Cynthia J. Miller, (10) "Citizens against Wilderness: Environmentalism and the Politics of Marginalization in the Great Smoky Mountains" by Stephen Wallace Taylor, (11) "Environmental Justice, Urban Planning, and Community Memory in New York City" by Julie Sze, (12) Ferrell Parkway: Conflicting Views of Nature in a Mixed Use Community" by Jane Bloodworth Rowe, (13) "'We Come This Far By Faith': Memories of Race, Religion, and Environmental Disparity" by Sylvia Hood Washington, (14) "Suttésája: From a Sacred Sami Site and Natural Spring to a Water Bottling Plant? The Effects of Colonization in Northern Europe" by Rauna Kuokkanen with Marja K. Bulmer, (15) "What Lies Beneath? Cultural Excavation in Neocolonial Martinique" by Renée Gosson, (16) "Plight of the Rara'muri: Crises in Our Backyard" by Four Arrows, (17) "Main Streets and Riverbanks: The Politics of Place in an Australian River Town" by Heather Goodall, (18) "'Taking Us for Village Idiots': Two Stories of Ethnicity, Class, and Toxic Waste from Sydney, Australia" by Peggy James, (19) "The Mirrar Fight for Jabiluka: Uranium Mining and Indigenous Australians to 2004" by Jacqui Katona, (20) "Guardians of the Land: A Maori Community's Environmental Battles" by Rachael Selby and Putaka Moore, (21) "Parameters of Legitimation and the Environmental Future of a Taipei Neighborhood" by Anya Bernstein, (22) "Remembering the Mother River: The Impact of Environmental Injustice on National Identity in Contemporary China" by Jane Sayers, (23) "Environmental Justice and Popular Protest in Thailand" by John Walsh, (24) "'Aiee, Our Fields Will Be Destroyed': Dubious Science and Peasant Environmental Practices in Madziwa, Zimbabwe" by Guy Thompson, (25) "Shell International, the Ogoni People, and Environmental Injustice in the Niger Delta, Nigeria: The Challenge of Securing Environmental Justice in an Oil-based Economy" by Phia Steyn, and (26) "The Community, Industry, and Quest for a Clean Vaal River 1997-2004" by Elise and Johann Tempelhoff.

Washington, Sylvia Hood, Paul C. Rosier, and Heather Goodall, eds. *Echoes from the Poisoned Well: Global Memories of Environmental Injustice*. Lanham, MD: Lexington Books, 2006. Contents include:

(1) "Citizen Activism for Environmental Health: The Growth of a Powerful New Grassroots Health Movement" by Lois Gibbs, (2) "Gendered Approaches to Environmental Justice: An Historical Sampling" by Nancy C. Unger, (3) "Fond Memories and Bitter Struggles: Concerted Resistance to Environmental Injustices in Postwar Native America" by Paul C. Rosier, (4) "'My Soul Looked Back': Environmental Memories of the African in America, 1600-2000" by Sylvia Hood Washington, (5) "Indigenous Peoples, Colonialism, and Memories of Environmental Injustice" by Heather Goodall, (6) "Racist Property Holdings and Environmental Coalitions: Addressing Memories of Environmental Injustice" by Bill E. Lawson, (7) "Racialized Spaces and the Emergence of Environmental Injustice" by K. Animashaun Ducre, (8) "Wadin' in the Water: African American Migrant Struggles for Environmental Equality in Cleveland, Ohio, 1928-1970" by Sylvia Hood Washington, (9) "Memories of (No)Place: Homelessness and Environmental Justice" by Cynthia J. Miller, (10) "Citizens against Wilderness: Environmentalism and the Politics of Marginalization in the Great Smoky Mountains" by Stephen Wallace Taylor, (11) "Environmental Justice, Urban Planning, and Community Memory in New York City" by Julie Sze, (12) Ferrell Parkway: Conflicting Views of Nature in a Mixed Use Community" by Jane Bloodworth Rowe, (13) "'We Come This Far By Faith': Memories of Race, Religion, and Environmental Disparity" by Sylvia Hood Washington, (14) "Suttesája: From a Sacred Sami Site and Natural Spring to a Water Bottling Plant? The Effects of Colonization in Northern Europe" by Rauna Kuokkanen with Marja K. Bulmer, (15) "What Lies Beneath? Cultural Excavation in Neocolonial Martinique" by Renée Gosson, (16) "Plight of the Rara'muri: Crises in Our Backyard" by Four Arrows, (17) "Main Streets and Riverbanks: The Politics of Place in an Australian River Town" by Heather Goodall, (18) "'Taking Us for Village Idiots': Two Stories of Ethnicity, Class, and Toxic Waste from Sydney, Australia" by Peggy James, (19) "The Mirrar Fight for Jabiluka: Uranium Mining and Indigenous Australians to 2004" by Jacqui Katona, (20) "Guardians of the Land: A Maori Community's Environmental Battles" by Rachael Selby and Putaka Moore, (21) "Parameters of Legitimation and the Environmental Future of a Taipei Neighborhood" by Anya Bernstein, (22) "Remembering the Mother River: The Impact of Environmental Injustice on National Identity in Contemporary China" by Jane Sayers, (23) "Environmental Justice and Popular Protest in Thailand" by John Walsh, (24) "'Aiee, Our Fields Will Be Destroyed': Dubious Science and Peasant Environmental Practices in Madziwa, Zimbabwe" by Guy Thompson, (25) "Shell International, the Ogoni People, and Environmental Injustice in the Niger Delta, Nigeria: The Challenge of Securing Environmental Justice in an Oil-based Economy" by Phia Steyn, and (26) "The Community, Industry, and Quest for a Clean Vaal River 1997-2004" by Elise and Johann Tempelhoff.

Wasike, Wilson S. K. "Business and the Environment," Environmental Politics 4 (no. 3, Fall 1995): 488-497. (v6,#4)

Wasserman, David and Womersley, Mick and Gottlieb, Sara, "Can a Sense of Place Be Preserved?," Philosophy and Geography 3 (1998): 191-213. Wasserman is a research scholar at the Institute for Philosophy and Public Policy, School of Public Affairs, University of Maryland. Womersley is a trainee with Maryland Sea Grant at the University of Maryland. (P&G)

Wasserstrom, Richard A., Today's Moral Problems, 3rd edition. New York: Macmillan; London: Collier Macmillan, 1985. Chapter 7 is "Humans and the Nonhuman Environment." Readings, Tom Regan: "Ethical Vegetarianism and Commercial Animal Farming"; H. J. McCloskey, "Moral Rights and Animals"; John Passmore, "Preservation"; John Rodman, "The Liberation of Nature." (v2,#4)

Watanabe, M, "Describing the "Tree of Life": Attainable Goal or Stuff of Dreams?," Bioscience 52(no.10, 2002): 875-880.

Watanabe, M. E., "Origins of HIV: The Interrelationship between Nonhuman Primates and the Virus," BioScience 54(no. 9, 2004): 810-814(5). (v.14, #4)

Watanabe, Myrna E., "Origins of HIV: The Interrelationship between Nonhuman Primates and the Virus", BioScience 54(no.9, 1 September 2004):810-814(5).

Waterman, Laura, and Waterman, Guy. Backwoods Ethics: Environmental Issues for Hikers and Campers. Woodstock, VT: Countryman Press, 1993. I. Hikers: Who Are We? II. The New Ethic (low impact camping). III. Toward a Sense of Stewardship. IV. Four Unresolved Impact Issues: (1) Low-Impact Bushwacking. (2) Man's Best Friend--or Menace to Wilderness? (dogs in the wilds). (3) Rock Climbers and Their Environment. (4) Winter Camping--Tracks in More than the Snow (snow shelters, igloos, snow caves, trenches, impact on vegetation). Foreword by Bill McKibben.

Waterman, Laura, Waterman, Guy. Wilderness Ethics: Preserving the Spirit of Wilderness. Woodstock, VT: Countryman Press, 1993. 240pp. \$14 paper. Preserving the spiritual dimension of wilderness, and the conflicting values presented by the need to manage and protect the physical environment. Written in popular format. With lots of case studies. Sections: I. Something More than Trees and Rocks. II. Respect for the Mystery. III. Machines Amok in the Garden. IV. What Kind of Backcountry Do We Want? Some chapters: "The Spiritual Side of Wild"; "Values in Conflict in the Backcountry"; "Aircraft and Wilderness"; "The High Cost of Search and Rescue"; "In Defense of Difficulty." An exploration of the most difficult wilderness management issues. Foreword by Roderick Nash. The Watermans live on a homestead in Vermont and are active environmentalists.

Waters, B. "Christian Theological Resources for Environmental Ethics," Biodiversity and Conservation 4(no. 8, Nov. 1995):849- . (v6,#4)

Waterton, C., Wynne, B., Grove-White, R., Mansfield, T., *Scientists Reflect on Science: Scientists' Perspectives on Contemporary Science and Environmental Policy*. Lancaster, UK: Centre for the Study of Environmental Change and the Institute for Environmental and Natural Sciences, Lancaster University, 2001.

Waterton, C., Wynne, B., Grove-White, R., Mansfield, T. *Scientists Reflect on Science: Scientists' Perspectives on Contemporary Science and Environmental Policy*. Lancaster, UK: Centre for the Study of Environmental Change and the Institute for Environmental and Natural Sciences, Lancaster University, 2001.

Watkins, Kevin, Economic Growth with Equity: Lessons from East Asia. Oxford, UK: Oxfam Publications, 1998. 160 pages. (v9,#1)

Watkins, Kevin. "Free Trade and Farm Fallacies: From the Uruguay Round to the World Food Summit," The Ecologist 26(no.6, 1996):244. Free trade is increasingly considered to be the best way of ending world hunger. The removal of trade barriers, it is argued, will allow countries to "reap the benefits of comparative advantage" and enable domestic consumption to be met more cheaply by less costly imported supplies. But while Southern countries have been obliged under the Uruguay Round of GATT to remove subsidies to their farmers, subsidies to Northern producers remain intact. Far from relieving hunger, liberalization is increasing food insecurity by throwing Southern producers into unequal competition with the heavily-subsidized, capital-intensive agricultural systems of the North. Millions of livelihoods will be lost as a result. An alternative trade agenda is urgently required--one that promotes greater food self-sufficiency in the South, with a focus on smallholder producers, and that accepts the need to restrict imports in the interests of tackling the underlying causes of hunger. (v8,#2)

Watkins, Kevin. "Liberalization for Philippine Agriculture", The Ecologist (1979) 26(no. 4,1996):172.

Watkins, RZ; Chen, J; Pickens, J; Brosofske, KD, "Effects of Forest Roads on Understory Plants in a Managed Hardwood Landscape", Conservation Biology 17(no.2, 2003):411-419.

Watkins, T. H. The World of Wilderness: Essays on the Power and Purpose of Wild Country. Niwot, Colorado: Roberts Rinehart Publishers, 1995. 284pp. \$14.95 paperback, \$24.95 hardcover. A collection of 16 essays that were published in Wilderness, the magazine of The Wilderness Society, over the past 13 years. There is a complex mix of science, politics, and economics that now characterizes the conservation movement (and its opposition). (v7,#2)

Watson, A. Elizabeth, LaBelle, Judith M. "Introduction to Planning and Land Use Management in the United States, with Some Comparisons with Canada and England," Environments 24(no.3, 1997):66. (v8,#3)

Watson, F., "Review Of: T. C. Smout, Nature Contested: Environmental History in Scotland and Northern England since 1600," Environmental History 7(no.1, 2002): 130. (v.13,#2)

Watson, Jeff, ed. The Golden Eagle. San Diego: Academic Press, 1997. 392 pp. \$49.95 paper. Watson has worked on eagles in Scotland for over 15 years and his studies provide the foundation for a treatment which also includes up to date information from work in North America, continental Europe, and throughout the world. The species' relationships in a variety of habitats. (v8,#3)

Watson, Lyall, Dark Nature--A Natural History of Evil. New York: HarperCollins, 1995. A study of the dark side of nature, made in biological terms--not from the top down, but from the bottom up. The usual (top-down) accounts of evil events and behavior that are given in religion, philosophy, and ethics fail, not because they underestimate evil, but because they misunderstand its nature. Evil is commonplace and widespread, perhaps not even confined to the human species, although it is all too easy to leap to unwarranted conclusions, particularly where other species are concerned. In evolutionary history, organisms make themselves, always a creative advance into novelty, and evil is a part of this scheme of things. It is part of the ecology of life, casting its shadow on everything that we do. As we humans choose our future, we have to understand a dark side to our own nature; but just this capacity to choose makes us special, giving us the ability to select a course for nature, instead of just submitting to the course of natural selection. (v10,#4)

Watson, Lyall, Dark Nature--A Natural History of Evil. New York: HarperCollins, 1995. A study of the dark side of nature, made in biological terms--not from the top down, but from the bottom up. The usual (top-down) accounts of evil events and behavior that are given in religion, philosophy, and ethics fail, not because they underestimate evil, but because they misunderstand its nature. Evil is commonplace and widespread, perhaps not even confined to the human species, although it is all too easy to leap to unwarranted conclusions, particularly where other species are concerned. In evolutionary history, organisms make themselves, always a creative advance into novelty, and evil is a part of this scheme of things. It is part of the ecology of life, casting its shadow on everything that we do. As we humans choose our future, we have to understand a dark side to our own nature; but just this capacity to choose makes us special, giving us the ability to select a course for nature, instead of just submitting to the course of natural selection. (v.11,#1)

Watson, Paul, Seal Wars: Twenty-Five Years on the Front Lines with the Harp Seals. Buffalo, NY: Firefly Books, 2003. Paul Watson has spent 25 years trying to end the seal "hunt," especially the clubbing of baby seals. Clubbing baby seals has been reduced, but killing of seals after they are a few weeks old continues. Watson has himself been clubbed until he was unconscious, and dragged across sharp ice and released to flounder in ice-cold seas. Americans banned importing harp seal pelts in 1972: the European Economic Community banned whitecoat pelts in 1983. Canada banned the baby seal hunt

in 1988, though only until their white coats begin to molt and turn silvery grey, about two weeks after birth. Canada still has a 975,000 kill quota for "adult" seals, arguing that the seals eat codfish and harm the industry. Watson replies that the codfish depletion is due to massive drag trawler fleets. Seal hunters come primarily from Newfoundland, commercial hunters supplying the fur industry. Although the EU bans importing pelts, the demand for seal pelts is growing in Norway, Denmark, and much of Europe. Watson was a founder of Greenpeace, and later broke with Greenpeace to found his more aggressive Sea Shepherd Society.

Watson, Paul, Ocean Warrior: My Battle to End the Illegal Slaughter on the High Seas. St. Leonards, NSW, Australia: Allen and Unwin, 1994. 264 pages. Watson's account of his efforts through the Sea Shepherd Conservation Society, which include many episodes of civil disobedience in defense of whales, seals, dolphins, and other creatures of the sea. The Canadian government once brought charges that might have sent Watson to prison for life, spending some \$ 4 million to press the charges. The charges were dismissed, except that he was fined \$ 35 for a misdemeanor. Watson was at once time with Greenpeace, but left to pursue more aggressive civil disobedience, and he has sunk quite a number of (illegal) whaling ships, though claims never to have physically harmed a person. (v6,#4)

Watson, R.T.; Zinyowera, M.C.; and Moss, R.H. Climate Change 1995--Impacts, Adaptations and Mitigation of Climate Change: Scientific-Technical Analyses. New York: Cambridge University Press, 1996. 890 pages. \$95 cloth, \$35.95 paper. In this report from Working Group II of the Intergovernmental Panel on Climate Change, the lead authors and contributors assess just how these changes will impact on earth systems, how the earth will adapt to the increase in greenhouse gases and what mitigation options are available. (v7, #3)

Watson, Richard A. Review of Time Wars. By Jeremy Rifkin. Environmental Ethics 11(1989):85-91.

Watson, Richard A., and Philip M. Smith, "Underground Wilderness: A Point of View," International Journal of Environmental Studies 2(1971):217-220. The concept of wilderness in the U.S. Wilderness Act of 1964 is ambiguous, but this is an administrative advantage. The Act can include underground wilderness. The longest cave in the world, the Flint Ridge Cave System in Mammoth Cave National Park, Kentucky, should be officially declared as wilderness by Congress, even though the surface above it is developed. Watson is in philosophy at Washington University, St. Louis; Smith is in the office of polar programs, U.S. National Science Foundation.

Watson, Richard A. Review of The Singer Solution to World Poverty: A Contentious Ethicist Explains Why Your Taste for Foie Gras is Starving Children. New York Times Magazine. 6 September 1999. By Peter Singer. Environmental Ethics 22(2000):327-328.

Watson, Richard A. "Interests, Rights, and Self-Consciousness." Environmental Ethics 4(1982):285-87.

Watson, Richard A. Review of How Deep is Deep Ecology? By George Bradford. Environmental Ethics 12(1990):371-74.

Watson, Richard A. Review of Human Scale. By Kirkpatrick Sale. Environmental Ethics 6(1984):181-84.

Watson, Richard A., "Some Philosophical Problems in Environmental Ethics," Philosophical Inquiry 11(nos. 1-2, Winter-Spring 1989):1-16. "Logical problems, philosophically unsupported arguments, and disturbing social implications in four areas of environmental ethics: (1) eco-philosophy, ecosophy, or deep ecology; (2) eco-religion, ecomysticism, and eco-morality; (3) anti-anthropocentrism and anti-humanism; and (4) the rights of nonhuman animals, nonsentient nature, and abstract corporate entities."

"The environmental ethics literature is ... shot through with examples of the naturalistic fallacy" (p. 11)
"A substantial amount of what goes on in the literature of environmental ethics is either in ignorance of or in outright defiance of much that has been accomplished in philosophy since the Enlightenment" (p. 14).
"Value enters the world only under the scope of the interests, intentions, and actions of self-conscious entities" (p. 12). Watson teaches philosophy at Washington University, St. Louis.

Watson, Richard A. Review of The Fate of the Earth. By Jonathan Schell. Environmental Ethics 6(1984):181-84.

Watson, Richard A. "A Critique of Anti-Anthropocentric Biocentrism." Environmental Ethics 5(1983):245-56. Arne Naess, John Rodman, George Sessions, and others, designated herein as ecosophers, propose an egalitarian anti-anthropocentric biocentrism as a basis for a new environmental ethic. I outline their "hands-off-nature" position and show it to be based on setting man apart. The ecosophic position is thus neither egalitarian nor fully biocentric. A fully egalitarian biocentric ethic would place no more restrictions on the behavior of human beings than on the behavior of any other animals. Uncontrolled human behavior might lead to the destruction of the environment and thus to the extinction of human beings. I thus conclude that human interest in survival is the best ground on which to argue for an ecological balance which is good both for human beings and for the whole biological community. Watson is in the philosophy department, Washington University, St Louis, MO. (EE)

Watson, Richard A. "A Note on Deep Ecology." Environmental Ethics 6(1984):377-79.

Watson, Richard A. and Philip M. Smith. "New Wilderness Boundaries." Environmental Ethics 1(1979):61-64. Wilderness is not a simple geographic concept and the boundaries of wilderness can never be simple geographic lines. Wilderness boundaries depend on attitudes and appearances as much as on the physical environment. Many areas and forms of wilderness should be protected and included within the National Wilderness Preservation System with specialized designations in terms of wilderness experience. Watson is in the philosophy department, Washington University, St. Louis, MO. Smith was formerly with the Office of Science and Technology Policy, Executive Office of the President, Washington, DC.

Watson, Richard A. Review of Promethean Ethics: Living With Death, Competition, and Triage. By Garrett Hardin. Environmental Ethics 3(1981):283-87.

Watson, Richard A. "Misanthropy, Humanity, and the Eco-Warriors." Environmental Ethics 14(1992):95.

Watson, Richard A. Review of Return of the Son of Deep Ecology. By George Bradford. Environmental Ethics 12(1990):371-74.

Watson, Richard A. Review of The Ostrich Factor: Our Population Myopia. By Garrett Hardin. Environmental Ethics 22(2000):327-328.

Watson, Richard A. "Self-Consciousness and the Rights of Nonhuman Animals and Nature." Environmental Ethics 1(1979):99-129. A reciprocity framework is presented as an analysis of morality, and to explain and justify the attribution of moral rights and duties. To say an entity has rights makes sense only if that entity can fulfill reciprocal duties, i.e., can act as a moral agent. To be a moral agent an entity must (1) be self-conscious, (2) understand general principles, (3) have free will, (4) understand the given principles, (5) be physically capable of acting, and (6) intend to act according to or against the given principles. This framework is foundational both to empirical and supernatural positions which distinguish a human milieu, which is moral, from a nonhuman milieu, which is not. It also provides a

basis for evaluating four standard arguments for the rights of nonhuman animals and nature--the ecological, the prudential, the sentimental, and the contractual. If reciprocity is taken as being central to the general concepts of rights and duties, then few animals, and no natural objects or natural systems, have rights and duties in an intrinsic or primary sense, although they may be assigned them in an extrinsic or secondary sense as a convenience in connection with human interests. Nevertheless, there are some animals besides humans--e.g., especially chimpanzees, gorillas, dolphins, and dogs--which, in accordance with good behavioral evidence, are moral entities, and sometimes moral agents. On the grounds of reciprocity, they merit, at a minimum, intrinsic or primary rights to life and to relief from unnecessary suffering. Watson is in the philosophy department, Washington University, St. Louis, MO. (EE)

Watson, Richard. Review of Murray Bookchin. Which Way for the Ecology Movement?: (Edinburgh and San Francisco: AK Press, 1993). (EE)

Watson, RT, "An International Assessment of Agricultural Science and Technology," Bioscience 52(no.12, 2002).

Watters, Larry. "The Takings Clause and the Future of Environmental and Land Use Regulation." Environmental Law 25 (no. 1, 1995): 199- . A panel of speakers, moderated by Larry Watters. (v6,#1)

Watts, D.C.H.; Ilbery, B.; Maye, D., "Making reconnections in agro-food geography: alternative systems of food provision," Progress in Human Geography 29(no.1, February 2005):22-40(19).

Watts, May Theilgaard, Reading the Landscape of America. Rochester, NY: Nature Study Guild Publishers (P. O. Box 10489, Rochester NY 14610-0489; 800-954-2984), 1999. 368 pages. \$ 19.95 paper. Reprint of a 1975 classic in landscape interpretation, remarkably timely. Hunched down to protect herself before a tundra summer snowstorm, she sees a tiny alpine cushion plant and figures out why the plant is tiny and hunched down. And similarly across the U.S. continent. Unexcelled in the blending of landscape ecology and lived experience on landscapes. (v.10,#2)

Watts, Michael. "Development III: The Global Agrofood System and Late Twentieth-century Development (or Kautsky Redux)." Progress in Human Geography 20, no.2 (1996): 230. (v7, #3)

Wawrzyniak, J., Teoretyczne podstawy neonaturalistycznej bioetyki Ńrodowiskowej (The Theoretical Foundations of Neonaturalistic Environmental Bioethics), Wydawnictwo Naukowe IF UAM (IF UAM Publishers), Poznań, 2000.

Contents:

Part I. Introduction to Neonaturalism

Part II. Evolutionary Ethics: Eco-Evolutionary Identification of Morality

Part III. Evolutionary Axiology and Radical Metaethical Neonaturalism (v.13,#1)

Wawrzyniak, J., Teoretyczne podstawy neonaturalistycznej bioetyki Ńrodowiskowej (The Theoretical Foundations of Neonaturalistic Environmental Bioethics), Wydawnictwo Naukowe IF UAM (IF UAM Publishers), Poznań, 2000.

Contents:

Part I. Introduction to Neonaturalism

Part II. Evolutionary Ethics: Eco-Evolutionary Identification of Morality

Part III. Evolutionary Axiology and Radical Metaethical Neonaturalism

Wawrzyniak, J., "Teoretyczna struktura bioetyki neonaturalistycznej (The Theoretical Structure of Neonaturalistic Bioethics)" in: Wawrzyniak, J., (ed.), Dynamika praktyki moralnej i jej etyczne

racjonalizacje (The Dynamics of Moral Practice and its Ethical Rationalizations), Wydawnictwo Naukowe IF UAM (IF UAM Publishers), Poznań, 1999,

Wawrzyniak, J., "Ocena treści i funkcjonowania Ustawy o ochronie zwierząt, ze szczególnym uwzględnieniem statusu zwierząt laboratoryjnych. Kontekst społeczny i aksjologiczny (The Evaluation of Contents and Functioning of the [Polish] Animal Welfare Act, with a Special Consideration of Lab-Animals' Status. Axiological and Social Aspects)", in: H. Korpikiewicz (ed.), Człowiek - Zwierzę - Cywilizacja. Aspekt humanistyczny (Human - Animal -Civilization. Humanistic aspect), ProDRUK Publishers, Poznań, 2001. (v.13,#4)

Wawrzyniak, J., "Teoretyczna struktura bioetyki neonaturalistycznej (The Theoretical Structure of Neonaturalistic Bioethics)" in: Wawrzyniak, J., (ed.), Dynamika praktyki moralnej i jej etyczne racjonalizacje (The Dynamics of Moral Practice and its Ethical Rationalizations), Wydawnictwo Naukowe IF UAM (IF UAM Publishers), Poznań, 1999, (v.13,#1)

Wawrzyniak, J., Teoretyczne podstawy neonaturalistycznej bioetyki środowiskowej (The Theoretical Foundations of Neonaturalistic Environmental Bioethics), Wydawnictwo Naukowe IF UAM (IF UAM Publishers), Poznań, 2000. Contents include: Part I. Introduction to Neonaturalism, Part II. Evolutionary Ethics: Eco-evolutionary Identification of Morality, Part III. Evolutionary Axiology and Radical Metaethical Neonaturalism. Includes Index and English Abstract. (v.13,#4)

Wawrzyniak, Jan, "Suffering as a Transcendental Value," paper in English at the Jagiellonian University Symposium on Ethics, Suffering as Human Experience, Cracow, Poland, June 6-8, 1994. The conference, though largely devoted to human suffering, contained two papers on suffering in the animal world. Suffering must be valued from the point of view of sentient animals, and this makes any associated values to transcend the merely human account of any worth found in suffering. For the other paper, see Leszek Pyra, "Suffering and the Rights of Animals." Copies from Professor Jan Wawrzyniak, Instytut Filozofii, Adam Mickiewicz University, 60-569 Poznan, Szamarzewskiego 91c, Poland. (v5,#3)

Wawrzyniak, Jan, "A Proposal of Neonaturalistic Axiology and Metaethics," (in Polish) in Józef Lipiec, ed., The Crossroads of Values. Cracow, Poland: Jagiellonian University Press, 1993. (v5,#3)

Wawrzyniak, Jan, "Aksjologia ewolucyjna jako podstawa etyki środowiskowej (Evolutionary Axiology as a Foundation of Environmental Ethics)." In: S. Dziamski, S. (ed.) Aksjologia, etyka, samookreslenie (Axiology, Ethics, Self-determination). Poznan: Humaniora Press, 1996. In Polish. (v9,#2)

Wayne, Robert K. and John L. Gittleman. "The Problematic Red Wolf." Scientific American 273 (no. 1, July 1995):36-39. Is the red wolf a species or a long-established hybrid of the gray wolf and the coyote? Proving that the red wolf fits any of the traditional definitions of species has been extremely challenging. Studies of DNA fail to find diagnosable red wolf DNA sequences different from those of the coyote or gray wolf. The authors conclude that the red wolf is a hybrid and not a distinct species. Such distinctions may affect ongoing efforts to save a variety of endangered species, although the authors argue that there are, nevertheless, compelling reasons to continue protection of the red wolf. Wayne teaches biology at UCLA, Gittleman at the University of Tennessee.

Wearing, Stephen and Neil, John, "Refiguring Self and Identity Through Volunteer Tourism," Loisir et société, Society and Leisure (Presses de l'Université du Québec) 23 (no. 2, 2000):389-419. In English. "As we travel with ourselves we see the 'other' as a world we are travelling through; but at some stage does that 'other' become part of ourselves? This paper is then about that dialogue: interpersonality, boundaries, travel, self and nature. It focuses on the volunteer tourists, as they appear to best represent the type of tourist that allows us to examine this area" (p. 390). "Volunteer tourism applies to those

tourists who, for various reasons, volunteer in an organized way to undertake holidays that might involve aiding or alleviating the material poverty of some groups in society, the restoration of certain environments, or research into aspects of society and environment" (p. 394).

What is happening to the sense of self, the personal and community identity of tourists? More ordinary tourists tend to be "gazers," or "escapers," "Cartesians," "modernists." Ecotourists "interact" more significantly with nature and the local communities they visit, "embodied practice" (pp. 397-398). Ecotourists "are those who know that their future will be made of dialogue with their fellow travellers and those they meet along the way" (p. 395); this involves "postmodernized interactionism." They are "travelling to incorporate nature into the self" (p. 402). Environmental philosophers, especially ecocentrists and deep ecologists, can be of help understanding and facilitating this. Wearing is at the University of Technology, Sydney. Neil is at the University of Newcastle, UK. (v.13, #3)

Weatherall, David, and Helen Munn. "Moving the Primate Debate Forward." *Science* Vol. 316, no. 5822 (13 April 2007): 173. This editorial is about the recent United Kingdom report *The Use of Non-Human Primates in Research* of an independent group of scientists and nonscientists outside the primate research community that attempt to provide a better-informed basis for the debate. This report available through the UK Academy of Medical Sciences at: <www.acmedsci.ac.uk/image/project/nhpdownl.pdf>. The UK public accepts the need for animals in medical research, but dislikes the use of primates. No great apes have been used in research in the UK since 1986, so the report deals mostly with monkeys and their use in research in neurosciences, communicable diseases, vaccines for HIV/AIDS, tuberculosis, and malaria. Generally the conclusion is that blanket prohibition is unwise due to the complexity of developing research and uncertain needs for the future. Primate research needs to be minimized, but not ruled out. In a typically pro-science posture, the authors of the report say: "The public debate on nonhuman primate research needs to move forward on the basis of sound scientific reasons." Yes, but presumably however, no amount of sound scientific research will answer the ethical questions.

Weatherford, Gary. Review of *The Evolution of National Wildlife Law*. By Michael J. Bean. *Environmental Ethics* 1(1979):189-92.

Weaver, David B. *Ecotourism in the Less Developed World*. New York: Oxford University Press, 1998. 288 pp. \$56. Weaver begins with three introductory chapters which provide an economic and geographic context for ecotourism in the developing world. These are followed by studies of ecotourism in Costa Rica, Kenya, Nepal, Thailand, and the Caribbean and South Pacific. The final chapter discusses common themes and patterns in the studies and relates these to strategies for the future. Weaver is at Griffiths University, Queensland, Australia. (v.10,#3)

Weaver, David B., ed., *The Encyclopedia of Ecotourism*. New York: Oxford University Press, 2001. Weaver is at Griffith University, Australia.

Weaver, Jace, ed. *Defending Mother Earth: Native American Perspectives on Environmental Justice*. Maryknoll, NY: Orbis Books, 1997. 185pp. \$18 paper. These essays document a range of ecological disasters, including the devastating effects of mining, water pollution, nuclear power facilities, and toxic waste dumps. Such hazards are commonly located on or near Indian lands. (v8,#1)

Weaver, Jace, ed. *Defending Mother Earth: Native American Perspectives on Environmental Justice*. Maryknoll, NY: Orbis, 1996.

Weaver, John L.; Paquet, Paul C.; and Ruggiero, Leonard F. "Resilience and Conservation of Large Carnivores in the Rocky Mountains." *Conservation Biology* 10, no.4 (1996): 964. (v7, #3)

Weaver, S. A., and M. C. Morris, "Science, Pigs, and Politics: A New Zealand Perspective on the

Phase-out of Sow Stalls," Journal of Agricultural and Environmental Ethics 17(2004):51-66. Sows housed in stalls are kept in such extreme confinement that they are unable to turn around. In some sectors of the pork industry, sows are subjected to this degree of confinement for almost their entire lives (apart from the brief periods associated with mating). While individual confinement is recognized by farmers and animal welfare community organizations alike, as a valuable tool in sow husbandry (to mitigate against aggression), what remains questionable from an animal welfare point of view is the necessity to confine sows in such small spaces.

In 2001, the Australian Journal of Agricultural Research published a review article on the science associated with the use of the sow stall, and claimed "no scientific evidence to support the recommendation in the Code of Practice advising against housing of sows in stalls followed by housing in crates" (Barnett et al., 2001, p. 21). If all the available scientific publications on the animal welfare implications of sow stalls are consulted (many of which did not feature in the above review), then one will indeed find scientific evidence to support recommendations against the housing of sows in stalls. Because there is science on both sides of this policy divide, the argument to defend the use of sow stalls, therefore, is not one of science vs. public opinion, but one of ethics.

An analysis of the scientific arguments against the use of the sow stall should be used to encourage ethical debate on this issue. As an ethical debate, the issue of the use of the sow stall can then focus on the degree of suffering we as a society are willing to tolerate in agricultural practices, and the animal welfare costs associated with extreme economies of scale in sow stocking rates, rather than get bogged down in red herring debates over whether there is any suffering at all. Keywords: animal welfare, New Zealand, pigs, pork industry, sow stalls.

The authors are in Environmental Studies, School of Earth Sciences, Victoria University, Wellington, New Zealand. (JAEE)

Weaver, Sean A. and Michael C. Morris, "Risks Associated with Genetic Modification: An Annotated Bibliography of Peer Reviewed Natural Science Publications," Journal of Agricultural and Environmental Ethics 18(2005):157-189. An annotated bibliography of peer reviewed scientific research. Risks include concerns over resistance and non-target effects of crops expressing Bt toxins, consequences of herbicide use associated with genetically modified herbicide-tolerant plants, and transfer of gene expression from genetically modified crops through vertical and horizontal gene transfer. These risks are not connected to the technique of genetic modification as such, but would be present for any conventionally produced crops with the same heritable traits. In contrast, other risks are a direct consequence of the method used in gene manipulation. These come about because of the unstable nature of the transgene and vectors used to insert it, and because of unpredictable interactions between the transgene and the host genome. The debate over the release of genetically modified organisms is not merely a scientific one; it encompasses economics, law, ethics, and policy. Keywords: animal welfare - annotated bibliography - biotechnology - Bt - environment - genetic modification - GMOs - human health - risk assessment - transgene. The authors are in geography and earth science, Victoria University of Wellington, Wellington, New Zealand. (JAEE)

Weaver, Sean A., "Chronic Toxicity of 1080 and its Implications for Conservation Management: A New Zealand Case Study," Journal of Agricultural and Environmental Ethics 19(2006):367-389.

Sodium monofluoroacetate (1080) is a mammalian pesticide used in different parts of the world for the control of mammalian pest species. In New Zealand it is used extensively and very successfully as a conservation management tool for the control of brushtail possums (Trichosurus vulpecula) - an introduced marsupial that has become a substantial agricultural and conservation management pest. Possums pose a threat to cattle farming in New Zealand as they are a vector for bovine tuberculosis. In protected natural areas, possum browsing is responsible for large scale defoliation of native vegetation. As with many other pesticides, there has been some degree of popular concern about the use of this toxin and its safety, with particular reference to non-target effects. These concerns have been associated with potential non-target effects on human health, and the health of animals of recreational value (e.g., hunting

dogs and game animals). This has led to the development of a strong "anti-1080" lobby in New Zealand. In contrast, this study encompasses a science-based risk analysis focusing on the potential risks to non-target native wildlife with a particular focus on chronic toxicity. It finds that there is evidence that 1080 may have endocrine disrupting capabilities (with potential relevance for non-target wildlife) but that this still needs more detailed investigation. This can be clarified by further targeted research. Further research is also needed to test the degradation rates of 1080 and its breakdown products at ecologically-relevant temperatures (i.e., winter stream temperatures - below 11EC). Such research may demonstrate that some adjustment to 1080 risk management is warranted in New Zealand, or it may help to put to rest the current controversy over the use of this cost effective conservation management tool. Keywords: chronic toxicity - conservation - endocrine disruption - New Zealand - risk- Sodium monofluoroacetate (1080) - wildlife. Weaver is in Environmental Studies, School of Earth Sciences, Victoria University, Wellington, New Zealand.

Webb, L. J. and J. Kikkawa, eds., Australian Tropic Rainforests: Science--Values--Meaning. East Melbourne, Victoria: CSIRO Publications, 1990. 185 pages. 19 essays organized into sections on "The Depths of Time," "Natural Processes," "Value and Meaning," "Future Perspectives." Some sample essays: J. Davidson, "Values and Uses: Seeing the Forest Through Different Eyes"; I. Lowe, "Scientific Objectivity and Values"; D. A. Ratcliffe, "Conserving Wild Nature: Purpose and Ethics"; J. R. Engel, "Rainforest as Metaphor: The Search for Public Education in the Australian Wet Tropics"; M. Charlesworth, "Nature's Rights." An excellent mixture of science and conscience. Len J. Webb is with the Division of Environmental Sciences, Griffith University, Nathan, Queensland; Jiro Kikkawa is in the Department of Zoology, University of Queensland, St. Lucia. (v1,#4)

Webb, Stephen H., On God and Dogs: A Christian Theology of Compassion for Animals. New York: Oxford University Press, 1998. 222 pages. Animal welfare and Christian conviction. The emotional bond with companion animals should play a central role in the way we think about animals in general. Against the more extreme animal liberationists--Webb defends the intermingling of the human and the animal worlds. He imagines what it would be like to treat animals as a gift from God; indeed, animals are not only a gift to us, but they give to us. We need to attend to their giving and return their gifts appropriately. Webb teaches religion at Wabash College. (v.9,#4)

Webb, Stephen H., On God and Dogs: A Christian Theology of Compassion for Animals. New York: Oxford University Press, 1998. \$ 30.00. A Christian perspective on responsibilities to animals, the relationships between humans and their pets, particularly dogs. The relationship can and should inform broader opinions about animal welfare and moral obligations to all animals. (v.9,#3)

Weber, E., Lovrich, N. and Gaffney, M., "Collaboration, Enforcement, and Endangered Species: A Framework for Assessing Collaborative Problem Solving Capacity," Society and Natural Resources 18(no. 8, September 2005): 677-698.

--Whitfield, John, "Biogeography: Is Everything Everywhere?" Science 310(11 November 2005):960-961. Microbiologists have long thought that the same microbes are everywhere. "There is no biogeography for anything smaller than 1 millimeter" (Bland Finlay), partially because the microbes and spores are blown transcontinentally in the wind, partially because these can long lie dormant. But other microbiologists are now finding that some microbes are locally specific. One problem is that the species question is not well defined at the microbe level. Many assign microbes to different species only if their DNA is less than 97% identical, but the same criteria would put all primates from lemurs to humans in one species.

Weber, JR; Word, CS, "The Communication Process as Evaluative Context: What Do Nonscientists Hear When Scientists Speak?" Bioscience 51(no. 6, 2001):487-496. (v.13,#1)

Weber, Marcel, "The Aim and Structure of Ecological Theory," Philosophy of Science 66(1999):71-93. Law-like statements often play an important role in ecological theory, contrary to the views of such philosophers of science as Shrader-Frechette and McCoy, who argue that ecology can only be piecemeal, local case studies. "I show that there are ecological laws, if it is allowed that laws generalize over a restricted domain of application." The principle of competitive exclusion (that species with insufficiently differentiated fundamental niches cannot coexist at equilibrium) is such a law. Weber is at the Zentrale Einrichtung für Wissenschaftstheorie und Wissenschaftsethik, Universität Hannover, Germany. (v.10,#1)

Weber, William, Rabinowitz, Alan. "A Global Perspective on Large Carnivore Conservation." Conservation Biology 10, no.4 (1996): 1046. (v7, #3)

Webster, D., "The Looting and Smuggling and Fencing and Hoarding of Impossibly Precious, Feathered and Scaly Wild Things," New York Times Magazine, 16 February 1997, pp. 26-33, 48-53, 61. (v9,#2)

Webster, Henry H., "Societal Irrationality," Journal of Forestry 103(no.1, January/February 2005):3-3(1).

Weddell, Bertie J., Conserving Living Natural Resources. New York: Columbia University Press, 2002. Analyzes three approaches: (1) A utilitarian approach. (2) A preservationist approach. (3) A sustainable-ecosystem approach. Weddell is at Washington State University, Pullman. (v.13,#4)

Wee, Cecilia. "Cartesian Environmental Ethics." Environmental Ethics 23(2001):275-286. René Descartes is often thought to have exerted a pernicious influence on our views concerning the relationship of humans to the environment. The view that because animals are machines, "thoughtless brutes," they have no moral standing, and we thus have a right to use them to further our own interests, is attributed to him. A celebrated passage from the Discourse on Method adds fuel to the view that he subscribes to the "dominion" theory. I argue that this picture is misleading and unfair. Descartes does not hold the dominion theory, and there is evidence that he accords animals (and plants) moral standing. Most importantly, Descartes holds that it is a human good to subordinate one's interests to those of the larger universe. He can, in fact, be seen as a forerunner of modern ecocentrism. (EE)

Weeks, Priscilla, Packard, Jane M. "Acceptance of Scientific Management by Natural Resource Dependent Communities," Conservation Biology 11(no.1, 1997):236. (v8,#2)

Weeks, W. William. Beyond the Ark: Tools for an Ecosystem Approach. Washington, D.C.: Island Press, 1996. 224 pages. \$40 cloth, \$20 paper. An overview of conservation and management issues featuring much practical information gleaned from a wide range of real-life projects. Guidance for those working to protect endangered natural resources. (v7, #3)

Weeks, W. William. Beyond the Ark: Tools for an Ecosystem Approach to Conservation. Washington, D.C.: Island Press, 1996. 172 pp. \$40 cloth, \$20 paper. A detailed account of the conservation planning discipline that is at the heart of The Nature Conservancy's approach. A description and analysis of the planning process that TNC goes through for each project--a process designed to lead to a working understanding of the ecological system under consideration, threats to it and their causes, economically grounded strategies for addressing those threats, and a means of measuring success. (v7,#4)

Weeramantry, Christopher, Nauru: Environmental Damage Under International Trusteeship. New York: Oxford University Press, 1992. 416 pages. \$ 72.00. Weeramantry is on the Commission on Inquiry on the Rehabilitation of Phosphate Lands in Nauru, an island in the South Pacific entrusted to Britain, Australia, and New Zealand. The island has quite valuable phosphate deposits and was much contested, raped, bombed in the war. International law, mandate and trusteeship, abuse of power, unjust enrichment, acquired rights and permanent sovereignty over national, natural resources. Probably the most detailed practical study of an international mandate and trusteeship ever conducted. (v3,#3)

Wege, D. C. and A. J. Long, Priority Areas for Threatened Birds in the Neotropics. Washington, DC: Smithsonian Institution Press, 1995. 370 pages. \$ 32.00. From Mexico south, including the Caribbean Islands, the most important areas for bird conservation. Maps for each country. The last documented sightings of threatened birds in these areas. (v6,#4)

Wegman, Richard A. and Harold G. Bailey Jr. "The Challenge Of Cleaning Up Military Wastes When U.S. Bases Are Closed." Ecology Law Quarterly 21 (no. 4, 1994): 865-- . (v6,#1)

Wehr, Kevin. Review of David Harvey, "Spaces of Hope", Organization and Environment, 15, (No. 4, 2002): 493-495. Wehr is a lecturer in sociology at the University of Wisconsin.

Weible, Chris; Sabatier, Paul; Nechodom, Mark, "No Sparks Fly: Policy Participants Agree on Thinning Trees in the Lake Tahoe Basin," Journal of Forestry 103(no.1, January/February 2005):5-9(5).

Weibull, A., O. Ostman and A. Granqvist, "Species richness in agroecosystems: the effect of landscape, habitat and farm management," Biodiversity and Conservation 12(no. 7, 2003): 1335-1355. (v 14, #3)

Weida, William J. Regaining Security--A Guide to the Costs of Disposing of Plutonium and Highly Enriched Uranium. Brookfield, VT: Ashgate, 1997. 192 pp. \$59.95. The economic issues surrounding the major expenditures facing the US as it attempts to dispose of weapon-grade nuclear materials in a proliferation-resistant manner.

Weida, William J. Regaining Security--A Guide to the Costs of Disposing of Plutonium and Highly Enriched Uranium. Brookfield, VT: Ashgate, 1997. 192 pp. \$59.95. The economic issues surrounding the major expenditures facing the US as it attempts to dispose of weapon-grade nuclear materials in a proliferation-resistant manner.

Weidensaul, Scott, photographs by Mark Godfrey, "The Ivory-bill and its Forest Breathe New Life," Audubon 55(no. 2, 2005):20-31. The ivory-bill woodpecker, not seen (reliably) for over sixty years, has again been found in the Arkansas Mississippi delta (area of Cache River National Wildlife Refuge), in a location not precisely revealed to protect the bird.

Weigert, Andrew J., Self, Interaction, and Natural Environment: Refocusing Our Eyesight. Albany: State University of New York Press, 1997. An analysis of how we as individuals understand environmental issues and respond accordingly. Environmental issues exist on worldwide scale, but most people do not consider the pollution they cause by operating cars or fertilizing lawns. (v9,#1)

Weikard, Hans-Peter, "A Methodological Note on Ethics, Economics, and the Justification of Action", Journal of Agricultural and Environmental Ethics 5(1992):183-188. Two disciplines claim to provide justification of action. Ethics gives you moral reasons to act upon, whereas economics exploits the concept of rationality. The paper discusses two theories of interdisciplinarity of ethics and economics in order to clarify the relationship. The traditional view of a hierarchical ordering of ethics and economics is rejected, and it is claimed that there are substantial economic contributions to ethical justification. Weikard is in economics at the University of Bristol, U.K.

Weil, Robert, "Doomed Harvest: How PNTR and the WTO Threaten to Drive Chinese Farmers off the Land," Multinational Monitor, May 2000, pages 16-18. Much of Chinese agriculture is in small and scattered fields, not efficient by industrialized standards. But China is largely self-sufficient in grain and other foods. China's rural population has often moved to the cities, stressing agriculture, but the Chinese government has worked out means of price support, protective tariffs, and a responsibility system emphasizing local initiative. Permanent normal trade relations and entry into the WTO will undermine all

this, and U.S. and other foreign grain companies are poised to exploit the weaknesses in Chinese agriculture. Even Chinese government sources estimate that increased imports will displace ten million peasants from their land. (EE v.12,#1)

Weiland, P. S., and Vos, R. O., "Reforming EPA's Organizational Structure: Establishing an Adaptable Agency through Eco-Regions," Natural Resources Journal 42(no.1, 2002): 91-132. (v.13,#4)

Weiland, S, "Review of: Edmund Russell, War and Nature: Fighting Humans and Insects with Chemicals from World War I to Silent Spring," Environmental Politics 11(no.4, 2002): 141.

Weiner, Douglas, R., A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachev. Berkeley: University of California Press, 1999. How Russian scientists, despite state repression during a dark era, fought for their alternative vision of land conservation. Nature protection did not just endure in the Soviet Union, it thrived. Scientists, often quite cleverly, disguised their actions as cultural patriotism for a beloved fatherland, camouflaging their deeper intents. They anchored their success around zapovedniki, strict nature reserves. This concept is without a Western equivalent, though nearest to our wilderness. There appeared in Russia, independently from the West, a close analogue of our wilderness idea. (v.12,#4)

Weiner, Douglas R. *Models of Nature: Ecology, Conservation and Cultural Revolution in Soviet Russia*. Pittsburgh: University of Pittsburgh Press, 2000.

Weiner, Myron. Global Migration Crisis: Challenge to State and Human Rights. New York: Harper Collins, 1995. 253 pages. \$ 23.50. Immigration issues are much different in the present than they were in the past. As world populations rise, population and migration issues will become increasingly important--more and more linked to issues of national defense and social welfare. (v8,#1)

Weinstein, Stanley. Review of A Bibliography of Animal Rights and Related Matters. By Charles R. Magel. Environmental Ethics 4(1982):89-91.

Weinstein, Stanley. Review of A Search for Environmental Ethics: An Initial Bibliography. Compiled by Mary Angelmyer, Eleanor R. Seagreaves, and Catherine C. Le Maistre. Environmental Ethics 4(1982):89-91.

Weinstein, Tara, "Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?" The Georgetown International Environmental Law Review 17(no. 4, 2005):697-722. No state has ever been held accountable for environmental damage during wartime. Perhaps the time has come for change.

Weinstock, Daniel, "Full Marx," Philosophy and Geography 5 (No. 1, 2002): 115-117. Book review of David Harvey's "Spaces of Hope," Berkeley: University of California Press, 1999. (P&G)

Weir, Jack, "An Argument for the Constitutive Goodness of the Natural Environment." Southwest Philosophy Review 10 (January 1994): 167-75. The key concept of a "constitutive good" is analyzed, and the methodological moves in the argument are clarified. Human nature, including individual identities, is conditioned by the environment. Moreover, a life in a sufficiently different environment would not be a human life. Hence, the environment is a constitutive good, and ought to be preserved. (v5,#3)

Weir, Jack, "Kantian Wholism: Toward a Critical Environmental Ethic," Southwest Philosophical Studies 11(1989):1-12. Kant's ethic is rejected by most environmental ethicists, criticized as being traditionally anthropocentric. But a Kantian-type environmental ethic is possible when Kant is supplemented by insights from recent ecological science. The resulting synthesis could be labelled "Kantian wholism" or

"eco-humanism." The fundamental claim in this ethic is that it is irrationally self-destructive for rationally autonomous selves to act so as to destroy the eco-human basis of their rational self-identity. Ecological balance is necessary for both human survival and human self-identity. Normatively, based on the proposed Kantian-type wholism, our acts ought to enhance our own self-conscious rational autonomy by enhancing wholistic eco-human values. Weir teaches philosophy, Morehead State University, Morehead, KY. (v8,#3)

Weir, Jack, "Animals and Radical Translation." Southwest Philosophy Review 11 (January 1995). W. V. O. Quine's principle of charity and Richard Grandy's principle of humanity are applied to nonhuman animals. Weir argues that animals have at least some kinds of beliefs. (v5,#3)

Weir, Jack, "The Environmental Crisis as a Crisis of the Spirit," Science, Technology and Religious Ideas 5 (Fall 1994). In this paper, Weir argues that the environmental will not be solved by political science (diplomacy), natural science (technology), or philosophy (a new ideology). Rather, the problem is at its deepest level a problem of the heart--one of greed and selfishness--and will not be resolved until people's characters are transformed. (v5,#3)

Weir, Jack. "Unnecessary Pain, Nutrition, and Vegetarianism." Between the Species 7, no.1 (Winter 1991): 13-26. After an analysis of the concept and principle of unnecessary pain, meat-eating is examined in light of nutritional and socio-cultural factors. The paper concludes that vegetarianism is good but not strictly obligatory. (v8,#1)

Weir, Jack. "Response." [A Response to Steven F. Sapontzis, "Reply to Weir: Unnecessary Fear, Nutrition, and Vegetarianism," Between the Species 7, no. 1 (Winter 1991): 27-32]. Between the Species 7, no. 1 (Winter 1991): 33-35. (v8,#1)

Weir, Jack. "Poverty, Development, and Sustainability." Acorn: The Journal of the Gandhi-King Society 8, no.2 (1995): 17-22. Using ideas from Tolstoy and Gandhi, Weir argues that sustainable development is a euphemism for Westernization and Capitalistic materialism and greed. The formulation of a new, nonanthropocentric environmental philosophy will likely not solve the world's environmental problems because the problem is at bottom one of human greed and finitude (which are often called "spiritual" problems). (v8,#1)

Weis, J. S. et al, "Biology, Environment, and Conservation in South Africa," Bioscience 52(no.9, 2002): 781-91. (v.13,#4)

Weis, Julie A. "Eliminating the National Forest Management Act's Diversity Requirement as a Substantive Standard," Environmental Law 27(no.2, 1997):641. Weiss considers the U.S. Forest Service's treatment of the biodiversity standards of the National Forest Management Act (NFMA). After noting that courts have generally been highly deferential to the Forest Service's approach to biodiversity, she addresses recently proposed changes to NFMA rules, and concludes that these changes would further reduce biodiversity protections under the statute. (v8,#3)

Weisheipl, James A., "Aristotle's of Nature: Avicenna and Aquinas." Pages 137-160 in Roberts, Lawrence D., ed., Approaches to Nature in the Middle Ages. Binghamton, NY: Center for Medieval and Renaissance Studies, 1982.

Weishu, Xu, Birds in China (Beijing: Foreign Language Press, 1989). 72 pages. Short introduction to the birds of China. (China)

Weishu, Xu. Birds in China. San Francisco: China Books and Periodicals, 1989. 116 pp. \$19.95. The first

book in English on birds in China available in North America. It is a survey of the species found in China, with particular attention to endangered species and the efforts to protect them.

Weiskel, Timothy C., "Environmental Ethics and the Problem of Community," Quinnipiac/Schweitzer Journal 1, no. 2 (Fall/Winter 1994-95): 44-53. A social anthropologist, Weiskel is director of the newly created Center for the Study of Values and Public Life at Harvard Divinity School. The environment is decaying before communities summon the will to balance their way of life. The journal is available for \$5 U.S. per issue: Public Relations, Quinnipiac College, 275 Mt. Carmel Ave., Hamden, CT 06518, USA. (v6,#2)

Weiskel, Timothy C., "Religion, Belief, and Survival on a Small Planet," Harvard Divinity Bulletin, vol. 21, no. 4, 1992. "We must seek to derive our values from both the emerging revelations of ecosystem science and the prophetic insights of past theological traditions." Weiskel is director of the Harvard Seminar on Environmental Values and also at the Kennedy School of Government, Harvard. (v3,#3)

Weisman, Alan. *The World Without Us*. New York: Thomas Dunne Books, 2007. Weisman explores the consequences of a thought experiment of what would happen on Earth if humans were suddenly extinguished.

Weiss, Edith Brown and Jacobson, Harold K. "Getting Countries to Comply with International Agreements." Environment 41(No. 6, July 1999):16- . A study of eight countries and five international agreements shows that compliance with environmental accords is a multilayered and volatile process. (v10,#4)

Weiss, Edith Brown, and Jacobson, Harold K., eds., Engaging Countries: Strengthening Compliance with International Accords. Cambridge, MA: MIT Press, 1998. (v.10,#1)

Weiss, Edith Brown, Paul C. Szasz, and Daniel B. Magraw, International Environmental Law: Basic Instruments and References. Transnational Publishers, Inc., One Bridge St., Irvington, NY 10533. 750 pages. 1992. \$ 95.00. Eighty-five documents, with lists of 870 international environmental instruments. Brown Weiss is Associate General Counsel for International Environmental Law at the Environmental Protection Agency; Szasz is former Director of the General Legal Division of the United Nations; Magraw teaches environmental law at the University of Colorado. (v4,#3)

Weiss, Edith Brown. In Fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity. Dobbs Ferry, NY: Transnational, 1989. (v8,#3)

Weiss, Rich, "Mice Made Defective to Decode Human Ills," Washington Post (6/7/98): A1. Genetically-engineered mice to have human diseases. A major new trend in biomedical research is to genetically alter mice to have biological defects that cause disease in humans. Breeds of mice, never before existing in nature, are created with inherent propensities to develop diabetes, cancer, multiple sclerosis, cystic fibrosis, arthritis, obesity, etc.. These mice serve as models that allow researchers to study disease processes and possibly to develop treatments for them. For example, mice created to possess Huntington's disease have allowed researchers to identify small protein deposits in the brain never before noticed in human patients with Huntington's. Critics charge that creating defective animals treats animals as mere tools and fosters an attitude that undermines a recent trend toward more judicious and compassionate use of lab animals. Barbara Orlans of the Kennedy Institute of Ethics at Georgetown, who supports some animal research, worries that "It's sort of carte blanche where we're going: Knock out a gene and see what happens." Mice with deformed genitals, without legs, with a single, Cyclops-like eye, and massive head deformities have all been produced. Rebecca Dresser, a bioethicist at Case Western Reserve, suggests we are creating animals "genetically programmed to suffer." Bernard Rollin, a

philosopher at Colorado State University, says "there really is something primordially horrible about replicating animals that will suffer endlessly." Another philosopher, Paul Thompson of Purdue University, says: "I can rationalize some harm to an individual animal in exchange for a valuable research result. But when we are in such a dramatic position of control that we are designing these animals from scratch, this is a different issue. ... This notion that we can own, buy, sell and exchange fundamental life processes can lead to a fundamental transformation of how we understand life as sacred." Andrew Rowan, a senior VP of the Humane Society of the U.S., along with a coalition of other groups, has recently petitioned the government to reverse its policy under which mice and rats are specifically exempted from the Animal Welfare Act, the primary federal statute that protects lab animals. Many European countries have shown greater concern about these issues. In Holland, lab animals--including mice and rats--were recently deemed to have "inherent value," a status that requires a higher level of physical and psychological care. The citizens of Switzerland are voting on a constitutional referendum that would ban the creation of--or research on--engineered animals. The referendum would also ban the release of genetically engineered microbes and plants into the environment and would limit the patenting of life forms. All of these are common practice in the U.S.. For letters to the editor about the article, including one in which Frankie Trull, President of the Foundation for Biomedical Research, asserts that "Unless one is willing to take the morally offensive view that the lives of mice are equal to the lives of people, it would be unethical not to use such a tool," see "Of Mice and Medicine," Washington Post (6/22/98): A20. (v9,#2)

Weiss, Rick, "When is Food 'Organic'? USDA Proposes 1st Rules," Washington Post (12/16/97): A1. Definition for "Organic" Food. The US Agriculture Department has put out for public comment proposed national rules that specify what types of foods can be marketed as organic. The rules require the use of environmentally-sound farming practices to maintain water and soil quality, severely limit the use of synthetic chemicals, and specify handling practices for animals. Processed foods would have to contain at least 95 percent organic ingredients to be labeled "organic." Organic meat would have to come from animals raised under "living conditions adequate to promote the health of the animal;" routine use of antibiotics and other drugs in healthy animals would be prohibited. Although a congressionally-mandated panel of experts had recommended that foods that are genetically-engineered, irradiated, or fertilized with sewage sludge be precluded, the proposed guidelines do not require this and explicitly allow the use of a genetically-engineered bacterial pesticide. The panel also had recommended that confinement of animals without space for movement or access to the outdoors be allowed only temporarily due to illness or inclement weather. The guidelines were criticized by animal-care activists for backing away from this requirement and allowing "organically-raised" animals to be confined indefinitely in crowded factory-farm conditions. The guidelines would also allow milk to be sold as organic even it came from a cow that had been on antibiotics or other drugs "relatively recently." The proposed rules could shape the \$3.5 billion organic foods industry which is growing at 20 percent a year. The stronger the rules, the more likely organic farming--currently dominated by small and medium sized farms of 100 acre or less--can continue to avoid being taken over by large agribusiness. (v.8,#4)

Weiss, Rick, "Lost in the Search for a Wolf Are Benefits in Sheep's Cloning," Washington Post (3/7/97): A3. See under: Kolata, Gina, "With Cloning of a Sheep, the Ethical Ground Shifts," New York Times (2/24/97): A1. (v8,#1)

Weiss, Rick, "Patent Sought on Making Part-Human Creatures," Washington Post (4/2/98): A12. Patents on Human-Animal Chimeras? Cellular biologist Stuart Newman and anti-biotechnology activist Jeremy Rifkin are seeking a patent on creatures that are part human and part animal (as well as a patent on a process of making such hybrids). They have not made such creatures and have no intention of doing so. Rather, their aim is to reignite debate about the morality of patenting life forms and engineering humans, activities they believe to be immoral. Patents are available on the basis of detailed descriptions of an invention, even if it is not made or used. They give owners exclusive 20-year rights to their inventions,

and Newman would use the patent to block anyone else from commercializing such processes or creatures. To date, 79 animal patents have been issued, including patents on birds, fish, and sheep.

Patents are not allowed on human beings, because the patent office has ruled that this would violate the 13th Amendment to the Constitution which bans slavery. But a number of patents have been issued for human genes and cell lines, as well as for animals that contain human genes and cells. The question these activists are forcing is: How human must something be before patents will be denied? The application is for a technique that mixes human embryo cells with embryo cells from some other animal (such as a monkey or ape) and then transfers the fused single embryo into a surrogate mother (human or other animal). The method is an updated version of one that ten years ago successfully produced "geeps," creatures that were part goat and part sheep. Because people and monkeys are more closely related to each other than sheep and goats, Newman believes the technique would work to produce human-animal chimeras of unpredictable nature. Such creatures might be useful for understanding human development, as organ donors, and for toxicity testing of human tissues.

Unlike the European patent office that can reject patents on moral grounds, the U.S. patent office is not empowered to take ethical criteria into account. The hope is that the courts and Congress will rethink the current liberal policy concerning patenting of life forms. (v9,#1)

Weisser, Daniel, Review of Redlinger, Robert Y. et al., Wind Energy in the 21st Century: Economics, Policy, technology and the Changing Electric Industry. Environmental Values 12(2003):405-407. (EV)

Weitzman, M. L., "Landing Fees Vs Harvest Quotas with Uncertain Fish Stocks," Journal of Environmental Economics and Management 43(no.2, 2002): 325-38. (v.13,#2)

Weitzman, Martin L., "Why the Far-Distant Future Should Be Discounted at Its Lowest Possible Rate," Journal of Environmental Economics and Management 36(No.3, 1998):201-. (v.10,#2)

Welch, Ned; Fischhoff, Baruch, "The Social Context of Contingent Valuation Transactions," Society & Natural Resources 14(no.3, MAR 01 2001):209-. (v.12,#4)

Welchman, Jennifer, "Is ecosabotage civil disobedience?," Philosophy and Geography 4 (No. 1, 2001): 98-107. According to current definitions of civil disobedience, drawn from the work of John Rawls and Carl Cohen, eco-saboteurs are not civil disobedients because their disobedience is not a form of address and/or does not appeal to the public's sense of justice or human welfare. But this definition also excludes disobedience by a wide range of groups, from labor activists to hunt saboteurs, either because they are obstructionist or because they address moral concerns other than justice or the public weal. However earlier definitions of civil disobedience were not so narrow. I review the development of the current definition and the circumstances of its acceptance. I argue that the circumstances which help to explain the attractiveness of the Rawls/Cohen formulations in the 1970s are no longer applicable and that the question of civil disobedience should be revisited. I suggest a wider definition according to which at least some types of eco-sabotage would be civil disobedience. Welchman is Associate Professor of Philosophy at the University of Alberta. (P&G)

Welchman, Jennifer, Norton and Passmore on Valuing Nature," Journal of Agricultural and Environmental Ethics 20(2007):353-363.

Welchman, Jennifer. "The Virtues of Stewardship." Environmental Ethics 21(1999):411-423. What virtues do good stewards typically have and can these virtues move people to be good stewards of nature? Why focus on the virtues of stewards rather than on trying to construct and defend morally obligatory rules to govern human behavior? I argue that benevolence and loyalty are crucial for good stewardship and these virtues can and do motivate people to act as good stewards of nature. Moreover, since it is a matter of dispute whether rational considerations can move us to perform a given act in the absence of

disposition to do so, I argue we should try to determine which moral dispositions (if any) will motivate people to be concerned for the environment so that the development of environmentally sensitive character may be encouraged. (EE)

Welcomer, Stephanie A. "Human Interests and the Forested Land", Organization and Environment, 16, (No. 1, 2003): 113-20. An extended book review essay on Richard W. Behan's Plundered Promise: Capitalism, Politics, and the Fate of the Federal Lands and Neil Rolde's The Interrupted Forest: A History of Maine's Wildlands. Welcomer is an assistant professor of management at University of Maine Business School.

Welford, Richard, Starkey, Richard, eds. Business and the Environment: A Reader. Bristol, PA: Taylor and Francis, 1996. 284pp. \$24.95 paper. This book brings together the work of leading experts in the field of business and the environment. It contains contributions to the various debates and discussions currently taking place around the world. Its goal is to enable the reader to become better aware of the complex issues facing business and better to understand what businesses need to do to contribute to sustainable development for the future.

Welker, Michael, Creation and Reality. Minneapolis: Fortress Press, 1999. 102 pages. \$ 13.00 paper. Six essays in major reconsideration of creation as a theological theme, in the light of both biological science and environmental issues, emphasizing creation as not so much unilateral act of God (the classical view) as interactive creation with creatures engaged in making themselves. "The mandate of dominion aims at nothing less than preserving creation while recognizing and giving pride of place to the interests of human beings. In all the recognizing and privileging of the interests of human beings, the central issue is the preservation of creation in its complex structures of interdependence. The expansion of the human race upon the earth is inseparable from the preservation of the community of solidarity with animals in particular, and inseparable from the caretaking preservation of the community of solidarity with all creatures in general. God judges human beings worth of this preservation of creation. They are to exercise dominion over creatures by protecting them. Human beings acquire their power and their worth precisely in the process of caretaking. The mandate of dominion according to Genesis 1 means nothing more and nothing less" (p. 73). Welker is a Reformed theologian at Heidelberg University, with considerable residency in the United States. (v.10,#2)

Weller, Milton W. Freshwater Marshes: Ecology and Wildlife Management. 3rd ed. Minneapolis: University of Minnesota Press, 1994. 192 pages. \$34.95, \$16.95 paper. (v5,#2)

Wellington, A.; Greenbaum, A.; and Cragg, W. Canadian Issues in Environmental Ethics. Broadview Press, 1997. ISBN 1-55111-128-4. Case studies and issues. Chapters by Allan Drengson, Peter Miller, Wesley Cragg, Michael Fox, Peter Wenz, and Laura Westra. (v9,#1)

Wellington, Alex, Greenbaum, Allan, and Cragg, Wesley, eds., Canadian Issues in Environmental Ethics. Overviews of specific, concrete problems that are important in Canada, rather than analysis of the theoretical problems in environmental ethics. Resource use, nature preservation, and environmental justice. Reviewed by Warren Neill, Ethics and the Environment 6(no. 1, 2001):116-121. (E&E)

Wells, Jeffrey V. *Birder's Conservation Handbook: 100 North American Birds at Risk*. Princeton: Princeton University Press, 2007. Wells presents the status of North America's most threatened birds and suggests what birders and other conservationists can do to help.

Wells, M., "Biodiversity Conservation, Affluence and Poverty: Mismatched Costs and Benefits and Efforts to Remedy Them," Ambio 21(1992):237-242. "In general, while there is growing recognition that many of the benefits from conserving biodiversity go to the world as a whole, in many cases the costs are

borne at national and local levels. The heaviest burden tends to be borne by poorer countries, and especially by impoverished people living in remote rural areas of these poor countries in the proximity of protected areas" (p. 237).

Wells, Michael P. "The Social Role of Protected Areas in South Africa," Environmental Conservation 23(no.4 1996):322. (v8,#3)

Wells, NM; Evans, GW, "Nearby Nature: A Buffer of Life Stress Among Rural Children", Environment and Behavior 35(no.3, 2003):311-330.

Welsh, I., "Science, Governance and Environmental Politics," Environmental Politics 11(no.1, 2002): 192-96. (v.13,#2)

Welsh, Ian. "Green Anarchism: Peter Marshall's Nature's Web," Environmental Values 4(1995):73-78. A review of: Nature's Web: An Exploration of Ecological Thinking, by Peter Marshall. Contemporary social movements frequently lay claim to an historical lineage as if this demonstrates a right to the hearts and minds of society. In Nature's Web Peter Marshall has followed feminists and others in interpreting the history of ideas through a particular set of conceptual spectacles. It is a 'green' interpretation which may prove to be a best seller amongst believers and a source of profound concern for thinkers. Welsh is in economics and social sciences, University of Western England. (EV)

Welsh, Michael. Review of Jane Bennett and William Chaloupka, eds. In the Nature of Things: Language, Politics, and the Environment: (Minneapolis: University of Minnesota Press. 1993). (EE)

Welsh, MM, "Reaction of the National Environmental Groups to Devolution", Society and Natural Resources 17 (no.4, 2004): 293-304(12).

Weltzin, JF, et al, "Assessing the Response of Terrestrial Ecosystems to Potential Changes in Precipitation," Bioscience 53(no.10, 2003):941-952. (v.14, #4)

Wemelsfelder, F., Animal boredom: Towards an empirical approach of animal subjectivity. PhD thesis, University of Leiden, 1993.

Wemmer, Christen, and Catherine A. Christen, eds. *Elephants and Ethics: Toward a Morality of Coexistence*. Baltimore: The John Hopkins University Press, 2008. Contents include: (1) "Introduction: Never Forgetting the Importance of Ethical Treatment of Elephants" by Christen Wemmer and Catherine A. Christen, (2) "Elephants in Time and Space: Evolution and Ecology" by Raman Sukumar, (3) "Personhood, Memory, and Elephant Management" by Gary Varner, (4) "Elephant Sociality and Complexity: The Scientific Evidence" by Joyce H. Poole and Cynthia J. Moss, (5) "Elephants, Ethics, and History" by Nigel Rothfels, (6) "Pain, Stress, and Suffering in Elephants: What is the Evidence and How Can We Measure It?" by Janine L. Brown, Nadja Wielebnowski, and Jacob V. Cheeran, (7) "Elephants and People in India: Historical Patterns of Capture and Management" by Dhriti K. Lahiri Choudhury, (8) "Carrots and Sticks, People and Elephants: Rank, Domination, and Training" by John Lehnhardt and Marie Galloway, (9) "Canvas to Concrete: Elephants and the Circus-Zoo Relationship" by Michael D. Kreger, (10) "Why Circuses are Unsuitable to Elephants" by Lori Alward, (11) "View From the Big Top: Why Elephants Belong in North American Circuses" by Dennis Schmitt, (12) "The Challenges of Meeting the Needs of Captive Elephants" by Jane Garrison, (13) "Most Zoos Do Not Deserve Elephants" by David Hancocks, (14) "Zoos as Responsible Stewards of Elephants" by Michael Hutchins, Brandie Smith, and Mike Keele, (15) "Can We Assess the Needs of Elephants in Zoos? Can We Meet the Needs of Elephants in Zoos?" by Jill D. Mellen, Joseph C. E. Barber, and Gary W. Miller, (16) "Giants in Chains: History, Biology, and Preservation of Asian Elephants in Captivity" by Fred Kurt, Khyne U Mar,

and Marion E. Garaï, (17) "Restoring Interdependence Between People and Elephants: A Sri Lankan Case Study" by Lalith Seneviratne and Greg D. Rossel, (18) "Sumatran Elephants in Crisis: Time for Change" by Susan K. Mikota, Hank Hammatt, and Yudha Fahrimal, (19) "Human-Elephant Conflicts in Africa: Who Has the Right of Way?" by Winnie Kiiru, (20) "Playing Elephant God: Ethics of Managing Wild African Elephant Populations" by Ian Whyte and Richard Fayer-Hosken, (21) "Toward an Ethic of Intimacy: Touring and Trophy Hunting for Elephants in Africa" by Rebecca Hardin, and (22) "The Ethics of Global Enforcement: Zimbabwe and the Politics of the Ivory Trade" by Rosaleen Duffy.

Wenhua, Li and Zhao Xianying, China's Nature Reserves (Beijing: Foreign Languages Press, 1989), 190 pages. Li Wenhua is one of China's foremost ecologists; Zhao Xianying is a geobotanist who has studied in the United States. Quite useful general introduction to nature reserves in China. The rationale they give: resources, aesthetics, scientific research, environmental protection, education, tourism. Humans have, in the past, had the wrong attitude toward nature, one of exploitation. "We once judged our ability to squeeze nature for all its worth as an important indication of humankind's civilization and progress. Often as not, the cost of our conquests over nature was the devastation of those elements so vital to our own existence, the earth's environment and natural resources. We were, in effect, destroying our own life-support system. Living in harmony with our planet means cherishing and protecting the natural world" (pp. 1-2). China was late forming any conservation strategy. The first reserve was in 1956, and nineteen reserves were set up by 1966, but most of these gains lost in the Cultural Revolution. Since 1976 there has been steady improvement. By late 1981 there were 76 reserves, by 1986 there were 383. A goal is 500 reserves by 2000. But one must use considerable care; many of these are paper reserves only (the designation as a reserve of the forests that remain on a former Buddhist temple site, although the area may be much used). (China)

Wennberg, Robert N., God, Humans, and Animals: An Invitation to Enlarge our Moral Universe. Grand Rapids, MI: Wm. B. Eerdmans, 2003. (v.14, #4)

Wensveen, Louke van. "Cardinal Environmental Virtues: A Neurobiological Perspective." In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Wensveen, Louke van. "The Emergence of Ecological Virtue Language." Reprinted in Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Wensveen, Louke van, book review of Holmes Rolston, Genes, Genesis, and God: Values and Their Origins in Natural and Human History, Conservation Biology 18 (no. 2, 2004): 590-1.

Wensveen, Louke van. "Ecosystem Sustainability as a Criterion for Genuine Virtue." Environmental Ethics 23(2001):227-241. I propose an ecologically attuned criterion for genuine virtue, namely, the criterion of ecosustainable virtue: a genuine virtue includes the goal of ensuring ecosystem sustainability. I show how this criterion emerges from environmental practice and how it can be supported by syllogistic reasoning. (EE)

Wensveen, Louke van, "Review of Holmes Rolston, III, Genes, Genesis and God," Conservation Biology 18(2004):590-591. (v. 15, # 3)

Wenz, Peter S., Environmental Ethics Today. New York: Oxford University Press, 2000. A wide ranging introduction, featuring current facts, real controversies, individual stories, and vivid narrative, seeking to engage students and give meaning to abstract philosophical concepts. The morality of pollution permits for corporations, medical experimentation on animals, genetic engineering, economic globalization, biodiversity. Utilitarianism, contractarianism, and hermeneutic theories. The views of

Aldo Leopold, Vandana Shiva, Garrett Hardin, Peter Singer, Julian Simon, David Korten, Jane Goodall, Holmes Rolston III, J. Baird Callicott, Karen Warren, Tom Regan, Val Plumwood, Wendell Berry, Father Thomas Berry, Daniel Quinn, and Arne Naess. Wenz is in philosophy at the University of Illinois, Springfield. (v.11,#3)

Wenz, Peter S. "Pragmatism in Practice: The Efficiency of Sustainable Agriculture." Environmental Ethics 21(1999):391-410. Bryan Norton advocates using the perspectives and methods of American pragmatism in environmental philosophy. J. Baird Callicott criticizes Norton's view as unproductive anti-philosophy. I find worth and deficiencies in both sides. On the one hand, I support the pragmatic approach, illustrating its use in an argument for sustainable agriculture. On the other hand, I take issue with Norton's claim that pragmatists should confine themselves to anthropocentric arguments. Here I agree with Callicott's inclusion of nonanthropocentric consideration. However, I reject Callicott's moral monism. In sum, I support pragmatic moral pluralism that includes nonanthropocentric values. (EE)

Wenz, Peter S. "Environmental Justice through Improved Efficiency." Environmental Values 9(2000):173-188. Abstract: Environmentalists can convince others to adopt nature-friendly policies through appeal to commonly-held values. Efficiency and justice are such values in industrial societies, but these values are often considered at odds with each other and with policies that preserve land and reduce pollution. The present paper analyses the notion of efficiency and argues that transportation policies that environmentalists favour - substitution of intercity rail and urban mass transit for most automotive forms of transport - are both efficient and just. Keywords: Automobiles, efficiency, justice, mass transit, rail, transportation. Peter S. Wenz is in Philosophy at the University of Illinois at Springfield, Sch. of Liberal Arts/Sciences Brookens 482, Springfield, IL 62794-9243, USA. (EV)

Wenz, Peter S. Review of Christopher Belshaw. Environmental Philosophy: Reason, Nature and Human Concern. Environmental Ethics 25(2003):317-320. (EE)

Wenz, Peter S., "Environmental Ethics," in Donald M. Borchert, ed., The Encyclopedia of Philosophy Supplement. New York: Macmillan Reference, Simon and Schuster and Prentice Hall International, 1996. A supplement to the 1967 four volume Encyclopedia of Philosophy, three decades later. Brief survey of environmental ethics and brief bibliography. (v7,#2)

Wenz, Peter S. Review of Wrongness, Wisdom, and Wilderness: Toward a Libertarian Theory of Ethics and the Environment. By Tal Scriven. Environmental Ethics 21(1999):105-108.

Wenz, Peter S. "Peacemaking in Practice: A Response to Jim Sterba." Environmental Ethics 22(2000):441-442.

Wenz, Peter S., Environmental Ethics Today. New York: Oxford University Press, 2001. Wide-ranging, front-line, readable. Part I. Anthropocentrism. 1. Overpopulation, Markets, and Human Rights (free markets, tragedy of the commons, lifeboat ethics). 2. Energy, Economics, and Future Generations (global warming, fair contracts, cost-benefit analysis). 3. Competing Human-Centered Values (environmental hazards in Third World, aesthetic values, moral pluralism, relativism).

Part II. Nonanthropocentrism. 4. Animal Liberation and Utilitarianism. 5. Animal Rights and Medical Research. 6. Species Diversity and Gaia (extinction, endangered species, mechanical and organic metaphors for nature). 7. The Land Ethic (hunting to preserve ecosystems, tigers and elephants vs. humans in the Third World).

Part III. Environmental Synergism. "Environmental synergists believe that synergy exists between respect for people and respect for nature. Overall and in the long run, simultaneous respect for people and nature improves outcomes for both. ... Respect for nature promotes respect for people, so the best way to serve people as a group is to care about nature for itself" (p. 169). (This seems to be

something like Bryan Norton's convergence hypothesis.) 8. Human Rights, Agriculture, and Biodiversity (sustainability, high-tech agriculture, fouling our own nest, anthropocentrism or synergism). 9. Ecofeminism and Environmental Justice. 10. Religion and Nature (playing God, hermeneutics, narratives, grand narratives, deep ecology, stewardship, Native American religion).

Part IV. Applications. 11. Personal Choices, Consumerism, and Human Nature. 12. Public Policies, Efficiency, and Globalization. Final Reflections: Is Optimism Justified?

In the course of the book Wenz considers the views of Thomas Berry, Wendell Berry, J. Baird Callicott, Jane Goodall, Garrett Hardin, David Korten, Aldo Leopold, Arne Naess, Val Plumwood, Daniel Quinn, Tom Regan, Holmes Rolston, III, Vandana Shiva, Julian Simon, Peter Singer, and Karen Warren. Wenz is in philosophy at the University of Illinois/ Springfield; earlier works include Nature's Keeper (1988) and Environmental Justice (1988). (EE v.12,#1)

Wenz, Peter, "Environmental Health," Encyclopedia of Bioethics, revised ed. (New York: Macmillan Library Reference, Simon and Schuster, 1995), 694-99. (v6,#2)

Wenz, Peter S., Nature's Keeper. Philadelphia: Temple University Press, 1996. 207 pages. "In this book I attempt to understand, and to suggest how to curtail, the tragedy I was taught to call progress" (frontis). Chapter titles: Our Christian Heritage. Commercialism. Industrialism. Nationalism, Bureaucracy, and the Holocaust. Nuclear Power and Radiation Exposure. Nuclear Power and Human Oppression. Indigenous Peace and Prosperity. "In societies where there is much less human oppression than in ours, nature is typically respected as valuable in itself, and people are not trying to overpower nature for human benefit" (p. 119). Indigenous World Views. Implications. Practical Suggestions for agriculture, international trade, transportation, energy, equity, population control. Living with Nature. (v9,#1)

Wenz, Peter S., Review of Andrew Light and Eric Katz, Environmental Pragmatism. Environmental Ethics 19(1997):327-330. (EE)

Wenz, Peter S. "Environmental Synergism." Some anthropocentrists, such as Bryan Norton, claim that intergenerational anthropocentrism provides the best rationale for protecting biodiversity. Some nonanthropocentrists, such as J. Baird Callicott and Eric Katz, disagree. In the present paper, I analyze different varieties of anthropocentrism, argue for adopting what is here called multicultural anthropocentrism, and then advance the following thesis of environmental synergism: combining multicultural anthropocentrism with nonanthropocentrism enables synergists to argue more cogently and effectively than either anthropocentrists or previous nonanthropocentrists for policies that both protect biodiversity and maximize long-term welfare for human beings as a group. Environmental Ethics 24(2002):389-408. (EE)

Wenz, Peter S., "Leopold's novel: The land ethic in Barbara Kingsolver's Prodigal Summer," Ethics and the Environment 8(no. 2, 2003):106-125.

Prodigal Summer corresponds to Aldo Leopold's call for "a land ethic [that] changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it." People should "respect ... fellow-members and also ... the community as such." Barbara Kingsolver explains Leopold's key ideas and updates the Land Ethic by showing how it might guide people today. The present paper selectively displays this relationship, and then suggests some pedagogical advantages of fiction. Wenz is in philosophy, University of Illinois at Springfield. (E&E)

Wenz, Peter S. Review of Justice for Here and Now. By James P. Sterba. Environmental Ethics 22(2000):311-314.

Wenz, Peter S. Nature's Keeper. Reviewed by Joseph DesJardins, Environmental Ethics 20(1998):211-13.

Wenz, Peter S. *Environmental Justice*. Translators: Song Yubo and Zhu Danqiong. (Shanghai: Shanghai People's Press, 2007). (in Chinese)

Wenz, Peter. "Minimal, Moderate, and Extreme Moral Pluralism." *Environmental Ethics* 15(1993):61-74. Concentrating on the views of Christopher Stone, who advocates moral pluralism, and J. Baird Callicott, who criticizes Stone's views, I argue that the debate has been confused by a conflation of three different positions, here called minimal, moderate, and extreme moral pluralism. Minimal pluralism is uncontroversial because all known moral theories are minimally pluralistic. Extreme pluralism is defective in the ways that Callicott alleges and, moreover, is inconsistent with integrity in the moral life. However, moderate pluralism of the sort that I advance in *Environmental Justice* is distinct from extreme pluralism and free of its defects. It is also consistent with Callicott's version of Aldo Leopold's land ethic, which is itself moderately pluralistic. Wenz is in the philosophy Program, Sangamon State University, Springfield, IL. (EE)

Wenz, Peter. "Philosophy Class as Commercial." *Environmental Ethics* 19(1997):205-216. Because commercialism tends toward environmental degradation, selection and treatment of the philosophical canon are environmental matters. Environmentalists and others who teach early modern and modern philosophy should, I argue, alter typical pedagogical approaches that (usually unwittingly) reinforce common assumptions underlying commercialism and promote anti-environmental perspectives. Typical treatments of Hobbes, Locke, Descartes, Kant, Hume, and Bentham focus on human selfishness, mind-body dualism, the subjectivity of values, and the mathematical nature of reality, positions that are frequently identified as contributing causes both of the environmental crisis and of commercialism. The alternative, I argue, is to place canonical thinkers in historical perspective within a history of ideas that also includes such writers as Montaigne, Erasmus, Reid, Burke, Goethe, and Emerson. Such courses can be historically accurate, pedagogically sound, and environmentally benign. Wenz is in philosophy at the University of Illinois, Springfield. (EE)

Wenz, Peter. "Synergistic Environmental Virtues: Consumerism and Human Flourishing." In Ronald Sandler and Philip Cafaro (eds.), *Environmental Virtue Ethics* (Lanham, MD: Rowman and Littlefield, 2005).

Wenz, Peter. "Ethics, Energy Policy, and Future Generations." *Environmental Ethics* 5(1983):195-209. Conflicts can arise between energy policies pursued in the interests of present people and the needs of future people for environmental and social conditions conducive to human well-being. This paper is addressed primarily to those who believe that we have moral obligations toward people of the distant future, and who consider these obligations to affect the range of energy policies which we are morally entitled to pursue. I examine utilitarian, contractarian, and formalist ethical theories to determine which provide adequate ethical bases for this moral conviction. I argue that utilitarian theories lead to bizarre prescriptions concerning energy policies that affect people of the distant future. Contractarian theories, on one interpretation, fail to support any moral concern at all for such people and, on another, exclude some relevant dimensions of moral concern, i.e., beneficence, and provide policy planners with inadequate guidance in the face of moral dilemmas. Only formalism, for example, that of W. D. Ross, supports a moral concern for people of the distant future, and yields reasonable prescriptions concerning energy policies that affect such people. Wenz is in the philosophy program, Sangamon State University, Springfield, IL. (EE)

Wenz, Peter. *Environmental Ethics Today*. Reviewed in *Environmental Ethics* 25(2003):111-112. (EE)

Wenz, Peter. *Environmental Justice*. Reviewed in *Environmental Ethics* 11(1989):269-75.

Wenz, Peter S. *Environmental Ethics Today*. Translators: Song Yubo and Zhu Danqiong. (Shanghai:

Shanghai People's Press, 2007). (in Chinese).

Wenzel, George. Animal Rights, Human Rights: Ecology, Economy and Ideology in the Canadian Arctic (London: Belhaven Press, 1990). A critique of the Greenpeace campaign to ban the annual seal-cull by the Inuit community. Claims that environmental activity has oppressed and devastated an indigenous society. (v1,#2)

Werber, J, "Review of: Tropical Forests and the Human Spirit: Journeys to the Brink of Hope by Roger D. Stone and Claudia D'Andrea," Journal of Environment and Development 11(no.4, 2002): 441-442.

Werhane, P. and L. Westra, eds. (1998). The Business of Consumption: Environmental Ethics and the Global Economy. Boston: Rowman & Littlefield, 1998. (v.11,#2)

Wernstedt, Kris and Robert Hersh, "Brownfields Policy Reform in Wisconsin: A New Regulatory Culture," Resources (Resources for the Future), Spring 2004, Issue No. 153, pp. 14-17. Brownfields (sites with real or perceived pollution problems) number in the hundreds of thousands, perhaps as many as a million in the U.S., and under Superfund and related laws developers are afraid of them, as they can become responsible for inherited problems. Often new land is developed rather than incur the risks of reclaiming brownfields. The state of Wisconsin has a new approach to cleanup and development of brownfields. (v. 15, # 3)

Wersal, Lisa. "Islam and Environmental Ethics: Tradition Responds to Contemporary Challenges." Zygon 30(1995):451-459. The insights of Islamic scholars as they examine the interaction of Islam and the West facing environmental issues. The Western view that separates religion and science, value and fact, in particular differs from Islamic tradition, which sees all facets of life and affairs interconnected by virtue of their common source, the Creator. As traditional Islamic values have been abandoned to adopt Western technologies, environmental problems have intensified in the Muslim world. Muslim scholars urge a return to Islamic ideals that reflect a sacramental view of the physical universe, and they champion the revival of an Islamic science that synthesizes empirical study and symbolic cognition. Wersal lives in St. Paul, MN. (v6,#3)

Wersal, Lisa. "Islam and Environmental Ethics." Zygon 30, no. 3 (September 1995): 451-60. (v7,#1)

Wescoat, Jr., James L., "Muslim Contributions to Geography and Environmental Ethics: The Challenges of Comparison and Pluralism," Philosophy and Geography 1 (1997): 91-116. Wescoat is associate professor of geography at the University of Colorado. (P&G)

Wesley, E. and F. Peterson. "The Ethics of Burden Sharing in the Global Greenhouse," Journal of Agricultural and Environmental Ethics 11(1999):167-196. The Kyoto Protocol on global warming has provoked great controversy in part because it calls for heavier burdens on wealthy countries than on developing countries in the effort to control climate change. The U.S. Senate voted unanimously to oppose any agreement that does not require emissions reductions in low-income countries. The ethics of this position are examined in this paper which shows that there are good moral reasons for supporting the provisions of the Kyoto Protocol. Such a conclusion follows easily from considerations of distributive justice but can also be supported by more narrowly selfinterested arguments. KEY WORDS: global warming, ethics, distributive justice, development, U.S. politics

West, Karen, "Ecolabels: The Industrialization of Environmental Standards," The Ecologist 25 (no. 1, January 1, 1995):16- . Ecolabelling schemes are being promoted by governments and industry as substitutes for environmental regulation. Without the backing of legally-binding standards, however,

ecolabelling is little more than a marketing gimmick, providing minimal protection for the environment or for the consumer. Under GATT, even this weak instrument could be ruled a barrier to trade. (v6,#2)

West, N. E., "Biodiversity of Rangelands," Journal of Range Management 46(1993):2-13. (v.10,#3)

West, Patrick C. and Steven R. Brechin, eds., Resident Peoples and National Parks: Social Dilemmas and Strategies in International Conservation (Tempe: University of Arizona Press, 1991). 420 pages. \$ 29.95. National Parks in the U.S. are protected from human exploitation and habitation but the American model may not always be relevant to other economic, social, and cultural contexts. Examples of parks from around the world to address the rights of third world peoples faced with relocation or blocked from access to essential resources. An examination of the moral issues associated with moving peoples, particularly disadvantaged ones, in the name of conserving representative ecosystems. (v2,#1)

West, Patrick C., and Brechin, Steven R., Resident Peoples and National Parks: Social Dilemmas and Strategies in International Conservation. Tucson, AZ: The University of Arizona Press, 1991.

Westbroek, Peter, Life as a Geological Force: Dynamics of the Earth. New York: Norton, 1991. \$ 21.95. How biological and geological factors are interwoven in the processes of life on Earth. With particular attention to the landscape of the author's native Holland. (v3,#3)

Westerling, A. L., et al., "Warming and Earlier Spring Increase Western U. S. Forest Wildfire Activity," Science 313(18 August 2006):940-943. Higher spring and summer temperatures and earlier snowmelt are extending the wildfire season and increasing the intensity of wildfires in the western United States. With commentary: Running, Steven W., "Is Global Warming Causeing More, Larger Wildfires?" Science 313(18 August 2006):927-928.

Western, D, "Conservation Science in Africa and the Role of International Collaboration", Conservation Biology 17(no.1, 2003):11-19.

Western, David, and R. Michael Wright, eds., Natural Connections: Perspectives in Community-based Conservation. Washington, DC: Island Press, 1994. 581 pages. Case studies in Amboseli National Park, Kenya, forest management in eastern India, coastal management in the Maluku Islands, Indonesia, wildlife in the Peruvian Amazon, Kakadu National Park in Australia, the Zimbabwe Campfire program, wildlife in Papua New Guinea, forests in Costa Rica, forests in Niger, farms on the North Moors National Park, UK, and neotropical forests. Twenty-six articles. Focus on the needs to reconcile human needs and conservation at the local level: local participation, empowerment, tangible benefits, sustainable development. Western is with the Wildlife Conservation Society, Kenya, formerly with the Bronx Zoo; Wright is with the World Wildlife Fund. (v6,#4)

Western, David and Mary Pearl, eds. Conservation for the Twenty-first Century. Reviewed in Environmental Ethics 13(1991):95-96.

Westing, Arthur H., ed. Global Resources and International Conflict: Environmental Factors in Strategic Policy and Action (Oxford and New York: Oxford University Press, 1986). (v1,#1)

Westing, Arthur H., ed. Environmental Warfare: A Technical, Legal and Policy Appraisal (London and Philadelphia: Taylor and Francis, 1984). (v1,#1)

Westing, Arthur H., ed. Herbicides in War: The Long-term Ecological and Human Consequences (London and Philadelphia: Taylor and Francis, 1984). (v1,#1)

Westing, Arthur H., ed. Explosive Remnants of War: Mitigating the Environmental Effects (London and Philadelphia: Taylor and Frances, 1985). (v1,#1)

Westing, Arthur H. "Ethics and Spiritual Values and the Promotion of Environmentally Sustainable Development." Environmental Conservation 23, no.1 (1996): 89. (v7, #3)

Westing, Arthur H., "Towards a Universal Recognition of Environmental Responsibilities," Environmental Conservation 26(no. 3, Sept 01 1999):157- . (v.11,#1)

Westing, Arthur H., "Core Values for Sustainable Development," Environmental Conservation 23(no. 3, 1996):218-225. Widely shared core social values became strikingly articulated following World War II in such documents as the Universal Declaration of Human Rights. Widely shared core environmental values began to emerge later in such documents as the World Charter for Nature and the Rio Declaration. The social values at first ignored environmental values, but the environmental values were generally couched in social terms. Key ethical issues are how to strike a balance between anthropocentric and non-anthropocentric concerns, a proper apportionment of the biosphere between humankind and other life on Earth. Stumbling blocks include the imbalance between human numbers and available natural resources, the prevalence of totalitarian and corrupt regimes, and the ineffective system of peaceful world governance. Nevertheless a trend toward environmental values is evident. Westing is with the Westing Associates in Environment, Security and Education, Putney, VT. (EE v.12,#1)

Westing, Arthur H., ed. Cultural Norms, War and the Environment (Oxford and New York: Oxford University Press, 1988). (v1,#1)

Westing, Arthur H., "Core Values for Sustainable Development," Environmental Conservation 23(no. 3, 1996):218-225. Analyzes United Nations and other international agreements to find that the core values include: (1) An environment of quality that permits a life of dignity and well-being. (2) Solemn responsibility to protect and improve the environment for present and future generations. (3) Education on environmental matters to create enlightened opinion and responsible conduct. (4) In formulating long-term plans for economic development, due account shall be taken of the long-term capacity of natural systems. (4) Nature shall be respected and its essential processes shall not be impaired. (v.12,#3)

Westing, Arthur H., ed. Comprehensive Security for the Baltic: An Environmental Approach (London and Newbury Park, CA: Sage Publications, 1989). The series of books amply document the devastating effects of war and preparation for war on the environment. The books are also sponsored by the United Nations Environment Programme, although their publication was (in part at least, according to Joan Martin-Brown of UNEP) opposed by the U. S. State Department. Although rather expensive books, they should be in all major libraries. For a review of the first five, see Holmes Rolston, III, "International Conflict and Conservation of Natural Resources," Conservation Biology 3(1989):322-326. (v1,#1)

Westling, Louise H., The Green Breast of the New World: Landscape, Gender, and American Fiction. Athens: University of Georgia Press, 1996. 232 pages. \$ 29.95. An examination of American literary tradition in terms of gender and ecology. Westling teaches English at the University of Oregon. (v7,#2)

Weston, Anthony, Review of Schafer, R. Murray, The Soundscape: Our Sonic Environment and the Tuning of the World. Environmental Ethics 18(1996):331-333. (EE)

Weston, Anthony, Back to Earth. Reviewed by Jim Cheney. Environmental Ethics 18(1996):89-92. (EE)

Weston, Anthony, Back to Earth: Tomorrow's Environmentalism. Philadelphia: Temple University Press, 1994. 200 pages. \$ 17.95, paper. \$ 39.95 cloth. "Weston goes beyond the 'environmental ethics'

approach to argue for the reinstatement of our age-old connections to Nature and other animals, ... a sense of the 'vividness, vibrancy, and aliveness of the rest of the natural world.' Weston draws upon an encyclopedic knowledge of recent research in animal behavior in his proposal for a new trans-species 'etiquette.' He also provides practical suggestions for redesigning our cities and neighborhoods in bioregional ways to help bring about a new ecological relationship with nature." George Sessions. Humans must put aside their presuppositions about their centrality and superiority and recover their participation in the world through a rediscovery of touch and smell, noticing the details of nature, restoring the great annual celebrations at the turns of the seasons, build Earth-friendly houses, and plan neighborhoods that allow for other-than-human beings. Weston teaches philosophy at Elon College, North Carolina. (v5,#4)

Weston, Anthony, A 21st Century Ethical Toolbox. New York: Oxford University Press, 2000. A set of ethical tools to help students make a constructive difference in problematic moral situations and real-life moral controversies. Part VII is "The Expanding Circle," with Chapter 20, "Animals," and Chapter 21 "Environmental Ethics." Weston is in philosophy at Elon College. (v.11,#3)

Weston, Anthony, Review of: Christopher D. Stone: The Gnat Is Older than Man, Environmental Ethics 16(1994):441-444.

Weston, Anthony, "Listening to the Earth," Tikkun, vol. 5, no. 2, March/April 1990, pp. 50-54. A sensitive meditation on how technologically remade environments close off from us relationships with the natural world, how what we do to food and other domestic animals prevents them from being morally considerable, and how teaching environmental ethics is problematic in built environments. Anthony Weston, Department of Philosophy, State University of New York at Stony Brook, Stony Brook, NY 11794-3750. (v1,#2)

Weston, Anthony, ed., An Invitation to Environmental Philosophy. New York: Oxford University Press, 1999. \$14.95. Five original essays by prominent philosophers in environmental ethics--David Abram, Jim Cheney, Val Plumwood, Holmes Rolston III, and Anthony Weston--together with an introduction and an epilogue and resource guide by Weston. The book aims to "animate the basic questions, tell compelling stories, and offer a range of philosophical responses as complementary--not antagonistic--exploratory strategies vital to this growing topic." Intended for use as a text in upper-level environmental philosophy as well as ethics courses, alternative to the heavy academic anthologies now available, and also as a somewhat different model of environmental philosophy itself, meant for those "looking for new and more inclusive ways to approach and practice [it]". Abram's essay is "A More Than Human World"; Weston's "Is It Too Late?"; Plumwood's "Paths Beyond Human-Centeredness: Lessons from Liberation Struggles"; Rolston's "Ethics on the Home Planet"; and Cheney's "The Journey Home". Weston teaches philosophy at Elon College, North Carolina. (v.9,#3)

Weston, Anthony, "Self-Validating Reduction: Toward a Theory of Environmental Devaluation," Environmental Ethics 18(1996):115-132. Disvaluing nature—a cognitive act—usually leads quickly to devaluing it too: to real-world exploitation and destruction. Worse, in fact, nature in its devalued state can then be held up as an excuse and justification for the initial disvaluation. In this way, dismissal and destruction perpetuate themselves. I call this process 'self-validating reduction.' It is crucial to recognize the cycle of self-validating reduction, both in general and specifically as it applies to nature, if we are to have any chance of reversing it. Weston teaches philosophy at Elon College, North Carolina. (EE)

Weston, Anthony, Toward Better Problems. Philadelphia: Temple University Press, 1992. Cloth \$ 49.95. Paper \$ 18.95. Grappling with controversial issues such as abortion, animal rights, and environmental ethics, Weston explores the significance of approach and perspective in any decision-making context. The seemingly endless debates can be simplified or avoided by a "preventive ethics" that acknowledges

that all values bearing on a social problem are acknowledged as equal and "correct." Chapter 4 is on animals, Chapter 5 on the environment. Weston is professor of philosophy at SUNY, Stonybrook. This year he is at Elon College, Elon, NC. ISEE members can obtain a 20% discount by identifying themselves. 800/447-1657. (v3,#3)

Weston, Anthony. "On Callicott's Case against Moral Pluralism." Environmental Ethics 13(1991) 283-86.

Weston, Anthony. "Forms of Gaian Ethics." Environmental Ethics 9(1987):217-30. James Lovelock's "Gaia hypothesis"--the suggestion that life on Earth functions in essential ways as one organism, as a single living entity--is extraordinarily suggestive for environmental philosophy. What exactly it suggests, however, is not yet so clear. Although many of Lovelock's own ethical conclusions are rather distressing for environmental ethics, there are other possible approaches to the Gaia Hypothesis. Ethical philosophers might take Gaia to be analogous to a "person" and thus to have the same sorts of values that more familiar sorts of persons have. Deep ecologists might find in the Gaia hypothesis a means by which to transform and reunderstand our concrete experience of the world. This essay canvasses some of the strengths, weaknesses, and possibilities of each approach. Weston is in the philosophy department, State University of New York, Stony Brook, NY.

Weston, Anthony. Review of *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology*. Edited by Eric Katz, Andrew Light, and David Rothenberg. Environmental Ethics 23(2001):331-334. (EE)

Weston, Anthony. "Multicentrism: A Manifesto." Environmental Ethics 26(2004):25-40. The familiar "centrisms" in environmental ethics aim to make ethics progressively more inclusive by expanding a single circle of moral consideration I propose a radically different kind of geometry. Multicentrism envisions a world of irreducibly diverse and multiple centers of being and value not one single circle, of whatever size or growth rate, but many circles, partly overlapping, each with its own center. Moral consideration necessarily becomes plural and ongoing, and moral action takes place within an open-ended context of negotiation and covenant. Much critical and constructive work, both in environmental ethics proper and in many related fields, is already multicentric in spirit. It needs to be drawn together into an explicit, alternative environmental-ethical "platform." (EE)

Weston, Anthony. "Unfair to Swamps: A Reply to Katz." Environmental Ethics 10(1988):285-88.

Weston, Anthony. "Before Environmental Ethics." Environmental Ethics 14(1992):321-38. Contemporary nonanthropocentric environmental ethics is profoundly shaped by the very anthropocentrism that it tries to transcend. New values only slowly struggle free of old contexts. Recognizing this struggle, however, opens a space for--indeed, necessitates--alternative models for contemporary environmental ethics. Rather than trying to unify or fine-tune our theories, we require more pluralistic and exploratory methods. We cannot reach theoretical finality; we can only co-evolve an ethic with transformed practices. Weston is in the philosophy department, State University of New York, Stony Brook, NY. (EE)

Weston, Anthony. "Beyond Intrinsic Value: Pragmatism in Environmental Ethics." Environmental Ethics 7(1985):321-39. I propose an environmental ethic in the pragmatic vein. I begin by suggesting that the contemporary debate in environmental ethics is forced into a familiar but highly restrictive set of distinctions and problems by the traditional notion of intrinsic value, particularly by its demands that intrinsic values be self-sufficient, abstract, and justified in special ways. I criticize this notion and develop an alternative which stresses the interdependent structure of values, a structure which at once roots them deeply in our selves and at the same time opens them to critical challenge and change. Finally,

I apply this alternative view back to environmental ethics. It becomes easy to justify respect for other life forms and concern for the natural environment, and indeed many of the standard arguments only become stronger, once the demand to establish intrinsic values is removed. Weston is in the philosophy department, State University of New York, Stony Brook, NY. (EE)

Weston, Anthony. "Universal Consideration as an Ordinary Practice." Environmental Ethics 20(1998):279-89. Tom Birch has decisively transformed the so-called "considerability" question by arguing that all things must be "considerable" from the start in "the root-sense" if we are to determine what further kinds of value they may have. Spelling out this kind of "root" or "deep" consideration proves to be difficult, however, especially in light of post-Kantian conceptions of mind. Such consideration may also ask of the world too ready a kind of self-revelation. This paper proposes another, complementary version of universal consideration: as a kind of practical invitation, as a way of creating the space within which a response can emerge or an exchange coevolve. I conclude by locating this vision within a picture of ethics as a whole that brings what I call its "ordinary" stage, rather than its formal stage, into focus. Weston is in philosophy, Elon College, NC. (EE)

Weston, Anthony. A Practical Companion to Ethics. New York: Oxford University Press, 1997. The closing section of this small book is "The Expanding Circle," ethics extended to animals, to the enormous creativity, complexity, and depth of the rest of the world, the nonhuman, the other-than-human, the more-than-human" (p. 80). Weston is in philosophy at Elon College, North Carolina. (v7, #3)

Weston, Anthony. Review of Toward Unity among Environmentalists. By Bryan G. Norton. Environmental Ethics 14(1992):283-87.

Weston, Anthony. Review of Mitchell Thomashow. Bringing the Biosphere Home: Learning to Perceive Global Environmental Change. Environmental Ethics 25(2003):411-412. (EE)

Weston, Anthony. Review of Infinite Nature. By R. Bruce Hull. Environmental Ethics 29(2007):335-336. (EE)

Weston, Julia. "Poll Shows Environmental Issues a Priority for Most Canadians," Alternatives 21(no.4 Oct. 1995):12- . (v6,#4)

Westphal, Dale and Fred Westphal, eds., Planet in Peril: Essays in Environmental Ethics. Fort Worth: Harcourt Brace College Publishers, 1994. Softcover. 265 pages. \$ List 24.00, price to bookstores, \$ 18.00. Part One: Changes in Attitude: Toward a Biocentric Ethic. Part Two: The Wilderness: The Inherent Value of Undeveloped Nature. Part Three: Pollutions: Cleansing the Air, the Waters, and the Land. Part Four: The Animals: The Rights of our Neighbors. Includes articles by Gore, Taylor, Goodpaster, Sagoff, Callicott, Godfrey--Smith, Stone, Baxter, Kelman, Rolston, Singer, Regan, Russow. This one is more selective than comprehensive, modest and manageable in size and price, and contrasts with the much bigger collections. Also the selections are less abbreviated than in the bigger collections with dozens of extracts. Dale Westphal is professor of philosophy emeritus at Western Michigan University and taught one of the first courses in the United States in environmental ethics. Fred Westphal is in philosophy at the University of Miami, Florida. (v4,#3)

Westra, L., and Robinson, T. The Greeks and the Environment. Lanham, MD: Rowman & Littlefield, 1997. Chapters by Anthony Preus, John Rist, Alan Holland, Madonna Adams and many others. Forward by Max Oelschlaeger. (v8,#2)

Westra, L., and Werhane, P., eds. The Business of Consumption: Environmental Ethics and the Global Economy. Lanham, MD: Rowman & Littlefield, 1997. 360 pp. Original articles by Herman Daly,

Robert Goodland, William Rees, Donald Brown, Mark Sagoff, Ernest Partridge, William McDougout, Laura Westra, Eric Freyfogle and many others. (v8,#2)

Westra, L., Crabbe, P., Holland, A., and Ryczkowski, L., eds., Implementing Ecological Integrity: Restoring Global and Regional Environmental and Human Health. The Netherlands: Kluwer Publishers, 2000. Papers from a conference in Budapest, Hungary, 1999. Sample papers:

- Irina Glazyrina and Tatyana Strizhova, "Ecosystem Integrity and Its Implementation in Eastern Siberia."
- Maria Patroescu, "Natural Transborder Parks: the Direction of Biodiversity Preservation in Romania."
- James Kay and Henry Regier, "Uncertainty, Complexity, and Ecological Integrity: Insights from an Ecosystem Approach."
- Imre Lazar, "Mothers and Mother Nature: Attachment, Detachment and Human Ecological Integrity."

Westra, L.S., Bowen, K.L., and Behe, B.K., "Agricultural Practices, Ecology, and Ethics in the Third World", Journal of Agricultural and Environmental Ethics 4(1991):60-77. The increasing demand for horticultural products for nutritional and economic purposes by lesser developed countries (LDC's) is well-documented. Technological demands of the LDC's producing horticultural products is also increasing. Pesticide use is an integral component of most agricultural production, yet chemicals are often supplied without supplemental information vital for their safe and efficient implementation. Illiteracy rates in developing countries are high, making pesticide education even more challenging. For women, who perform a significant share of agricultural tasks, illiteracy rates are even higher than for men. The dilemma exists of how a developing country can improve its nutritional and economic situation without giving consideration to social and environmental consequences.

Westra, Laura, and Robinson, Tom, eds. The Greeks and the Environment. Lanham, MD: Rowan and Littlefield Publishers, 1997. 184 pp. \$21.95 paper, \$52.50 cloth. A collection of original essays that reexamines the views of nature and ecology found in the thought of Plato, Aristotle, the Stoics, and Plotinus. Recognizing that these thinkers were not confronted with the environmental degradation that threatens contemporary philosophers, the contributors find that the Greeks nevertheless provide an excellent foundation for a sound theory of environmentalism. Westra is in philosophy at the University of Windsor. Robinson is in philosophy at the University of Toronto. (v8,#1)

Westra, Laura, "'Respect,' 'Dignity,' and 'Integrity': An Environmental Proposal for Ethics," Epistemologia 12(1989):91-124. Westra proposes an account that has a wider reach than either Albert Schweitzer's reverence for life or Paul Taylor's respect for nature. (v1,#2)

Westra, Laura, An Environmental Proposal for Ethics: The Principle of Integrity. Lanham, MD: Rowman and Littlefield, 1993. 240 pages. \$ 21.95 paper. \$ 55.00 cloth. What does ecosystem integrity mean as a basis of moral obligation? Part I: The Theory of Integrity, with chapters analyzing integrity, respect, and dignity in philosophy, science, and law, and concluding with a defense of biocentric holism. Part II. The Practice of Integrity, with analysis how to make the concept of ecosystem integrity operational. "Westra's book is the best philosophical defense, to date, of the ecosystems approach to environmental ethics" -- Kristin Shrader-Frechette. "This original discussion breaks new ground by thoroughly analyzing ethical values, centering on the concept of ecological integrity, that apply intrinsically to nature and that govern our rightful use of the environment" -- Mark Sagoff. Westra is in philosophy at the University of Windsor. (v4,#3)

Westra, Laura, Review of Revolution for Nature. Environmental Values 3 (1994):184. (EV)

Westra, Laura, Kira L. Bowen, and Bridget K. Behe, "Agricultural Practices, Ecology, and Ethics in the Third World, " Journal of Agricultural and Environmental Ethics, vol. 4 (no. 1, 1991):60-77. The increasing demand for horticultural products for nutritional and economic purposes by lesser developed

countries is well documented. Pesticide use is an integral component of most agricultural production, yet chemicals are often supplied without supplemental information vital for their safe use. A developing country faces a dilemma whether it should improve its situation without giving adequate consideration to environmental consequences. Westra is now at the University of Windsor, but was formerly at Auburn University, Alabama. Bowen and Behe are both professors in the College of Agriculture, Auburn University. (v2,#3)

Westra, Laura, "The Corporation and the Environment," Business Ethics Quarterly 5(1995):661-673.

Westra, Laura, An Environmental Proposal for Ethics: the Principle of Integrity: (Lanham, Md.: Rowan and Littlefield, 1994). Reviewed by David Schmitz in Environmental Values 4(1995):371-372. (EV)

Westra, Laura and John Lemons, eds. Perspectives on Ecological Integrity. Reviewed by David J. Rapport. Environmental Values 8(1999):116. (EV)

Westra, Laura, and Lawson, Bill, eds., Faces of Environmental Racism, 2nd. ed. Lanham, MD: Rowman and Littlefield, 2001. The new edition enlarges concerns from blacks and whites to explore cases of Latino involvement. The first edition, 1995, was edited by Laura Westra and Peter Wenz. (v.12,#4)

Westra, Laura, "Biotechnology and Transgenics in Agriculture and Aquaculture: the Perspective from Ecosystem Integrity," Environmental Values 7(1998):79-96. New agricultural technologies are often justified morally in terms of their expected benefits, e.g., feeding the world's hungry. Such justifications stand or fall, not only on whether such benefits are indeed forthcoming, but on whether or not they are outweighed by attendant dangers. The practical details of each case are, therefore, all-important. In this paper agriculture and aquaculture are examined from the perspective of ecosystem integrity, and with further reference to the uncertain effects of anthropogenic changes in the earth's atmosphere. The principle of integrity provides a strong justification for a cautious approach to new technologies, and particularly so in the case of transgenics. KEYWORDS: Agriculture, aquaculture, biotechnology, ecosystem health, integrity. Laura Westra is at University of Windsor, Ontario. (EV)

Westra, Laura, "The Ethics of Environmental Holism and the Democratic State: Are they in Conflict?" Environmental Values Vol.2 No.2(1993):125-136. ABSTRACT: Environmental holism, with its demands for universality, appears to undermine the democratic rights of individuals, and of nation states within the international community. But these rights may better be viewed as means towards justice or other goods, rather than as ends in themselves. Where basic survival issues are involved, environmental 'triage' may be morally essential, and some checks on 'populist' democratic politics inevitable. KEYWORDS: Democracy, environmental ethics, holism, individual rights. University of Windsor, 401 Sunset, Windsor, Ontario, Canada N9B 3P4.

Westra, Laura and Lawson, Bill E., eds., Faces of Environmental Racism: Confronting Issues of Global Injustice. 2nd ed. Totowa, NJ: Rowan and Littlefield, 2001. Reviewed by Sandler, Ronald, Environmental Values 12(2003):543-546. (EV)

Westra, Laura and John Lemons, Scientific and Ethical Perspectives on Ecosystem Integrity, Kluwer Academic Publishers, Dordrecht, The Netherlands, 1995. A collection of essays by philosophers and scientists, drawing together many of the issues discussed by the participants in the meetings of L. Westra's SSHRC (Canada) Grant: "The Integrity Project", 1992-95. Authors include Mark Sagoff, Kristin Shrader-Frechette, Robert Ulanowicz, James Kay, Henry Regier, James Karr, Patricia Werhane, Tom Lacher, Jr., Robert Goodland and others. The essays discuss the "Ecosystem approach" and the mandate "to protect and restore integrity" from various critical perspectives. (v5,#4)

Westra, Laura, and Peter S. Wenz, eds. Faces of Environmental Racism: Confronting Issues of Global

Justice, Rowman Littlefield Publishers, Inc., Lanham MD, 1995. 300 pages. \$ 21.95 paper. Authors include Robert D. Bullard, Clarice Gaylord, Hussein Adam, Bill Lawson, Robert Goodland, Howard McCurdy, Kristin Shrader-Frechette, Omari Kokole, Peter Wenz, and Laura Westra. Although most minorities are bearing disproportionate burdens such as toxic waste exposure and other environmental hazards. This volume deals exclusively with persons and communities of color who are either African or African American. Holistic approaches to environmental protection are generally accepted as necessary to preserve the ecosystem and avoid mass extinctions that jeopardize human existence. However, such approaches may be viewed as risking some individuals or groups for the good of the whole. Racial minorities in the U.S. are disproportionately exposed to toxic wastes and other environmental hazards. Internationally, wealthy countries of the North increasingly ship hazardous wastes to poorer countries of the South. Ecocentric environmentalists are often viewed by the general public as unconcerned about human hazards: "If it doesn't swim upstream or hoot in the night, environmentalists don't care about it." (Withlynn Battle, Community leader, Birmingham, AL). These essays show that environmentalism and concern for human beings and justice are entirely compatible. Reviewed in Environmental Ethics 21(1999):325-328. Westra is in philosophy at the University of Windsor. Second edition by Westra, Laura and Lawson, Bill, 2001, q.v. Wenz is in philosophy at Sangamon State University. (v6,#2) (v5,#4)

Westra, Laura, "Corporate Responsibility and Hazardous Products," critical review of Elaine Draper, Risky Business (New York: Cambridge University Press, 1991. Business Ethics Quarterly, vol. 4 (no. 1, January 1994):97-110. With an extended analysis of problems and issues in genetic testing. (v5,#1)

Westra, Laura, and Werhane, Patricia, eds. The Business of Consumption: Environmental Ethics and the Global Economy. Lanham, MD: Rowman Littlefield, 1998. (v.9,#4)

Westra, Laura, *Ecoviolence and the Law: Supranational Normative Foundations of Ecocrime*. Ardsley, NY: Transnational Publishers, 2004. The international law principles of jus cogens ("compelling law," higher laws binding on all nations), and erga omnes (obligations promoting basic values of all nations) justify characterizing ecocrime as a "just crime" requiring action to curb their occurrence and punishment to deter them. Westra proposes the creation of an International Environmental Court that would adjudicate "ecocrime" issues. The book results from a doctoral thesis in law at Osgoode Hall Law School, York University, Toronto.

Westra, Laura, *Environmental Justice: The Rights of Unborn and Future Generations*. London: Earthscan, 2006. How the rights of the unborn and future generations are handled in common law and under international legal instruments. Convention on the Rights of the Child, industrial disasters, toxic spills, clean water provision, diet, HIV/AIDS, environmental racism and climate change, the Kyoto Protocol, the Millennium Development Goals, and international trade. Case studies such as Bhopal and Chernobyl. Westra is philosophy (emeritus), University of Windsor, and adjunct professor in social science, York University, Toronto.

Westra, Laura, and Lemons, John, eds. Perspectives on Ecological Integrity. Boston, London, Dordrecht: Kluwer Academic Publishers, 1995. 279pp. Recently, concepts of ecological integrity have been proposed to facilitate enhanced protection of biological and ecological resources against the threat of human activities. The promotion of ecological integrity as a basis for public policy and decision making stems from scientists and others concerned about the threats of human activities to ecosystems and species, and from philosophers attempting to derive a more suitable ethic to guide the relationships between humans and the nonhuman environment. Although ecological integrity has been proposed as a norm for public policy and decision making, the concept is relatively new and therefore the underlying scientific and philosophical rationales have not been developed fully. This book offers a number of perspectives that are intended to stimulate and inform future discussion concerning the importance and consequences of ecological integrity for science, morality, and public policy. The audience of this work

will include environmental professionals, whether academic, governmental, or industrial, or in the private consultancy sector. It is also suitable as an upper level reference text. Contributors include James Karr, Ellen Chu, James Kay, Eric Schneider, Reed Noss, Robert Ulanowicz, Henry Regier, Robert Goodland, Herman Daly, Kristin Shrader-Frechette, S. O. Funtowicz, Jerome Ravetz, Mark Sagoff, D. Martin Fleming, D. L. DeAngelis, W. F. Wolf, Peter Miller, David Pimentel, Joel Reichart, Patricia Werhane, James Nations, Ray Cesca, J. Angus Martin, and Thomas Lacher, Jr., Laura Westra, and John Lemons. (v7, #3)

Westra, Laura. Review of Diritto Per la Natura. By Mariachiara Tallacchini. Environmental Ethics 21(1999):101-103.

Westra, Laura. Living with Integrity: A Global Ethic to Restore a Fragmented Earth. Lanham, MD: Rowan Littlefield, 1997. This innovative book takes a new look at environmental ethics and the need for ecological and biological integrity. Westra explores the necessity for radical alteration not only of interpersonal ethics but also of social institutions and public policy. In the process, Westra denies the validity of majority rule in environmental ethical concerns. Issues discussed in the book include the link between ecological integrity and human health; an environmental evaluation of business and technology; biotechnology and transgenics in agriculture and aquaculture; and the environmental ethics of the ancient Greeks and Kant. (v8,#3)

Westra, Laura. "Let It Be: Heidegger and Future Generations." Environmental Ethics 7(1985):341-50. The concept of freedom in Heidegger's sense of truth or unconcealedness of beings may be applied to future generations without thereby reducing the status of other elements within the environment to mere means, since Da-sein's approach as one who is a caring and concerned, anxious and aware of its own death in an authentic manner, does not place man in any sense "above" other things. This care (Sorge), concern, favor, can be captured in Heidegger's remark that man is not the lord of beings, but rather is "the Shepherd of Being." Accordingly, we may be able to learn to moderate our ordering and commanding attitude and learn to "listen" and free beings, letting them be what they truly are. If so, we might then require no special justification in order to extend toward earth, sky, and future persons the same understanding and freeing concern we normally give to, and wish for, ourselves. Westra is in the department of history, philosophy, and religion, Clemson University, Clemson, SC. (EE)

Westra, Laura. Living in Integrity. Lanham, MD: Rowman & Littlefield, 1998. (v9,#1)

Westra, Laura. An Environmental Proposal for Ethics: The Principle of Integrity (Lanham, Md.: Rowman and Littlefield, 1994). Reviewed by Kristin Shrader-Frechette in Environmental Ethics 17(1995):433-435. (EE)

Westra, Laura. Living in Integrity: A Global Ethic to Restore a Fragmented Earth. Reviewed by Mark S. Halfon. Environmental Ethics 22(2000):101-103.

Westra, Laura. "Ecosystem Integrity, Sustainability, and the 'Fish Wars.'" Wild Earth, Summer 1996, pp. 66-69. The cod population in Newfoundland waters crashed in 1992, a result of overfishing for decades. In 1995, haddock (turbot) populations declined, due to overfishing beyond the 200 mile limit in the Grand Banks off the coast of Newfoundland, resulting in dispute to the point of violence between Canadians and Spanish fishing crews. Westra argues that such problems can be best addressed through an ethics of ecosystem integrity, from which strict regulations and reduced quotas follow. Westra is in philosophy at the University of Windsor, Ontario. (v7, #3)

Westra, Laura. "Why Norton's Approach is Insufficient for Environmental Ethics." Environmental Ethics 19(1997):279-297. There has been an ongoing debate about the best approach in environmental ethics. Bryan Norton believes that "weak anthropocentrism" will yield the best results for public policy, and that

it is the most defensible position. In contrast, I have argued that an ecocentric, holistic position is required to deal with the urgent environmental problems that face us, and that position is complemented by the ecosystem approach and complex systems theory. I have called this approach "the ethics of integrity," and in this paper I show why this perspective suggests better solutions to difficult cases, for which "weak anthropocentrism" fails to provide an answer. Westra is in philosophy at the University of Windsor, Windsor, Canada. (EE)

Westra, Laura. "Environmental Integrity, Racism, and Health." The Science of the Total Environment 184 (1996): 57-66. Environmental degradation seriously affects human health. Thus, a close relationship exists between the protection of ecosystem integrity and wilderness on one hand, and human health on the other. However, there is an overarching holistic perspective in laws and regulations--as well as morality--to maintain a healthy relationship between the two. Problem areas focused on in this paper are: (a) climate change and global warming; (b) food production; and (c) global equity. Westra is in philosophy at the University of Windsor, Ontario. (v7, #3)

Westra, Laura. Review of Etica e Ambiente. By Sergio Bartolommei. Environmental Ethics 13(1991):367-69.

Westra, Laura. "From Aldo Leopold to the Wildlands Project: The Ethics of Integrity." Environmental Ethics 23(2001):261-274. Aldo Leopold's influence on environmental ethics cannot be overstated. I return to Leopold's work in order to show the connection between the ethics of integrity and many of the points made by Leopold in his writings. I also show how the spirit of Leopold's land ethic and his love and respect for wilderness is present and current in the Wildlands Project, and that it is a live part of public policy in North America, albeit a debated one. (EE)

Westra, Laura. "Ecosystem Integrity and the 'Fish Wars.'" Journal of Aquatic Ecosystem Health 5(1996):275-282. The problem of fisheries and aquatic ecosystems in Canada have been analyzed primarily from the standpoint of the conservation of these resources, without much emphasis on the value of aquatic ecosystems for themselves, including their life-support function, vital to all the biota therein. This represents a purely anthropocentric approach, that is flawed from the standpoint of sustainability practically and theoretically. Without entering into the anthropocentrism debate, this study indicates the apparent conflict between theoretical legislative and regulative aims, and most forms of "management principles," even when these are presented in their most enlightened forms. Starting with the examination of a recent Canadian case, the failure of present management practices is outlined, even when these are democratically chosen and support worthwhile social goals. The Canadian "fish wars" example shows clearly why the ethics of integrity provide better guidelines for public policy, as such ethics alone take as primary biological and ecological objectives. Westra teaches philosophy at the University of Windsor, Ontario. (v8,#2)

Westra, Laura. "Ecology and Animals: Is There a Joint Ethic of Respect?" Environmental Ethics 11(1989):215-30. Recent work in animal ethics has advanced principles that are too individualistic to be compatible with a holistic environmental ethic such as the land ethic proposed by Aldo Leopold. J. Baird Callicott, on the other hand, has attempted to reconcile the two ethics by suggesting that sympathy, natural among humanity, as he claims on Humean grounds, does not necessarily terminate at the species barrier. His argument shows minimally that it is not necessary that we abandon ecological ethics in order to view nonhuman animals as morally considerable. I argue instead that it is not sympathy, but hostility/indifference that manifests the reality of life in wild nature, and as such forms a better basis for an all-encompassing ethic. If one accepts that the factual realm suggests the limits of norms and establishes the background and context of normative judgments in this context (as Holmes Rolston, III, for instance, does), then a different line of argument can be developed. I argue that intraspecies and interspecies ethics ought to be different for us because behavior in the wild is different within and without a species.

Further, I argue that hostility/indifference coupled with respect form the basis of an approach which embraces a holistic environmental ethic as well as one concerned with nonhuman animals. Westra is in the philosophy department, Auburn University, Auburn, AL. (EE)

Westra, Laura. Ecoviolence and the Law: Supranational Normative Foundations of Ecocrime. 2004. ISBN 1-57105-316-6. 480 pages. Westra proposes a different way of looking at the multiple environmental crises threatening the global community, contending that the current movement in both ethics and the law to separate human rights from environmental rights is profoundly misguided. These, she argues, are not separate fields of study or endeavor, rather, they are closely interrelated principles. Access to clean air and water, land capable of growing uncontaminated food, and a climate that fosters growth are inherent human rights. Part I provides a theoretical framework within which to analyze her main concern, and on which to rest the defense of the primary argument of this work: simply, environmental harms are assaultive in nature; hence they are not "quasi-crimes" but actual crimes—ecocrimes. Part II deals with practical concerns and examines cases where the deprivation of environmental rights can be construed as an assault on the current and future well-being of a community. Part III analyzes international covenants that recognize and emphasize the gravest crimes against humanity. The final chapter covers obstacles that have emerged in the defense of basic human rights. The author concludes with a proposal for the creation of an International Environmental Court that would adjudicate ecocrime issues. This forward-thinking work provides careful analysis with imaginative solutions. To order contact Transnational Publishers. Phone: 914-693-5100. Toll free: 800-914-8186. Email: info@transnationalpubs.com.

Westra, Laura. "The Disvalue of 'Contingent Valuation' and the Problem of the 'Expectation Gap'." Environmental Values 9(2000):153-171. Abstract: 'Contingent Valuation' is a method often used to make decisions about environmental issues. It is used to elicit citizens' preferences at the location of a specific facility, new road and the like. I argue that even if we could elicit a truly informed and 'free' choice, the method would remain flawed, as 1) all 'local' activity also has far-reaching environmental consequences; 2) majority decisions may support choices that adversely affect minorities; 3) even with full information, consenting to harms like significant alterations of our normal functioning or health, or genetic mutations, may not be morally acceptable. Keywords: Risk assessment methods, citizens' choices, global impacts, minority rights. Laura Westra is at Sarah Lawrence College, 1 Mead Way, Bronxville, New York 10708-5999, USA. (EV)

Westra, Laura. "Virtue Ethics as Foundational for a Global Ethic." In Ronald Sandler and Philip Cafaro (eds.), Environmental Virtue Ethics (Lanham, MD: Rowman and Littlefield, 2005).

Westra, Laura. *Environmental Justice and the Rights of Indigenous Peoples: International and Domestic Legal Perspectives*. London: Earthscan Publications, 2007. Westra reconstructs the historical background and current legal plight of indigenous peoples by using examples from case law and showing how indigenous peoples' lack of sufficient legal rights consistently leaves them defenseless against environmental injustices.

Wetlesen, Jon, "Hvorfor naturvern? Noen kommentarer til Arne Naess' dypokologiske svar (Why protect nature? Some comments on Arne Naess' deep ecological answer)," Norsk filosofisk tidsskrift 27(no. 3, 1992):87-110. The deep ecology platform treats as synonyms value in itself, intrinsic value and inherent value. But these are not synonyms and the deep ecological claim about value in nature is ambiguous. Intrinsic value can be interpreted teleologically. Inherent value can be interpreted deontologically. If clarified and both meanings are used, this can be used to advantage in what deep ecology hopes to achieve. But Naess is biased toward the teleological emphasis. (Norway)

Wetlesen, Jon, "Animal Rights or Human Duties?" Archiv für Rechts- und Sozialphilosophie, Beiheft, 1994. In English. Wetlesen develops the notion of inherent value within a deontological framework.

The argument is related to that of Tom Regan and Paul Taylor, extending the notion of inherent value analogically, first from moral agents to moral persons who are not agents; and then to moral subjects who are not moral persons. The argument proceeds casuistically, based on morally relevant similarities and differences, these being fundamentally the capability of conation or autopoiesis, a capacity of self-organization, self-reproduction, and self-determination. This will include all individual living organisms within the class of moral subjects, and, with some uncertainty, perhaps supra-individual wholes as well. Unlike Regan and Taylor, Wetlesen ascribes inherent value in a gradual manner, depending on the degree of similarity with a moral agent who has the capacity for rational self-determination. The stringency of moral duties binding other agents is proportional to the degree of inherent value. Wetlesen is on the philosophy faculty at Oslo and teaches environmental ethics there. A copy is available on request. Address: Department of Philosophy, University of Oslo. E-mail: jon.wetlesen@filosofi.uio.no

Wetlesen, Jon. "The Moral Status of Beings Who are not Persons: A Casuistic Argument." Environmental Values 8(1999):287-323. ABSTRACT: This paper addresses the question: Who or what can have a moral status in the sense that we have direct moral duties to them? It argues for a biocentric answer which ascribes inherent moral status value to all individual living organisms. This position must be defended against an anthropocentric position. The argument from marginal cases propounded by Tom Regan and Peter Singer for this purpose is criticised as defective, and a different argument is proposed. The biocentric position developed here is related to that of Albert Schweitzer and Paul F. Taylor, but rejects their assumption of equal inherent value for all living organisms. It argues instead for equal moral status value for moral persons and agents, and gradual moral status value for nonpersons, depending on their degree of similarity with moral persons. Mary Ann Warren's recent book on Moral Status is also discussed. The argument is constructed as a casuistic argument, proceeding by analogical extension from persons to non-persons. The meta-ethical question of its pragmatic validity is discussed. KEYWORDS: moral status, inherent value, casuistic argument, strong versus weak cognitivism, pragmatic validity. Jon Wetlesen, Department of Philosophy University of Oslo 0315 Oslo, Norway email: jon.wetlesen@filosofi.uio.no (EV)

Wettestad, J., "Clearing the Air: Europe Tackles Transboundary Pollution," Environment 44(no.2, 2002): 32-40. (v.13,#2)

Wettestad, Jorgen. "Science, Politics and Institutional Design: Some Initial Notes on the Long-Range Transboundary Air Pollution Regime," The Journal of Environment and Development 4, no. 2 (Summer 1995): 165- . (v6,#4)

Wheale, Peter, ed. The Social Management of Biotechnology: Workshop Proceedings. Tilburg, The Netherlands: International Centre for Human and Public Affairs, 1996. Dfl 29,- (Dutch guilders). This volume of collected papers is designed to inform, stimulate and engage all those interested in the emerging biotechnological age. Topics covered in the text include the ethical questions raised by the creation of transgenic farm animals, the morality of genetic experimentation on animals, the controversy surrounding the patenting of genetic material and of the transgenic animals themselves, and the ethical implications of engineering transgenic animals for the sole purpose of transplanting their organs into humans (xenografting). Also considered are the environmental hazards, public policy issues, and the political implications of modern biotechnology and genetic engineering.

Ordering Information: Send check or money order payable to ICHPA (International Centre for Human and Public Affairs, or transfer to Postbank account 4307323; address: Pastoor Smitsstraat 25 5014 RH Tilburg, The Netherlands; Phone/Fax +31-13-5360751; Email: R.vonSchomberg@kub.nl. (v7, #3)

Wheeler, D, "Racing to the Bottom? Foreign Investment and Air Pollution in Developing Countries," Journal of Environment and Development, 10(no. 3, 2001):225-245. (v.13,#1)

Wheeler, David. "Addressing Population and Immigration Bioregionally," Wild Earth 7(no.1, 1997):74. (v8,#2)

Wheeler, Douglas P. "An Ecosystem Approach to Species Protection." Natural Resources and Environment 10(no. 3, Winter 1996):7. (v7,#1)

Wheeler, Quentin D., "Insect Diversity and Cladistic Constraints," Annals of the Entomological Society of America 83 (no. 6, 1990):1031-1047. "This paper examines a systemic paradox: powerful analytical approaches to studies of phylogenetic patterns among species continue to be perfected as species are being driven to extinction before they can be collected, preserved, or studied" (p. 1031). "Pieces of the puzzle are being destroyed faster than they can be collected and placed in a box for future contemplation, let alone the rate at which the puzzle can be solved" (p. 1034). Wheeler is in entomology, Cornell University.

Wheelwright, Jeff. Degrees of Disaster: Prince William Sound--How Nature Reels and Rebounds. New Haven: Yale University Press, 1996. 352 pages. \$16 paper. The ecological effects of the 1989 Exxon Valdez oil spill on Prince William Sound. The complex story of a region where natural disturbance is normal. While the spill had toxic short-term effects, the author concludes that cleanup efforts probably perpetrated more damage than the oil did. Left alone, the Sound would have repaired itself quickly. Throughout the book the author illuminates the gap between the scientists's measurements of change and the public's understanding of disaster. (v7, # 3)

Wheelwright, Nathaniel T., "Enduring Reasons to Preserve Threatened Species," The Chronicle of Higher Education, June 1, 1994, B2,B3. Many endangered species may not be good for anything, either in the markets of economics or for their roles in ecosystems. "It is poor conservation strategy to bank on the arguments of economics or ecologists alone. Why? Because the most convincing case for rain forests is simply that the loss of species, like the destruction of a Beethoven symphony or a Renoir painting of the Taj Mahal, would be a loss of splendence. ... Religious leaders and philosophers have the training to raise the moral and philosophical values of preserving species. Traditionally they have had the courage to explore life's most difficult issues. Yet thus far their voices have hardly been heard in the debate over biodiversity. They can and must speak up, defining and explaining the sanctity not just of human life but of life in all of its forms." Wheelwright is a biologist at Bowdoin College who has studied resplendent quetzals in Costa Rica. (v7,#1)

Wheelwright, NT, "State-of-the-Art Conservation Literature," Conservation Biology 17(no.5, 2003):1469-1471. (v.14, #4)

Whelan, RJ, "Managing Fire Regimes for Conservation and Property Protection: an Australian Response," Conservation Biology 16(no.6, 2002): 1659-1661.

Whelan, Tensie, Nature Tourism: Managing for the Environment. Covelo, CA: Island Press, 1991. \$ 34.95 cloth, \$ 19.05 paper. 220 pages. Trekking, bird watching, nature photography, wildlife safaris, mountain climbing, river rafting. Nature tourism amounts to \$ 19.5 billion annually and is increasing at the rate of 30% each year. Right and wrong ways to do it, with particular attention to how countries can develop their economies while also protecting their natural resources. (v2,#3)

Whidden, Shawna Marie. "The Hanford Reach: Protecting the Columbia's Last Safe Haven for Salmon." Environmental Law 26, no.1 (1996): 265. The Hanford Reach of the Columbia River is home to the largest naturally spawning population of fall chinook salmon in the Columbia River Basin. Whidden discusses the factors that have contributed to the success of this species and compares the legal strategies

and political opportunities for providing permanent protection to the Hanford Reach. (v7, #3)

Whigham, D., D. Dyknová, and S. Hejny, eds., Wetlands of the World: Inventory, Ecology and Management. Vol. 1. Africa, Australia, Canada and Greenland, Mediterranean, Mexico, Papua New Guinea, South Asia, Tropical South America, United States. Dordrecht, The Netherlands, 1993. 788 pages. \$ 286.00. Two more volumes are coming, but slowly. An important reference, at an exorbitant price. (v5,#3)

Whisenant, S., Repairing Damaged Wildlands: A Process-Oriented, Landscape-Scale Approach. Cambridge: Cambridge University Press, 1999, Whisenant is at Texas A&M University. (v.13, #3)

Whitaker, Julie, Review of: Cahill, Michael and Tony Fitzpatrick, eds., Environmental Issues and Social Welfare. Oxford: Blackwell Publishers, 2002. Environmental Values 14(2005):276-278.

Whitcomb, Claire, "Dr. Jane Goodall: Messenger of Hope," Victoria 14 (no. 9, September 2000):40, 109. Jane Goodall, profiled in a popular woman's magazine, and promoting her "Roots and Shoots," a conservation education program for youth, alarmed that there are now only a quarter as many chimpanzees as when she started studying them forty years ago. (v.11,#3)

White, Allen L. "Sustainability and the Accountable Corporation: Society's Rising Expectations of Business." Environment 41(No. 8, Oct. 1999):30- . Thorough and consistent reporting is the key to increasing corporations' accountability in the environmental, social, and economic realms. (v10,#4)

White, Amy. "Environmental Harms, Causation, and Act Utilitarianism." Environmental Ethics 26(2004):189-203. It is in group environmental harms. Such attempts are seriously flawed. Causation need not, and many times should not, be important in assessments of accountability for act utilitarians. A model that maximizes utility in such assessments called the "best fit model" provides a good alternative. Because use of this model leads to more utility than models of after-the-fact accountability which rely on causal links, act utilitarians should adhere to the "best fit model" regardless of actual causal links. Although the "best fit model" is a better method to assign accountability using an act utilitarian approach than methods involving causation, it does have a serious flaw in regard to application and future utility. Given this flaw, the model (indeed, any after-the-fact model of accountability) is not enough to ensure future utility maximization. To maximize utility to the fullest, the model should be used along with incentives to prevent environmental harm before it occurs. Perhaps if such incentives are strong enough, the model may not need to be imposed at all. However, in cases where harm does occur, the "best fit model" yields the most utility. Thus, if the "best fit model" is not an acceptable method by which to assess responsibility, neither is act utilitarianism. (EE)

White, Benjamin and Roberts, Adam M., "The World Trade Organization: Democracy for Sale," The Animals' Agenda 19(no. 6, Nov 01 1999):19- . International policies threaten species and undermine protective laws. (v.11,#1)

White, D., "The Unhappy Legacy of Thomas Malthus," Environmental Politics 10(no.4, 2001): 121-27. (v.13,#2)

White, D. F., "A Green Industrial Revolution? Sustainable Technological Innovation in a Global Age," Environmental Politics 11(no.2, 2002): 1-26. (v.13,#4)

White, Damien Finbar. "Hierarchy, Domination, Nature: Considering Bookchin's Critical Social Theory", Organization and Environment, 16, (No. 1, 2003): 34-65. The work of Murray Bookchin stands as one of the most ambitious attempts in recent times to produce a post-Marxist critical social theory that places

ecological concerns at its core, and this article argues that this richly elaborated theory has highlighted the distinct limitations of "high modernist" formulations of historical materialism and liberalism. However, it is also maintained that Bookchin's "organic society" thesis and his theorising about social hierarchy, social domination, and the domination of nature ultimately suffer from significant theoretical and empirical inconsistencies. Bringing Bookchin's more valuable insights into dialogue with the recent interface between "historical-geographical materialism" and poststructuralism, a dynamic, discontinuous view of eco-social relations is recommended that recognises that human societies are always involved in the production, reproduction and enframing of disruptive, active and generative natures. How forms of social domination relate to these processes is viewed as complex, contingent, and spatially and historically varied. White is a lecturer in sociology at Goldsmiths College, University of London.

White, Daniel R., Postmodern Ecology: Communication, Evolution, and Play. Albany, NY: State University of New York Press, 1997. The trends in European thought that have contributed to the rise of industrial civilization and to the ecological crisis. Alternative visions of nature and culture, from Romanticism to ecological theory, in an effort to rewrite the story of natural and cultural history. Ecological poetics, technological artistry, evolutionary learning, the play of communication, and the struggle for a viable ecological ethic, and a larger theory of human and transhuman interests. White is in critical theory and cultural studies at the University of Central Florida. (v.8,#4)

White, Dave; Hall, Troy, "Public Understanding of Science in Pacific Northwest Salmon Recovery Policy," Society and Natural Resources 19 (no.4, Number 4/April 2006): 305-320 (16).

White, James E., ed., Contemporary Moral Problems, 6th ed. Belmont, CA: Wadsworth Publishing Co., 2000. Chapter 8 is on animals: Kant, Singer, Regan, Machan, Mary Anne Warren, Rachels. Chapter 9 is on the environment: Leopold, Callicott, Taylor, Rolston, Vandana Shiva. The previous edition, 5th ed., 1997, had only one section, combining animals and the environment. White is in philosophy at St. Cloud State University, St. Cloud, MN. (v.10,#3)

White, James E., Contemporary Moral Problems, 4th edition. Minneapolis/St. Paul: West Publishing Co., 1994. 518 pages. Paper. With a section on Animals and the Environment. Peter Singer, Bonnie Steinbock, Tom Regan, Marry Anne Warren, Joel Feinberg, Christopher D. Stone, William F. Baxter. White is at St. Cloud State University, St. Cloud, MN. (v4,#4)

White James E., ed. Contemporary Moral Problems. 5th ed. Minneapolis, MN: West Publishing Co., 1997. Chapter 8 is "Animals and the Environment": Peter Singer, "All Animals Are Equal"; Bonnie Steinbock, "Speciesism and the Idea of Equality"; Tom Regan, "The Case for Animal Rights"; Mary Anne Warren: "Difficulties with the Strong Animal Rights Position"; William F. Baxter, "People or Penguins: The Case for Optimal Pollution": William Godfrey Smith (now William Grey), "The Value of Wilderness"; Christopher D. Stone, "Should Trees Have Standing?"; Karen J. Warren, "The Power and Promise of Ecological Feminism"; problem cases, suggested readings. White is at St. Cloud State University, St. Cloud, MN. (v7, #3)

White, Lynn, Jr. "The Historical Roots of Our Ecologic Crisis," Science 155(1967):1203-07. This well-known and often-quoted essay places the blame for the ecological crisis on the supposed biblical notion that human beings were given the task of dominating (even exploiting) the earth.

White, M, "Review of: James M. Cahalan, Edward Abbey: A Life," Environmental History 7(no.4, 2002): 700.

White, Omar N., "The Endangered Species Act's Precarious Perch: A Constitutional Analysis Under the Commerce Clause and the Treaty Power," Ecology Law Quarterly 27 (No. 1, 2000): 215- . (v.11,#4)

White, R. J., "Why Wild Fish Matter: Balancing Ecological and Aquacultural Fishery Management," Trout 33 (no. 4, 1992):16-48. We have built 89 fish hatcheries on the Columbia River alone, costing billions of dollars, and these stock more smolts than ever before. But returns to natal streams continue to decline, spawning runs have dropped from an average of 16 million salmon to one million. Hatchery fish may have disrupted the system through genetic pollution, as wild stocks are swamped with genes from hatchery fish that are not adaptive fits. (v5,#4)

White, Richard, "Native Americans and the Environment," in W. R. Swagerty, ed., Scholars and the Indian Experience: Critical Reviews of Recent Writing in the Social Sciences, pp. 179-204. Bloomington: Indiana University Press, 1984. A critical summary and review of over a hundred works in the field. White is at the University of Utah. (v5,#4)

White, Rodney R., North, South, and the Environmental Crisis. Toronto: University of Toronto Press, 1993. 256 pages. Cloth, Canadian \$ 50. Paper \$ 17.95. What used to be viewed as local environmental problems are really linked to the whole process of global industrialization, urbanization, and rapid population growth. In the extension of European power over most of the globe, the environment was considered as external to economic rationality. In developing countries population is producing megacities that are creating an alarming imbalance between population and resources at the same time that they are becoming major industrial producers and major polluters. A serious problem is the lack of shared technologies. Unless the richer nations share their technologies, and unless they support trade policies that will allow poor nations to export their goods and to generate wealth for environmental conservation, the implications are ominous for all of us. White is in geography at the University of Toronto. (v4,#1)

White, SM; Paster, EL, "Creating Effective Land Use Regulations through Concurrency", Natural Resources Journal 43 (no.3, 2003): 753-780.

White, Thomas I., Business Ethics: A Philosophical Reader. New York: Macmillan, 1993. Chapter 18 is on "Business and the Environment." Articles by W. Michael Hoffman, "Business and Environmental Ethics"; David P. Henson, "The Ethics of Development and Global Environmentalism"; Peter Singer, "The Place of Nonhumans in Environmental Issues," and Eric Katz, "Defending the Use of Animals by Business: Animal Liberation and Environmental Ethics"; also two case studies: nuclear power and dolphins. A long book, 867 pages. (v3,#4)

White, Thomas I., ed. Business Ethics: A Philosophical Reader. Riverside, NJ: Macmillan College Publishing, 1993. 867 pages, paper. In addition to the typical topics in business ethics texts, this one includes a section on "Business and the Environment" with essays by W. Michael Hoffman, David P. Hanson, Peter Singer, and Eric Katz. (v5,#2)

White, Thomas. *In Defense of Dolphins: The New Moral Frontier*. Malden, MA: Blackwell Publishing, 2007. White recounts a fifteen year journey to understand the nature of dolphins. He surveys scientific research on dolphin cognition and intelligence, emotional capacities, and social behavior to advocate for their ethical treatment.

White, Thomas. *In Defense of Dolphins: The New Moral Frontier*. Malden, MA: Blackwell Publishing, 2007. White recounts a fifteen year journey to understand the nature of dolphins. He surveys scientific research on dolphin cognition and intelligence, emotional capacities, and social behavior to advocate for their ethical treatment.

White, Vera K. and others, Healing and Defending God's Creation: Hands On! Practical Ideas for Congregations. Presbyterian Church (U. S. A.) informational, loose-leaf booklet, about 60 pages, with

sections on "Discipleship and Worship," "Learning and Teaching," "Lifestyle," "Reusing, Reducing and Recycling," and "Legislation, Public Policy, and Community-Involvement." Supplements will be issued periodically. \$ 4.95. Contact: Office of Environmental Justice, Social Justice and Peacemaking Ministry Unit, Presbyterian Church (U.S.A.), 100 Witherspoon Street, Louisville, KY 40202. Phones 502/569-5809 and (for orders only) 800/524-2612. (v2,#4)

White, Wayne C. "Senior Management's Role in Responsible International Environmental Performance," Journal of Environmental Law & Practice 4(no.6, 197):36. A framework for avoiding disreputable international practices. (v8,#3)

Whitehead, Mark. "Cold Monsters and Ecological Leviathans: Reflections on the Relationships between States and the Environment." *Geography Compass* Vol. 2, no. 2 (2008): 414-32. Whitehead provides a critical review of approaches to the study of environment-state relations across a range of different disciplines and argues that states continue to play a significant role in socio-environmental relations at a number of different scales in terms of normative perspectives, critical approaches, and notions of environmental governmentality.

Whitehouse, Peter J., "The Ecomedical Disconnection Syndrome," Hastings Center Report 29(no. 1, 1999):41-44. "Bridging medical and ecological ethics must be a critical aspect of future health and environmental planning, and in fact, of our species and others." "Our focus should shift not only from our individual selves to our human community, but to the community of other living creatures on earth. A new focus on 'values' or interests shared with other life on the planet is likely to lead to renewed spiritual exploration of our relationship to nature." Whitehouse is professor of biomedical ethics at Case Western Reserve University. (v.10,#1)

Whitehouse, PJ; Ballenger, JF; Sadowsky, J; Gaines, AD, "Mind, Environment, and Culture," Hastings Center Report 31(no.2, 2001):44-45. (v.12,#4)

Whitelaw, E., and MacMullan, E., "A Framework for Estimating the Costs and Benefits of Dam Removal," Bioscience 52(no.8, 2002): 724-30. (v.13,#4)

Whitelaw, GS, "Review of: The Politics of the Environment: Ideas, Activism, Policy by Neil Carter," Environments 31(no.1, 2003):117-118. (v.14, #4)

Whitelegg, John. Review of Joe Ravetz, City-Region 2020. London: Earthscan, 2000, Environmental Values 10(2001):558. (EV)

Whiten, A., Goodall, J., et al., "Cultures in Chimpanzees," Nature 399(1999):682-685. Thirty-nine different behavior patterns, including tool usage, grooming and courtship behaviors, are customary or habitual in chimpanzee communities and transmitted from generation to generation by observation and imitation. If culture is defined to include transmitted behavior (not involving language or intentional teaching), then chimpanzees have culture as well as humans (but so also, minimally, do songbirds with their learned dialects). (v.11,#1)

Whiteside, K., "The French Elections of 2002: Green Blues," Environmental Politics 12(no. 1, 2003): 241-245. (v 14, #3)

Whiteside, Kerry H., "Worldliness and Respect for Nature: an Ecological Application of Hannah Arendt's Conception of Culture," Environmental Values 7(1998):25-40. Arendt's conception of culture could supersede claims that nature's intrinsic value or human interests best ground environmental ethics. Fusing ancient Greek notions of non-instrumental value and Roman concerns for cultivating and preserving

worldly surroundings, culture supplies an ethic for the treatment of nonhuman things. Unlike a system of philosophical propositions, an Arendtian ecology could only arise in public deliberation, since culture's qualitative judgements are intrinsically linked to processes of political persuasion. KEYWORDS: Arendt, ecology, culture, politics, judgement (judgment). Whiteside is at Franklin and Marshall College, PA. (EV)

Whiteside, Kerry H. "Hannah Arendt and Ecological Politics." Environmental Ethics 16(1994):339-358. I argue that Arendt's understanding of "society" deepens Green critiques of productivism. By avoiding subjectivist or objectivist modes of thought, Arendt uncovers hidden links between life-sustaining labor and a world-destroying drive to consume. Checking environmentally destructive desires to produce and consume requires structuring communities around an optimal configuration of public deliberation, work and labor. I conclude that an Arendt-inspired ecological politics stresses the interdependence of human values and an all-encompassing natural order. Whiteside is with the Dept. of Government, Franklin and Marshall College, Lancaster, Pa. (EE)

Whiteside, Kerry H., Divided Natures: French Contributions to Political Ecology. Cambridge, MA: MIT Press, 2002 (coming in May) Much of environmental theory in English is shaped by the anthropocentrism/non-anthropocentrism debate. This debate is almost nonexistent among French theorists, who focus on the processes linking nature and human identity. The insights of French theorists could help English language theorists extricate themselves from endless debates over the center of nature's value. Among the French theorists discussed are Denis de Rougemont, Denis Ducios, René Dumont, Luc Ferry, André Gorz, Félix Guatarri, Bruno Latour, Alain Lipietz, Edgar Morin, Serge Moscovici, and Michael Serres. The English-language theorists discussed include John Barry, Robyn Eckersley, Robert Goodin, Tim Hayward, Holmes Rolston III, and Paul Taylor. (v.13, #3)

Whiteside, Kerry H., Review of: Bess, Michael, The Light-Green Society: Ecology and Technological Modernity in France, 1960-2000. Chicago: University of Chicago Press, 2003. Environmental Values 14(2005):138-140.

Whiteside, Kerry. *Precautionary Politics: Principle and Practice in Confronting Environmental Risk*. Cambridge, MA: The MIT Press, 2006. The precautionary principle - which holds that action to address threats of serious or irreversible environmental harm should be taken even in the absence of scientific certainty - has been accepted as a key feature of environmental law throughout the European Union. In the U.S., however, it is still widely unknown, and much of what has been written on the topic takes a negative view. Whiteside provides an analysis of the precautionary principle - its origins and development, its meaning and rationale, its theoretical context, and its policy implications. He looks at the application of the principle (and the controversies it has stirred) and compares European and American attitudes toward it and toward environmental regulation in general.

Whitney, Elspeth. "Lynn White, Ecotheology, and History." Environmental Ethics 15(1993):151-69. Controversy about Lynn White's thesis that medieval Christianity is to blame for our current environmental crisis has done little to challenge the basic structure of White's argument and has taken little account of recent work done by medieval scholars. White's ecotheological critics, in particular, have often failed to come to grips with White's position. I question White's reading of history on both interpretative and factual grounds and argue that religious values cannot be treated independently of the political, economic, and social conditions that sustain them. I conclude that medieval religious values were more complex than White suggests: rather than causing technological innovation, they more likely provided a justification for other activity taking place for other reasons. Whitney is in the department of history, University of Nevada, Las Vegas, NV. (EE)

Whitney, G, "Robert A. Lambert, Contested Mountains: Nature, Development and Environment in the Cairngorms Region of Scotland, 1880-1980," Environmental History 7(no.4, 2002): 683-684.

Whitney, H., "Cities and Superfund: Encouraging Brownfield Redevelopment," Ecology Law Quarterly 30(no. 1, 2003): 59-112. (v 14, #3)

Whittbecker, Alan E. "Metaphysical Implications from Physics and Ecology." Environmental Ethics 12(1990):275-82. I contrast metaphysical implications from physics and ecology and compare them through two concepts, the field, primary in physics and borrowed by ecology, and wholeness, postulated in ecology and borrowed by physics. I argue that several implications from physics are unacceptably reductive or erroneous and identify an old and a new ecology. Metaphysical implications from the old ecology are quite different from the new ecology, as well as from quantum or Newtonian physics. Wittbecker is at the Marsh Institute, Viola, ID. (EE)

Whittemore, Colin T. "Response to the Environmental and Welfare Imperatives by U.K. Livestock and Production Industries and Research Services." Journal of Agricultural and Environmental Ethics 8(1995):65-84. Production methods for food from U.K. livestock industries (milk, dairy products, meat, eggs, fibre) are undergoing substantial change as a result of the need to respond to environmental and animal welfare awareness of purchasing customers, and to espouse the principles of environmental protection. There appears to be a strong will on the part of livestock farmers to satisfy the environmental imperative, led by the need to maintain market share and by existing and impending legislation. There has been support forthcoming in the form of Government-sponsored scientific research and technological development to provide the necessary framework for new environmentally sensitive practices. The agricultural community has itself made substantial responses to market demand through the inception of Farm Assured Quality Assurance Schemes. These appear to have a more sustainable future than the extremes of organic farming and free-range practices. Pollution of agricultural land with nitrate and phosphate by intensive livestock industries is a greater problem in some parts of continental Europe than it is in the U.K. The distribution of livestock out of intensive units and into mixed farming systems, would require substantial restructuring of the industry. Many of the animal welfare requirements which have been forwarded as a part of the environmental agenda for agriculture have been voluntarily accepted by livestock producers. However, some major aspects, such as alternative housing systems for pigs and poultry, remain unresolved. Analysis of the science and technology support for the environmental imperative, especially from Government sources, would suggest that, although dramatically increased in recent years, environmentally orientated research remains a relatively small proportion of the whole. Whilst a movement away from governmental funding of volume production appears to be justifiable, there has not been an equivalent balancing of effort toward funding for product quality, sustainability, environmental protection and animal welfare. Nevertheless, the university education system is producing a generation of more environmentally aware agricultural science graduates who are opting to pursue Government-sponsored environmentally orientated postgraduate research programs. (JAEE)

Whitten, Andrew, "The Second Inheritance System of Chimpanzees and Humans," Nature 437(1 Sept. 2005):52-55. "When we focus our comparative lens on culture, the evidence is all around us that a gulf separates humans from all other animals. Nevertheless, recent studies of great apes suggest that they resemble us culturally to an extent unmatched by other species" (p. 52) Some prefer to use "traditions" for behavior that animals acquire by imitation, present in many vertebrate species, such as birds, maybe even in invertebrates. But chimp groups can have an array of multiple and specific traditions that can be called "culture."

"Ape culture may be particularly complex among non-human animals, yet it clearly falls short of human culture. An influential contemporary view is that the key difference lies in the human capacity for cumulative culture, whereby the achievements of successive generations have built on previous developments to create complex structure such as languages and technologies. Chimpanzees have

accumulated many traditions, but each remains sufficiently simple that there is little scope for it to have developed significant complexity compared to its original form. Hints of cumulation exist, such as the refinement of using prop stones to stabilize stone anvils during nut cracking, but these remain primitive and fleeting by human standards" (p. 53). Whitten is in psychology, University of St. Andrews, Scotland.

Whitten, Tony, Derek Holmes, and Kathy Mackinnon, "Conservation Biology: A Displacement Behavior for Academia?," Conservation Biology (no.1, Feb. 2001): 1-. Academic conservation biology and biologists were quite ineffective in the dramatic deforestation of Sumatra, an all too typical case. "Perhaps conservation biology is merely a displacement activity for concerned biologists within the academic system. Deep inside they would really love to attack the alpha male of conglomerate-led forest destruction, but a lack of access and funds, and the political and social complexities of conservation management, means they huddle together, metaphorically scratching their backsides and snorting" (p. 3). (v.12,#3)

Whitworth, A, "Ethics and Reality in Environmental Discourses," Environmental Politics 10(no. 2, 2001):22-42. (v.13,#1)

Who Counts?, special issue of the newsletter, Issues in Ethics, of the Center for Applied Ethics, Santa Clara University, Santa Clara, CA. Vol 4, no. 1, Winter/Spring 1991. Articles: "Ethics and the Spotted Owl Controversy" and "Who Should Pay: The Product Liability Debate." (v2,#3)

Whyte, I. J. et al., "A New Policy for the Management of the Kruger National Park's Elephant Population," Koedoe: Research Journal, South African Parks 42/1, 1999, pages 111-132. In the midst of controversies about culling elephants, free-ranging elephants, elephant effects on vegetation, and other issues, the new policy proposes that the Kruger National Park be divided into six zones--two botanical reserves, two high-elephant-impact zones (no population reduction), and two low-elephant-impact zones (where numbers will be actively reduced). Whyte is a biologist at Kruger. (v.10,#3)

Whyte, I., "Book Review: Paterson, A. Scotland's Landscape. Endangered Icon," Progress in Human Geography 26(no.5, 2002): 704. (v.13,#4)

Wickins-Drazilova, Dita, "Zoo Animal Welfare," Journal of Agricultural and Environmental Ethics 19(2006):27-36. The continuing existence of zoos and their good purposes, such as conservation, science, education, and recreation, can be ethically justified only if zoos guarantee the welfare of their animals. The usual criteria for measuring animal welfare in zoos are physical health, long life, and reproduction. This paper looks at these criteria and finds them insufficient. Additional criteria are submitted to expand the range of welfare considerations: natural and abnormal behavior; freedom and choice; and dignity. All these criteria should play a role in analyzing zoo animal welfare and interests but dignity has the overriding part because it impacts on both animal and human interests. Keywords: animal - dignity - ethics - reintroduction - welfare - zoos. Wickins-Drazilova is at the Department of Environmental Studies, School of Social Studies, Masaryk University Brno, Czech Republic. (JAEE)

Wiebe, K., "The Nile River: Potential for Conflict and Cooperation in the Face of Water Degradation," Natural Resources Journal 41(no.3, 2001): 731-54. (v.13,#2)

Wiebe, Robert H. "Humanizing Nationalism," World Policy Journal 13(no.4 1996):81. (v8,#1)

Wiedmann, Sally Nelson, Rawlsian Justice and Environmental Ethics, 1996, University of Miami, Ph.D. degree in philosophy. 207 pages. Rawls can be the source of a public environmental ethic supporting the

preservation of nature on the ground of nature's intimate association with certain primary goods and an obligation to future generations. Previous attempts to adapt Rawls' initial theory to an environmental ethic are all utilitarian, and unsuccessful. The appropriate Rawlsian ethic, while anthropocentric, is not narrowly so. Potential criticisms of the Rawlsian environmental ethic are rebutted. The advisor was Ramon Lemos. (v.10,#1)

Wiener, Jonathan Baert. "Law and the New Ecology: Evolution, Categories, and Consequences," Ecology Law Quarterly 22(no.2, 1995):325- . (v6,#4)

Wiens, John A., "Toward a Unified Landscape Ecology." Pages 148-151 (the conclusion) in Wiens, John A., and Moss, Michael R., eds., Issues in Landscape Ecology. Guelph, Ont.: The International Association for Landscape Ecology, 1999. A sourcebook for the International Association for Landscape Ecology Fifth World Congress, Snowmass Village, CO, 1999. Landscapes and culture are inseparable in two ways. The first is that culture affects the way humans can perceive landscapes; there is a "challenge of overcoming our culturally conditioned perceptions of landscapes to deal with landscapes at other scales."

"The second way that the culture-landscape linkage affects landscape ecology has to do with ethics. There is in most human cultures a deep-seated ethic about landscapes, reflecting the sense of a stewardship over the land. ... Ethics are one of the pillars of human culture, and land ethics affect both the ways in which we perceive landscapes and how we use landscapes. ... Landscapes have properties that go beyond science. ... Our science at some level reflects these ethical underpinnings." Wiens is in ecology at Colorado State University and currently president of the International Association for Landscape Ecology. (v.10,#3)

Wiens, John A., "What is Landscape Ecology, Really?" Landscape Ecology 7(1992):149-150. (v7,#2)

Wiens, John, "The Emerging Role of Patchiness in Conservation Biology," Pages 93-107 in Pickett, S.T.A., et al., eds., The Ecological Basis of Conservation. New York: Chapman, 1997. (v.10,#3)

Wiens, John A. "Oil, Seabirds, and Science." Bioscience 46, no.8 (1996): 587. The effects of the Exxon Valdez oil spill. When an environmentalist accident creates a potential conflict between science and environmental advocacy, science may suffer. Scientists, like the general public, expect the worst, and tend to interpret data accordingly, rather than to assume a null hypothesis, since "common sense" tells us that a big spill must have bad results. This was further complicated, in the Valdez spill, by much natural variation in the seabird populations. Subsequent studies indicate that seabirds recovered much faster than some scientists predicted. With critical exchange BioScience 46(1996):794, and 47(no. 2, 1997):66-67, and 47(no. 4, 1997):202-206. Wiens teaches ecology at Colorado State University. (v7, #3)

Wiepkema, P. R., Schouten, W.G.P., and Koene, P., "Biological Aspects of Animal Welfare: New Perspectives", Journal of Agricultural and Environmental Ethics 6(1993). Supplement. Basically vertebrates are organisms that collect, store and implement information in a cognitive way. This characteristic implies that changes in predictability/controllability (P/C) of relevant events strongly influence present and future behaviour. In cases of decreases of P/C stress symptoms appear. Individual vertebrates differ in their coping styles. Moreover, they show changes in P/C or certainty by means of emotional expressions. Finally, individuals that form a stable social group may significantly protect each other against stress. Animal friendships are a likely phenomenon. Wiepkema, Schouten, and Koene are in the Department of Animal Husbandry Ethology, Agricultural University, Wageningen, The Netherlands.

Wiesenfeld, Esther. "From Individual Need to Community Consciousness: The Dialectics Between Land Appropriation and Eviction Threat (A Case Study of a Venezuelan "Barrio")", Environment and Behavior

29(1997):198.

Wiggins, David, "Nature, Respect for Nature, and the Human Scale of Values," Proceedings of the Aristotelian Society 100 (no. 1, 2000):1-31. Leibniz supposed that the world grows ever more aesthetic with the human development of it, but environmentalists lament the vanishing of natural or wild elements of the landscape, which they treasure. Philosophers might fear that such values are too speculative, mystical, or romantic. Perhaps these lamented values are valued only because they are constitutive of larger human interests. But the human scale of values is not uniformly human centered. We cherish natural things for reasons that transcend utility, profit, human welfare. The swallow, the skylark, the wetland, the water meadow--these things matter to us, but we should "pay attention to the way in which they matter to us": they matter "by virtue of a pre-existing engagement with such things that is independent of our pursuit of our own content or happiness" (p. 11).

Economists are unable to account for such values in their terms. The value here is not only a matter of sustainability, though "every departure from sustainable policies has to be justified in terms of dire vital need" (p. 18). The central value is one already noted by Mill: "Nor is there much satisfaction in contemplating the world with nothing left to the spontaneous action of Nature" (p. 22) (and contrary to Leibniz).

We require analysis of the idea of nature. The contrast between nature and culture is important (even if humans are in other senses natural). Nature is multi-faceted and produces various responses (gratitude, awe, disconcertment, disgust, fear); a philosophical puzzle now is what to make of "respect for nature," especially if one is not religious but secular. One form of respect is nature as a redoubtable opponent or a force to be reckoned with, a limitation upon our will, by which we might gain a better understanding of the scale of our humanity. This would make us duly precautionary, but more: Perhaps we do well to respect nature as "the aggregate of the powers and properties of all things" (Mill). Wiggins is at New College, Oxford, and this was the presidential address to the Aristotelian Society, London, October 1999. (v.13, #3)

Wightaxling (Wight-axling), Heather, "Review of: Federalism in the forest: National Versus State Natural Resource Policy by Tomas M. Koontz," Natural Resources Journal 43(no. 1, 2003): 335-338.

Wigley, Daniel C., Shrader-Frechette, Kristin. "Environmental Justice: A Louisiana Case Study," Journal of Agricultural and Environmental Ethics 9(1996):61-82. The paper begins with a brief analysis of the concepts of environmental justice and environmental racism and classism. The authors argue that pollution--and environment-related decision-making--is prima facie wrong whenever it results in inequitable treatment of individuals on the basis of race or socio-economic status. The essay next surveys the history of the doctrine of free informed consent and argues that the consent of those affected is necessary for ensuring the fairness of decision-making for siting hazardous facilities. The paper also points out that equal opportunity to environmental protection and free informed consent are important rights. Finally, it presents a case study on proposed uranium enrichment facility near Homer, Louisiana and argues that siting the plant would violate norms of distributive equity and free informed consent. It concludes that siting the facility is a case of environmental injustice and likely an example of environmental racism or classism. Keywords: informed consent, equity, fairness, Louisiana, pollution, racism, radiation, rights, uranium. Wigley and Shrader-Frechette teach philosophy at the University of South Florida, Tampa. (JAEE)

Wigley, T. B., "Forests, Forestry, and the Status of Wildlife Communities," Journal of Forestry 100(no.7, 2002): 55-56. (v.13,#4)

Wikramanayake, E; Mcknight, M; Dinerstein, E; Joshi, A; Gurung, B; Smith, D, "Designing a Conservation Landscape for Tigers in Human-Dominated Environments," Conservation Biology 18(no.3, 2004):839-844. (v. 15, # 3)

Wilcove, David S., The Condor's Shadow: The Loss and Recovery of Wildlife in America. New York: W. H. Freeman, 1999. 339 pages. One third of the U.S. species are either endangered, threatened, or vulnerable. America's landscapes have been silently eroding for a century. A host of exotic blights and pests are wrecking landscapes and forests. Most forestry on public lands is still destructive. Nevertheless conservationists have won some victories: the national parks (usually too small to be functioning ecosystems), wilderness areas designated, the Endangered Species Act, wolves restored to Yellowstone. Reviewed by Bill McKibben, New York Review of Books 46 (no. 13, Aug. 12, 1999):44-45. (v.10,#3)

Wilcove, David S. *No Way Home: The Decline of the World's Great Animal Migrations*. Washington, DC: Island Press, 2008. Around the world great animal and bird migrations are disappearing. International conservation efforts are urgently needed to save the migrants from the devastating effects of over-exploitation, habitat destruction, human created obstacles, and climate change. Some of the migrants include songbirds, red knots, bellbirds, monarch butterflies, dragonflies, wildebeests of the Serengeti, springbok of South Africa, the white-eared kob of Sudan, bison of North America, grey whales, right whales, sea turtles, and salmon. The Rocky Mountain locust is already extinct. Wilcove is an ecologist at Princeton University.

Wilcove, DS; Lee, J, "Using Economic and Regulatory Incentives to Restore Endangered Species: Lessons Learned from Three New Programs," Conservation Biology 18(no.3, 2004):639-645. (v. 15, # 3)

Wilcox, C. V. and Elder, B. D., "The Endangered Species Act Petitioning Process: Successes and Failures," Society and Natural Resources 16(no. 6, 2003): 551-560.

Wilcox, Geoffrey L. "New England and the Challenge of Interstate Ozone Pollution Under the Clean Air Act of 1990." Boston College Environmental Affairs Law Review 24, no.1 (1996): 1. (v8,#1)

Wild Duck Review, vol. 3, no. 3, August 1997, is a special issue in tribute to Paul Shepard. Tributes by his wife, Florence Shepard, by Stephen Kellert, Bernie Krause, C. L. Rawlins, Barbara Ras, William Severine Kowinski, Barbara Dean, and Dolores LaChapelle. Wild Duck Review, 419 Spring Street, Suite D, Nevada City, CA 95959. 916/478-0134.

Wild Earth is the periodical of The Wildlands Project, now in volume 6, and is increasingly proving a forum for the discussion of conservation, policy, strategy, ethics, especially involving relatively large areas of wildlands and interconnecting buffers and corridors. Winter 1995/96, vol. 5, no. 4, is a good sample issue. Examples of articles:

Freyfogle, Eric T., "Land Ownership: Private and Wild," pages 71-77. The word property shares etymological roots with such words as proper, appropriate, and propriety. Thus, embedded in the world, if not in today's version of the institution, are certain seemingly inescapable ideas--of rightful scale and proportion, of balance and order, of personal responsibility. To make something one's own--to transform it into one's property--is to make it part of one's life, an extension of one's person and character; it is to bring the thing within the fold of one's individual care and duty. Do these ethical ideas, we might wonder, lurk somewhere beneath the surface of American property law? Freyfogle teaches law at the University of Illinois.

Windsor, Donald A., "Endangered Interrelationships: The Ecological Cost of Parasites Lost," pages 78-83. "Collectively, parasites form a pervasive matrix of interrelationships within an ecosystem which tends to hold it together, acting almost as a glue." Parasites are important regulators of ecosystems, acting almost like complicated servomotors in complex machines. When parasitism is viewed in its larger category, symbiosis, the unifying force is seen as even more comprehensive. "If a single message jumps out from all the myriad details of parasitology, it is that the complex interrelationships among parasites and their hosts are essential to the natural functioning of ecosystems." Required reading for those who

dislike parasites. Windsor is an invertebrate zoologist, Norwich, New York. (v7,#1)

Wild Earth, 13, nos. 2/3, Summer/Fall 2003 is a theme issue, Facing the Serpent, with five articles about human attitudes toward snakes, by E. O. Wilson, Eileen Crist, Harry W. Greene, Reed F. Noss, and Charles Bowden. And another article on mosquitoes. (v.14, #4)

Wild vs. Tame, the pros and cons of game ranching, Bugle: Journal of Elk and the Hunt, vol. 10, no. 3 (Summer 1993):35-43. Jim Posewitz, "The Risks Are Too Great," says no, game ranching commercializes and trivializes hunting, and compromises the integrity both of the wild animal and of the human hunter. Robert D. Brown, "Perception vs. Reality," defends game ranching, selling hunts, as well as game farming, raising game to be slaughtered for the commercial market. Game ranching in many situations preserves the only kind of hunting possible in contemporary, overcrowded America. Posewitz, formerly with the Montana Division of Wildlife, now heads the Cinnabar Foundation, a conservation group. Brown is head of the Department of Wildlife and Fisheries at Texas A & M University. (v5,#1)

Wildavsky, Aaron, But Is It True? A Citizen's Guide to Environmental Health and Safety Issues. Cambridge, MA: Harvard University Press, 1995. \$30. Argues that claims of imminent disaster from global warming and acid rain--but not ozone depletion--are "mostly false, unproven or negligible."

Wilder, Martijn. "Quota Systems in International Wildlife and Fisheries Regimes," The Journal of Environment and Development 4, no. 2 (Summer 1995): 55- . (v6,#4)

Wilderness Psychology Group. Annual Conference, 1980, Proceedings. Ed. Lance K. Canon. A dozen papers, wilderness management, wilderness psychology, solitude in the wilderness, wilderness as metaphor, wilderness classification. Conference was held at University of New Hampshire, Durham, August 14-15, 1980.

Wilderness Psychology Group, Third Annual Conference, 1982, Proceedings. Ed. Franklin E. Boteler. A dozen papers, wilderness management, wilderness psychology, therapeutic values of wilderness. Conference was held at West Virginia University, Morgantown, July 8-9, 1982.

Wildes, Fred T., "Recent Themes in Conservation Philosophy and Policy in the United States," Environmental Conservation 22 (no. 2, 1995):143-150. A compact history of environmental philosophy in the last thirty years, with numerous references. A dichotomy between utilitarian conservationist and preservationist non-anthropocentric views has been present the whole century, shifting with new emphases (such as ecofeminism or environmental spirituality), but still underrunning the main divisions across the last thirty years. Sustainable development is the dominant paradigm at present. Wildes is in geography, San Diego State University, University of California, Santa Barbara. (v.10,#1)

Wildfire is a publication of the International Association of Wildland Fire, featuring technical and policy articles on wildfire. Dr. Jason Greenlee, IAWF, P. O. Box 328, Fairfield, WA 99012. Phone 509/283-2397. Fax 509/283-2264. (v6,#1)

Wildlife Alliance. "Smuggler Nabbed at Russian-China Border with Tiger Pelts, Hundreds of Bear Paws" (September 5, 2007). Environmental News Network online at: <<http://www.enn.com/animals/article/22694/print>>. The Chinese demand for tiger parts, bear paws, bear galls, deer penises, musk glands, and so on for use in traditional medicine seems insatiable, with an illegal border traffic of thousands of such animal parts, the most valuable from endangered species, and all too little enforcement.

Wildlife News is published by the African Wildlife Foundation, Washington, DC, and Nairobi, reporting

wildlife issues throughout Africa, and continuing more than thirty years of conservation efforts by this foundation. African Wildlife Foundation, 1717 Massachusetts Ave., N.W., Washington, DC 20036. (v6,#3)

Wildlife Travelling Companions:

--Sterry, Paul, Wildlife Travelling Companion: East Africa. Ramsbury, Marlborough, Wiltshire, UK, The Crowood Press, 1992.

--Measures, John, Wildlife Travelling Companion: Spain. Ramsbury, Marlborough, Wiltshire, UK, The Crowood Press, 1992.

--Gibbons, Bob, Wildlife Travelling Companion: France. Ramsbury, Marlborough, Wiltshire, UK, The Crowood Press, 1992.

--Walters, Martin, Wildlife Travelling Companion: Great Britain and Ireland. Ramsbury, Marlborough, Wiltshire, UK, The Crowood Press, 1992. (v.12,#2)

Wildlife Viewing Guides are now available for about half of the U.S. States, and some Canadian provinces, through the Watchable Wildlife Program, with about a dozen partners from the major federal and state (and provincial) agencies, also Defenders of Wildlife. Contact Falcon Press, P. O. Box 1718, Helena, MT 59624. 800/582-2665. Falcon Press is also excellent for various scenic guides, trail guides, biker's guides, and so forth to the countryside.

Wiles, R. David, Neo-Aristotelian Environmental Virtue Ethics. M.A. thesis, Colorado State University, spring 2003. Neo-Aristotelian virtue ethics has recently emerged as an important ethical alternative, challenging Kantianism and utilitarianism for theoretical dominance. This thesis argues that virtue ethics is indeed the best ethical theory available, both generally, and as a grounding framework for environmental ethics. An environmental virtue ethics uniquely recognizes the intricate connections between a healthy environment and human flourishing. It also recognizes the diverse values that nature affords in our quest for eudaimonia, and provides good reason for protecting and preserving these values. Specifically, environmental virtue ethics recognizes the importance of living materially simple lives in our quest for the good life, and stresses the fact that material simplicity is needed to ameliorate the environmental crisis caused by over-consumption. Living close to nature, endorsed by an environmental virtue ethic, facilitates a materially simple lifestyle, which facilitates eudaimonia. Solitary time spent in nature gives us the "mind-time" needed for wisdom. With wisdom, we come to see how truly important nature is for living well. The advisor was Philip Cafaro. Wiles is now a Ph.D. student in the program in religion and nature, University of Florida.

Wiley, Andrea S. "A Role for Biology in the Cultural Ecology of Ladakh," Human Ecology 25(no.2 1997):273. (v8,#3)

Wilford, John Noble, "Ages-Old Icecap at North Pole Is Now Liquid, Scientists Find," New York Times, August 19, 2000, p. A1, A12. North Pole melted. The ice cap at the North Pole has melted, at least for the present, into a mile wide stretch of open water. Despite their monitoring of warming trends in the Arctic, this took scientists quite by surprise. In recent years, submarines and icebreakers have had to plough through six to nine feet of ice. A tourist cruise there in August found the open water. James J. McCarthy, an oceanographer, a Harvard zoologist, leader of an Intergovernmental Panel on Climate Change, and lecturer on the icebreaker cruise trip, says they are the first humans in history to see open water at the Pole. The last time scientists are certain there was open water at the Pole was 50 million years ago. (v.11,#3)

Wilford John Noble, "Showing Why a Rainforest Matters," New York Times, May 29, 1998. B31, B39. In a new permanent exhibition, the American Museum of Natural History features the interdependence of living things, the wealth of biodiversity, and expresses concern about the future of life on Earth. This is

the Museum's first issues-oriented hall, and puts the Museum forward as an advocate of saving biodiversity through saving ecosystems.

Wilford, John Noble, "In Mongolia, an 'Extinction Crisis' Looms," New York Times, Dec. 6, 2005. Przewalski wild horses have made some comeback, and possibly wolves, but on the whole wildlife is under relentless siege by overhunting and excessive trade in skins and other animal products. There are feeble efforts at control by the government. The sheer size of the country makes it unrealistic to police hunting strictly, and some of the rangers are also involved in the poaching.

Wilford, John Noble, "Tests Suggest Neanderthals Were Hunters, Not Scavengers," New York Times (6/13/00). Neanderthals were hunters not scavengers. New chemical tests on 28,000-year-old Neanderthal bones reveal a diet consisting almost entirely of animal protein. According to several scientists, this strongly suggests that they were accomplished hunters rather than scavengers and foragers. Neanderthals are extinct members of the genus Homo who lived in Europe and were eventually replaced by modern Homo sapiens who arrived there about 40,000 years ago. (v.11,#2)

Wilhere, GF, "Adaptive Management in Habitat Conservation Plans," Conservation Biology 16(no.1, 2002):20-29. (v.13, #3)

Wilhite, Christopher, "A Wilder Vision for the Texas Hill Country," Wild Earth 10(no.3, Fall 2000):74-77. Texas is mostly private land, but there are landowners willing to piece together packages of wildlands into a cooperative system of wild landscape continuity. Wilhite is a naturalist and writer in the Texas Hill Country and executive coordinator of Hill Country Wild, Austin, TX. (EE v.12,#1)

Wilken, Gene C., Sustainable Agriculture is the Solution, but What is the Problem, Occasional Paper No. 14, Board for International Food and Agricultural Development and Economic Cooperation, Agency for International Development (AID), Washington, D. C. 20523, April 1991. "The concept of sustainability recognizes that agriculture is governed as much by economics as by ecology, by laws of supply and demand as by principles of system maintenance." "Few agroecosystems are ecologically or economically self-contained; most rely on inputs that make them vulnerable to external influences." "The demand to which the world's agroecosystems must respond is made up of two components. Population is not likely to stop growing soon and income may never stop." "The message is clear: The lands and technologies now in use are not adequate to meet present requirements, much less those of the future." "Providing for twice as many people at higher rates of consumption, yet avoiding disastrous impacts on the environment are bold objectives. It is not clear how they will be achieved." Wilken is a geographer at Colorado State University, Fort Collins. (v2,#2)

Wilkes, Angela. "An Economic Perspective on Climate Change Policies," The Journal of Environment and Development 5(no.1, 1996):117. (v8,#2)

Wilkes, Garrison, "Germplasm Conservation and Agriculture," in Ke Chung Kim and Robert D. Weaver, Biodiversity and Landscapes (New York: Cambridge University Press, 1994), pages. 151-170. With escalating populations, we will need to produce as much food in a single year as we once did in a century, as much in the two decades 2000-2020 as has been produced since the beginning of agriculture 10-12 thousand years ago. Present food production uses a quite limited number of crop plants. To produce increasing amounts of food, germplasm conservation is critical. We are at or near the limits. Wilkes also has articles on "Germplasm Conservation" and "Gene Banks" in the Encyclopedia of Environmental Biology. He is in biology, Harbor Campus, University of Massachusetts at Boston. (v6,#4)

Wilkes, Garrison, "Germplasm Collections: Their Use, Potential, Social Responsibility, and Genetic Vulnerability," International Crop Science I (Madison: WI: Crop Science Society of America, 1993),

pages 445-450. This volume contains 109 chapters on sustainability, global climate change, breeding crops for increased production, research imperatives, and other issues in crop production over the next decades. There is also a section on "Plant Intellectual Property Rights."

Wilkie, David, Finn, John T. Remote Sensing Imagery for Natural Resource Monitoring: A Guide for First-time Users. New York: Columbia University Press, 1996. 295 pp. \$49.50 cloth, \$27.50 paper. Some of the issues covered include "What Sorts of Information Can Be Remotely Sensed?", "Detecting and Monitoring Temporal Change in a Landscape", "Rapid Updating of Maps and GIS Data Layers". (v7,#4)

Wilkie, David, Ellen Shaw, and Philippe Auzel, "Roads, Development, and Conservation in the Congo Basin Roads," Conservation Biology 14(no.6, Dec. 2000): 1614-. (v.12,#3)

Wilkie, DS; Carpenter, JF; Zhang, Q, "The under-financing of protected areas in the Congo Basin: so many parks and so little willingness-to-pay," Biodiversity and Conservation 10(no.5, 2001):691-709. (v.12,#4)

Wilkie, DS; Godoy, RA, "Income and Price Elasticities of Bushmeat Demand in Lowland Amerindian Societies," Conservation Biology 15(no.3, 2001):761-769. (v.12,#4)

Wilkins, Thurman, John Muir: Apostle of Nature. Norman: University of Oklahoma Press, 1995. \$ 24.95 cloth. A biography and evaluation of John Muir, and how his influence continues to shape contemporary attitudes toward nature. (v6,#4)

Wilkinson, Bill, "Sustainability and Small Ownerships," Journal of Forestry 99(no.2, 2001): 30-. (v.12,#3)

Wilkinson, Charles F. "Aldo Leopold and Western Water Law: Thinking Perpendicular to the Prior Appropriation Doctrine," Land and Water Review (University of Wyoming, College of Law) 24(1989):1-38. The classic prior appropriation doctrine, "first in time, first in right," mainstay of water law in the West, is bad economics, does not respect the rights of other governments, ignores widely accepted policy objectives, such as maintenance of instream flows and long-term water planning. The classic doctrine is bad science. Leopold's land ethic, though not initially addressing water management policy, is a comprehensive ecological approach to natural resource management and land-use practices, and is directly applicable to water management reform. An ecosystem approach would result in comprehensive watershed resource planning, maximizing societal benefits derived from resource use on a sustainable basis, stability for private water rights, maintenance of water quality, prevention of soil loss, all based on preserving "the integrity, stability, and beauty" of the watershed community. Wilkinson illustrates his claim with efforts on several fronts to move in this direction. (v1,#2)

Wilkinson, Charles F. The American West: A Narrative Bibliography and a Study in Regionalism. Wilkinson is a lawyer and professor at the University of Colorado Law School, interested in incorporating an ethic of place and a sense of regional residence into natural resource law. Niwot, Colorado: University Press of Colorado, 1989. (v1,#2)

Wilkinson, Charles F., Crossing the Next Meridian: Sustaining the Lands, Waters, and Human Spirit in the West, Environment 32 (no. 10, December 1990):14-20, 32. Federal subsidies and laissez-faire policies have left a legacy of widespread environmental degradation in the western United States. Heretofore, most discussions of the changes needed to reverse the trend have been purely technical and neglected the humanistic issues involved. But to achieve any kind of sustainability, the West must find an approach that is humanistically, as well as scientifically and economically, correct. Wilkinson is professor of law at the University of Colorado, Boulder. (v2,#1)

Wilkinson, Charles F. The Eagle Bird: Searching for an Ethic of Place. Salt Lake City, Utah: Howe Brothers, 1990.

Wilkinson, Charles F., "Values and Western Water: A History of the Dominant Ideas," Western Water Policy Project, Discussion Series Paper No. 1, Natural Resources Law Center, University of Colorado, School of Law, Boulder, CO, 1990. The ten principal values associated with water and an inquiry how far water law supports these values. There are a half dozen other related papers in this series. (v1,#3)

Wilkinson, Charles. Fire on the Plateau: Conflict and Endurance in the American Southwest. Washington, D.C.: Island Press, 1999, 402pp. Reviewed by Matthew Barnes. Environmental Values 9(2000):403.

Wilkinson, Loren, ed., Earthkeeping in the Nineties: Stewardship and the Renewal of Creation (Grand Rapids, MI: Eerdmans, October 1991). A much revised and enlarged edition of: Wilkinson, Loren ed., Earthkeeping, Eerdmans, 1980. Four main sections: (1) "The State of the Planet," (2) "Historical Roots," and "Our Mind Today" (environmental movement and the search for religious meaning), (3) "The Earth is the Lord's" (Biblical teachings), (4) "What Shall We Do?" (v2,#1)

Wilkinson, Rick, "Living with Tigers," The Lamp 78 (no. 3, fall 1996):4-5. The Lamp is the Exxon publication sent to shareholders. Can we learn from myth and mystery to live once more in harmony with them before they are gone. Exxon, whose symbol is the tiger, has established a Save the Tiger Fund, with the National Fish and Wildlife Foundation. (v8,#1)

Wilkinson, T. Science under Siege: The Politicians' War on Nature and Truth. Boulder, Co, USA: Johnson Books, 1998. Review by Anders Nordgren, Environmental Values 10(2001):423. (EV)

Wilkinson, Todd. "Yellowstone Grizzlies Delisting Dilemma." Wild Earth 9(No. 2, Summer 1999):27- . (v10,#4)

Wilkinson, Todd. "Winter and Park Service Pact Threaten Yellowstone Bison." The Christian Science Monitor, vol. 89, 22 Jan. 1997, p. 3.

Wilkinson, Todd. "Last Stand for Bison Herd at Yellowstone National Park?" The Christian Science Monitor, vol. 89, 21 Feb. 1997, p. 3.

Wilkinson, Todd. "Rodeos Sweep American West But Raise Concern of Cruelty." The Christian Science Monitor, vol. 89, 30 April 1997. pp. 1,5.

Wilkinson, Todd. "Whistle of Wings Pierces Midwest Skies." The Christian Science Monitor, vol. 88, 30 Oct. 1996, p. 4.

Wilkinson, Todd. "Why Megadump May be Neighbor of a Desert Park." The Christian Science Monitor, vol. 89, 25 Feb. 1997, p. 3.

Wilkinson, Todd. "Indian Reservations Reap Deadly Legacy of WWII." The Christian Science Monitor, vol. 89. 9 Dec. 1996. p. 4.

Wilkinson, Todd. "Grizzly Bear Comeback Prompts Growls of Protest." The Christian Science Monitor, vol. 89, 13 January 1997, p. 1-18.

Wilkinson, Todd. "Park Service Seeks New Steward-and Direction." The Christian Science Monitor, vol. 89, 15 January 1997, p. 3.

Wilkinson, Todd." Native Americans Challenge Park Agency for Land Rights." The Christian Science Monitor, vol. 88, 22 Oct. 1996, p. 1, 14.

Wilks, Alex and Nicholas Hildyard. "Evicted! The World Bank and Forced Resettlement." The Ecologist 24 (no. 4, July, 1994): 225- . At least two million people currently face forcible eviction as a result of infrastructure development projects--from dams to roads--financed by the World Bank. Yet an internal review of the Bank's resettlement record from 1986 to 1993 reveals that mandatory policies intended to minimize the impact of resettlement are being systematically flouted. (v6,#1)

Wilks, Sarah, ed. *Seeking Environmental Justice*. Amsterdam: Rodopi, 2008. Contents include: (1) "Search for a Theory Linking Environment and Society" by Doriana Dariot and Luis Felipe Nascimento, (2) "Gaia: The Politics of Love and the Globe's Future: Orientations in Perverse Ecologies" by Serena Anderlini D'Onofrio, (3) "Sustainability: Framing a Shared Vision of Hope" by Kendal Hodgman, (4) "Voluntary Agreements in Queensland, Australia: Contributing Factors and Current Incentive Schemes" by Jo Kehoe, (5) "Global Environmental Governance: Mapping Unequal and Contested Terrain" by Andrew Deak, (6) "Sustainable Outcomes through Effective Conflict Management" by Tania Sourdin, (7) "The Public Debate on Genetic Modification (GM) Varieties of Understanding" by Linda Hadfield, (8) "Environmental Justice: Bridging the Gap Between Experts and Laymen" by Kim Loyens, (9) "Promoting Environmental Citizenship? A Critique of the Moral Persuasiveness on Direct Action Environmental Protest" by Belinda Clements, (10) "How many Koalas are there on Kangaroo Island?" by Sarah Wilks, (11) "Environmental Education in a Course on Ethics and International Development" by Judith Andre, (12) "Carbon Justice? The Case Against a Universal Right to Equal Carbon Emissions" by Derek R. Bell, (13) "The Final Frontier: Free Trade, Corporate Capitalism and International Environmental Law" by Kristy J. Buckley, and (14) "Empowerment of Professionals as a Strategy for Effective Sustainability of the Built Environment" by Joseph Akin Fadamiro.

Willard, L. Duane. "On Preserving Nature's Aesthetic Features." Environmental Ethics 2(1980):293-310. I consider and reject four possible arguments directed against the preservation of natural aesthetic conditions. (1) Beauty is not out there in nature, but is "in the eye of the beholder." I argue that since ingredients of nature cause aesthetic experiences, we cannot justifiably disregard and exploit nature. Preservation of aesthetic conditions is compatible with both objective and nonobjective theories of aesthetic value. (2) Frequent aesthetic disagreements bring about irresolvable disputes concerning which segments of nature to preserve. I claim that these disputes are not irresolvable. Not all disputes about nature's aesthetic values are purely aesthetic disputes: ecological balance, community identity, historic continuity, and economics are relevant; aesthetic experts can help; and such disputes can be put to a vote. (3) Natural beauty is not important compared to nonaesthetic values of nature. I show that this is questionable. Current awareness of environmental problems includes a rapidly growing concern for natural aesthetics. Moreover, even if majority preference is for nonaesthetic uses of nature, this does not settle the question of whether we ought to preserve nature's attractive features. (4) From neither a utilitarian nor a deontological viewpoint do we have an obligation to preserve natural aesthetic conditions for future generations. I argue that even if we do not have a strict obligation, it does not follow that it makes no moral difference whether we preserve. Not yet existing people may have no rights against us, but this does not mean that we do no wrong in polluting and destroying aesthetic conditions of the natural world in which future people will live. Willard is in the department of philosophy and religion, University of Nebraska at Omaha, NE.

Willer, Chuck, "A Conservation Advocate's Perspective on Intensively Managed Forest Plantations," Journal of Forestry 103(no.2, March 2005):95-96(2).

Willers, Bill, "A Response to "Current Normative Concepts in Conservation" by Callicott et al,"

Conservation Biology 14 (No. 2, 2000 Apr 01): 570- . (v.11,#4)

Willers, Bill, Review of Chase, Alston, In a Dark Wood: The Fight Over Forests and the New Tryanny of Ecology (Tichnor and Fields), in Conservation Biology 10(1996):1563-1567.

Willers, Bill, ed., Learning to Listen to the Land. Covelo, CA: Island Press, 1991. Attempts to combine environmental science and nature with spiritual and ethical values. Articles by E. O. Wilson on biological diversity, Wallace Stegner on wilderness, Barry Commoner on pollution control and prevention, Edward Abbey on runaway urban growth, Anne and Paul Ehrlich on population control. Bill Willers is a professor of biology at the University of Wisconsin at Oshkosh. (v2,#3)

Willers, Bill, "The Postmodern Attack on Wilderness," Natural Areas Journal 21(2001):259-265. This essay counters postmodern social scientists J. Baird Callicott, Alston Chase, and William Cronon, who impugn the wilderness concept as nothing essential but merely a social construct. These and similar postmodernists lack sufficient knowledge of elementary biology, so that they fail to understand the difference between artificial selection and natural selection, the latter of which is the distinguishing feature of wilderness. For this reason, they fail to grasp the evolutionary significance of wilderness. Willers is in biology, emeritus, University of Wisconsin, Oshkosh. (v.13, #3)

Willers, Bill, "The Trouble with Cronon," Wild Earth 6(no. 4, Winter, 1996/97):59-61. Response to William Cronon, "The Trouble with Wilderness, or Getting Back to the Wrong Nature," in Cronon, ed., Uncommon Ground: Toward Reinventing Nature (New York: W. W. Norton, 1995). (EE v.12,#1)

Willers, Bill. "Ecosystems and Evolution in Light of Systems Analysis. Wild Earth 9(No. 2, Summer 1999):10- . (v10,#4)

Willers, Bill. "The Trouble With Cronon," Wild Earth 6(1996):59. (v8,#1)

Willers, William B., ed., Unmanaged Landscapes: Voices for Untamed Nature. Washington: Island Press, 1999. Unmanaged landscapes are the focus of the struggle to protect and restore wildness, the autonomy of nature, and to allow for its preservation and return on a grand scale. About 40 contributors. Willers is in biology, University of Wisconsin, Oshkosh

Willey, Basil, The Religion of Nature. London: Lindsey Press, 1957. 28 pages, a single lecture, separately printed. Religious experience generated by encounter with nature, especially in William Wordsworth. How far the spectacle of the natural universe has value that is religious or spiritual, and how far the classical injunction to follow nature is valid as a moral maxim. Wordsworth's faith is now regarded as outmoded, but "exploded faiths have a way of coming to life again. ... The religion of Nature, in one form or another, is probably the oldest of all religions." Wordsworth dominated a century in English literature; his attraction to nature is partly in reaction to industrialization, partly a reaction to orthodox Christianity; but there is more. John Stuart Mill's criticism of following nature is effective; in nature "there are no lessons in love, mercy, justice etc.--in fact no morality in the human sense at all." Still, "deep in the human psyche ... there has always lurked an instinct to worship Nature, an instinct perhaps from the remote past of our species." We cannot follow nature morally, but natural things "can give massive satisfaction to certain deep cravings which ... normally remain unfulfilled and unrecognized. ... They remind us that Man is not all, that there is something Other and greater than ourselves, on which we are dependent, and can thus produce an acknowledgement of Being-over-against-us, which is part, though only a part, of religious experience." Sensitive article, worth reading by any who have been stung by Mill's critique in "On Nature." Willey was professor of English literature, University of Cambridge.

Williams, Bruce A., and Albert R. Matheny, Democracy, Dialogue, and Environmental Disputes. New

Haven: Yale University Press, 1995. 272 pages. \$ 32.50. The difficulties faced by environmental regulation are attributed to competing ideas about regulatory legitimacy, resulting from the growth of the American state. The authors propose a more complex and nuanced dialogue between all participants in regulatory policymaking, and apply this to case studies in New Jersey, Ohio, and Florida. (v7,#1)

Williams, Christopher, "Environmental Victims: Arguing the Costs Global Security Programme," Environmental Values 6(1997):3-30. ABSTRACT: The costs of anthropogenic environmental change are usually discussed in broad terms, for example embracing damage to the ecosystem or buildings. There has been little consideration of the direct human dimension of the cost to environmental victims except in clinical terms. In order to prevent and minimise environmental victimisation it seems necessary to present cost arguments to governments and commerce. This paper outlines the personal, social and cash costs of environmental victimisation, using the psycho-social literature, and brief case studies of intellectual disability, road transport and cross-border pollution. It is proposed that governments and commerce might not respond in obvious ways to these cost arguments, but trust is identified as a cost that both may recognise. It is concluded that the concept of loss-costs should be central to any analysis, and the paper provides a framework for comprehensive argument of the costs of environmental victimisation, in the form of a simple matrix. University of Cambridge, Botolph House, 17 Botolph Lane, Cambridge, CB2 3RE, UK. (EV)

Williams, Cindy Deacon, "Sustainable Fisheries: Economics, Ecology, and Ethics," Fisheries 22(no. 2, 1997):6-11. "We have an ethical responsibility as professionals who should know and understand to truly be in communion with nature, not verbally caught up in our description of its parts. We need to be a part of it, be aware, feel that we belong. We must be able to bring our love and passion to efforts to reach a sustainable relationship with the waters of the world and the species that inhabit them" (p. 11). Williams is an aquatic ecologist, Pacific Rivers Council. This was her plenary address to the American Fisheries Society, 1996. (EE v.12,#1)

Williams, Cindy Deacon. "Sustainable Fisheries: Economics, Ecology and Ethics," Fisheries. 22(no.2, 1997):6-11. (v8,#3)

Williams, D., "Bonnie Johanna Gisel, ed., Kindred and Related Spirits: The Letters of John Muir and Jeanne C. Carr," Environmental History 7(no.3, 2002): 528. (v.13,#4)

Williams, Daniel R., Patterson, Michael E. "Environmental Meaning and Ecosystem Management: Perspectives from Environmental Psychology and Human Geography," Society & Natural Resources 9(no.5, 1996):507. (v7,#4)

Williams, Daniel R., and Stewart, Susan I., "Sense of Place: An Elusive Concept That Is Finding a Home in Ecosystem Management," Journal of Forestry 96 (no. 5, May, 1998):18-23. "Sense of place" offers resource managers a way to identify and respond to the emotional and spiritual bonds people form with certain spaces. Reason for the increasing interest in sense of place. Four recommendations for managers: (1) Know and use the variety of local place-names. (2) Communicate management plans in locally recognized place-specific names. (3) Understand the politics of places. (4) Pay close attention to places that have special but different meanings to different groups. Devil's Tower, Wyoming, is an example: rock climbers versus a sacred site. Williams is in Leisure Studies, University of Illinois. Stewart is a research social scientist, USDA Forest Service, North Central Forest Experiment Station, Evanston, IL. (v.12,#3)

Williams, Dee Mack. "Patchwork, Pastoralists, and Perception: Dune Sand as a Valued Resource Among Herders of Inner Mongolia," Human Ecology 25(no.2 1997):297. (v8,#3)

Williams, Erin E., and Margo DeMello. *Why Animals Matter: The Case for Animal Protection*. Amherst, NY: Prometheus, 2007. Williams and DeMello provide an up-to-date and extensive explication and critique of the meat industry, hunting, the fur and skins industries, the animal experimentation industry, the pet industry, and the animal entertainment industry.

Williams, Erin E., and Margo DeMello. *Why Animals Matter: The Case for Animal Protection*. Amherst, NY: Prometheus, 2007. Williams and DeMello provide an up-to-date and extensive explication and critique of the meat industry, hunting, the fur and skins industries, the animal experimentation industry, the pet industry, and the animal entertainment industry.

Williams, George H., Wilderness and Paradise in Christian Thought. New York: Harper and Bros., 1962. "We shall find in the positive sense that the wilderness or desert will be interpreted variously as a place of protection, a place of contemplative retreat, again as one's inner nature or ground of being, and at length as the ground itself of the divine being. ... In its negative sense the wilderness will be interpreted as the world of the unredeemed, as the wasteland, and as the realm or phase of punitive or purgative preparation for salvation" (pp. 4-5).

Williams, Hugh, "What is Good Forestry? An Ethical Examination of Forest Policy and Practice in New Brunswick" Environmental Ethics 18(1996):391-410. Public concern for ecological and environmental values is making the job of forest management increasingly complex and uncertain and is gradually undermining the domination of timber value as the primary organizing goal of forest policy. The key question is how to balance the pursuit of short-term economic self-interests with the long-term public good. I articulate a moral theory that affirms the existence of a public good that is understood teleologically as an objective purpose to be pursued. I argue that there is a connection between the philosophical and moral concept of creativity and the scientific concept of biological diversity. I suggest that these concepts are both linked to the political question of the public good. The maximization of the ethical good of creativity according to this theory is linked to the maximization of the public good. In forestry, the management of forest ecosystems in order to maximize their creative good is linked to the maximization of the public good and vice versa. This ethical theory is essentially a religious one in the neoclassical theistic tradition, in which authentic human existence is defined in terms of our relationship to reality and a metaphysically and cosmologically informed world view. (EE)

Williams, Ivor D., and Nicholas V.C. Polunin, "Differences between Protected and Unprotected Reefs of the Western Caribbean in Attributes Preferred by Dive Tourists," Environmental Conservation 27(no.4, Dec. 2000): 382-. (v.12,#3)

Williams, Joy, "The Killing Game," Esquire, October 1990, pp. 112-128. An Esquire style diatribe against hunting. "Why the American hunter is blood-thirsty, piggish, and grossly incompetent." "Hunters kill for play, for the thrill of it." "Sport hunting is immoral. It should be made illegal. Hunters are persecutors who ought to be prosecuted." Williams cites and dislikes Rolston's position on hunting. (v1,#3)

Williams, Joy, "The Inhumanity of the Animal People," Harper's Magazine 295 (August 1997): 60-68. "The animal people are calling for a moral attitude toward a great and mysterious and mute nation, which can't, by our stern reckoning, act morally back. Their quest is quixotic; their reasoning, assailable; their intentions, almost inarticulate. The implementation of their vision would seem madness. But the future world is not this one. Our treatment of animals and our attitude toward them is crucial not only to any pretensions we have to ethical behavior but to humankind's intellectual and moral evolution."

Williams, K. J. H. and Cary, J., "Landscape Preferences, Ecological Quality, and Biodiversity Protection," Environment and Behavior 34(no.2, 2002): 257-74. (v.13,#2)

Williams, Meredith. "Rights, Interests, and Moral Equality." *Environmental Ethics* 2(1980):149-61. I discuss Peter Singer's claim that the interests of animals merit equal consideration with those of human beings. I show that there are morally relevant differences between humans and animals that Singer's rather narrow utilitarian conception of morality fails to capture. Further, I argue that Singer's formal conception of moral equality is so thin as to be virtually vacuous and that his attempts to give it more substance point to just the kind of differences between humans and animals that undermine his equalitarian thesis. Williams is in the philosophy department, Wesleyan University, Middletown, CT. (EE)

Williams, Michael, *Americans and their Forests: A Historical Geography*. New York: Cambridge University Press, 1989. 599 pages. U.S. forest history.

Williams, Michael, *Deforesting the Earth*. Chicago: University of Chicago Press, 2003. Humans deforesting the Earth have wrought in the last hundred years what is surely the most dramatic change in Earth's surface since the end of the Pleistocene 10,000 years ago and what may shortly become the greatest change since the beginning of the Pleistocene over two million years ago. The great majority of this clearing has taken place since 1900 and it has been especially accelerating since 1950.

Humans have long influenced forests, although scholars dispute how significant these influences were. But, despite local influences, generally people really had not put much of a dent in the world's forests as a whole until the last 500 years. Until 1900 the largest impact was in temperate forests, but today the largest impact is on tropical forests. Wood for fuel is part of the picture, but clearing for agriculture is the overwhelming cause. Industrial uses is another factor. There are few visible solutions in prospect for this tangled mess. (v.14, #4)

Williams, Michael, *Americans and their Forests: A Historical Geography*. New York: Cambridge University Press, 1988. Includes significant impacts of Native Americans on the environment. (v8,#3)

Williams, Michael. *Deforesting the Earth: From Prehistory to Global Crisis, An Abridgement*. Chicago: The University of Chicago Press, 2006. This book was first published in 2002 as a landmark study of the history and geography of deforestation. This abridgement retains the original breadth of a survey of ten thousand years to trace anthropogenic deforestation's effects on economies, societies, and landscapes, while making the arguments of the 2002 edition more accessible to the general layperson.

Williams, Nancy M., "Affected Ignorance and Animal Suffering: Why Our Failure To Debate Factory Farming Puts Us At Moral Risk," *Journal of Agricultural and Environmental Ethics* 21(2008):371-384. It is widely recognized that our social and moral environments influence our actions and belief formations. We are never fully immune to the effects of cultural membership. What is not clear, however, is whether these influences excuse average moral agents who fail to scrutinize conventional norms. In this paper, I argue that the lack of extensive public debate about factory farming and, its corollary, extreme animal suffering, is probably due, in part, to affected ignorance. Although a complex phenomenon because of its many manifestations, affected ignorance is morally culpable because it involves a choice not to investigate whether some practice in which one participates in might be immoral. I contend further that James Montmarquet's set of intellectual virtues can provide a positive account of what it means to act as a responsible moral agent while immersed in a meat eating culture; they also represent the moral and epistemic framework for the kind of public discourse that should be taking place. Williams is in the Department of Philosophy, Wofford College, Spartanburg, South Carolina.

Williams, Nigel. "Slow Start for Europe's New Habitat Protection Plan." *Science* 269(1995):320-322. The European Union's Habitats Directive has considerable promise, but nations have been slow to comply with filing their proposed habitat sites, some 169 habitats by a preliminary estimate. The emphasis is on

large conservation areas, which can produce conflicts with development. Good summary of opportunities and problems in Europe. (v6,#3)

Williams, Philip Lee. Crossing Wildcat Ridge: A Memoir of Nature and Healing. Athens, GA: University of Georgia Press, 1999. 240 pp. \$24.95. A counterpoint between Williams' open-heart surgery and contemplative essays on the natural world. (v.10,#1)

Williams, Raymond, "Ideas of Nature," in Problems in Materialism and Culture. London: Verso Editions, 1982. "The idea of nature contains, though often unnoticed, an extraordinary amount of human history. Like some other fundamental ideas which express mankind's vision of itself and its place in the world, 'nature' has a nominal continuity, over many centuries, but can be seen, in analysis, to be both complicated and changing, as other ideas and experiences change" (p. 67). One principal problem is that the term "nature" becomes "singular, abstracted, and personified," as human strive to make sense of their world.

Williams, Sidney B., Jr., "There is Not a Conflict Between Intellectual Property Rights and the Rights of Farmers in Developing Countries", Journal of Agricultural and Environmental Ethics 4(1991):143-150. In a debate: Is there a conflict between intellectual property rights and the rights of farmers in developing countries?

Williams, Ted. "Courage Under Fire," Audubon 100 (no. 5, Sept./Oct. 1998):36-45. Government workers who are willing to blow the whistle on their employers are rare. They are also essential. Five case studies of government employees in natural resource agencies. Quite revealing of the social forces that push political decisions about environmental conservation. A successful advocate of such employees is the Forest Service Employees for Environmental Ethics, with director Andy Stahl. Jeff DeBonnis who founded FSEEE now directs a similar organization for all state and federal resource agencies, Public Employees for Environmental Responsibility (PEER). FSEEE phone: 541-484-2692. PEER phone: 202-265-7337. (v.9,#3)

Williams, Terry Tempest, An Unspoken Hunger: Stories from the Field. New York: Pantheon Books, 1994. \$ 20.00. A collection of nature essays. "We call out--and the land calls back. It is our interaction with the ecosystem; the Echo system."

Williams, Terry Tempest, "A Place of Humility," Wild Earth 9(no. 3, Fall 1999):18- . (v.11,#1)

Williams, Terry Tempest, Smart, William B., and Smith, Gibbs M., New Genesis: A Mormon Reader on Land and Community. Salt Lake City: Gibbs Smith Publishing Co., 1998. 280 pages. The Mormon tradition and experience on the Utah landscape has more resources for a better environmental ethic than the church has usually recognized. (v.10,#3)

Williamson, M.H., Fitter, A. "The Characters of Successful Invaders", Biological Conservation 78(no.1/2, 1996):163.

Willis, David J., "Ecophilosophy and Natural Law," Journal of Energy, Natural Resources and Environmental Law (University of Utah College of Law) 12(no. 2, 1996):419-451. "More effort is needed to construct and articulate a coherent ecophilosophy. ... It is particularly vital that attention be focused on the philosophical underpinnings of environmental policy. ... In a philosophical vacuum, we may do little to protect and preserve our conception of the good life" (p. 419, p. 422).

"What we think about and wish for in environmental matters--what we value, both for ourselves and posterity--is the proper business of ecophilosophy and a timely subject for public debate. Natural law is a key element of this approach. ... Ecophilosophy offers such a theory based upon the Gaia hypothesis,

a concept of the earth as a unified biological/geological entity greater than the sum of its parts" (p. 423, p. 424). Willis offers ten principles of natural law: Among them:

"1. The commonwealth of nature constitutes the greater society of which all living beings are members and have a rightful place" (p. 429).

"3. All forms of life have intrinsic as well as utilitarian value, adding to the diversity, health, and richness of the natural commonwealth" (p. 433).

"10. Enlightened self-awareness and action on the part of individuals acts cumulatively to encourage the maturing of human society and bring it into better harmony with the natural order" (p. 449).

Willis a lawyer in Houston, Texas. (v.9,#4)

Willis, K. J., Gillson, L., and Brncic, T. M., "How 'Virgin' is Virgin Rainforest?" Science 304(16 April 2004):402-403. "Evidence has started to emerge from archaeological and paleoecological investigations that many of these so called 'virgin' rainforest blocks might not be as pristine as originally thought and have in fact undergone substantial prehistoric modification." Examples from the Amazon basin, the Congo basin, and the Indo-Malay region of Southeast Asia. But these forest are also resilient and not as fragile as sometimes portrayed; the extent of their regeneration has obscured their earlier modification. "Left for long enough, forest will almost certainly regenerate." The authors also think little biodiversity was lost. With critical response, Science 305(13 August 2004):943-944, the respondents claiming it is unknown whether biodiversity was lost and that no implications follow from this earlier regeneration about whether presently degraded forests, from contemporary logging and agriculture, can similarly regenerate.

Willis, K. G., and J. T. Corkindale, eds., Environmental Valuation: New Perspectives. Wallingford, Oxfordshire, U.K.: C.A.B. International, 1995. Distributed in U.S. by University of Arizona Press. 249 pages. \$ 82.50!!! Cost-benefit analysis, the contrasting approaches of economists and ecologists, the pros and cons of alternative valuation methods, contingent valuation, the transferability of environmental benefit estimates, and the establishment of research priorities. Willis is in town and country planning, University of Newcastle upon Tyne, UK, and Corkindale is with the Environmental Protection Economics Division, Department of the Environment, UK. (v7,#2)

Willis, K. J. and Birks, H. J. B., "What Is Natural? The Need for a Long-Term Perspective in Biodiversity Conservation," Science 314(24 November 2006):1261-1265. Ecosystems change over time and most data available are too short-term to judge natural variability, separating it from human introduced disturbances. Paleoecological records can be used to provide a longer temporal perspective. The use of such records can reduce much of the uncertainty regarding the question of "what is natural." In result, we can start to provide better guidance for long-term management and conservation. One finding is that, when climates change, what these authors call "rear-edge" populations (source populations from which "leading-edge" populations migrate) are extremely important in the conservation of diversity. Willis is at the Long-Term Ecology Laboratory, Oxford University. Birks is in Biology, University of Bergen, Norway.

Willis, K.G., Review of Bjornstad, David J., Kahn, James R., The Continent Valuation of Environmental Resources. (Cheltenham: Edward Elgar, 1996). Environmental Values 6(1997):243-244. (EV)

Willott, Elizabeth, "Restoring Nature, Without Mosquitoes?" Restoration Ecology 12(no. 2, 2004):147-153. Wetlands have many benefits, but have often been drained to help control malaria and other diseases. Mosquitoes pose practical and theoretical problems in restoring wetlands. Abundant mosquitoes is a primary and foreseeable effect of creating habitat suitable for them. But restoration biology often fails properly to address this downside. Willott is in Entomology, University of Arizona, Tucson.

Wills, Christopher et al. (two dozen others), "Nonrandom Processes Maintain Diversity in Tropical

Forests," Science 311 (20 January 2006): 527-531. Tropical forests are often thought to lose diversity over time, due to accidental extinction of rare species, competitive exclusion and other causes. But these authors find that in small patches of tropical forests, rare species often do better than common ones. One reason may be that the common trees, being close together, are more susceptible to deadly infections; such diseases do not spread if trees are rare. Also the rare trees may use resources differently than the common ones, who are starved from over-competition. This suggests that diversity is a self-augmenting process, also that damaged forests may restore their own diversity. Wills is in evolutionary biology, University of California, San Diego.

Wills, J., "Review of: Munck, R. Globalization and Labour: The Great New Transformation," Progress in Human Geography 27(no. 2, 2003):244.

Wilmut, Ian, Campbell, Keith, and Tudge, Colin, The Second Creation: The Age of Biological Control by the Scientists who Cloned Dolly. London: Headline, 2000. 306 p. The two scientists most closely involved with Dolly's creation combine with British science writer Colin Tudge for an account of this celebrated cloning and its significance. They claim that too many mistake metaphor for reality in promoting anti-cloning laws. (v.11,#1)

Wilshusen, P., "A Review of: Ndubisi, Forster. Ecological Planning: A Historical and Comparative Synthesis," Society and Natural Resources 18(no. 10, November/December 2005): 937-939.

Wilshusen, P. R., "Review of: Brulle, Robert J. Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective," Society and Natural Resources 14(no.8, 2001): 730-31. (v.13,#2)

Wilson, Albert R. "Defining the 'Environmentally Impaired Market Value' of Real Property." Journal of Environmental Law & Practice 3(May 1996):10. The author defines "environmentally impaired market value," discusses each of the elements of the definition, and specifically argues against use of the term "stigma."

Wilson, Alexander, The Culture of Nature: North American Landscape from Disney to the Exxon Valdez. Cambridge, MA: Blackwell Publishers, 1992. 335 pages. Another book featuring the social construction of nature: "We should by no means exempt science from social discussions of nature. ... In fact, the whole idea of nature as something separate from human existence is a lie. Humans and nature construct one another" (p. 13). A cultural history of North American and native responses to the land, especially the multiplicity of environments built on the North American continent in the last 50 years. Chapters on nature education and promotion; landscape design, nature movies and TV, theme parks that image nature (Disney), nature parks, zoos, nuclear plants, environmental architecture. "We must build landscapes that heal, connect, and empower, that make intelligible our relations with each other and with the natural world. ... Nature parks cannot do this work. We urgently need people living on the land, caring for it, working out an idea of nature that includes human culture and human livelihood. All that calls for a new culture of nature, and it cannot come soon enough" (p. 17). Wilson is a horticulturalist, journalist, and landscape designer in Toronto. (v7,#1)

Wilson, Anne, Roseland, Mark, Day, J.C., "Shared Decision-making and Public Land Planning: An Evaluation of the Vancouver Island, Regional CORE Process", Environments 23(No.2, 1996):69- . (v7,#1)

Wilson, Darryl, "Grandfather's Story," The Ecologist 30 (No. 1, Jan 01 2000): 12- . Darryl Wilson, a member of the indigenous Ajuma and Astuge peoples of California reveals the deep ecological message of the stories in terms of which the worldview of tribal people is formulated. (v.11,#2)

Wilson, Don E., Cole, F. Russell, Nichols, James D., Rudran, Rasanayagam, Foster, Mercedes S., eds. Measuring and Monitoring Biological Diversity. Washington, D.C.: Smithsonian Institution Press, 1996. 480pp.. \$49 cloth. \$22.50 paper. Over fifty scientists provide standardized methods for biodiversity sampling procedures for measuring and monitoring populations of any mammal group, from rodents to open-country grazers. Beginning with brief natural histories of the twenty-six orders of living mammals, the book describes in successive chapters field techniques--such as observation, capture, and sign interpretation--appropriate to different taxa. Guidelines for study design, survey planning, statistical techniques, and methods of translating field data into electronic formats. (v7,#4)

Wilson, Douglas Clyde, Review of Rögnvaldur Hannesson, *The Privatization of the Oceans*, *Environmental Values* 16(2007):138-141.

Wilson, E. O., "E. O. Wilson to the Defense," National Wildlife, Dec. 95/Jan. 96, pages 10ff. A renowned biologist argues the case for biodiversity, both with his intellect and his heart. Adapted from a longer essay in Susan Middleton and David Littschwager, Witness: Endangered Species of North America (San Francisco: Chronicle Books, 1994). (v6,#4)

Wilson, Edward O., "Back from Chaos," Atlantic Monthly 281(no. 3, March, 1998): 41-62. Enlightenment thinkers knew a lot about everything, today's specialists know a lot about a little, and postmodernists doubt that we can know anything at all. The Enlightenment mostly got it right. The fragmentation of knowledge and the chaos in philosophy are not reflections of the real world but artifacts of scholarship. Wilson argues that we can know what we need to know, and that we will discover underlying all forms of knowledge a fundamental unity. Wilson divides what we know, at least about nature and environmental affairs, into four quadrants: environmental policy, environmental ethics, social science, biology. One good test of truth is when many lines of independent evidence converge in support of a claim, a consilience of inductions. Wilson's latest book is Consilience: The Unity of Knowledge (New York: Knopf, Random House, 1998). Wilson is emeritus from comparative zoology at Harvard University.

Another discussion is in the current issue of The Wilson Quarterly, "Is Everything Relative?" where the editors, worried about crippling relativism, put Wilson into debate with Richard Rorty and biologist Paul R. Gross. Contains:

--Wilson, Edward O., "Resuming the Enlightenment Quest," The Wilson Quarterly, Spring 1998, pp. 16-27. Science is the royal road to truth, the cure to the contemporary fragmentation of knowledge, to which philosophers have too much contributed. Wilson's consilience of the sciences--philosophers will want to notice--has now reached the settled conclusion that our human nature, including its morality, is "biased by" the genes. The consilience within biology is expanding to overtake the social sciences and the humanities. The brain is a survival instrument, with Paleolithic survival instincts (p. 20). Fortunately, the biological sciences have figured this out and can correct for it (with what brain, Wilson does not say).

--Rorty, Richard, "Against Unity," pages 28-38. Rorty claims to be more biologicistic than Wilson. Language is a survival tool, as Wilson should know. This means that things are described for various purposes, never for what they are in themselves. "As we pragmatists see it, there can and should be thousands of ways of describing things and people--as many as there are things we want to do with things and people--but this plurality is unproblematic" (p. 30). (But why we should accept Rorty's thousands-plus-yet-one-more view as being better than the rest does become problematic). "My scorn," Rorty continues, "for the claim that a natural scientist gets closer to the way things are in themselves than the carpenter, the moralist, or the literary critic" does mean that "I do indeed think of science as just another way of looking at the world" (p. 38). Rorty is University Professor of Humanities at the University of Virginia.

--Gross, Paul R., "The Icarian Impulse," pages 39-49. Gross defends Wilson; we need to press for consilience as much in ethics as in the sciences, but he is much less sure we are reaching it. Gross is

University Professor of Life Sciences at the University of Virginia, co-author of Higher Superstition (1994), and an editor of The Flight from Reason and Science (1996). (v9,#1)

Wilson, Edward O., "Is Humanity Suicidal?" New York Times Magazine, May 30, 1993. Humans are not exempt from the ecological laws that bind other species. "Human physical and spiritual health depends on sustaining the planet in a relatively unaltered state." (v4,#3)

Wilson, Edward O., Biophilia. Cambridge: Harvard University Press, 1984. Wilson claims, or hopes, that humans have an innate genetic disposition for the love of life, one that can develop into a respect for life, and on which a conservation ethic can be built. A long commentary on this volume is: Kellert, Stephen R. and Edward O. Wilson, eds., The Biophilia Hypothesis (Washington, DC: Island Press, 1993).

Wilson, Edward O. On Human Nature. Reviewed in Environmental Ethics 2(1980):81-88.

Wilson, Edward O., In Search of Nature. Washington, DC: Island Press/Shearwater Books, 1996. 214 pages. Extracts from Wilson's earlier writings, grouped around three themes: Animal Nature, Human Nature; The Patterns of Nature; Nature's Abundance. Sample essays: "Ants and Cooperation"; "Altruism and Aggression"; "The Little Things That Run the World"; "Biophilia and the Environmental Ethic." Wilson is a celebrated conservationist and teaches biology at Harvard University.

Wilson, Edward O., The Future of Life. New York: Alfred A. Knopf, 2002. The twentieth century was a century of unprecedented growth and advance, and also of dark and savage wars. "If Earth's ability to support our growth is finite--and it is--we were mostly too busy to notice. As a new century begins we have begun to awaken from this delirium: "the wreckage of the planet by an exuberantly plentiful and ingenious humanity." Now, increasingly postideological in temper, we may be ready to settle down before we wreck the planet. It is time to sort our Earth and calculate what it will take to provide a satisfying and sustainable life for everyone into the indefinite future. .. The bottom line is different from that generally assumed by our leading economists and public philosophers. They have most ignored the numbers count." Ed Wilson projecting the population and consumption problems onto the biodiversity problems. "The pattern of human population growth in the 20th century was more bacterial than primate." Another problem: "The human brain evidently evolved to commit itself emotionally only to a small piece of geography." So cosmopolitan and biospheric perspectives run counter to our genetic tendencies; but we humans are highly innovative and intelligent. So there is hope. "The issue, like all great decisions, is moral." Reviewed by Norman Myers, Science 295(18 January 2002):447. (v.13,#1)

Wilson, Edward O., The Diversity of Life. Cambridge, MA: Harvard University Press, 1992. Marvellous survey of the diversity of life. Wilson is in biology at Harvard University, one of the most ardent conservation biologists in the world.

Wilson, Edward O. The Creation. New York: W. W. Norton, 2006. With an imagined correspondence between Wilson and a Southern Baptist pastor (Wilson was raised a Southern Baptist). "The defense of living nature is a universal value. It doesn't rise from, nor does it promote, any religious or ideological dogma. Rather, it serves without discrimination the interests of all humanity.If there is any moral precept shared by people of all beliefs, it is that we owe ourselves and future generations a beautiful, rich, and healthful environment.Darwin's reverence for life remained the same as he crossed the seismic divide that divided his spiritual life. And so it can be for the divide that today separates scientific humanism from mainstream religion." Reviewed by Steven Bouma-Prediger, "Hoping to Establish Common Ground for Saving Biodiversity," Science 314(1 December 2006):1392-1393.

Wilson, Edward O., The Future of Life, Chinese translation, translator: Chen Jiakuan et al. Publisher: Shanghai People's Publishing House, 2003.

Wilson, Edward O. *The Creation: An Appeal to Save Life on Earth*. New York: W.W. Norton & Company, 2006. Wilson, who abandoned his childhood Baptist faith, writes to an imaginary Baptist pastor to search his faith for reason to make common cause with secular conservation biologists.

Wilson, F.A. Towards Sustainable Project Development. Cheltenham: Edward Elgar, 1997. Review by Jan van der Straaten, Environmental Values 10(2001):133. (EV)

Wilson, G, "Review of: Pavlinek, P. and Pickles, J., Environmental transitions: transformation and ecological defence in central and eastern Europe, and O'Riordan, T., editor, Globalism, localism and identity: fresh perspectives on the transition to sustainability", Progress in Human Geography 27(no.2, 2003)248-250.

Wilson, Harry B., "Finding an Ethical Basis for Section 7 of the Endangered Species Act," Journal of Undergraduate Sciences 3(Summer 1996):85-87. Wilson argues that the most likely comprehensive account is that of Holmes Rolston, III. Wilson is a philosophy student, Harvard University.

Wilson, James, "The Savage State," The Ecologist 30(no. 9, Dec. 1, 2000):50. The press regularly uses words like "primitive" and "Stone Age" to describe tribal societies. The media's representation of tribal groups is doing them a disservice. (v.12,#2)

Wilson, James D. and J. W. Anderson, "What the Science Says: How We Use It and Abuse It to Make Health and Environmental Policy," Resources (Resources for the Future, 1616 P. Street, NW, Washington, DC 20036-1400), Summer 1997, Issue 126, pp. 5-8. Science is used and abused by either side in environmental controversies, partly because policy makers and scientists are unwilling to face up to the uncertainties in scientific knowledge, which is often incomplete when decisions must be made. Scientific consensus on environmental issues has often changed back and forth several times. The best assurance of good public policy seems to lie not only in scientific knowledge per se but in open debate, caution, and a regulatory system capable of self correction. Good short article to get these issues under discussion in a classroom. Wilson is a fellow with RFF, and Anderson, formerly with the Washington Post, is a journalist in residence at RFF. (v8,#3)

Wilson, James, "GM Crops: Patently Wrong?" *Journal of Agricultural and Environmental Ethics* 20(2007):261-283. This paper focuses on the ethical justifiability of patents on Genetically Modified (GM) crops. I argue that there are three distinguishing features of GM crops that make it unethical to grant patents on GM crops, even if we assume that the patent system is in general justified. The first half of the paper critiques David Resnik's recent arguments in favor of patents on GM crops. Resnik argues that we should take a consequentialist approach to the issue, and that the best way to do so is to apply the Precautionary Principle, and that the Precautionary Principle, in this case, supports patents on GM crops. I argue that his argument in favor of a consequentialist treatment is invalid; his Precautionary Principle in any case appears to be incompatible with consequentialism; and his conception of reasonable precautions is too ill-defined to have any argumentative purchase. In the second half of the paper, I argue against GM crop patents, on three grounds. First, there is insufficient evidence to say whether allowing patents on GM crops will make research go faster than not having patents, whilst there is a good reason to think that, other things being equal, a society that allows patents on GM crops will be less just than one that does not. Second, even assuming that patents on GM crops will increase the pace of GM crop research, there is no social need to do so. Third, patents on GM crops will frequently have ethically unacceptable side effects. Keywords: Consequentialism - GM crops - intellectual property - precautionary principle - tragedy of the anticommons. Wilson is at Centre for Professional Ethics (PEAK), Keele University, Keele, Staffordshire, UK.

Wilson, Jonathan R. "Evangelicals and the Environment: A Theological Concern," Christian Scholars Review 28(No.2. 1998):298-307. Evangelicals differ in their evaluations of and responses to suggestions that we are in the midst of a world-wide ecological crisis. Wilson uses a dialectic of creation and redemption to provide a theological basis for discussing our differences and correcting our concepts and practices.

Wilson, Michael, Microbial Inhabitants of Humans: Their Ecology and Role in Health and Disease. Cambridge: Cambridge University Press, 2005. You are a community, an ecosystem from the skin in!! More bacteria inhabit your body than you have cells in your body (1014 versus 1013 respectively), far more than there are people on Earth. And you can't live without them; their symbioses are vital to your health (and your health to theirs). Despite occasional pathogens, the process is most often peaceful and mutually beneficial. Wilson is a microbiologist at the Eastman Dental Institute, University College London. Reviewed by Elaine Tuomanen, "Appreciating Our Unusual Guests," Science 308(29 April 2005):635.

Wilson, Patrick Impero, "Deregulating Endangered Species Protection," Society & Natural Resources 14(no.2, Feb. 2001): 161-. (v.12,#3)

Wilson, Patrick Impero. "Wolves, Politics, and the Nez Perce: Wolf Recovery in Central Idaho and the Role of Native Tribes." Natural Resources Journal 39(No. 3, Summer 1999):543- . (v10,#4)

Wilson, Seth M., "Conservation on the Edge: Lessons for Recovering Grizzly Bears in Contested Landscapes," NRCC (Northern Rockies Conservation Cooperative) News, no. 16, Autumn 2003, pp. 3-5. [Northern Rockies Conservation Cooperative, P. O. Box 2705, Jackson, WY 83001] "The politics of grizzly bear recovery is largely dominated by acrimony, uncertain information, and turf battles that often thwart productive dialogue and progress on the ground. There is mutual distrust among federal and state wildlife agencies, research scientists, conservation groups, and rural private landowners and ranchers. Distrust often leads to polarization, inflamed rhetoric, and antagonism, and it inhibits grizzly bear recovery." (v.14, #4)

Wimberly, M. C. and Ohmann, J. L., "A multi scale assessment of human and environmental constraints on forest land cover change on the Oregon (USA) coast range," Landscape Ecology 19(no. 6, 2004): 631-646(16). (v.14, #4)

Wimberly, Michael, "Species Dynamics in Disturbed Landscapes: When does a Shifting Habitat Mosaic Enhance Connectivity?," Landscape Ecology 21 (no.1, January 2006): 35-46 (12).

Wimberly, Michael C; Ohmann, Janet L, "A multi-scale assessment of human and environmental constraints on forest land cover change on the Oregon (USA) coast range", Landscape Ecology 19(no.6, August 2004):631-646(16).

Winckler, Suzanne, "Stopgap Measures," Atlantic Monthly, January 1992. The extinction of any species is a tragedy, but the time has come to introduce the idea of triage into conservation efforts. Instead of spending millions of dollars to save a few "terminally ill" species, we should promote biodiversity more broadly by protecting the health of whole ecosystems. To pretend that we are acting to save everything is intellectually dishonest. It turns the hard choices over to the forces of litigation and bureaucratic inertia. (v3,#1)

Windsor, Donald A., "Endangered Interrelationships: The Ecological Cost of Parasites Lost," Wild Earth, Winter 1995/96, vol. 5, no. 4, pages 78-83. "Collectively, parasites form a pervasive matrix of interrelationships within an ecosystem which tends to hold it together, acting almost as a glue." Parasites

are important regulators of ecosystems, acting almost like complicated servomotors in complex machines. When parasitism is viewed in its larger category, symbiosis, the unifying force is seen as even more comprehensive. "If a single message jumps out from all the myriad details of parasitology, it is that the complex interrelationships among parasites and their hosts are essential to the natural functioning of ecosystems." Required reading for those who dislike parasites. Windsor is an invertebrate zoologist, Norwich, New York. (v7,#1)

Winker K., "Natural History Museums in a Postbiodiversity Era," BioScience 54(no.5, 1 May 2004):455-459(5). (v. 15, # 3)

Winker, Kevin. "The Crumbling Infrastructure of Biodiversity: The Avian Example." Conservation Biology 10, no.3 (1996): 703. (v7, #3)

Winkler, Earl R. and Jerrold R. Coombs, Applied Ethics: A Reader. Oxford, UK and Cambridge, MA: 1993. Contains a section on environmental ethics: Holmes Rolston, III, "Values in and Duties to the Natural World"; Lori Gruen, "Re-valuing Nature"; Dale Jamieson, "Ethics, Public Policy, and Global Warming" and Peter Danielson, "Morality, Rationality, and Politics: The Greenhouse Dilemma." This adds to a list of a dozen or more anthologies in applied ethics with sections on environmental ethics. Winkler and Coombs are in philosophy and education at the University of British Columbia. (v4,#2)

Winkler, Earl and Jerrold R. Coombs, eds., Applied Ethics: A Reader. Cambridge, MA: Blackwells, 1993. 450 pages. \$ 19.95 paper, \$ 49.95 hardcover. To be released in July. The papers in the second half of the book are on environmental ethics, business ethics, and biomedical ethics. The papers on environmental ethics focus on the question of intrinsic values in nature. More details when available. Both authors are at the University of British Columbia. (v4,#1)

Winner, Langdon. The Whale and the Reactor. Reviewed in Environmental Ethics 9(1987):377-80.

Winograd, Isaac J., and Eugene H. Rosebloom Jr. "Yucca Mountain Revisited." *Science* Vol. 320, no. 5882 (13 June 2008): 1426-27. Despite hundreds of studies and dozens of workshops and panels, Yucca Mountain, Nevada remains controversial as a repository for radioactive wastes.

Winpenny, James T., Values for the Environment: A Guide to Economic Appraisal. London: HSMO (Overseas Development Institute), 1991. Winpenny is a development economist in London.

Winston, Mark L. Nature Wars: People vs. Pests. Reviewed in Environmental Ethics 21(1999):221-222. I apply an agent-based virtue ethics to issues in environmental philosophy regarding our treatment of complex inorganic systems. I consider the ethics of terraforming: hypothetical planetary engineering on a vast scale which is aimed at producing habitable environments on otherwise "hostile" planets. I argue that the undertaking of such a project demonstrates at least two serious defects of moral character: an aesthetic insensitivity and the sin of hubris. Trying to change whole planets to suit our ends is arrogant vandalism. I maintain that these descriptions of character are coherent and important ethical concepts. Finally, I demonstrate how the arguments developed in opposition to terraforming, a somewhat farfetched example, can be used in cases closer to home to provide arguments against our use of recombinant DNA technologies and against the construction of tourist developments in wilderness areas. (EE)

Winter, Brian D., and Hughes, Robert M., "Biodiversity: American Fisheries Society Position Statement," Fisheries 22 (no. 3, March):16-23. A position statement resulting from several years of preparation and review within the American Fisheries Society. Among other reasons: "Biodiversity must be sustained simply because humans have a moral obligation to ensure the natural evolutionary existence of species and ecosystems whose values do not depend on their human usefulness" (pp. 16-17). Winter is with the

National Park Service, Olympic National Park. Hughes is an aquatic biologist with Dynamic, Corvallis, OR. (EE v.12,#1)

Winter, C, "Preferences and Values for Forests and Wetlands: A Comparison of Farmers, Environmentalists, and the General Public in Australia," Society and Natural Resources 18 (no. 6, July 2005): 541-555.

Winter, G. J., Vogt, C. and Fried, J. S., "Fuel Treatments at the Wildland-Urban Interface: Common Concerns in Diverse Regions," Journal of Forestry 100(no.1, 2002): 15-22. (v.13,#2)

Winter, Gerd, ed. European Environmental Law: A Comparative Perspective. Brookfield, Vt.: Ashgate, 1996. 464 pp. \$39.95 paper, \$89.95 cloth. Addressing law students and professionals, sixteen outstanding lawyers have joined in a project to investigate the core concepts of environmental law in Europe. (v8,#2)

Winter, Greg; Vogt, Christine A; McCaffrey, Sarah, "Examining Social Trust in Fuels Management Strategies", Journal of Forestry 102(no.6, September 2004):8-15(8).

Winter, M., "Geographies of food: agro food geographies, food, nature, farmers and agency," Progress in Human Geography 29(no. 5, 2005): 618-625.

Winter, Michael, "Geographies of food: agro-food geographies - farming, food and politics", Progress in Human Geography 28(no.5, 1 October 2004):664-670(7).

Winter, Ryan L., "Reconciling the GATT and WTO with Multilateral Agreements: Can We Have our Cake and Eat It Too?" Colorado Journal of International Environmental Law and Policy 11 (2000): 223- .

Wirth, David A. The Role of Science in the Uruguay Round and NAFTA Trade Disciplines. Geneva: United Nations Environmental Program - Environment and Trade # 8, 1994. 68 pp. The presence and integrity of scientific support is a principal touchstone for determining the legitimacy of many national regulatory efforts aimed at assuring environmental integrity or safeguarding public health. The paper highlights the quiescent issues at the interface between science and governmental regulatory policies that are raised by the emphasis on scientific validity in the Uruguay Round and the NAFTA. (v8,#2)

Wirzba, Norman, ed., The Essential Agrarian Reader. Lexington, KY: University Press of Kentucky, 2003. Many contributors are in tribute to Wendell Berry. Contributors include Herman Daly, Vandana Shiva, Wes Jackson, Eric Freyfogle. The small successes in conserving local farming have been overwhelmed by crushing losses. America now has half the number of farms it had in 1977. Agribusiness corporations that were once national are now global. More machinery, less labor. We now have more Americans in prison than work on farms and feed the nation. Reviewed by Bill McKibben, "Local farming vs. agribusiness," Christian Century 120 (no. 26, December 26, 2003):20-22.

Wirzba, Norman, "Lethal Lawn Care," Christian Century 121 (No. 10, May 18, 2004):8-9. "Lawn care" seems more like "lawn warfare." Weed killers are toxics. Children and pets have to be kept out of the way. "Do we really want to apply millions of gallons of them to the land that we 'live on'?" The American attitude towards lawns is too much of an icon for the Western attitude toward nature: total management and control. Wirzba teaches philosophy and theology at Georgetown College, Georgetown, KY. (v. 15, # 3)

Wirzba, Norman, "Caring and Working: An Agrarian Perspective," Christian Century 116(no. 25, Sept. 22-29, 1999):898-901. We need concrete practices that teach us how to accept the limits of being creatures. Agrarianism has not been adequately considered by philosophers, theologians, or scientists.

The land grant universities quickly left farmers behind, in pursuit of technology. "Whereas techne is about making and controlling a world in our own image, agrarianism is about tending to or taking care of a world already given" (p. 899). Wirzba teaches philosophy at Georgetown College, Georgetown, Kentucky. (v.10,#3)

Wirzba, Norman, The Paradise of God: Renewing Religion in an Ecological Age. New York: Oxford University Press, 2004. The doctrine of creation, understood as a statement about the moral and spiritual meaning of the world, actually holds the key to a true understanding of our place in the environment and our responsibility toward it. Our present culture results from a denial of creation that has caused modern problems such as rootlessness, individualism, careerism, boredom, and consumerism. The renewal of the meaning of creation can lead to a renewed sense of human identity and vocation, and happier, more peaceful lives. Wirzba teaches philosophy at Georgetown College, Georgetown, KY.

Wirzba, Norman. "Barnyard Dance: Farming that Honors Animals." *Christian Century* Vol. 124, no. 2 (January 23, 2007): 8-9. Joel Salatin's Polyface Farm in central Virginia is quite profitable and honors animals, inspired by his Christian faith that God loves the creatures. Wirzba teaches at Georgetown College in Kentucky.

Wisdom, HW; Brooks, DJ, "International Forest Resources Agreements: A Primer," Journal of Forestry 99(no. 10, 2001):29-34. (v.13,#1)

Wise, Steven M. "The Legal Thinghood of Nonhuman Animals." Boston College Environmental Affairs Law Review 23, no.3 (1996): 471.

Wise, Steven M., Rattling the Cage: Toward Legal Rights for Animals. Cambridge, MA: Perseus Books, 2000. Foreword by Jane Goodall, who says: "This book can be seen as the animals' Magna Carta, Declaration of Independence, and Universal Declaration of Rights all in one" (p. ix-x). At least some nonhuman animals, the great apes in particular, should be given legal rights, since there is now a tremendous weight of evidence attesting to their higher cognitive capacities. The great apes ought to be considered as "persons." Rights under the law stem not from belonging to a particular species, but from having a certain type of mind, and any definition of mind that encompasses all humans would also include chimpanzees, bonobos and perhaps other species. Wise rejects the utilitarian argument that animal experiments are justified if the human benefits outweigh the cost to animals, because we do not so operate with other humans, persons with minds. With a program for putting such rights into effect in law. Wise is a Boston-based attorney who specializes in animal rights law, and has been visiting lecturer at Harvard Law School.

The editors of Nature Neuroscience remark in an editorial that "the traditional view is that there is an absolute distinction between humans and all other animals, but Wise argues that modern biology has made this obsolete, and that there is no reason why it should remain embodied in law." "Neuroscientists in particular are likely to find themselves on the front lines at some point, given that the animals of greatest interest as models for the human brain are, by definition, the ones for which the case for protection is strongest. It would be unproductive to deny that the arguments raised in Wise's book have some force. Instead, the research community will need to confront them head-on, and to be prepared with good counterarguments. ... They will need to refute its arguments if they are to withstand the legal challenges that appear to be on the horizon." "Legal Challenges to Animal Experimentation," Nature Neuroscience 3(no. 6, June 2000):523. (v.12,#4)

Wismer, Susan. "Across the Great Divide; Monitoring, Assessing and Reporting Upon Ecological Change", Environments 24(no. 1, 1996):69.

Wisner, Ben. "The Reconstruction of Environmental Rights in Urban South Africa," Human Ecology 23(no.2, June 1995):259- . (v6,#4)

Wissenburg, M, "Liberalism is Always Greener on the Other Side of Mill: A Reply to Piers Stephens," Environmental Politics 10(no, 3, 2001):23-42. (v.13,#1)

Wissenburg, M. Green Liberalism: The Free and the Green Society. London: UCL Press, 1998. Review by Markku Oksanen, Environmental Values 10(2001):550 (EV)

Wissenburg, Marcel, Review of: Hailwood, Simon, How to be a Green Liberal: Nature, Value and Liberal Philosophy. Chesham, UK: Acumen, 2004. Environmental Values 14(2005):140-142.

Wissenburg, Marcel, Review of Parkin, Sara, ed. Green Light on Europe. Environmental Values Vol.2 No.2(1993):179.

Wissenburg, Marcel, "Globotopia: The Antiglobalization Movement and Utopianism", Organization and Environment 17 (no.4, December 2004).

Wissenburg, Marcel, "Global and Ecological Justice: Prioritising Conflicting Demands," Environmental Values 15(2006): 425-439. 'Global and ecological justice' (or some variant) is a very popular catchphrase in policy documents, treaties, publications by think-tanks, NGOs and other bodies. I argue that it represents an informal combination of four distinct and sometimes conflicting ideas: global justice, protection of the ecology, sustainability and sustainable growth. To solve the practical, conceptual and logical complications thus caused, a more precise interpretation of global justice and ecological justice is suggested, on the basis of which it is also possible to rank the two and re-interpret the further goals of sustainability and growth. (EV)

With, K. A., "The Landscape Ecology of Invasive Spread," Conservation Biology 16(no.5, 2002): 1192-203. (v.13,#4)

With, Kimberly A., and King, Anthony W., "Extinction Thresholds for Species in Fractal Landscapes," Conservation Biology 13(No.2, 1999):314-. (v.10,#2)

Withers, Charles, W.J., "History and philosophy of geography, 2002-2003: geography in its place," Progress in Human Geography 29(no.1, February 2005):64-72(9).

Withgott, Jay, "Are Invasive Species Born Bad?" Science 305(20 August, 2004):1100. Ecologists are debating whether invasive species are invasive "naturally" in the wild, or whether they acquire new aggressive capacities by genetic modifications after they are introduced to new environments--whether invasive species are "born" or "made." A record number of ecologists, over 4,000, gathered for the recent 89th annual meeting of the Ecological Society of America in Portland, Oregon. (v. 15, # 3)

Withgott, Jay, "Pollination Migrates to Top of Conservation Agenda," Bioscience 49(no. 11, Nov 01 1999):857- .

Withgott, Jay, "Ubiquitous Herbicide Emasculates Frogs," Science 296(19 April 2002):447-448. Scientists have been watching with alarm the decline of amphibians for a decade and wondering why. A new study implicates the most heavily used herbicide in the U.S., atrazine, which makes hermaphrodites of male frogs at concentrations commonly found in the environment, including rainwater. (v.13,#2)

WithrowRobinson, B; Broussard, S; SimonBrown, V; Engle, M; Reed, AS, "Seeing the Forest: Art About Forests and Forestry," Journal of Forestry 100(no.8, 2002): 8-14.

Witkin, James B., ed., Environmental Aspects of Real Estate Transactions: From Brownfields to Green

Buildings. 2nd ed. Chicago: American Bar Association, 1999. 900 pages. \$ 150, not cheap, but few law books are. Jointly published by the ABA's Section of Environment, Energy and Resources and Section of Real Property, Probate, and Trust Law. The intersection of real estate and environmental law. Liability, rights, obligations of buyers, sellers, lenders, and fiduciaries. (v.13,#1)

Witness, Winter 1989, is a special issue on new nature writings. (v1,#4)

Witney, Dudley, Hopkins, Adam. The Moorlands of England. Toronto: Key Porter Books. (800/ 668-5525). Anyone who has gazed on an English moor, tramped it, or perhaps felt its primordial mystery through reading Wuthering Heights or Jane Eyre cannot help but wonder about these tree-barren lands of bracken and peat and rock. The moorlands go back to Neolithic and Bronze Age England, when early farmers cleared forest and dwelt there, leaving their dolmens and stone circles and precisely bordered fields. The damp moors, with their ruined abbeys, myths--and, of course, sheep--are revealed as another tough soil from which the English sprang. (v7,#1)

Witoszek, Nina, "Arne Naess and the Norwegian Nature Tradition" Worldviews: Environment, Culture, Religion, vol.1, no.1. (v8,#2)

Witoszek, Nina, and Brennan, Andrew, eds., Philosophical Dialogues: Arne Naess and the Progress of Philosophy. Lanham, MD: Rowman and Littlefield, 1999. Somewhat different from Rethinking Deep Ecology, 1996. Over a dozen contributors. (v.11,#1)

Witoszek, Nina and Andrew Brennan, eds. Philosophical Dialogues: Arne Naess and the Progress of Philosophy. Lanham, MD and Oxford: Rowman and Littlefield, 1999. Review by David Rothenberg, Environmental Values 10(2001):418. (EV)

Witoszek, Nina, ed., Rethinking Deep Ecology, Vol. 2 of the Nature and Humanities Series, Oslo: Centre for Development and the Environment, University of Oslo, 1996. The volume can be ordered from: Centre for Development and the Environment, University of Oslo, P.O. Box 1116 Blindern, 0317 Oslo, Norway, Fax: ++47 22 85 89 20. Further information on <<http://www.sum.uio.no>>. The project of rethinking Deep Ecology is twofold: to scrutinize a radical philosophy which has informed environmental thinking for the past twenty five years, and to look again at the facts and myths which have accumulated around it. The essays collected in the volume are based on a seminar organized by SUM at University of Oslo in September 1995. Contents: "Reconsidering Deep Ecology," by Andrew Brennan; "Does Deep Ecology Need Intrinsic Value?" by Bayard Catron; "From Scepticism to Dogmatism and Back: Remarks on the History of Deep Ecology," by Peder Anker; "Value in Nature: Intrinsic or Inherent?" by Jon Wetlesen; "Demystifying the Critiques of Deep Ecology," by Harold Glasser; "Response, or Deep Ecology in the Line of Fire," by Arne Naess; "Afterword: River Thinking and Bottle Thinking in Philosophy," by Henning Breten. (v7,#2)

Wittbecker, Alan E., "An Ecological Development Plan for the Palouse Region," Pan Ecology 8, no. 1, Winter 1993. An approach to mixing nature and culture in this dry, intermountain grassland in the Columbia Basin of the U. S. Pacific Northwest. (v4,#2)

Wittbecker, Alan E. "Deep Anthropology: Ecology and Human Order." Environmental Ethics 8(1986):261-70. Deep ecology has been criticized for being anti-anthropocentric, ignorant of feminism, and utopian. Most of the arguments against deep ecology, however, are based on uncritical use of these terms. Deep ecology places anthropocentrism, feminism, and utopianism into a proper perspective--deep anthropology--which permits understanding of the human relationships with other beings in nature, in a total-field model, without accepting unhealthy extremes. The principles of deep ecology are concerned with creating good places, rather than the "no places" of modern industrial cultures. Wittbecker is at the

Marsh Institute, Viola, ID. (EE)

Wogeman, J. Philip. "Accountability in a Global Economy," Theology and Public Policy 6(no. 2, 1994).

Wohl, Ellen, Disconnected Rivers: Linking Rivers to Landscapes. New Haven, CT: Yale University Press, 2005. The rivers of the United States as they were and as they have become.

Wohl, Ellen, Virtual Rivers: Lesson from the Mountain Rivers of the Colorado Front Range. New Haven: Yale University Press, 2001. The Colorado mountain rivers may seem wild, but they have been so tampered with for over a century, for mining and agriculture, that they are as much "virtual rivers." A river ultimately absorbs everything that happens in its drainage basin, and the basin is the fundamental organizational unit for the flow of materials and energy. Rivers thus reflect the cumulative historical effects of human activities on landscapes. Though Wohl says this is not a polemic or environmentalist book, her commitments are clear. "We as a society will have to determine how highly we value functioning rivers." Featured in The Chronicle Review (Chronicle of Higher Education), Sept. 14, 2001. Wohl is in geology (earth resources) at Colorado State University. (v.12,#4)

Woinarski, J. C. Z. and Fisher, Alaric. "The Australian Endangered Species Protection Act 1992." Conservation Biology: The Journal of the Society of Conservation Biology 13(No. 5, Oct. 1999):959- . (v10,#4)

Wold, Chris. "Multilateral Environmental Agreements and the GATT: Conflict and Resolution", Environmental Law 26(no. 3):841. Wold analyzes the underlying conflicts between international trade rules as declared in the General Agreement on Tariffs and Trade (GATT) and the trade provisions of various multilateral environmental agreements. Wold teaches law at Northwestern School of Law, Lewis & Clark College. (v7,#4)

Wolf, Amanda. Quotas in International Agreements. Covelo, CA: Island Press, 1997. 224 pp. \$35 paper. A critical examination of quotas as regulatory tools and as products of negotiation. (v8,#2)

Wolf, Clark, "Markets, Justice, and the Interests of Future Generations," Ethics and the Environment 1(no.2, 1996):153-175. This paper considers the extent to which market institutions respond to the needs and morally significant interests of future generations. Such an analysis of the intertemporal effects of markets provides important ground for evaluation of normative social theories, and represents a crucial step toward the development of an adequate account of intergenerational justice. After presenting a prima facie case that markets cannot provide appropriate protections for future needs and interests, I evaluate and reject two of the most promising arguments that purport to rebut this case. None of these arguments is adequate to show that markets will protect the interests of future generations. Given important grounds for pessimism about non-market solutions, this leaves little room for hope that we can successfully preserve productive resources that future generations will need to satisfy their basic needs. However, I tentatively suggest where this hope may reside. Wolf teaches philosophy at the University of Georgia. (E&E)

Wolf, Clark. "Property Rights, Human Needs, and Environmental Protection: A Response to Brock," Ethics and the Environment 4(1999):107-114. (E&E)

Wolf, Clark. Review of Kristin Shrader-Frechette, Ethics of Scientific Research, Ethics and the Environment 4(1999):241-246. (E&E)

Wolf, KL, "Business District Streetscapes, Trees, and Consumer Response," Journal of Forestry 103 (no. 8, December 2005): 396-400.

Wolf, Martin, "The Morality of the Market," Foreign Policy, September/October 2003, pages 47-50. "The market economy has triumphed virtually everywhere--and has come to be reviled virtually everywhere. Critics, including more than a few economists, charge that capitalism creates gross inequality, inflicts environmental destruction, and undermines democracy. Nothing could be further from the truth. The market economy is the most just and humane economic system yet conceived." Taken from a forthcoming book to be published by Yale University Press. Wolf is an editor and chief economics commentator for the Financial Times. (v.14, #4)

Wolf, Tom, "The Los Utes Case: Forestry Seeks Its Soul," American Forests November, December 1990. "A badly botched timber sale on the Santa Fe National Forest in New Mexico raises questions about where the ethical soul resides in today's practice of forestry. The agency blundered on the 900-acre Los Utes timber sale and blew it in a fashion that has everyone disturbed. .. Can there--and should there--be an environmental ethic for foresters." "It is simple to say that what happened at Los Utes is wrong, both technically and ethically, but it is difficult to fix responsibility in a way that will result in better performance next time." The area is three miles upstream from Bandelier National Monument. Tom Wolf is an author and forester who has worked for The Nature Conservancy and The Trust for Public Land. (v1,#4)

Wolf, Tom, Colorado's Sangre de Cristo Mountains. Niwot, CO: University Press of Colorado, USA, 1995. 384 pages. \$39.95 cloth. Of interest for its argument that wilderness designation for the Sangre de Cristo mountains, with the richest ecological and cultural diversity from Montana to New Mexico, will result in weaker crucial links between their ecology and the economies of the human communities that surround them. He proposes downsizing the federal management and maintains that the large private ranches in the region are the sites of exciting experiments in creating and maintaining wildlife habitat that tie cultural to biological diversity. Wolf teaches at Colorado College. (v6,#2)

Wolfe, BE; Klironomos, JN, "Breaking New Ground: Soil Communities and Exotic Plant Invasion," BioScience 55 (no. 6, June 2005): 477-488.

As exotic plant species invade ecosystems, ecologists have been attempting to assess the effects of these invasions on native communities and to determine what factors influence invasion processes. Although much of this work has focused on aboveground flora and fauna, structurally and functionally diverse soil communities also can respond to and mediate exotic plant invasions. In numerous ecosystems, the invasion of exotic plant species has caused major shifts in the composition and function of soil communities. Soil organisms, such as pathogenic or mutualistic fungi, have direct effects on the establishment, growth, and biotic interactions of exotic plants. An integrated understanding of how aboveground and belowground biota interact with exotic plants is necessary to manage and restore communities invaded by exotic plant species.

Wolfe, Joan, Making Things Happen: How To Be an Effective Volunteer. Covelo, CA: Island Press, 1991. \$ 22.95 cloth, \$ 14.95 paper. 240 pages. Volunteers are the backbone of grassroots environmentalism, but volunteers are often not as effective as they could be, because they must perform jobs for which they have little or no training. (v2,#3)

Wolff, Edward N., Top Heavy: A Study of the Increasing Inequality of Wealth in America. New York: Twentieth Century Fund Press (41 East 70th Street, NY, NY 10021; 800/275-1447, 1995. Disquietingly, evidence supports the general conviction that there are diminished prospects for average American citizens. Over the last several years, many studies have established that the working population of the United States--especially men with less than a college education--not only are doing more poorly than their parents, but that their real wages are declining. Between 1947 and 1973, American families in every income category enjoyed income growth--and the poorest families had the highest rate of all. Then,

between 1973 and 1990, average income not only remained almost stagnant, but that average was a reflection of higher income growth for the top 20 percent of families, and a significant fall in real income for the poorest 20 percent. As a result, nearly half the families in American today have lower real income than they did in 1973. In terms of total wealth (distinguished from income), in the 1980's the top 1 percent of wealth holders enjoyed two thirds of all increases in financial wealth. The bottom 80 percent of households ended up with less real financial wealth in 1989 than in 1983. Startlingly, the United States has gone from a position of less wealth inequality among its citizens than in Europe to greater wealth inequality than is found in class-ridden societies. The insecurity that a large segment of the population increasingly faces is shaking the democratic system. Wolff is professor of economics at New York University. (v7,#1)

Wolfson, Paulette S.; Loyd, Melissa E.; and Hernandez, Monica Jara. "Mexican Environmental Regulations: How They Affect Your Business Decisions." Natural Resources and Environment 10, no.4 (1996): 48. (v7, #3)

Wolke, Howie. Wilderness on the Rocks. Reviewed in Environmental Ethics 15(1993):91-92.

Wolkomir, Michelle, Futreal, Michael, Woodrum, Eric, and Hoban, Thomas, "Denominational Subcultures of Environmentalism," Review of Religious Research 38 (no. 4, June 1997):325-343. The authors test the hypothesis that Christian denominations that take the Genesis "dominion" teaching more seriously will have less environmental concern, and find this to be false. They do not find any significant impact of belief in the dominion of humans on environmental attitudes. Different religious groups have varied ways of interpreting such scriptures. This raises the further question of what other aspects of religious belief and activity do connect with environmentalism. Michelle Wolkomir is in sociology at North Carolina State University. (v8,#3)

Wolters, Volkmar, Whendee L. Silver, and Johannes A. van Veen, "Effects of Global Changes on Above- and Belowground Biodiversity in Terrestrial Ecosystems: Implications for Ecosystem Functioning," Bioscience 50(no.12, Dec. 2000): 1089-. (v.12,#3)

Wolvekamp, Paul, ed. Forests for the Future: Local Strategies for Forest Protection, Economic Welfare and Social Justice. London and New York: Zed Books, 1999, 270pp. Reviewed by Christian Gamborg. Environmental Values 9(2000):541.

Women and International Development Annual, Volume 4. Edited by Rita Gallin, Anne Ferguson, and Janice Harper. Boulder, CO: Westview Press, 1994. 256 pages. \$38.00. Focuses on women's status and empowerment relative to economic deterioration, political democratization, nationalism, social conflict, grassroots groups, coalition-building, political parties, and quality of women's lives. (v5,#2)

Wondolleck, Julia M., and Yaffee, Steven L. Making Collaboration Work: Lessons from Innovation in Natural Resource Management. Covelo, CA: Island Press, 2000. 288 pages. Cloth \$50. Paper \$25. Collaboration in natural resource management: Nearly two hundred cases from around the country. (v.11,#4)

Wondrak Biel, Alice, Do (Not) Feed the Bears: The Fitful History of Wildlife and Tourists in Yellowstone. Lawrence, KS: University Press of Kansas, 2006. Management history, shifts in scientific perspectives, cultural attitudes about animals, and the changing relationships between animals and people, using the bears as a focal point. The shift from "human-oriented conservation" to "nature-oriented preservation

Wong Kinyuen. "Eco-ethics and Chinese Mythology." *Journal of Jiangsu University* No. 1

(2007): 67-71.

Wood, B., "Maintaining Vegetation Diversity on Reserves: The Relationship between Persistence and Species Richness," Biological Conservation 97(no.2, 2001): 199-. (v.12,#3)

Wood, B., "Room for nature? Conservation management of the Isle of Rum, UK, and prospects for large protected areas in Europe," Biological Conservation 94 (No. 1, 2000): 93- . (v.11,#4)

Wood, Daniel B. "A Guide to America's Best Sand, Sun, and Solitude." Christian Science Monitor 89 (16 July 1997): 1, 4. Best wild beaches: Jasper Beach, Maine; Cumberland Island, Georgia; Padre Island, Texas; Shi Shi Beach, Washington; Kalalua Beach State Park, Hawaii.

Wood, Daniel B. "Heat Rises Over Clean-Air Proposal." The Christian Science Monitor, vol. 89, 29, Nov. 1996, pp. 1-18.

Wood, Daniel B. "Suburbia Consumes California's Fruit Basket to the World." Christian Science Monitor 89 (11 September 1997): 1, 18. Farmland is being developed for homes at a rate of 100,000 acres per year. (v8,#3)

Wood, Forest, Jr. The Delights and Dilemmas of Hunting. Lanham, MD: University Press of America, 1997. 237 pages. Paper, \$ 23.50. Cloth, \$ 43.00. Arguments from both sides, with a focus on exactly what the arguments are. Chapters: I. The Case for Hunting. II. The Case Against Hunting. III. Leopold's Ethics of Hunting. IV. Political and Religious Factors of Hunting/Anti-Hunting. V. Responsibility, Challenge and the Future. Wood teaches philosophy at the University of Southern Mississippi in Hattiesburg. (v8,#1)

Wood, Forrest, Jr. The Delights and Dilemmas of Hunting: The Hunting Versus Anti-Hunting Debate. Reviewed by H. Sterling Burnett. Environmental Values 8(1999):120. (EV)

Wood, Gene, "Thoughts on Planning and Management of the Nations Public Forests," Journal of Forestry 104(no.1, January/February 2006):52-52(1).

Wood, Harold W., Jr. "Modern Pantheism as an Approach to Environmental Ethics." Environmental Ethics 7(1985):151-63. While philosophers debate the precise articulation of philosophical theory to achieve a desirable change in environmental attitudes, they may be neglecting the fountainhead of social change. Insofar as ordinary people are concerned, it is religion which is the greatest factor in determining morality. In order to achieve an enlightened environmental ethics, we need what can only be termed a "religious experience." While not denying the efficacy of other religious persuasions, I explore the contribution of an informed modern Pantheism to environmental ethics. The conceptual division of the holy and the world is rectified by pantheism. As a form of "nature mysticism," pantheism promotes a theological basis for achieving oneness with God through knowledge, devotion, and works, all of which establish an enlightened theory for environmental ethics. A modern pantheism bears investigation by those advocating new ethical approaches toward the environment. Wood is founder of the Universal Pantheist Society, Big Pine, CA. (EE)

Wood, Jr., Forrest, "Against Cartmill on Hunting: Kinship with Animals and the Midcentric Fallacy," Philosophy in the Contemporary World 4 (nos. 1 & 2. Spring, Summer, 1997): 56-60. Three recent books offer alternative views of hunting: Matt Cartmill's A View to a Death in the Morning, James Swan's In Defense of Hunting, and Forrest Wood's The Delights and Dilemmas of Hunting. Wood argues, first, that Cartmill's claim of continuity of kind between animals and persons is both overstated and logically disconnected from the hunting/antihunting debate, and, second, that Cartmill's claims that

the suffering of sentient animals is somehow intrinsically undesirable exhibits an unjustified prejudice toward middle-sized organisms. (v9,#1)

Wood Mary Christina. "Fulfilling the Executive's Trust Responsibility Toward the Native Nations on Environmental Issues: A Partial Critique of the Clinton Administration's Promises and Performance," Environmental Law 25(no.3, 1995):733- . Wood analyzes the Clinton Administration's emerging policies to accommodate native interests when implementing environmental and natural resources statutes. She focuses in particular on the trust responsibility in implementing the Endangered Species Act, drawing upon recent regulatory actions affecting treaty fishing in the Columbia River Basin to demonstrate the need for prioritizing tribal interests when regulatory action affects treaty rights. (v6,#4)

Wood, Mary Christina. "Environmental Scholarship for a New Millennium", Environmental Law 26(no. 3):761. Urging students and scholars of environmental law to break the intellectual apathy in this important field, Wood suggests that scholars interested in preventing ecological disaster should take to "millennium scholarship," marked by revealing the environmental crisis, assessing the effectiveness of our legal system, and refocusing on the ethical question of human responsibility toward the earth. Wood is an Associate Professor of Law at University of Oregon School of Law. (v7,#4)

Wood, Paul M., "Biodiversity as the Source of Biological Resources: A New Look at Biodiversity Values," Environmental Values 6(1997):251-268. ABSTRACT: The value of biodiversity is usually confused with the value of biological resources, both actual and potential. A sharp distinction between biological resources and biodiversity offers a clearer insight into the value of biodiversity itself and therefore the need to preserve it. Biodiversity can be defined abstractly as the differences among biological entities. Using this definition, biodiversity can be seen more appropriately as: (a) a necessary precondition for the long term maintenance of biological resources, and therefore, (b) an essential environmental condition. Three values of biodiversity are identified and arranged in a hierarchy: (1) the self-augmenting phenomenon of biodiversity maintains (2) the conditions necessary for the adaptive evolution of species and higher taxa, which in turn is necessary for providing humans with (3) a range of biological resources in the long term. Two broad policy implications emerge: increments of biodiversity should not be traded off against biological resources as if they were the same, and the conservation of biodiversity should be a constraint on the public interest, not a goal in service of the public interest. KEYWORDS: Biodiversity, biological diversity, biological resources, conservation policy, future generations, public interest, sustainability, tyranny of the majority. Faculty of Forestry University of British Columbia, 2357 Main Mall, Vancouver, British Columbia, Canada, V6T 1Z4. (EV)

Wood, Paul M., Biodiversity and Democracy: Rethinking Society and Nature. Vancouver, BC: University of British Columbia Press, 1999. The negative, potentially catastrophic, consequences of biodiversity loss are largely irreversible and the greatest loss will be suffered by future generations. The issue is one of intergenerational justice. Democracies are designed to implement the wishes of the current population. Wood examines a number of contemporary theories of justice and concludes that biodiversity conservation is a legitimate constraint on current collective preference. Biodiversity should be preserved, even if it is not in the current public's best interest to do so. This carries strong implications for constitutional and statutory reform in liberal democracies. Wood is in Forest Resources Management at the University of British Columbia. (v10,#4)

Wood, Paul M. "Intergenerational Justice and Curtailments on the Discretionary Powers of Governments." Environmental Ethics 26(2004):411-428. "Governments of all nations presume they possess full discretionary policy-making powers over the lands and waters within their geopolitical boundaries. At least one global environmental issue the rapid loss of the world's biodiversity, the sixth major mass extinction event in geological time challenges the legitimacy of this presumption. Increment by increment, the present generation is depleting the world's biodiversity by way of altering species'

habitats for the sake of short term economic gain. When biodiversity is understood as an essential environmental condition essential in the long term because it is the source of the biological resources upon which humans depend then the strongly differential distribution of benefits and burdens between generations raises an issue of intergenerational justice. We receive the short-term benefits of economic development; future generations will receive the resulting burden of a biosphere in which one of the life-support systems necessary for humanity will have been compromised. Using Ronald Dworkin's conceptions of distributive justice, it can be demonstrated that constitutional constraints on the discretionary powers of governments, for the sake of intergenerational justice, are entirely consistent with central tenets of liberal democracy. As a result, we should abandon to some extent the presumption that governments have full jurisdiction over the lands and waters within their boundaries.(EE)

Wood, Paul, Review of Alston Chase, In a Dark Wood: The Fight over Forests and the Rising Tyranny of Ecology. Environmental Ethics 20(1998):215-18.

Wood, Paul M. and Laurel Waterman. "Sustainability Impeded: Ultra Vires Environmental Issues." *Environmental Ethics* 30(2008):159-174. Some anthropogenic environmental changes that produce net benefits for the current generation will also produce foreseeable net harms to future generations. Well recognized as "time-lag effects," these changes are environmental issues with strongly differential benefits and burdens between generations. Some of the world's largest environmental issues fall into this category, including biodiversity loss and global climate change. The intractability of these issues for Western governments is not merely a practical problem of avoiding unpopular policy options; it is a theoretical problem for liberal democracy. Current conceptions of political legitimacy authorize governments to act for the benefit of their respective current citizens but not for future generations. A liberal democratic government is not authorized to enact policies for the benefit of future generations if so doing would entail unwanted constraints on the current electorate. To do so would fall beyond the jurisdiction—the legitimate scope of decision making—of government. The result is an entire category of environmental issues that is largely beyond the jurisdiction of government to resolve. These are ultra vires (beyond jurisdiction) environmental issues. To the extent that the concept of sustainability embodies intergenerational justice, then current conceptions of political legitimacy are impeding sustainability. (EE)

Wood-Gush, D. G. M. & Vestergaard, K., "Exploratory Behavior and the Welfare of Intensively Kept animals", Journal of Agricultural Ethics 2(1989):161-169. Exploratory behavior is considered under the following categories: (1) extrinsic exploration in which the animal seeks information about conventional reinforcers such as food, (2) intrinsic exploration which is directed toward stimuli which may have no biological significance, further divided into inspective and inquisitive exploration. Wood-Gush is in agriculture at the University of Edinburgh, Scotland. Vestergaard is in animal production and health at the Royal Veterinary and Agricultural University, Denmark.

Woodard, Colin. "The Black Sea Faces Dark Times." The Christian Science Monitor, vol. 89, 13 Dec. 1996, p. 6.

Woodard, Colin. "Bottlenose Whale Could Bottleneck Canada's Gas-Pipe Route." Christian Science Monitor 89 (28 July 1997): 6. (v8,#3)

Woodard, Colin. "Troubles Bubble Under the Sea." Christian Science Monitor 89 (10 September 1997): 1, 10-11. Pollution and overfishing have altered numerous marine ecosystems worldwide and have endangered several species. Tougher controls and marine preserves are being proposed. Sources of marine pollution are: Ocean dumping, 10%; Shipping and accidental spills, 12%; Airborne emissions from land, 33%; Runoff and discharges from land, 44%; Offshore mining and oil and gas drilling, 1%. (v8,#3)

Woodgate, Graham, and Redclift, Michael, "From a 'Sociology of Nature' to Environmental Sociology: Beyond Social Construction," Environmental Values 7(1998):3-24. This paper aims to provide some theoretical starting points for constructing a social science approach to environmental issues which goes beyond narrower forms of constructivism without dismissing the importance of interpretative sociology. An ecological understanding of society is compared with the notion of structuration and integrated into the concept of coevolution in order to shed light on the dynamic nature of socio-environmental relations and move beyond the constructivist/realist dualism. KEYWORDS: Coevolution, social construction, socio-environmental relations, structuration. Woodgate is at Wye College, University of London and Redclift is at Keele University. (EV)

Woodhouse, M., "Is Public Participation a Rule of the Law of International Watercourses?," Natural Resources Journal 43(no. 1, 2003): 137-184.

Woodley, Stephen, George Francis, and James Kay, Ecological Integrity and the Management of Ecosystems. Delray Beach, FL: St. Lucie Press, 1993. 256 pages. \$ 55, cloth. Does ecological science have the capacity to provide useful measures of ecological integrity? Is there a useful process for incorporating value judgments within measurable ecological variables? The authors maintain that the definition of ecological integrity cannot be dissociated from societal values. Useful examination of related concepts such as ecosystem health, environmental quality. Sponsored by the Heritage Resources Center, University of Waterloo and Canadian Park Service. (v5,#3)

Woodley, Stephen, and Kay, James, and Francis, George (editors), Review of Spellerberg, Ian, Ecological Integrity and the Management of Ecosystems. Environmental Values 3(1994):274-275. (EV)

Woodley, Stephen. "Monitoring, Assessing and Reporting Upon Ecological Change: Implications for Planning and Management", Environments 24(no. 1, 1996):60.

Woodley, Stephen. "A Scheme for Ecological Monitoring in National Parks and Protected Area." Environments 23, no.3 (1996): 50. (v7, #3)

Woodroffe, R., S. Thirgood, and A. Rabinowitz, eds., *People and Wildlife: Conflict or Coexistence?* Cambridge: Cambridge University Press, 2005. Human-wildlife conflicts are inevitable if we are to share the planet with other species. Such conflicts will only increase as humans encroach on wildlife areas and, potentially, as wildlife repopulate human-dominated landscapes. Worldwide, this is what is happening now and will continue for some time. Conservation of large carnivores and herbivores is needed to maintain the well-being of the concerned ecosystems and landscapes; they serve a keystone function. But often local people do not think so and reject them because they disturb agriculture. Interestingly, there is more progress in reconciling these conflicts in Europe than in developing nations.

Woodrum, Eric and Thomas Hoban, "Theology and Religiosity Effects on Environmentalism," Review of Religious Research 35(1994):193-206. (v8,#3)

Woods, Abigail, "Why Slaughter? The cultural Dimensions of Britain's Foot and Mouth Disease Control Policy, 1892-2001," Journal of Agricultural and Environmental Ethics 17(2004):341-362. In 1892, the British agricultural authorities introduced a policy of slaughtering animals infected with foot and mouth disease (FMD). This measure endured throughout the 20th century and formed a base line upon which officials superimposed the controversial "contiguous cull" policy during the devastating 2001 epidemic. Proponents of the slaughter frequently emphasized its capacity to eliminate FMD from Britain, and claimed that it was both cheaper and more effective than the alternative policies of isolation and vaccination. However, their discussions reveal that a less obvious but nonetheless important reason for maintaining the slaughter policy was the conviction that in its manner of operation and its outcomes, it

benefited the state and status of the British nation. To its supporters, slaughter was far more than a method of disease control; it acted also as a moralizing and civilizing force, an indicator of veterinary ability and a "virility symbol" of British international leadership. This "cultural" rationale for FMD control by slaughter declined during the late 20th century and was wholly undermined by the 2001 epidemic, when extensive culling failed to convey the intended image of an organized, enlightened Britain. Keywords: agriculture, contiguous cull, foot and mouth disease, history, nationalism, policy, slaughter, vaccination. The author is with the Wellcome Unit for the History of Medicine, Centre for the History of Science, Technology and Medicine, University of Manchester, UK. (JAEE)

Woods, Mark, "Can Wilderness Survive?" From the Center: A Newsletter (The Center for Values and Social Policy, University of Colorado, Boulder), vol. 14, no. 2, Fall 1995. There are mounting criticisms of wilderness. We can circumvent such criticism with a non-anthropocentric wilderness ethic. "Wilderness is meaningful because it is an important repository of value--the value of the free play of natural forces. We cannot avoid impacting nature, but we can choose whether we want to control, dominate, and fully trammel all of nature by living side by side with it and protecting it as wilderness. Academics who claim that there is no such thing as wilderness because the concept is meaningless intentionally or inadvertently support the assault on the physical space of wilderness. Wilderness cannot survive the combined forces of academics who banish it as a meaningless concept and bulldozers that destroy it as a meaningful place. The defense against both is worthwhile." Woods is a PhD candidate at the University of Colorado, Boulder. (v6,#4)

Woods, Mark J. Rethinking Wilderness. PhD thesis, University of Colorado, Boulder, CO, Fall 1996. An examination some of the more important criticisms of wilderness coming from environmental philosophy, ecology, and environmental history. The legal-political practice of wilderness preservation reveals paradoxes about how wilderness is preserved. Recent work in ecology leads us to question whether wilderness can be preserved. Philosophical and historical critiques cast doubt on whether there is any such thing as wilderness to be preserved. We are forced to re-examine the metaphysical and scientific underpinnings and moral values of wilderness, but the arguments advanced against it are all found to be wanting. Three questions steer the discussion: 1. What is wilderness? 2. Why does wilderness have value? 3. How should wilderness be protected? Dale Jamieson was the principal advisor; James Nickel, John Fisher, and Holmes Rolston (Colorado State University) also served on the committee, also Charles F. Wilkinson (University of Colorado Law School). (v7, #3)

Woods, Mark, "Wilderness," in Jamieson, Dale, ed., A Companion to Environmental Philosophy. Oxford: Blackwell, 2000. (v.13,#1)

Woods, Mark and Paul Veatch Moriarty. "Strangers in a Strange Land: The Problem of Exotic Species," Environmental Values 10(2001):163-191. Environmentalists consider invasions by exotic species of plants and animals to be one of the most serious environmental problems we face today, as well as one of the leading causes of biodiversity loss. We argue that in order to develop and enact sensible policies, it is crucial to consider two philosophical questions: (1) What exactly makes a species native or exotic, and (2) What values are at stake? We focus on the first of these two questions, and offer some preliminary suggestions with regard to the second. Through a series of case studies, we show that it is not always clear whether a species is native or exotic. We identify five possible criteria that could be used for distinguishing natives from exotics. Rather than identifying one of these criteria as the "correct" one, we suggest that the concepts of "native" and "exotic" function more like what some philosophers have called cluster concepts. That is, there are several characteristics that are typical of native species, and a corresponding set of characteristics that are typical of exotic species. None of these characteristics is either necessary or sufficient for identifying a species as either native or exotic. We then identify several of the values that are at stake in dealing with exotic species, and we suggest that policies need to avoid

being overly simplistic. Keywords: Cluster concept, exotic species, invasion biology, native species. Mark Woods is in the Department of Philosophy, University of San Diego, San Diego, CA and Paul Veatch Moriarty is in the EPML Department, Longwood College, Farmville, VA. (EV)

Woods, Mark. "The Nature of War and Peace: Just War Thinking, Environmental Ethics, and Environmental Justice." *Rethinking the Just War Tradition*, Michael W. Brough, John W. Lango, and Harry van der Linden, eds. Albany: State University of New York Press, 2007. Increasing attention today is being paid to the environmental impacts of armed conflicts and military activities - the ecology of war and peace. Most environmental critiques of military activities offer only limited protection, however, because they stem from outsiders looking into matters of war and peace. Woods argues that these critiques can be augmented by building environmental considerations into how western militaries view war and peace from the inside out - via the just war tradition.

Woods, Richard, "The Seven Bowls of Wrath: An Ecological Parable," Ecotheology No 7 (July 1999):8-21.

Woodwell, G. M., "Biotic Feedbacks from the Warming of the Earth." Pages 3-21 in G. M. Woodwell and F. T. Mackenzie, Biotic Feedbacks in the Global Climatic System. New York: Oxford University Press, 1995. (v7,#4)

Woodwell, George M., eds., The Earth in Transition: Patters and Processes of Biotic Impoverishment. New York: Cambridge University Press, 1990. \$49.50. (v3,#1)

Woolley, J. T., McGinnis, M. V., and Kellner, J., "The California Watershed Movement: Science and the Politics of Place," Natural Resources Journal 42(no.1, 2002): 133-84. (v.13,#4)

Woolley, John T. and McGinnis, Michael Vincent, "The Conflicting Discourses of Restoration," Society & Natural Resources 13 (No. 4, 2000 June 01): 339- . (v.11,#4)

Wootton, R. J., Kukalová-Peck, J., Newman, D. J. S., and Muzón, J., "Smart Engineering in the Mid-Carboniferous: How Well Could Paleozoic Dragonflies Fly?" Science 282(23 October 1998):749-751. "Insect wings ... are proving to be spectacular examples of microengineering. ... The dragonflies ... are supremely versatile, maneuverable fliers, and this is reflected in their wing morphology." A related story is Vogel, Gretchen, "Insect Wings Point to Early Sophistication," Science 282(23 October 1998):599-601. "The insects come equipped with highly engineered wings that automatically change their shape in response to airflow, putting the designers of the latest jet fighters to shame." Well, so much for blind, dumb, stupid evolution. (v.9,#4)

World Bank and the Environment, The. Fiscal 1993. Washington, DC: The World Bank, 1993. (1818 H. Street, N.W. 20433). The fourfold environmental agenda of the World Bank. 1. Assisting countries in environmental stewardship. 2. Assessing and mitigating adverse effects of Bank-financed projects. 3. Building on the positive synergies between development and the environment. 4. Addressing global environmental challenges. (v4,#4)

World Conservation Monitoring Centre (WCMC), The World List of Threatened Trees. Cambridge, UK: World Conservation Press, 1998. ISBN 1 899628 10 X. This report finds that 10% of the world's 100,000 tree species are under threat, naming 976 species that are critically endangered and facing extinction, with many thousands of other species at threat. One such tree is frankincense. The report's grim bottom line is that habitat destruction threatens these trees and for three-quarters of them nothing is being done about it. Only 12% of tree species are in protected areas. Bird Life International published a similar report in 1994 and found that 11% were incidental. This report argues that the similar proportions

are not incidental. A summary is Williams, Nigel, "Study Finds 10% of Tree Species Under Threat," Science 281(4 September 1998):1426. (v.9,#4)

World Development Report 1997--The State in a Changing World. Philadelphia: The World Bank, 1997. \$ 25.95. 354 pages. (The World Bank, P. O. Box 7247-8610, Philadelphia, PA 19170-8619). Also available is the World Development Reports 1978-1997 on CD-ROM. Can an economy flourish without an effective state? No, and here's why. Many states try to do too much with too few resources and little capability. Governments should focus on core public activities that are vital to development. State-led development strategies have often failed. Re-invigorated public institutions need to give public officials the incentive to do their jobs better and to be more flexible, but also to provide restraints to check arbitrary and corrupt behavior. (v8,#3)

World Directory of Environmental Organizations, 4th ed., edited by Thaddeus C. Trzyna, President of the California Institute of Public Affairs and chairman of the IUCN Commission on Environmental Strategy and Planning, also by Roberta Childers. 232 pages. \$ 45.00. Jointly produced by the California Institute of Public Affairs, the Sierra Club, and the International Union for the Conservation of Nature and Natural Resources (IUCN). Covers 2,600 organizations in every nation in the world. (v3,#3)

World Environmental Directory, 6th edition. Business Publishers, Inc. 951 Pershing Drive, Silver Spring, MD 20910-4464. \$ 225, plus \$ 8 postage. Over 1,000 pages, 60,000 listings. (v2,#3)

World Environmental Directory, 5th edition, North America. More than 1,000 looseleaf pages, 12,000 listings, 24,000 contact names. \$ 131.50 postpaid. Available from Business Publishers, Inc., 951 Pershing Drive, Silver Spring, MD 20910-4464. Phone 301/587-6300. (v1,#2)

World Plant Conservation Bibliography. Published by Royal Botanic Gardens, Kew, and the World Conservation Monitoring Centre. This 645 page volume includes more than 10,000 citations to literature published during the last ten years about plant conservation at local, national, and international levels. Its scope ranges from highly specific papers on individual threatened plant species to more general papers tackling conservation strategy, policy, and law. Available from Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, United Kingdom. (v2,#2)

World Resources Institute, The United Nations Environment Programme, The United Nations Development Programme, and the World Bank. World Resources 1996-97. Seventh biennial issue of what is widely regarded as the most authoritative report on the global environment. Includes the latest ideas on a broad spectrum of urban environmental issues and suggests strategies for addressing them. (v7,#4)

World Resources Institute, the International Institute for Environment and Development, and the World Conservation Union. World Directory of Country Environmental Studies. Washington, D.C.: World Resources Institute, Publications Department, 1996. 250pp. \$24.95. This annotated bibliography provides information on the content and availability of hundreds of studies of environmental and natural resource conditions around the world. Covering OECD Countries, Eastern Europe, the former Soviet Union, and developing countries, the Directory provides an abstract and cites the title, author, publication date, and sponsoring and collaborating organizations and indicates how the document may be found. (v8,#1)

World Watch Magazine Vol. 21, no. 5 (2008). The topic of this special issue is "Population Forum." Contents include: (1) "Women: Population's Once and Future Key" by Thomas Prugh, (2) "Unnatural Increase?" by Robert Engelman, (3) "Population, Health, and Environment Through a 'Gendered' Lens" by Lori M. Hunter, (4) "U.S. Attitudes on Population" by Scott Connolly, Katie Elmore, and William Ryerson, (5) "Of Butterflies, Birds, and Bees" by Bernard O. Orimbo, (6) "Population, Urbanization, and

the Environment” by Leiwen Jiang, Malea Hoepf Young, and Karen Hardee, and (7) “Population and Security” by Elizabeth Leahy and Sean Peoples.

World Watch Magazine Vol. 21, no. 5 (2008). The topic of this special issue is “Population Forum.” Contents include: (1) “Women: Population’s Once and Future Key” by Thomas Prugh, (2) “Unnatural Increase?” by Robert Engelman, (3) “Population, Health, and Environment Through a ‘Gendered’ Lens” by Lori M. Hunter, (4) “U.S. Attitudes on Population” by Scott Connolly, Katie Elmore, and William Ryerson, (5) “Of Butterflies, Birds, and Bees” by Bernard O. Orimbo, (6) “Population, Urbanization, and the Environment” by Leiwen Jiang, Malea Hoepf Young, and Karen Hardee, and (7) “Population and Security” by Elizabeth Leahy and Sean Peoples.

World Wide Fund for Nature-India, National Consultation on Religion and Conservation, 21 April 1999: Proceedings. New Delhi: World Wide Fund for Nature-India, 1999. Proceedings of a conference held "to harness the crucial support of the major religions of [India] for nature conservation and environmental protection." Includes interesting interfaith discussions by religious leaders, and "pledges to mother earth" by representatives of the following religions: Bahai, Buddhism, Christianity, Hinduism, Islam, Jainism, Judaism, Sikhism, and Zoroastrianism. Also a final "Declaration of Principles." (EE v.12,#1)

World Wide Fund for Nature-India, Religion and Conservation. New Delhi: Full Circle Press, 1999. 120 pages, paperback. ISBN 81-7621-047-1. A follow-up publication to the Assisi Conference of 1986 and the Windsor Conference of 1995, on religion and nature. Includes Declarations on Nature by leaders of nine faiths: Bahai, Buddhism, Christianity, Hinduism, Islam, Jainism, Judaism, Sikhism, and Taoism. Also includes the U.N. World Charter for Nature of 1982 and supplementary material. (EE v.12,#1)

Worldviews: Environment, Culture, Religion, a new journal, is now available. Contents of Vol.1, No.1:

--Tucker, Mary Evelyn, "The Emerging Alliance of Ecology and Religion"

--Dwivedi, O.P., "Vedic Heritage for Environmental Stewardship"

--Szerzynski, Bronislaw, "The Varieties of Ecological Piety"

--Witoszek, Nina, "Arne Naess and the Norwegian Nature Tradition"

Further details from the Editor, Clare Palmer, University of Greenwich, or from the publishers: White Horse Press, 10 High Street, Knapwell, Cambridge CB3 8NR, UK. tel/fax 01954 267527, or 1 Strond, Isle of Harris HS5 3UD, UK. tel/fax 01859 520204. Or visit the White Horse Press website: www.ericademon.co.uk

Worldwatch Institute. *State of the World 2008: Toward a Sustainable Global Economy*. New York: W.W. Norton & Company, 2008. Contents include: (1) “The Need to Remake Economies” by Gary Gardner and Thomas Prugh, (2) “A New Bottom Line for Progress” by John Talberth, (3) “Rethinking Production” by Hunter Lovins, (4) “Sustainable Lifestyle: Dreams and Realities” by Tim Jackson, (5) “Meat and Seafood: The Most Costly Ingredients in the Global Diet” by Brian Halweil and Danielle Nierenberg, (6) “Building a Low-Carbon Economy” by Christopher Flavin, (7) “Harnessing Carbon Markets” by Zoë Chafe and Hilary French, (8) “Water in a Sustainable Economy” by Ger Bergkamp and Claudia Sadoff, (9) “Using Markets to Conserve Biodiversity” by Ricardo Bayon, (10) “The Parallel Economy of the Commons” by Jonathan Rowe, (11) “Building Sustainable Communities” by Erik Assadourian, (12) “Development from the Ground Up” by Jason Calder, (13) “Investing in Sustainability” by Bill Baue, and (14) “New Approaches to Trade Governance” by Mark Halle.

Worldwatch Institute. *State of the World 2007: Our Urban Future*. New York: W.W. Norton & Company, 2007. Contents include: (1) “An Urbanizing World” by Kai N. Lee, (2) “Providing Clean Water and Sanitation” by David Satterthwaite and Gordon McGranahan, (3) “Farming the Cities” by Brian Halweil and Danielle Nierenberg, (4) “Greening Urban Transportation” by Peter Newman and Jeff Kenworthy, (5) “Energizing Cities” by Janet L. Sawin and Kristen Hughes, (6) “Reducing Natural

Disaster Risk in Cities” by Zoë Chafe, (7) “Charting a New Course for Urban Public Health” by Carolyn Stephens and Peter Stair, (8) “Strengthening Local Economies” by Mark Roseland with Lena Soots, and (9) “Fighting Poverty and Environmental Injustice in Cities” by Janice E. Perlman with Molly O’Meara Sheehan.

Worm, Boris et al (a dozen others), "Impacts of Biodiversity Loss on Ocean Ecosystem Services," Science (3 November 2006):787-790. Human-dominated marine ecosystems are rapidly losing biodiversity, with unknown consequences, but projections here indicate that the ocean's capacity to provide food, maintain water quality, and recover from perturbations will be lost by 2048. By then all commercial fish and seafood species will be gone, at least in harvestable quantities. Of particular note is the finding that general oceanic biodiversity is required to sustain commercial fisheries. Available data does suggest that these trends are still reversible. The lead author is at Dalhousie University, Halifax, Canada. With commentary: Stokstad, Erik, "Global Loss of Biodiversity Harming Ocean Bounty," Science 314(3 November 2006):745.

Worster, David E. Nature's Economy: The Roots of Ecology. Reviewed in Environmental Ethics 1(1979):177-80.

Worster, Donald, Nature's Economy: A History of Ecological Ideas. 2nd edition. New York: Cambridge University Press, 1994. Features persons whose work was formative in the history of ecology, including Linnaeus, Gilbert White, Darwin, Thoreau, Rachel Carson, Frederic Clements, Aldo Leopold, James Lovelock, Eugene Odum. (v8,#3)

Worster, Donald, "The Ecology of Order and Chaos," Environmental History Review 14(1990):1-18. Classical ecology had much order, equilibrium, harmony, and it was possible to admire such nature, respect it, and form a policy of integrating society with such nature. But recent ecology has seen much disorder, disturbance, perturbation, chaos in natural systems, leaving the puzzling question whether such nature is worthy of respect and preservation. The tendency to see more chaos in ecosystems is part of a larger trend in other sciences--physics, astronomy, chemistry, climatology, mathematics--an interdisciplinary science of chaos. Nature at the system level is often unpredictable, either in principle or too complex to be modeled. But this new tendency to see disorder may not just be discovering objective facts about nature; it may be a projection onto nature of a "post-modernist" ideology about society, believing that societies too are fundamentally erratic. (v1,#3)

Worster, Donald, "Transformations of the Earth: Toward an Agroecological Perspective in History," The Journal of American History 76(1990):1087-1106. The focus of a roundtable discussion by environmental historians, with commentary following, by Alfred W. Crosby, Richard White, Carolyn Merchant, William Cronon, and Stephen J. Pyne, and a final rejoinder, "Seeing Beyond Culture" (pages 1142-1147) by Worster. Various aspects of the debate about whether nature can and ought to be seen with or without cultural filters. "The patterns of nature both do and ought to set a course for our lives--not the only course, or the only possible course, but a reasonably clear pattern that wise societies have followed in the past, foolish ones have scorned" (p. 1145). "One of humankind's oldest intuitions is that the realm of nature has an objective, independent order and coherence; that we are to some extent part of that order, to some extent out of it and opposed to it; that, in any case we ought to respect it" (p. 1146). Worster teaches environmental history at the University of Kansas.

Worster, Donald, "Are We Losing Ground? Environmentalism at the End of the Century," Ethics and the Environment 2(1997):71-79. A presentation at the University of Georgia's forum "Valuing the American Environment," Worster presents a radical viewpoint about the land stating that we need a "new way" to view the world. Worster is in history at the University of Kansas.

Worster, Donald, ed., The Ends of the Earth: Perspectives on Modern Environmental History. New York: Cambridge University Press, 1988. \$ 39.50 hardback. \$ 12.95 paper. (v3,#1)

Worster, Donald, Under Western Skies: Nature and History in the American West. NY: Oxford University Press, 1992. Worster teaches environmental history, University of Kansas. (v.10,#1)

Worster, Donald, "Nature and the Disorder of History," Environmental History Review 18(1994)1-15. "Over the past two decades the field of ecology has pretty well demolished Eugene Odum's portrayal of a world of ecosystems tending toward equilibrium, leaving us with no model of development for human society to emulate. ... Nature, we are now told, should be regarded as a landscape of patches of all sizes, textures, and colors, changing continually through time and space, responding to an unceasing barrage of perturbations. Now this is a nature that looks remarkably similar to the human community that Departments of History write about. ... Disturbance is history. And a disturbed nature is a nature that has a history very like the history that humans make. Worster teaches environmental history at the University of Kansas. (v5,#2)

Worster, Donald, The Wealth of Nature: Environmental History and the Ecological Imagination. New York: Oxford University Press, 1993. 255 pp. \$ 25.00. A collection of essays. Past ideas about the relations of humans to nature persist unavailingly into the present. No amount of tinkering will correct what, at root, is a fundamentally obsolete and dangerous world view dependent on the appropriation of nature. Worster wants "to discover a less-reductive, less-ecologically and spiritually nihilistic, less-grasping kind of materialism." With a tinge of fatalism. Worster is a historian at the University of Kansas, Lawrence. (v4,#2)

Worster, Donald. Review of John Muir and His Legacy: The American Conservation Movement. By Stephen Fox. Environmental Ethics 5(1983):277-81.

Worster, Donald. Review of The Pathless Way: John Muir and American Wilderness. By Michael P. Cohen. Environmental Ethics 10(1988):267-70.

Worthy, Trevor H., and Holdaway, Richard N., The Lost World of the Moa: Prehistoric Life of New Zealand. Bloomington, IN: Indiana University Press, 2002. In New Zealand, much of the biodiversity crisis is over. People won; native plants and animals lost. Before Polynesians arrived, New Zealand had at least 38 species of birds that could not fly. Of these 29 are now extinct and most of the other 9 are endangered. Including the satellite islands, humans have wiped out about half (70 of 145) of the native species of landbirds, flying or flightless, with most of the losses occurring before the Europeans arrived.

Another finding of interest is that, apart from the human disruption, the vertebrate faunas were rather stable rather than dynamic for the last 100,000 years. On every Pacific island group with a relatively long fossil record, the evidence points to pre-human faunal turnover several orders of magnitude slower than that usually proposed by ecologists, lately enamored of change.

Wouters, Patricia K. "An Assessment of Recent Developments in International Watercourse Law through the Prism of the Substantive Rules Governing Use Allocation", Natural Resources Journal 36(no.2, 1996):417.

Wrangham, Richard, and Dale Peterson, Demonic Males: Apes and the Origin of Human Violence. (New York: Houghton Mifflin, 1996). Chimpanzees are much more violent than their smaller cousins, pygmy chimpanzees or bonobo apes, otherwise quite similar. Chimps live in patriarchal groups in which males regularly rape, beat, and kill, and sometimes drink the blood of their own kind. But bonobos create peaceful societies in which males and females share power. In bonobo groups, female action works to suppress the excesses of male aggression. Females and males are equally important players in bonbo

society. Following this model, human civilization would be more civilized if women seized more political power through elections and used it to counterbalance the male instinct to constantly define "enemies" and attach them. To make this advance, however, women must first abandon a tendency they share with female chimpanzees to reward and select aggressive males as their mates. Bonobo female bonds are often lesbian; Wrangham is reluctant, however to recommend this for human society! Wrangham also claims to have discovered that warfare is not uniquely human, contrary to frequent claims by scientists that war does not occur in other animals. There is a summary story in the Harvard Magazine, January-February 1997, pp. 21-22. Wrangham is a Harvard anthropologist, Peterson is a science writer. (v7,#4)

Wrangham, Richard W., W. C. McGrew, Frans B. M. De Waal, and Paul G. Heltne, eds. Chimpanzee Cultures. Cambridge, MA: Harvard University Press, 1994. 424 pages. \$40. Despite the title, the editors begin by admitting that "cultural transmission among chimpanzees is, at best, inefficient, and possibly absent" (p. 2). This is because there is scant (and in some cases negative evidence) for active imitation or teaching of tool-using techniques. Many cognitive scientists believe that imitation and teaching require the ability to attribute mental states to others. Do chimpanzees consciously model their behavior on that of others, or are they "restricted to private conceptual worlds" (p. 2) If chimpanzees do differ from humans in being unable to attribute intentions, beliefs, and ignorance to others, they will inevitably lack the full capacity to imitate, to inform, and to teach. They will also lack all but the most rudimentary forms of culture. The various authors tackle this question as they are able to, especially with captive animals. (v6,#1)

Wright, Al, "Should the Courts Run the River?" Environmental Law 25 no. 2 (1995): 403- . The courts as managers of the Columbia River.

Wright, Charles Whitmer, Toward an Environmentally Responsive Ethics of Communication (Frankfurt School of Social Theory, Jurgen Habermas, Germany), 1996, State University of New York at Stony Brook a Ph.D. thesis philosophy. 495 pages. First generation members of the Frankfurt School of social theory--Max Horkheimer, Theodor Adorno and Herbert Marcuse--anticipated the need for theoretical reflection concerning the causes of environmental degradation, but their philosophical approach was burdened with serious conceptual difficulties. Jurgen Habermas's reconstruction promises to resolve many of these difficulties. Yet his linguistic and pragmatic approach seems to entail an anthropocentrism that prevents an adequate environmental ethic. This thesis outlines the obstacles facing environmental thinkers in Habermas's conception of practical reason and in his conception of modernity. But his theoretical approach can be reconciled with the aims of environmental ethics and philosophy. A place for a moral dimension to human interaction with the natural world can be secured. The advisor was Kenneth Baynes. (v.10,#1)

Wright, Danaya C., Hester, Jeffrey M., "Pipes, Wires, and Bicycles: Rails-to-Trails, Utility Licenses, and the Shifting Scope of Railroad Easements from the Nineteenth to the Twenty-First Centuries," Ecology Law Quarterly 27(no. 2, 2000):351- . (v.12,#2)

Wright, H. E., Jr., et al., eds. Global Climates Since the Last Glacial Maximum. Minneapolis: University of Minnesota Press, 1993. 544 pages. \$59.95. Based on a fifteen-year interdisciplinary study of geological, paleoecologic, and oceanographic evidence. Evidence for climatic changes during the past 18,000 years is summarized, and then the summarized data are compared to paleoclimatic simulations based on models of atmospheric circulation at 300-year intervals. (v5,#2)

Wright, Judith, "Wilderness and Wasteland," Island (Sandy Bay, Tasmania) 42(1990):3-7. Australians have regarded original Australia as wilderness and wasteland, dating from Captain Cook's claiming the eastern part as terra nullius, uninhabited land. Cook knew better, he had in fact been chased off Australia

as a trespasser, and he disobeyed imperial instructions to seek the consent of the natives. Nevertheless, the idea that Australia was uninhabited has continued in law until recently, resulting in unfair treatment of the indigenous peoples there.

Making matters more difficult is the American idea of wilderness, a place without people, now popular in Australia. Wilderness advocates too seek to set aside as wilderness uninhabited land, which are often lands from which indigenous peoples have long since been displaced. So neither those who want to possess uninhabited lands, or those who wish to preserve lands uninhabited have a suitable framework for dealing with the indigenous peoples remaining in Australia. Wright is a poet, a conservationist, and a campaigner for aboriginal rights.

Wright, Justin P.; Jones, Clive G., "The Concept of Organisms as Ecosystem Engineers Ten Years On: Progress, Limitations, and Challenges," BioScience 56 (no.3, March 2006): 203-209 (7). The modification of the physical environment by organisms is a critical interaction in most ecosystems. The concept of ecosystem engineering acknowledges this fact and allows ecologists to develop the conceptual tools for uncovering general patterns and building broadly applicable models. Although the concept has occasioned some controversy during its development, it is quickly gaining acceptance among ecologists. We outline the nature of some of these controversies and describe some of the major insights gained by viewing ecological systems through the lens of ecosystem engineering.

Wright, Nancy C. and Donald Kill, Ecological Healing: A Christian Vision. Maryknoll, NY: Orbis Books, 1993. 161 pages. Paper. Features the Coordination in Development Network (CODEL) of small-scale, environmentally sensitive development projects in developing nations, and how Christians have been and can be catalysts in these projects. Wright is a United Church of Christ minister, Kill is a Columban priest. (v5,#2)

Wright, R. Gerald, ed., National Parks and Protected Areas: Their Role in Environmental Protection. Cambridge, MA: Blackwell Science, 1996. 480 pages. \$ 54.95. National parks are becoming an integral part of preservation efforts on the national and local levels, not as islands of conservation but as integrated into their surrounding ecological and cultural landscapes. Wright is a research biologist for the National Biological Service. (v8,#1)

Wright, R. Gerald, ed. National Parks and Protected Areas. Malden, MA: Blackwell Science, Inc., 1996. 496pp. \$54.95. Focusing on the role and value parks can play in studying and preserving diversity and natural resources, the chapters look into techniques such as evaluating the ecological suitability of lands for parks, restoration of park resources, management of visitor use and protection of biodiversity. (v8,#1)

Wright, RG; Scott, JM; Murray, M, "Identifying unprotected and potentially at risk plant communities in the western USA," Biological Conservation 98(no.1, 2001):97-. (v.12,#4)

Wright, Richard T., Environmental Science: Toward a Sustainable Future, 9th edition. Upper Saddle River, NJ: Pearson, Prentice-Hall, 2005. An environmental science textbook with ethics and policy on almost every page. For example, there are sections: What is the Stewardship Ethic? Can Ecosystems Be Restored? The Dilemma of Immigration. The Ethical Dilemma of China's Population Policies. Erosion by Equation (difficulties of measuring the damage of erosion). The Lifeboat Ethics of Garret (sic) Hardin. Showdown in the New West (nuclear wastes). Transfer of Energy Technology to the Developing World. The Rights of Smokers? DDT for Malaria Control: Hero or Villain? "Affluenza": Do You Have It? Stewardship of the Atmosphere. The Tangier Island Covenant (crab and oyster harvesting in the Chesapeake Bay, and a covenant mediated by two churches there). Wright is biology emeritus, Gordon College, Massachusetts.

Wright, Scott D., (University of Utah), Thomas Dietz (George Mason University), Richard Borden (College of the Atlantic), Gerald Young (Washington State University), and Gregory Guagnano (George Mason University), eds., Human Ecology: Crossing Boundaries. Fort Collins, CO: The Society for Human Ecology, 1993. (c/o Jonathan Taylor, U.S. Fish and Wildlife Service, 4512 McMurray Ave., Fort Collins, CO 80525-3400). Paper. \$ 20.00, plus 25% if overseas. Some fifty papers, some long, some short, from the Sixth Conference of the Society for Human Ecology (at Snowbird, Utah). Samples: Andrew Light, "Environmental Pragmatism and Valuation in Nature"; Thomas Webler, "Habermas Put Into Practice: A Democratic Discourse for Environmental Problem-Solving"; Michael S. Brunett, "Valuing the Future as if it Mattered: The Negative Discount Rate and Sustainable Development"; Daniel E. Vasey, "History and Human Ecology: The Strong Principle"; Stirling N. Johnson, "Protecting the Earth, Animals, and Human Health Through a Plant-Based Diet." (v4,#4)

Wright, Will, Wild Knowledge: Science, Language, and Social Life in a Fragile Environment. Minneapolis, MN: University of Minnesota Press, 1992. 240 pages. \$ 14.95 paper. "The ecological problem always seems ... more a profound issue of social order than a strategic issue of legal controls. In many ways it seems to be a problem with our legitimating idea of rationality. Industrial society is based on a political and organizational commitment to the idea of rationality, but as the planet becomes more committed to rationality, in the Enlightenment sense of science and individualism, it also seem to become more irrational, in the ecological sense of sustainability. Rational society seems to be disrupting itself systematically, and if so, then there is a fundamental problem with our legitimating idea of rationality, because this idea is legitimating ecological disaster in the name of reason. If our 'rational' social order is inherently irrational, then we must either give up on it ... or articulate a more coherent idea of rationality, an idea that will legitimate a more ecological and sustainable social order" (p. ix). Wright argues for a "critical commitment to a 'wild' rationality, a rationality that is always external to any established institutional order and thus that is always legitimately available to criticize and disrupt that order. ... It is only through a commitment to a truly 'wild' knowledge that sustainable social institutions can be legitimated" (pp. 218-219). Wright is in sociology at the University of Southern Colorado. (v7,#1)

Wright, Will, Wild Knowledge: Science, Language, and Social Life in a Fragile Environment. Minneapolis: University of Minnesota Press, 1992. 240 pages. Paper, \$ 14.95. "Scientific knowledge ... is primarily an effort at social legitimization and ... its conceptual incoherence as knowledge is now becoming ecological incoherence as social practice." Wright wants to invent a new idea of science by replacing its traditional concept of laws, especially mathematical laws, with a social concept of language. Wright is professor of sociology at the University of Southern Colorado. (v4,#2)

Wrigley, N; Coe, NM; Currah, A, "Globalizing retail: conceptualizing the distribution-based transnational corporation (TNC)," Progress in Human Geography 29 (no. 4, August 2005): 437-457.

Wu, F, "Wei, Y.D. Regional development in China: states, globalization, and inequality," Progress in Human Geography 26(no.3, 2002):430-431. (v.13, #3)

Wu Gaohui, "A Plan for the Green Higher Education Project at Harbin Institute of Technology." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Wu Guiqing and Xun Shuseng, "The Construction of Environmental Ethical Values", Daode Yu Wenming (Ethics and Civilization) 1(2000): 28-29. In Chinese. (EE v.12,#1)

Wu, J. and Plantinga, A. J., "The Influence of Public Open Space On Urban Spatial Structure," Journal of Environmental Economics and Management 46(no. 2, 2003): 288-309.

Wu, Jianguo, et al, "Three-Gorges Dam--Experiment in Habitat Fragmentation?" Science 300(23 May 2003):1239-1240. "The world's largest dam, the Three-Gorges Dam (TGD) has been inserted in the middle of a biodiversity hot spot in south-central China. Labeled as the worst of the world's 20 most dangerous large dam projects ... we view TGD as an extraordinary opportunity for a grand-scale fragmentation experiment from which invaluable lessons can be learned." Most of the authors are at the Institute of Botany, Chinese Academy of Sciences, Beijing.

Wu, Jianguo (Jingle), "Landscape Ecology, Cross-disciplinarity, and Sustainability Science," Landscape Ecology 21 (no.1, January 2006): 1-4 (4).

Wu Jixia, "Some issues of environmental ethics studies", Ethic and Civilization, 2001(6)

Wu, JunJie and Babcock, Bruce A. "The Relative Efficiency of Voluntary vs Mandatory Environmental Regulations." Journal of Environmental Economics and Management 38(No. 2, Sept. 1999):158- . (v10,#4)

Wu, JunJie and Boggess, William G., "The Optimal Allocation Of Conservation Funds," Journal Of Environmental Economics And Management 38(no. 3, Nov 01 1999):302- . (v.11,#1)

Wu, Ken. "Eco-Forestry or Protected Status?" Wild Earth 6(1996):62. (v8,#1)

Wu Qingyan, ed., "The Bhopal (India) Incident." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no.1 (March 30, 2000). In Chinese. (EE v.12,#1)

Wuerthner, George and Matteson, Mollie, eds., Welfare Ranching: The Subsidized Destruction of the American West. Washington, DC: Island Press, 2002. Text and photos documenting how grazing is an incredibly destructive form of agriculture. The argument is equally in both. A coffee-table book seems an unlikely venue for a powerful analysis in environmental ethics and policy, but here it is, in the tradition of David Brower.

Wuerthner, George, ed. *Thrillcraft: The Environmental Consequences of Motorized Recreation*. White River Junction, VT: Chelsea Green Publishing Company, 2007. This coffee table size book documents the destructiveness of off-highway motorized craft. It includes over 100 large color photographs and describes and illustrates how jet skis, quads, dirt bikes, dune buggies, snowmobiles, and other motorized recreational craft cause wildlife habitat fragmentation, disturbance of sensitive wildlife, soil erosion, spread of invasive weeds, and land, water, air, and noise pollution. Contents include: (1) "Mind and Machine: A Brief History of Human Domestication" by Tom Butler, (2) "The Twilight of Mechanized Lumpenleisure: An Elegy for Bread, Circuses, and Jet Skis" by James Howard Kunstler, (3) "Off-Road Vehicles and Deep Ecology: Cultural Clash and Alienation from the Natural World" by David Orton, (4) "Teaching Disrespect: The Ethics of Off-Road Vehicle Use on America's Public Lands" by Philip Cafaro, (5) "The Human Cost of Silence Lost: How a Noisy Environment Hurts Our Health" by Richard Mahler, (6) "Fourteen Gardens: Reflections of an Activist" by Rick Bass, (7) "A Wicked Conflict: The Impacts of Motorized Encroachment on Grizzly Bears" by Brian L. Horejsi, (8) "No Wild, No Wildlife: The Threat from Motorized Recreation" by Barrie Gilbert, (9) "Invaders on the Move: Roads and Off-Road Vehicle Use as Major Causes of Weed Invasions" by Jonathan L. Gelbard, (10) "Raging with Machines: Off-Road Vehicles in the Deserts of the Southwestern United States" by Daniel R. Patterson, (11) "Shredded Wildlands: Impacts of Off-Road Vehicles in Alaska" by Ray Bane, (12) "Snowmobiles and Public Lands: Unacceptable Impacts on a Winter Landscape" by D.J. Schubert, (13) "Troubled Waters: Protecting Our Communities and Ourselves from Jet Skis" by Sean Smith and Carl Schneebeck, (14) "Turning the Ship Around: A Victory against All-Terrain Vehicles in Adirondack Park" by Peter Bauer, (15) "Protecting the Path of the Pronghorn: The Motorized Threat to Wildlife Migration Patterns" by Meredith Taylor, and

(16) "Miles from Everywhere: Roads, Off-Road Vehicles, and Watershed Restoration on Public Lands" by Bethanie Walder.

Easley, A. T., Joseph F. Passineau, and B. L. Driver, eds., The Use of Wilderness for Personal Growth, Therapy, and Education, Fort Collins, CO: United States Department of Agriculture, U.S. Forest Service, General Technical Report RM-193. 1990. Two dozen papers from a U.S. Forest Service task force.

Wuerthner, George, "Selfish Genes, Local Control, and Conservation," Wild Earth 9 (No. 4, Wint 1999): 87- . (v.11,#2)

Wuerthner, George, ed., Wild Fire: A Century Of Failed Forest Policy, Published by the Foundation for Deep Ecology by arrangement with Island Press, 2006. Coffee-table size book on the ecological role played by wild fires in forests and how industrial forestry and its supporters have erroneously viewed such fires.

Wuerthner, George, ed. *Thrillcraft: The Environmental Consequences of Motorized Recreation*. White River Junction, VT: Chelsea Green Publishing Company, 2007. This coffee table size book documents the destructiveness of off-highway motorized craft. It includes over 100 large color photographs and describes and illustrates how jet skis, quads, dirt bikes, dune buggies, snowmobiles, and other motorized recreational craft cause wildlife habitat fragmentation, disturbance of sensitive wildlife, soil erosion, spread of invasive weeds, and land, water, air, and noise pollution. Contents include: (1) "Mind and Machine: A Brief History of Human Domestication" by Tom Butler, (2) "The Twilight of Mechanized Lumpenleisure: An Elegy for Bread, Circuses, and Jet Skis" by James Howard Kunstler, (3) "Off-Road Vehicles and Deep Ecology: Cultural Clash and Alienation from the Natural World" by David Orton, (4) "Teaching Disrespect: The Ethics of Off-Road Vehicle Use on America's Public Lands" by Philip Cafaro, (5) "The Human Cost of Silence Lost: How a Noisy Environment Hurts Our Health" by Richard Mahler, (6) "Fourteen Gardens: Reflections of an Activist" by Rick Bass, (7) "A Wicked Conflict: The Impacts of Motorized Encroachment on Grizzly Bears" by Brian L. Horejsi, (8) "No Wild, No Wildlife: The Threat from Motorized Recreation" by Barrie Gilbert, (9) "Invaders on the Move: Roads and Off-Road Vehicle Use as Major Causes of Weed Invasions" by Jonathan L. Gelbard, (10) "Raging with Machines: Off-Road Vehicles in the Deserts of the Southwestern United States" by Daniel R. Patterson, (11) "Shredded Wildlands: Impacts of Off-Road Vehicles in Alaska" by Ray Bane, (12) "Snowmobiles and Public Lands: Unacceptable Impacts on a Winter Landscape" by D.J. Schubert, (13) "Troubled Waters: Protecting Our Communities and Ourselves from Jet Skis" by Sean Smith and Carl Schneebeck, (14) "Turning the Ship Around: A Victory against All-Terrain Vehicles in Adirondack Park" by Peter Bauer, (15) "Protecting the Path of the Pronghorn: The Motorized Threat to Wildlife Migration Patterns" by Meredith Taylor, and (16) "Miles from Everywhere: Roads, Off-Road Vehicles, and Watershed Restoration on Public Lands" by Bethanie Walder.

Wuerthner, George. "Wolves for Oregon: Myths and Reality." Wild Earth 9(No. 2, Summer 1999):32- . (v10,#4)

Wuketits, Franz M., "Moral Systems as Evolutionary Systems: Taking Evolutionary Ethics Seriously," Journal of Social and Evolutionary Systems 16(1993):251-271. Evolutionary ethics goes beyond mere description. The fact that human behavior is biologically constrained can give rise to some ideas about how to establish moral norms, so that the fact/value distinction in its strict sense is no longer tenable. Taking evolutionary ethics seriously means, after all, looking for possibilities of human beings as a biological species. Biological evolution does not entail any values and moral norms, but in organizing our social life we are well-advised to consider those factors that have channeled our evolution--i.e. not just ask what humans ought to do, but what they are able to do. Moral systems are evolutionary systems. Wuketits is in philosophy of science, University of Vienna, University of Graz, Austria. (v.10,#1)

Wulder M.A.; Hall R.J.; Coops N.C.; Franklin S.E., "High Spatial Resolution Remotely Sensed Data for Ecosystem Characterization," BioScience 54(no.6, 1 June 2004):511-521(11). (v. 15, # 3)

Wunderlich, G. A review of Bill McKibben, Maybe One: A Personal and Environmental Argument for Single-Child Families. Journal of Agricultural and Environmental Ethics 11(1999):158-162. (JAEE)

Wunderlich, Gene, Review of Dyson, Tim, Population and Food: Global Trends and Future Prospects. Journal of Agricultural and Environmental Ethics 10(1997):95-98. (JAEE)

Wunderlich, Gene, "Agricultural Technology, Wealth, and Responsibility", Journal of Agricultural Ethics 3(1990):21-35. Responsibility as a complement to human rights is presented as a moral alternative to extended, complex systems of animal and ecological rights. This simple idea of responsibility is then applied to four levels of agricultural technology: animal (nature) rights, conservation, organization of agriculture, and people versus planet relationships. The stewardship argument is freed from at least some of the complications of animal rights and ecology, but leaves responsibility with humans to do the right thing. Wunderlich is with the U.S. Department of Agriculture, Washington, D.C.

Wunderlich, Gene, "'Claims to Wealth from Biotechnology", Journal of Agricultural Ethics 1(1988):167-174.

Wunderlich, Gene, "Evolution of the Stewardship Idea in American Country Life," Journal of Agricultural and Environmental Ethics 17(2004):77-93. Theological and secular concepts of stewardship evolved markedly in the 20th century. During this period of evolution, the American Country Life Association through its church, academic, farm organization, and governmental affiliations, served as a bridging and bonding agent in developing the stewardship idea. As in any evolutionary process, the stewardship concept was subjected to a broad array of influences and characterized by notable highlights such as the Lynn Smith critique of the Judaeo-Christian ethic, the man-in-nature statement of Douglas John Hall, and the environmental concerns of ecologists and philosophers of the post-Rachel Carson era. Some gains have been made in understanding the place of humans in nature, but the stewardship idea continues as work in process. Keywords: American Country Life Association, environmental care, Genesis, man-in-nature, nature, stewardship, steward. (JAEE)

Wurzel, R., L. Bruckner, A. Jordan and A. Zito, "Struggling to Leave Behind a Highly Regulatory Past? 'New' Environmental Policy Instruments in Austria," Environmental Politics 12(no. 1, 2003): 51-72. (v 14, #3)

Wurzel, R., A. Jordan, A. Zito and L. Bruckner, "From High Regulatory State to Social and Ecological Market Economy? 'New' Environmental Policy Instruments in Germany," Environmental Politics 12(no. 1, 2003): 115-136. (v 14, #3)

Wuthnow, Robert, ed., Rethinking Materialism: Perspectives on the Spiritual Dimension of Economic Behavior. Grand Rapids, MI: William B. Eerdmans, 1995. Ten essays in commentary on our culture's obsession with material goods and the uneasy relation of materialism to religion. "Materialism has gotten out of hand" (p. 3). "Materialism draws us into its logic not so much by convincing us that material goods are preferable to helping the poor, but by persuading us that we can help them best by buying luxury goods for ourselves (thereby creating jobs)" . . . Materialism becomes so much a way of life that we no longer recognize it as an option, as one value among others that we can decide to choose or to reject" (p. 15). Albert Bergesen, in "Deep Ecology and Moral Community," claims that deep ecology provides the only real paradigm shift; the social ecology schools are all anthropocentric. "The emerging ecological theory will also have to have promises for 'all,' except that now the 'all' is more than just humans--it is all living things. Marxism versus liberalism, capitalism versus socialism, patriarchy versus feminism, or the

developed versus the underdeveloped countries--these are simply debates within the human community. This discourse has its place and is important. But it can no longer have the hegemony--in scientific theory or moral discourse--that it has had over the past six hundred years. The era of human-only discourse is at an end. The era of eco-human discourse is just beginning" (p. 208). Bergesen teaches sociology at the University of Arizona. Wuthnow directs the Center for the Study of American Religion, Princeton University. (v6,#4)

Wuthnow, Robert, Poor Richard's Principle. Princeton, NJ: Princeton University Press, 1996. 448 pages. \$ 24.95. Avarice and greed are destroying the American dream. "The quality of human relationships changes significantly when money becomes the underlying principle. Spouses become 'wage earners' or 'investments'; ... parents become 'deep pockets'; friends become 'business contacts.' More significant than these labels, however, are the norms that rise to prominence in fiduciary relations. Money's lack of memory replaces trust with transience. Bargaining becomes more important than sharing. People calculate what to do chiefly in terms of costs and payoffs. The consequences have been documented clearly in experimental psychological research involving children. Observing that young children generally perform acts of kindness and helping naturally, spontaneously, researchers have tried to discover what happens when efforts are made to reinforce this behavior with monetary rewards. Children consistently respond to such rewards by performing good deeds at higher (but only slightly higher) levels than they did before. But when the incentives are removed, the behavior also ceases. Money teaches them that good deeds should not be done spontaneously after all" (p. 197). Wuthnow directs the Center for the Study of American Religion, Princeton University. (v7,#4)

Wynberg, Rachel, "Biodiversity for All: Protecting, Managing and Using South Africa's Biotic Wealth," Africa - Environment and Wildlife 3(no. 1, January-February 1995):33-38. Very useful summary of biodiversity and the present state of its conservation, and threats to it, in South Africa. Wynberg is with the Environmental Evaluation Unit at the University of Cape Town. (v6,#3)

Wynn, Mark, "Beauty, Providence and the Biophilia Hypothesis," Heythrop Journal 38(1997):283-299. Wynn is skeptical about the possibility that any naturalistic theory can account for the full range of human aesthetic responses to nature and uses this point to defend a kind of teleological argument for the existence of God. Wynn is in theology, Australian Catholic University.

Wynn, Mark, "Natural Theology in an Ecological Mode," Faith and Philosophy 16(1999):27-42. The possibility of an alliance between natural theologians and environmental ethicists. Both uphold the goodness of the natural world. The work of Holmes Rolston III can contribute towards the natural theologian's treatment of two issues: the nature and extent of the world's goodness, and the reasons why we may fail to register its goodness fully. The holism and the non-anthropocentrism of Rolston's seminal work throw new light on the values in nature, and on the multiple achievements that are presupposed in any informed appreciation of its goodness. Rolston's work offers a way of broadening traditional philosophical discussions of the problem of evil, in a way that takes account of disvalues which are independent of any hurt done to human beings, and draws attention to the multiple achievements--conceptual, experiential, and (broadly speaking) moral--which are presupposed in any informed response to these issues. Wynn is at the Australian Catholic University, Everton Park (Brisbane).

Wynn, Mark, God and Goodness: A Natural Theological Perspective. London: Routledge, 1999. The world is impressive, and suggests a divine origin, because of its beauty and its openness to the emergence of life, sentience, and mind. The Earth is an integral whole, and its disvalues can best be interpreted in an ecological context. When natural phenomena are considered in their ecosystemic context, nature appears to be neither wasteful, nor cruel, nor blind. It is unsurprising that we often fail to grasp the value of the natural world, because we lack the necessary necessary familiarity with relevant ecological theory. Wynn is in philosophy of religion, Australian Catholic University. (v.12,#3)

Wynne, Clive D. L., Do Animals Think? Princeton, NJ: Princeton University Press, 2004. It may be romantic to think so, but it is not realistic. While animals are by no means dumb, they don't "think" in any way resembling human thinking. Animals have neither the "theory of mind" that humans have (that is, they are not conscious of what others are thinking) nor the capacity for linguistic reasoning. Wynne is in psychology, University of Florida. (v. 15, # 3)

Wynne, Clive D. L., Do Animals Think? Princeton, NJ: Princeton University Press, 2004, 2006. It may be romantic to think so, but it is not realistic. Animals are not dumb, but they do not "think" in our human sense of that word. Animals have neither the "theory-of-mind" capabilities that humans do, nor the capacity for higher-level reasoning. Nevertheless, we ought to respect animal minds. Wynne is in psychology, University of Florida.

Wynne-Tyson, J., ed., The extended circle: A commonplace book of animal rights. New York: Paragon House, 1988.

Wynne-Tyson, Jon, compiler, The Extended Circle: A Commonplace Book of Animal Rights (New York Paragon House, 1989). 436 pages. First American edition of a source book of quotations released in Britain in 1985. Hundreds of quotations from all ages and places concerning respect for life and the moral treatment of animals. (v1,#4)

Wyshaam, Daphne. "Ten-to-One-Against: Costing People's Lives for Climate Change." The Ecologist 24 (no. 4, July, 1994): 204- . (v6,#1)

Xia Jianhua, and Ma Bixiao. "Value Category of Ecological Ethics." *Journal of Hubei University* No. 5 (2007): 53-56.

Xiang Yuqiao. "On the Environmental Ethical Responsibilities of the Government." *Ethics Research* No. 1 (2003): 55-59.

Xiang Yuqiao. *A Study of Ecological Economic Ethics*. Changsha: Hunan Normal University Press, 2004.

Xiao Wei, "How Can Eco-ethics Be Possible", Fudan Xuebao (Fudan Journal) 2(2000): 37-43. In Chinese. (EE v.12,#1)

Xie, Jian. Environmental Policy Analysis: A General Equilibrium Approach. Brookfield, Vt.: Ashgate, 1996. 176 pp. \$51.95. An applied model based on the general equilibrium approach used to analyze the impacts of environmental policies on the economy and the environment. Also applies the model to estimate the impacts of several pollution management alternatives in China. (v8,#2)

Xie, Jian. Environmental Policy Analysis: The General Equilibrium Approach. Brookfield, VT: Ashgate, 1996. 164pp. \$51.95 cloth. This is an applied model using the general equilibrium approach to analyze the impacts of environmental policies on the economy and the environment, and an application of the model to estimate the impacts of several pollution management alternatives in China. Xie is at Cornell University. (v8,#1)

Xie, Y; MacKinnon, J; Li, D, "Study on biogeographical divisions of China", Biodiversity and Conservation 13 (no.7, 2004): 1391-1417(27).

Xie Yangju, "Western recognition of Daoism as environmental philosophy," Jiangxi Social Sciences

2001(6)

Xie Yangju, A Study of Daoism: Daoism from the Perspectives of Comparative Philosophy and Environmental Philosophy, Sanxi People's Press, 2003. Professor Xie is at the Institute of Thoughts and Culture, Northwest University.

Xu Gang, "A Brief Study on Zhuxi's Environmental Ethical Thoughts," Ziran Bianzhengfa Yanjiu (Studies in Dialectics of Nature) 6(1999):43-47. In Chinese. (v.11,#1)

Xu, H., Zhu, G., Wang, L. and Bao, H., "Design of Nature Reserve System for Red Crowned Crane in China," Biodiversity and Conservation 14(no. 10, October 2005): 2275-2289.

Xu, Haigen, Sheng Qiang, Zhengmin Han, Jianying Guo, Zongguo Huang, Hongying Sun, Shunping He, Hui Ding, Hairong Wu, and Fanghao Wan. "The status and causes of alien species invasion in China." Biodiversity and Conservation Vol. 15, no. 9 (2006): 2893-2904.

Xu Hongxin, "On the Illusion of Anthropocentrism", Shehuikexue Luntan (Forum of Social Sciences) 6(2000):23-25. In Chinese. (EE v.12,#1)

Xu Huiying, "Humankind Takes Up Environmental Ethics," Chinese Education and Society 37(no. 4, 2004):16-23. Translation from Xu Huiying, "Renli zouxiang huanjing lunli," Huanjing jiaoyu (Environmental Education) no. 6 (2001), pp. 16-18. Introductory article on environmental ethics, and how it differs from classical ethics. Origins of environmental ethics, the call to shed anthropocentrism, and some moral principles and norms of environmental ethics. Xu is at the Environmental Education Center, Beijing Normal University.

Xu, J; Wilkes, A, "Biodiversity impact analysis in northwest Yunnan, southwest China", Biodiversity and Conservation 13 (no.13, 2004): 959-983(25).

Xu Qixian, "Ethical Ideas on Ecological Environment in Ancient Chian," Zhongguo Renmin Daxue Xuebao (Journal of Renmin University)4(1999):44-49. In Chinese. (v.11,#1)

Xu Songling, "On the fitness of environmental ethic", Journal of Tsinghua University 2001(2)

Xu Songling, "A Study Outline of Environmental Ethics," Xueshu Yanjiu (Academic Research) 4(1999):23-29

Xu Songling, ed., The Progress of Environmental Ethics: Critics and Interpretation, Social Science Literature Press,1999, 480 pages. Anthology. Contains: (In Chinese).

-Cheng Changdu, "The Ecological Foundation of Inherent Value of Living Being."

-Yang Tongjin, "Integrating and Transcending: Toward Non-anthropocentric Environmental Ethics."

-Lei Yi, "A Outline of Deep Ecology."

-Zhang Jiangang, "Anthropocentrism, Intrinsic Value and Reason."

-Wang Yaoxian and Cheng Jiannan, "The Environmental Ethics for Sustainable Development."

-Duan Qi, "The Greening of Contemporary Western Christianity."

-Wei Dedong, "The Ecological Perspective of Buddhism."

-Zhang Yunfei, "On Confucianism and Taoism from the Perspective of Eco-ethics."

-Zhang Jing, "Market Economic Ethic and Environmental Ethic."

-Yu Mouchang, "Politics, Ecology and Ethics."

-Ren Yu, "International Environmental Problems and International Environmental Ethic."

-Xu Songling, "On Man with Ecological Reason: An Environmental Ethical Behaviour Pattern of Human

Being."

-Hong Dayong, "Environmental Consciousness and Its Analysis: The Case of China."

Xu, Z., and Bengston, D. N., "Trends in National Forest Values Among Forestry Professionals, Environmentalists, and the News Media, 1982-1993," Society and Natural Resources 10(1997):43-59. Forest values are "relatively enduring conceptions of the 'good' related to forests and forest ecosystems" (p. 44). There has been "a shift in forest values away from easily defined and measured economic values toward values that are much more difficult to measure and that often been neglected or ignored" (p. 55). (v.12,#3)

Xu, Zhi, Bengston, David N. "Trends in National Forest Values Among Forestry Professionals, Environmentalists and the News Media, 1982-1993," Society & Natural Resources 10(1997):43

Xu, Zhi, "Assessing Distributional Impacts of Forest Policies and Projects," Evaluation Review 18 (no. 3, 1994):281-311. Xu develops a model that assesses what he calls "distributional impacts," rather than costs and benefits, or economic impacts, production, and the usual measures. This model integrates monetary and nonmonetary measures of forest policies and projects with attention to who benefits, how much, and optimizing the values carried by forests. Xu is in forest resource policy and economics at the University of Minnesota. (v5,#4)

Xue, Dayuan, and Tisdell, Clem, "Global Trade in GM Food and the Cartagena Protocol on Biosafety: Consequences for China," Journal of Agricultural and Environmental Ethics 15(no. 3, 2002):337-356. The UN Cartagena Protocol on Biosafety adopted in Montreal, 29 January, 2000 and opened for signature in Nairobi, 15-26 May, 2000 will exert a profound effect on international trade in genetically modified organisms (GMOs) and their products. In this paper, the potential effects of various articles of the Protocol on international trade in GMOs are analyzed. Based on the present status of imports of GMOs and domestic research and development of biotechnology in China, likely trends in imports of foreign GM food and related products after China accedes to WTO is explored. Also, China's potential countermeasures to control and regulate imports of GMOs in line with implementation of the Protocol are discussed. China, in recent times, has increased its food and agricultural imports substantially from USA and Canada. China imported soybean 10.42 mill. tons in 2000 and about 15 mill. tons in 2001, of which majority are from USA where GM soybean accounts for 60%. The plantation of US Monsanto's transgenic Bt cotton was increased to more than 1 million ha in China in 2001. Though China has paid great attention to develop biotechnology, it appears to have little scope to export GMOs and GM products. So China may consider a range of administrative measures to implement the Cartagena Protocol and to regulate its import of GMOs and GM agricultural products. Consequently, the Regulation on Safety of Agri-GMOs was issued on June, 2001 and followed three detailed rules issued in Jan. of 2002, with a priority to limit foreign GMOs importing by safety certification and labeling system. These were outlined taking into account policies adopted in Western countries such as green barriers to international trade. KEY WORDS: biosafety, Cartagena Protocol on Biosafety, China, global trade, GMO. Xue is with the Nanjing Institute of Environmental Sciences, State Environment Protection Administration of China, Nanjing, P.R. China. Tisdell is in the Department of Economics, The University of Queensland, Brisbane, Australia. (JAEE)

Xue Yongmin. *Toward the Depth of Ecological Values: A Cotemporary Interpretation of Postmodern Environmental Ethics*. Taiyuan: Shanxi Science and Technology Press, 2006.

Yaffe, Martin D., ed., Judaism and Environmental Ethics: A Reader. Lanham, MD: Lexington Books, 2001. 416 pages. Sample contributions: E. L. Allen, "The Hebrew View of Nature"; Jeanne Kay, "Concepts of Nature in the Hebrew Bible"; Aldo Leopold, "The Forestry of the Prophets"; Steven S. Schwarzchild, "The Unnatural Jew"; Eilon Schwartz, "Judaism and Nature"; Eric Katz, "Nature's Healing

Power, the Holocaust, and the Environmental Crisis"; J. David Bleich, "Vegetarianism and Judaism" and many others. Yaffe is in philosophy and religious studies at the University of North Texas, Denton. (v.12,#2)

Yaffee, Steven L. "Lessons about Leadership from the History of the Spotted Owl Controversy," Natural Resources Journal 35(no.4, Sprg. 1995):381- . (v6,#4)

Yaffee, Steven et al. Ecosystem Management in the United States: An Assessment of Current Experience. Covelo: Island Press, 1996. (v.9,#3)

Yaffee, Steven L. "Three Faces of Ecosystem Management." Conservation Biology: The Journal of the Society for Conservation Biology 13(No. 4, August 1999):713- . (v10,#4)

Yaffee, Steven L., "Three Faces of Ecosystem Management," Conservation Biology 13(no. 4, 1999):713-725. People mean different things when they advocate ecosystem management, here analyzed in three categories: (1) Environmentally sensitive multiple use, (2) An ecosystem approach to resource management, and (3) Ecoregional management. Environmentally sensitive multiple use takes an anthropocentric approach. An ecosystem approach incorporates a biocentric view in which ecosystems are understood as a metaphor for holistic thinking. Ecoregional management takes an ecocentric perspective. The diverse approaches may not be undesirable but sometimes complementary. Yaffee is in the School of Natural Resources, University of Michigan, Ann Arbor.

Yaffee, Steven L.; Phillips, Ali F.; Frenzt, Irene C.; Hardy, Paul W.; Maleki, Sussance M.; and Thorpe, Barbara E. Ecosystem Management in the United States: An Assessment of Current Experience. Washington, D.C.: Island Press, 1996. 352 pages. \$30 paper. A practical and comprehensive guide to ecosystem management efforts nationwide that meets the needs of practitioners and decisionmakers alike. (v7, #3)

Yaffee, Steven Lewis, The Wisdom of the Spotted Owl: Policy Lessons for a New Century. Washington, DC: Island Press, 1994. 450 pages. \$ 26.95 paper. The spotted owl case offers a striking illustration of the failure of our society to cope with long-term, science intensive issues requiring collective choices. Yaffee looks at that issue and proposes reforms to re-create natural resource agencies and public policy processes for the challenges of the next century. Yaffee is professor in the School of Natural Resources and Environment at the University of Michigan. (v5,#1)

Yahnke, C.J., De Fox, I. Gamarra, Colman, F. "Mammalian Species Richness in Paraguay: The Effectiveness of National Parks in Preserving Biodiversity," Biological Conservation 84(no.3, 1998):263- . (v9,#2)

Yale Divinity School. *Reflections* Vol. 94, no. 1 (Spring 2007). This themed issue is entitled "God's Green Earth: Creation, Faith, Crisis" and contains a dozen short articles on religion and the future of the Earth.

Yale Journal of International Law, Winter 1993, vol. 18, no. 1, contains a series of papers, "Earth Rights and Responsibilities: Human Rights and Environmental Protection." The papers result from a conference held at Yale Law School, April 3-5, 1992, and sponsored by the American Association for the Advancement of Science and Yale Law School. Audrey R. Chapman, Program Director, Science and Human Rights, AAAS, was the principal coordinator of the conference and introduces the papers. The principal papers are: Cuomo, Kerry Kennedy, (Robert F. Kennedy Memorial Center for Human Rights, New York, NY), "Human Rights and the Environment: Common Ground." James A. Nash (Churches' Center for Theology and Public Policy, Washington, DC), "The Case for Biotic Rights." Holmes Rolston, III

(Philosophy, Colorado State University), "Rights and Responsibilities on the Home Planet." James W. Nickel (Philosophy, University of Colorado), "The Human Right to a Safe Environment: Philosophical Perspectives on Its Scope and Justification." James W. Karr (Institute for Environmental Studies, University of Washington), "Protecting Ecological Integrity: An Urgent Social Goal." J. Andy Smith, III (Social and Ethical Responsibility in Investments, National Ministries, American Baptist Churches in the USA), "The CERES Principles: A Voluntary Code for Corporate Environmental Responsibility." The CERES (Coalition for Environmentally Responsible Economies) Principles resulted from the Valdez oilspill. Robert D. Bullard (Sociology, University of California, Riverside), "Race and Environmental Justice in the United States." Samara F. Swanston (U.S. Environmental Protection Agency), "Legal Strategies for Achieving Environmental Equity." Armstrong Wiggins (a Miskito from the Northern Autonomous Region of Nicaragua, and Indian Law Resource Center, Washington), "Indian Rights and the Environment." Michelle Leighton Schwartz (Project on Human Rights and the Environment, National Heritage Institute), "International Legal Protection for Victims of Environmental Abuse." Michael J. Kane (U. S. Department of State, Coordination Center for UNCED), "Promoting Political Rights to Protect the Environment." (end of papers in Winter 93, Yale Journal of International Law) (v4,#1)

Yandell, Molly McDonald, Conflict and Consensus in Environmental Ethics and Policy. Colorado State University, M. A. thesis, summer 1999. Bryan Norton's convergence hypothesis states that a consensus among environmentalists is emerging at the most basic level of policy formation, regardless of the diversity of value concerns. This consensus, Norton believes, is capable of healing the fragmented environmental movement and producing environmental policy that will better protect the natural world. The aim of this thesis is to give evidence for the accuracy of Norton's convergence hypothesis. I begin by contrasting John Muir and Gifford Pinchot in order to illustrate the traditional divide that has separated environmentalists into two camps. In the second chapter, I compare the view points of Warwick Fox and E.O. Wilson in order to demonstrate that even with starkly different values, it is possible for environmentalists to agree on basic policy goals. Finally, I argue that Holmes Rolston, III and Bryan Norton also have similar policy goals, regardless of the fact that they do not share the same values. The advisor was Holmes Rolston. (v.10,#2)

Yang, Arlene. "Standards and Uncertainty in Risk Assessment," New York University Environmental Law Journal 3(no.2, 1995):523- . (v6,#4)

Yang Ming, "On the rights of nature and its ecological effects", Ethic and Civilization, 2001(3)

Yang Ming, "The orientation of environmental ethics", Theory and Modernization, 2001(3)

Yang Tao, "Green Quality Education at Harbin Institute of Technology." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Yang Tongjin, "Three theoretical foci of environmental ethics", Philosophical Trends, 2002(5).

Yang Tongjin, "Land ethic and its philosophical foundations", Journal of Yushi Normal College, 2003(1).

Yang Tongjin, "Ecofeminism: spiritual and social dimensions", Guangdong Social Sciences, 2003(4).

Yang Tongjin, "The Basic Ideas of Environmental Ethics", Daode Yu Wenming (Ethics and Civilization), 1(2000): 6-10. In Chinese. (EE v.12,#1)

Yang, Tongjin, Xifang Huanjing Lunli Sixiang Hanjiu (The Ethical Foundation of Environmental Movements--A Study of Western Environmental Ethics) (in Chinese). Ph.D. thesis at The People's University of China, Beijing, June 1998. The first doctoral dissertation in China studying Western

environmental ethics. The advisor was Luo Guoje, Chair of the Chinese Society of Ethics. Developing an environmental ethics in China requires an analysis of Western environmental ethics. Surveys various types of environmental ethics with detailed analysis of anthropocentric ethics, animal welfare ethics, biocentrism, and ecocentrism. These schools differ in regard to who is morally considerable, a moral patient. Anthropocentrism is necessary but not sufficient. An authentic environmental ethics must embrace animal welfare, biocentrism, and ecocentrism. Confucian and Taoist virtue ethics can provide grounds for harmonizing these differing schools. Virtuous persons express concern for nonhumans as well as for humans. The differing schools become complementary, resulting in a comprehensive and inclusive ethic. Yang continues his research at the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. He is the translator for a Chinese edition of Holmes Rolston's Environmental Ethics, forthcoming June 1999. (v.9,#4)

Yang Tongjin, "Environmental Ethics and the Green Civilization", Shengtai Jingji (Ecological Economy) 1(2000): 44-47. In Chinese. (EE v.12,#1)

Yang Tongjin, "Global environmental protection and international aids: an ethical justification", Jianghai Academic Journal, 2002(1)

Yang Tongjin, "Integrating and Transcending: Toward Non-anthropocentric Environmental Ethics," in Xu Songling, ed., The Progress of Environmental Ethics: Critics and Interpretation (Social Science Literature Press, 1999), pages 15-70. In Chinese. (v.11,#1)

Yang Tongjin, Toward A Deep Environmentalism: the Basic Ideas of Environmental Ethics. Chengdu, Sichuan People's Publishing House, 2000, 223 pages. I trace briefly the history of western environmental ethics, and analyze respectively the main four schools of western environmental ethical thoughts: anthropocentrism, animal liberation/rights theory, biocentrism and ecocentrism. I suggest that an authentic environmental ethics must be an open, pluralist environmental ethics, which not only incorporates the wisdom of the four schools, but also tries to transcend their limits. A virtue ethics, especially Confucian ethics and Taoist ethics, can provide a ground for such an environmental ethics. Only such an environmental ethics can provide the most solid ethical foundation for environmentalist movements.

This book, the first that studies western environmental ethical thoughts systematically in China, consists of six chapters: 1. Environmental Ethics: The Spiritual Foundation of Environmentalism. 2. Considering Others: Enlightened Anthropocentrism. 3. Sympathizing With Animals: Animal Liberation/Rights Theory. 4. Valuing Life: Bioegalitarianism. 5. Respecting for Nature: Ecocentrism. 6. Praying for Green: Toward A Deep Environmentalism. Each chapter begins with two cases. In Chinese. (EE v.12,#1)

Yang Tongjin, "An Outline of Ecofeminism" Huanjing yu Shehui, a Quarterly, (Environment and Society), vol. 3, no. 4 (December 30, 2000). Abstract: This paper gives an introduction and criticism of ecofeminism, with an emphasis on the basic features of ecofeminism and its classification. It suggests that ecofeminism is likely to give much splendor to future environmental movements. Key Words: Ecofeminism, Cultural ecofeminism, Socialist ecofeminism, Women's liberation. In Chinese. (EE v.12,#1)

Yang Tongjin, "Chinese and Western Animal Protection Ethics: An Outline for Comparative Studies", Daode Yu Wenming (Ethics and Civilization), 4(2000): 30-33. In Chinese. (EE v.12,#1)

Yang Tongjin, "Anthropocentrism: Defending and Criticizing," Shuzhou Tiedao Shifanxueyuan Xuebao (Journal of Shuzhou Normative College) 5(1999):7-12. In Chinese. (v.11,#1)

Yang Tongjin, "Analysis of Pluralist Environmental Ethics", Zhexue Dongtai (Philosophical Trends) 2

(2000): 22-24. In Chinese. (EE v.12,#1)

Yang Tongjin, and You Suzheng. *Harmony between Humans and Nature: Ethical Concern for the Environment*. Beijing: Chinese Youth Press, 2004.

Yang Tongjin, "Confucianism and Contemporary Environmental Ethics: A Preliminary Comparative Study." *History of Chinese Philosophy* No. 1 (2006): 38-42.

Yang Tongjin, ed., *Twenty Classic Texts of Western Ecological Thoughts*. Tianjing: Tianjing People's Press, 2008.

Yang Tongjin, "Ethical Debates over Transgenic Technology: Dilemma and Solution." *Journal of People's University* No. 5 (2006).

Yang Tongjin, ed. *Toward Ecological Civilization Series*. Chongqing: Chongqing Publishing House, 2007. This series includes Plumwood's *Feminism and the Mastery of Nature*, Hargrove's *Foundations of Environmental Ethics*, Baxter's *Ecologism*, Hancock's *Environmental Human Rights*, Berleant (ed.) *Environment and the Arts*, and other two books.

Yang Tongjin, and Gao Yuyuan, eds. *Ecological Turn of Modern Civilization*. Chongqing: Chongqing Publishing House, 2007.

Yang Tongjin. "Spiritual Resources and Cultural Foundations of Deep Ecology." *Ethics Research* No. 3 (2005): 47-52.

Yang Tongjin. "Ecofeminism: Spiritual and Social Dimensions." *Guangdong Social Sciences* No. 4 (2003): 117-23.

Yang Tongjin. "Two Patterns of Environmental Ethics." *Morality and Civilization* No. 1 (2008): 11-15.

Yang Tongjin. "Do Animals Have Rights." *Henan Social Sciences* No. 6 (2004): 29-32.

Yang Tongjin. *Environmental Ethics: Global Discourse, Chinese Perspective*. Chongqing: Chongqing Publishing House, 2007.

Yang Tongjin. "The Debating Environmental Ethics: Problems and Focus." *Philosophical Trends* No. 1 (2005): 11-14.

Yang Tongjin. "Contradictions and Conflicts between Rawls's Intergenerational Justice Theory and His General Justice Theory." *Philosophical Trends* No. 8 (2006): 57-63.

Yang, Tongjin, "Environmental Ethics in China in Recent Years," *Newsletter, International Society for Environmental Ethics*, vol 19, no. 2, Spring/Summer 2008, pp.29-36. Environmental issues are one of the recent priorities for China. To tackle environmental problems arising from rapid economic growth, China has adopted a series of comprehensive measures since 2000, with marked achievements to its credit. In 2003 the National Coordination Committee on Climate Change was established, and China's National Climate Change Program was formulated, outlining objectives, basic principles, and key areas of actions, as well as policies and measures to address climate change for the period up to 2010. These events are symbols, in some degrees, for the progress China has made in protecting the environment. There has been a fast and steady development of environmental ethics since 2000. Many universities such as Renmin University, Peking University, and Tsinghua University, and institutions such as the Chinese

Academy of Social Sciences, now offer master and doctoral degrees in environmental ethics. In 2003, the Environmental Philosophy Committee of the Chinese National Association of Natural Dialectics was established. Includes recent bibliography.
Online at: <http://www.cep.unt.edu/ISEE/index.htm>.

Yang Yingzi. "On the Theoretical Objective of Rolston's Environmental Ethics." *Ethics Research* No. 2 (2007): 70-73.

Yanitsky, Oleg N., "The Ecological Movement in Post-Totalitarian Russia: Some Conceptual Issues", *Society and Natural Resources*, 9(No.1, 1996):65- . (v7,#1)

Yardley, Jim, "Chinese Groups Seek to Halt a Dam and Save a Treasured Place," *New York Times*, October 20, 2004, p. A6. A hydropower dam in one of the world's deepest gorges, Tiger Leaping Gorge, would divert water from the Jinsha River (moving east until it becomes the Yangtze) in the mountainous north section of Yunnan Province to the fast-growing provincial capital, Kunming. The plan would also force the re-location of 100,000 people. The gorge is extremely steep and narrow; at one of the narrowest spots there is a large rock in the center of the river; traditional lore says a tiger leapt from one shore to the rock and to the other shore. The tigers are gone, but the gorge is wild and spectacular, a World Heritage site. Also an editorial, "Saving Shangri-La," *New York Times*, November 9. (This is the region sometimes called Shangri-La, featured in the 1933 novel, *Lost Horizons*. (v.14, #4)

Yasukawa, K, "Female Song Sparrows Prefer Males That Learn Well," *Bioscience* 52(no.12, 2002).

Yates, Michael D. "Review of Walter LaFeber, *Michael Jordan and the New Global Capitalism*", *Organization and Environment* 14 (No. 2, June 2001) pp.246-8. Yates is professor of economics at the University of Pittsburgh. (v.13,#2)

Yates, Scott B. "A Case for the Extension of the Public Trust Doctrine in Oregon," *Environmental Law* 27(no.2, 1997):663. Yates argues that Oregon should apply the public trust doctrine to state water allocation decisions to prevent harm caused to navigable waters by the diversion of water from nonnavigable tributaries. He examines Oregon's public trust case law and water code within the analytical framework utilized by the California Supreme Court in *National Audubon Society v. Superior Court of Alpine County*, and concludes that Oregon law supports extending the public trust doctrine into the appropriation context. (v8,#3)

Yaukey, John, "Studies Suggest Animals Capable of Higher Thought: Recent Research Ignites Debate on Ethics, Cruelty," Gannett News Service story appearing in Gannett Newspapers, e.g. *Fort Collins Coloradoan*, October 4, 1999, A6. New research suggests that animals have much higher levels of cognition and social development than previously thought. But this has to be tested for by ferreting out the kinds of problem-solving tactics animals need to hunt, hide, and survive, by seeing what the animals do naturally and cognitively--rather than with the old-style tests for language or maze-running. One result is that lines blur between those animals that have intelligence and those that do not. Another result is that animal rights/welfare law is tightening up. Harvard and Georgetown law schools have announced they will teach animal rights law. (v10,#4)

Yazzie-Durglo, Victoria, "The Right to Change Tribal Forest Management," *Journal of Forestry* 96(No.11, 1999):33-. Now that Native Americans can manage their land as sovereign nations, tribal councils face the challenge of achieving long-term quality and quantity of timber production while embracing cultural values. (v.10,#2)

Ye Ping, "On the Ecological Rights of Nonhuman Beings", *Daode Yu Wenming (Ethics and Civilization)*

1(2000): 11-15. In Chinese. (EE v.12,#1)

Ye Ping, "The Concept of 'Green University' and Its Position in Education" Huanjing yu Shehui, a Quarterly, (Environment and Society), vol. 3, no. 4 (December 30, 2000). Abstract: The Green university is the university for a new age that is adapted to the needs for environmental protection and the strategy for sustainable development. It is characterized by an effort to incorporate indices and contents of environmental science knowledge, ecophilosophical wisdom, and ecological ethical education into educational models, design of curricula, and the development of community bases for internships, so as to train high-level scientists and engineers for a new era who can both remake nature and rebuild nature. In Chinese. (EE v.12,#1)

Ye Ping ed., Following Nature: Ecological Wisdom and Its Ideas, Chinese Environmental Sciences Press, 2001. chapters: the global environmental problems; a reflections of the mainstream values; understanding nature; our common future; treating animals correctly; preserving wildness; hunting ethic; respect for nature; constructing our home; green education. Professor Ye is the chair of the Center of Environment and Society at Harbin Industry and Technology University.

Ye, Ping, series of six short articles on environmental ethics in Lin-Yeh Yüeh Pao (Forestry Monthly) (in Chinese) running from August through December 1991. "1. What Is an Ecological Ethics?", July, no. 7; "2. The Conception of an Ecological Ethics," August, no. 8; "3. The Growth of an Ecological Ethics," September, no. 9; "4. The Present Situation in Ecological Ethics," October, no. 10; "5. Ecological Ethics Applied to Forestry Management," November, no. 11; and "6. Ecological Ethics and 'Two-Crisis' Countermeasures," December, no. 12. The two crises are that waste materials in air pollution harm the Earth in two ways: destroying forests and creating a greenhouse effect. (China)

Ye Ping, "Prospect of the Environment and Man's Future." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no.1 (March 30, 2000). In Chinese. (EE v.12,#1)

Ye Ping, ed., Huanjing yu kechixu fazhan yanjiu (For Environment and Sustainable Development). Harbin, Heilongjiang, China: Heilongjiang Science and Technology Press, 1998. ISBN 7-5388-3508-3. Proceedings of the First National (All-China) Conference on Ecological Philosophy, Environment and Sustainable Development, held in Harbin, China, October 20-24, 1998. Contains, among others: (all in Chinese)

--Yu Mouchang, "Ecological Philosophy and Sustainable Development"

--Rolston, Holmes, III, "Ziran de jiazhi yu jiazhi de benzhi (Value in Nature and the Nature of Value)", pp. 5-12, originally in Robin Attfield and Andrew Belsey, eds., Philosophy and the Environment (Cambridge University Press, 1994). Liu Er, translator.

--Yang Tongjin, "Value and Human Nature: Rolston's Methods in Environmental Ethics"

--Ye Ping, "Knowledge-Based Economy and Sustainable Development"

--Chen Minhao, "Ecological Culture and Sustainable Development"

--Liu Er, "The Ecological Conscience and Our Choice of Life-Styles"

--Zhao Xuehai, "Problems in the Sustainability of Forests and the Management of Forestry Enterprises"

--Li Xin & Xu Dejun, "On the Protection of Grasslands after the Flood" (Floods in northern China on the Neng River and the Songhua River in August 1998). (v10,#4)

Ye, Ping, "On the Structure of Ecological Ethics," Seeking Truth, no. 2 (1992): 39-42. Article in Chinese. The foundation, starting point, and ultimate end of ecological ethics is the coordination of the ongoing relations between humans and nature. To develop an ecological ethics, there must be development of the study of ecological moral philosophy as well as of the study of ecological science. This involves both

fundamental principles and application, theory and practice; it couples attitudes and behaviors, personal norms and personal actions. Both this and the preceding article criticize an exclusively anthropocentric ethics and begin to explore a nonanthropocentric environmental ethics. Ye Ping is professor of philosophy, Northeast Forestry University, Harbin, China. (China)

Ye Ping, "Prospects for the Ecological Environment and the Human Future", Huanjing Yu Shehui (Environment and Society) 1(2000): 8-12. In Chinese. (EE v.12,#1)

Ye, Ping, "Man and Nature: A Review of Western Ecological Ethics" (in Chinese), Tzu-Jan Pien-Cheng-Fa Yen-Chiu (Studies in Dialectics of Nature) 7(no. 11, 1991):4-13, 46. Published by the Chinese Association for the Dialectics of Nature. (China)

Ye Ping, et al, eds., Sheng t'a huan ching pao hu tzu jan tzu yüan kuan li ti li lun yen chiu (A Theoretical Study of Ecological Environmental Protection and Management of Natural Resources). He-lung chiang k'o hsüeh chi shu ch'u pan she, 1995. ISBN 7-5388-2729-3. Harbin, China: Scientific and Technological Publishing Co., 1995. 324 pages. An anthology collecting and summarizing the papers from an academic conference on ecological and environmental natural resources and social development. Some seventy contributors. The sections are: Ecological Philosophy and Methodological Problems; Ecological Ethics, Law, and Aesthetic Issues; Chinese Traditional Cultural and Ecological Ethics Morality; Protection of Living Things and Protection of Biodiversity; Issues of Protection of Forestry Resources, Utilization, and Management; Issues of Ecological Environmental Protection and Social Development. One of the papers is Holmes Rolston, III, "Global Environmental Ethics: A Valuable Earth" from Richard L. Knight and Sarah F. Bates, A New Century for Natural Resources Management (Washington, DC: Island Press, 1995), and Rolston also contributes a preface. Ye Ping teaches philosophy and ethics at Northeast Forestry University, Harbin, and is secretary of the Chinese Society for Environmental Ethics. (China) (v7, #1).

Ye Ping, "The ideology of ecological ethics and the traditions of ethics", Journal of Harbin Industry and Technology University. 2002(4)

Ye Ping & Liu Yunhua, "Open Up a New Prospect for Green Higher Education in China." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Ye Ping, "Some Features of Contemporary Western Environmental Ethics Studies," Ziran Bianzhengfa Yanjiu (Studies in Dialectics of Nature) 8(1999):69-71. In Chinese. (v.11,#1)

Ye Ping, Sheng t'ai lun li hsüeh (Ecological Ethics). Chinese Forestry Young Scientist's Works Series. Tung-pei lin yeh ta hsüeh ch'u pan she, 1994. Harbin: Northeast Forestry University Press, 1994. ISBN 7-81008-487-9. 281 pages. The chapter titles are: 1. Introduction to Ecological Ethics. 2. Ecological Ethics on Anthropocentrism. 3. Ecological ethics on Nonanthropocentrism (Biocentrism, Ecocentrism, Animal Liberation). 4. Ecological Ethic Viewpoints on the Cooperation and Evolution between Humans and Nature. 5. Scientific Basis of Ecological Ethics (the is and the ought). 6. Value Outlooks in Ecological Ethics. 7. Ecological Power and Interest Outlooks on Ecological Ethics. 8. Ecological Moral Codes for Human Action in the Wildness. 9. The ecological Moral Practices for the Cooperation and Evolution between Humans and Nature. Ye Ping teaches philosophy and ethics at Northeast Forestry University, Harbin, and is secretary of the Chinese Society for Environmental Ethics. (China) (v7, #1)

Ye Ping. *Philosophy and Ethics of Environment*. Beijing: Chinese Social Sciences Press, 2006.

Ye Ping. *On the Life of Rivers*. Zhengzhou: Yellow River Press, 2007.

Ye Ping. *Return to Nature: Ecoethics for the New Century*. Fuzhou: Fujian People's Press, 2004.

Yearley, Steve, Cinderby, Steve, Forrester, John, Bailey, Peter, and Rosen, Paul, "Participatory Modelling and the Local Governance of the Politics of UK Air Pollution: A Three-City Case Study, Environmental Values 12(2003): 247-262. In the last decade, many arguments have emerged for encouraging public participation in environmental policy making and management. While some have argued that, in democratic societies, people simply have a right to a participatory role, others base arguments for public participation on the idea that lay people may have access to knowledge which is unknown to officially sanctioned experts. Local people may count as experts about aspects of their neighbourhood or they may have insights into the behaviour of plant operators that is thought to give rise to pollution. This paper reports on a novel empirical approach to analysing and capturing such 'lay' understandings. This technique ('participatory modelling'), developed in ESRC-funded work in the UK, uses community mapping exercises in urban centres to produce spatial representations of local knowledges about air pollution and related problems of noise and odour. In the paper the technique is outlined, presenting data from the three-city case study. The paper concludes by assessing the ways in which participatory modelling can contribute to the local governance of air quality.

Yearley, Steven, "The 'End' or the 'Humanization' of Nature?," Organization and Environment 18 (no.2, June 2005).

Yeld, John, Caring for the Earth: South Africa. A Strategy for Sustainable Living. Stellenbosch, South Africa: Southern African Nature Foundation, 1993. 55 pages. (v6,#3)

Yeranian, Edward. "Lebanon Begins to Clean Up Civil War Legacy: Toxic Waste." The Christian Science Monitor, vol. 89, 4 March 1997, p. 6.

Yew-Kwang, Ng, "Intergenerational Impartiality: Replacing Discounting by Probability Weighting," Journal of Agricultural and Environmental Ethics 18(2005):237-257. Intergenerational impartiality requires putting the welfare of future generations at par with that of our own. However, rational choice requires weighting all welfare values by the respective probabilities of realization. As the risk of non-survival of mankind is strictly positive for all time periods and as the probability of non-survival is cumulative, the probability weights operate like discount factors, though justified on a morally justifiable and completely different ground. Impartial intertemporal welfare maximization is acceptable, though the welfare of people in the very far future has lower effects as the probabilities of their existence are also lower. However, the effective discount rate on future welfare values (distinct from monetary values) justified on this ground is likely to be less than 0.1 per annum. Such discounting does not compromise environmental protection and sustainability unduly. The finiteness of our universe implies that the sum of our expected welfare to infinity remains finite, solving the paradox of having to compare different infinite values in optimal growth/conservation theories.

Keywords discounting - environmental ethics - impartiality - intergenerational - intertemporal - probability - sustainable development - welfare. Yew-Kwang is in economics, Monash University, Melbourne, Australia. (JAEE)

Yi Baoli & Li Changsheng, "Bears Encaged in a Remote Mountain Valley," An investigation. Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 3 (September 30, 2000). In Chinese. (EE v.12,#1)

Yiming, L; Zhongwei, G; Qisen, Y; Yushan, W; Niemela, J, "The implications of poaching for giant panda conservation", Biological Conservation 111(no.2, 2003):125-136.

Yoder, J. and Blatner, K., "Incentives and Timing of Prescribed Fire for Wildfire Risk Management," Journal of Forestry 102(no. 6, 2004): 38-41(4).

Yoder, Jonathan; Blatner, Keith, "Incentives and Timing of Prescribed Fire for Wildfire Risk Management", Journal of Forestry 102(no.6, September 2004):38-41(4).

YomTov, Y, "Poaching of Israeli wildlife by guest workers," Biological Conservation 110(no.1, 2003): 11-20.

Yoon, Carol, "Simple Method Found to Increase Crop Yields Vastly," New York Times (8/22/00): D1. Chinese farmers reduce disease and double crop yields by abandoning monoculture. In one of the largest agricultural experiments ever, thousands of rice farmers in China have abandoned chemical fungicides and controlled rice blast (the most serious disease affecting this crop) by planting a mixture of two different rices instead of a single type of rice as they have typically done. By planting a variety of rice that is resistant to the fungus in rows next to the preferred rice variety (which is susceptible), they blocked the spread of this wind born fungus. As more and more farmers nearby did the same, these positive effects began to multiply across the region. The experiment shows that ecologically based approaches to agriculture can be effective even on a very large scale. It also reinforces the idea that diversity in wild ecosystems is conducive to health as well. (v.12,#2)

Yoon, Carol Kaesuk, "Coping With Supersalmon," New York Times (5/1/00): A1. Frankenfish. A Canadian company has genetically altered Atlantic salmon to produce a growth hormone so they grow twice as fast as normal salmon. The transgenic salmon (with genes from a chinook salmon and an ocean pout) awaits Canadian and U.S. governmental approval before it is grown and marketed commercially. Although concerns about food safety with the fish are low, it is the Food and Drug Administration that will make the decision in the U.S. Critics worry that this agency is ill-equipped to analyze the significant environmental risks associated with widespread growth and marketing of the fish. One worry is that the fast-growing salmon might escape from commercial growing pens and mate with wild fish resulting in "genetic pollution." Furthermore, because females often preferentially mate with larger males, females of wild fish populations might prefer the transgenic males. If such mating produced offspring that did not survive well, the escape of these altered salmon could lead to the extinction of wild fish populations. One possible solution is to sterilize the salmon to be grown in the net pens. Another is to require that the fish only be grown in tanks on land. Anti-biotechnology and consumer groups have affected the public's perception of the health and environmental safety of genetically-altered plants and animals. In Scotland and New Zealand, efforts to develop faster growing salmon were abandoned amid cries of "Frankenfish." The International Salmon Farmers Association, representing the vast majority of salmon farmers worldwide, has taken a strong stand against the new fish. Relatedly, Frito-Lay has decided it would no longer buy biotech corn (a possible threat to monarch butterflies and organic farmers). (v.11,#2)

Yoon, Carol Kaesuk, "Penguins in Trouble Worldwide," New York Times, June 26, 2001, p. D1, p. D2. Populations are declining and evidence is mounting that global warming is a prime cause. Shortage of fish, or krill, leaves the birds starving. Or toxin blooms like a red tide, due to warming, kill the birds. Ten of the world's seventeen species are listed as threatened or endangered. (v.12,#3)

Yoon, Carol Kaesuk, "Biotech Corn Isn't Serious Threat to Monarchs, Draft U.S. Report Finds," New York Times (9/26/00): D4.

Biotech corn may not harm Monarchs. The U.S. Environmental Protection Agency has tentatively concluded that Bt corn (corn genetically modified to produce the pesticide Bt) is unlikely to pose a serious threat to the overall Monarch butterfly population. The agency also downplayed the potential for the insecticide to persist in the soil or to lead to the evolution of pests that can withstand it. The Monarch has recently become a symbol of fragile nature threatened by biotechnology. (v.11,#4)

Yoon, Carol Kaesuk, "As Mt. St. Helens Recovers, Old Wisdom Crumbles," New York Times, (5/16/00). Chance survivors, not orderly succession, the key to recovery on Mt. Saint Helens. Biologists studying the return of life to the slopes of Mt. Saint Helens 20 years after it erupted say that rather than a predictable parade of pioneering species coming in from the edges and altering the environment for the arrival of mid and then late successional species, chance events, including the lucky survival of "biological legacies," is what is shaping the new biota. For example, moles, gophers and ants survived the blast because they were hidden beneath the ground, as did some saplings and shrubs buried in the snow. Roots and bulbs of some wild flowers rode the top of the avalanche and established themselves immediately. These species are playing the crucial role in the recovery of life on Mt. Saint Helens. The findings have implications for forestry where leaving a significant number of trees and deadwood after a harvest will speed the rebirth of a new forest. (v.11,#2)

York, Paul Francis. *Respect for the World: Universal Ethics and the Morality of Terraforming*. Ph.D. Dissertation, University of Queensland, 2005. York provides an examination of the morality of large-scale efforts to transform inanimate parts of nature for example, proposals to terraform Mars. A universal ethics expands the class of entities regarded as morally considerable to include inanimate entities. York builds on the theory of Paul W. Taylor (*Respect for Nature*) and proposes two extensions: (1) an expansion of the scope of moral considerability to include all concrete material objects, and (2) the introduction of the concept of variable moral significance (the notion that all entities have inherent worth but some have more than others). He develops a universal ethics, an ethical framework whose key elements are a fundamental ethical attitude of respect for the world and a principle of minimal harm. Universal ethics regards all concrete material entities, whether living or not, and whether natural or artefactual, as inherently valuable, and therefore as entitled to the respect of moral agents. York concludes that terraforming Mars or any other celestial body at this point in our history would be morally wrong, and he also suggests that universal ethics provides an ethical foundation for efforts to protect Antarctica.

York, Richard, "Humanity and Inhumanity: Towards A Sociology of the Slaughterhouse", Organization and Environment 17 (no. 2, June 2004).

Yost, Nicholas, "Who Regulates Environmental Impacts and Why It Matters," Ecology Law Quarterly 25(No.4, 1999):564-. (v.10,#2)

Youatt, R., "Counting Species: Biopower and the Global Biodiversity Census," *Environmental Values* 17(2008):393-417. Biopolitical analyses of census-taking usually focus on human censuses and consider how human experience is shaped by the practice. Instead, this article looks at the proposed global biodiversity census, which aims to take inventory of every species on earth as a response to anthropogenic species extinction. I suggest that it is possible to extend and modify Foucault's concept of biopower to consider contemporary human-nonhuman interactions. Specifically, I argue that an ecologically-extended version of biopower offers a useful way to conceptualise how power circulates in the practices that surround the biodiversity census, and that it points us towards thinking about how analyses of power, authority, and community can consider ecological, rather than purely human, locations and networks.

Young, Andrew G. and Clarke, Geoffrey M., eds., Genetics, Demography and Viability of fragmented Populations. New York: Cambridge University Press, 2000. The authors are with CSIRO, Canberra, Australia. (v.13,#4)

Young, BA; Lee, CE; Daley, KM, "Do Snakes Meter Venom?," Bioscience 52(no.12, 2002): 1121-1126.

Young, C, "Integrated Land Use and Environmental Models," Landscape Ecology 20 (no. 7, November

2005): 892-892.

Young, C, "Deciphering Disorder in Africa: Is Identity the Key?," World Politics 54(no.4, 2002): 532-557.

Young, Crawford, The African Colonial State in Comparative Perspective. New Haven: Yale University Press, 1994. \$ 45. This is the kind of book that those who hope for environmental conservation, environmental justice, and sustainable development in Africa hate to read. Even a cursory glance at postcolonial Africa suggests disaster. Abject poverty, widespread suffering, health crisis, civil wars, displaced populations, murderous and corrupt dictatorships, the collapse of basic infrastructures, and environmental degradation mark much of the region. Young finds colonialism still the culprit. But postcolonial states in Asia, Oceania, and the Americas have fared, on the whole quite differently. Seven distinctive characteristics of the African colonial state account for its virulent legacy: the speed of colonial occupation, the ruthless drive to extract resources from the subjugated societies in order to finance their conquest, the forcing of rural Africans into labor service, a welfare ideology that crippled independence of spirit, a thoroughgoing domination aided by new technologies, a racist ideology that permeated dealings with Africa and denigrated the value of African culture, and--outside Islamic areas--the lack of a religious system that could counter the West's monopolization of the production of meaning and thus the construction of culture. Postcolonial politics inherited the practices and norms of the old, and added destructive and exploitative elements of their own. "The new state was but a derelict reproduction of the old one, unable to perform its functions with the same competence." Can a new state be invented that sheds the debilitating traditions of the past? The outlook is bleak for Africans. And equally bleak for the wildlife. (v7,#2)

Young, David, Our Islands, Our Selves: A History of Conservation in New Zealand. Dunedin, NZ: University of Otago Press, 2004. From pre-human times, to the Maoris, to the European settlers, with over one-third of the book devoted to the period since World War II. How perceptions and actions have changed, how often New Zealand got it wrong, and what might still be done to protect New Zealand's natural environment. The author is a freelance journalist in New Zealand.

Young, H. P., "Sharing the Burden of Global Warming," The Report from the Institute for Philosophy and Public Policy, vol. 10, no.3/4, Summer/Fall 1990. "The fact that the atmosphere is currently treated as a global commons, whose use is largely unregulated, does not imply that nations, firms, or individuals have the right to continued free access to it." (v2,#2)

Young, Iris Marion. Review of Feminism and Ecology. Special issue of Heresies: A Feminist Journal of Art and Politics, 4, no. 1, 1981. Also a review of "Women and Life on Earth: Eco-Feminism in the 80's," seven papers from a conference at the University of Massachusetts, April 1980. Environmental Ethics 5(1983):173-79.

Young, Iris Marion. Review of Marxism and Domination. By Isaac D. Balbus. Environmental Ethics 6(1984):185-91.

Young, J et al., "Towards sustainable land use: identifying and managing the conflicts between human activities and biodiversity conservation in Europe," Biodiversity and Conservation 14 (no. 7, June 2005): 1641-1661.

Young, John Edward. "Iceland: Don't Like the Landscape? Wait Till Tomorrow." The Christian Science Monitor, vol. 89, 27 Nov. 1996, p. 12.

Young, John, Sustaining the Earth. Cambridge: Harvard University Press, 1990. By a professor of history

and director of the Center for Environmental Studies at the University of Adelaide, Australia. \$ 19.95. (v1,#4)

Young, John E., Discarding the Throwaway Society. Worldwatch Paper 101, January 1991. "Industrial economies eventually secrete as waste most of the raw materials they devour." "The United States alone consumed more minerals from 1940 to 1976 than did all of humanity up to 1940." Young is a co-author of State of the World 1990. (v2,#1)

Young, John, Sustaining the Earth (Cambridge, MA: Harvard University Press, 1990). 200 pages. \$ 19.95 cloth. Only a powerful synthesis of political, economic, and moral ideologies will move world societies into a relationship with the environment that maintains the best democratic values. Even the most radical environmentalists must recognize the reality of questions about equity and poverty, technology and energy, and aid and trade between wealthy and impoverished countries. (v2,#2)

Young, John. Sustaining the Earth. Reviewed in Environmental Ethics 13(1991):281.

Young, K. R., "Minding the Children: Knowledge Transfer and the Future of Sustainable Agriculture," Conservation Biology 16(no.4, 2002): 855-56. (v.13,#4)

Young, Kenneth R. "Threats to Biological Diversity Caused by Local Cocaine Deforestation in Peru." Environmental Conservation 23, no.1 (1996): 7. (v7, #3)

Young, M. K. and Harig, A. L., "A Critique of the Recovery of Greenback Cutthroat Trout," Conservation Biology 15(no.6, 2001): 1575-84. (v.13,#2)

Young, Michael D., Towards Sustainable Agricultural Development. Columbia University Press, 1991. 400 pages. \$ 75.00 Also published by Belhaven Press in the United Kingdom. (v2,#3)

Young, Oran R. "Hitting the Mark: Why Are Some International Environmental Agreements More Successful Than Others." Environment 41(No. 8, Oct. 1999):20- . Is it possible to increase the probability that a regime created to solve an environmental problem will hit its target? (v10,#4)

Young, Oran R., The Institutional Dimension of Environmental Change: Fit, Interplay, and Scale. Cambridge, UK: Cambridge University Press, 2002. Reviewed by Arold Vatn. Environmental Values 13(2004):135-137. (EV)

Young, Oran R., ed., Global Governance: Drawing Insights from the Environmental Experience. Cambridge, MA: The MI Press, 1998. Problems of international governance in the absence of a world government. The emerging environmental agenda has prompted an awareness of the need for new arrangements to achieve sustainable human/environment relations. Environmentalism offers new opportunities for international governance. Young is in environmental studies and directs the Institute on International Environmental Governance at Dartmouth College. (v9,#1)

Young, Oran R., ed. Global Governance: Drawing Insights from the Environmental Experience. Cambridge, MA:MIT Press, 1998. 344 pp. paper \$22.50, Cloth \$40. Contributors draw upon the experiences of environmental regimes to examine the problems of international governance in the absence of a world government. (v.9,#4)

Young, R. V., Jr. "A Conservative View of Environmental Affairs." Environmental Ethics 1(1979):241-54. The contemporary debate over the human relation to the natural environment raises many complex issues which have thrown our familiar liberal and conservative political alignments into

disarray. Although ecology is now generally regarded as a liberal cause with conservatives supporting commercial and industrial expansion, until very recently liberals almost unanimously championed industrialization and technological advance. Resistance to "progress" was the folly of only the most eccentric conservatives. Today, both liberal proponents of environmental protection and conservative defenders of business and industry argue on merely prudential grounds: each side maintains that only the adoption of its own program can save human civilization from collapse, or even the race from extinction. Extremely radical environmentalists have based their arguments on moral principle: humanity is just one species among many, and humans are, therefore, morally obligated to respect the rights of other organisms and of the ecosystem as a whole. This position, however, is ultimately reducible to a self-contradictory utilitarianism. It is the reverent attitude of traditional conservatism--that humans are superior to other creatures as the stewards of creation, holding it not as absolute possessor but only in trust from their Creator--that promises both the most moral and the most sensible approach to environmental affairs. Young is in the department of English, North Carolina State University, Raleigh, NC. (EE)

Young, Richard, Healing the Earth: A Theocentric Perspective on Environmental Problems and Their Solutions. Nashville: Broadman and Holman, 1994. Theocentrism, rather than either anthropocentrism or biocentrism, is the only proper stance for Christians to take in environmental ethics. (v9,#2)

Young, Richard Alan, Is God a Vegetarian? Chicago: Open Court, 1999. 187 pages. \$ 20. Sorts through the Bible's many references to animals and diet in order to articulate a Christian account of food. Young's principle is a twist on Socrates: The unexamined meal is not worth eating. The Bible begins and ends with a noncarnivorous creation but in between God explicitly permits meat eating. Jesus eats fish and Paul seems to condemn vegetarianism (1 Timothy 4.13). A good case can be made, however, that vegetarianism is a valid and valuable way of anticipating the kingdom of God by practicing what God most intended for the world. Animal rights and Christian belief. Young teaches New Testament at Temple Baptist Seminary. (v.9,#4)

Young, Robert. "'Monkeywrenching' and the Processing of Democracy." Environmental Politics 4(Winter 1995):199. (v7,#2)

Young, Stephen C. "Cities and Sustainable Development: An Unravelling Research Agenda", Environmental Politics 5(no.2, 1996):353.

Young, T, "Overconsumption and Procreation: Are they Morally Equivalent?" Journal of Applied Philosophy 18(no. 2, 2001):183-192. (v.13,#1)

Young, T. P., "Restoration Ecology and Conservation Biology," Biological Conservation. 92(no. 1, 2000):73- . (v.11,#1)

Young, Thomas. "The Morality of Ecosabotage," Environmental Values 10(2001):385-393. Environmental ethicists rarely discuss the morality of using illegal tactics to protect the environment. Yet ecosabotage (or monkeywrenching) is the topic of numerous articles and books in the popular press. In this paper I examine what I consider to be the three strongest arguments against destroying property as a means of defending the environment: the social fabric argument, the argument for moral consistency, and the generalisation argument. I conclude that none of them provides an a priori obstacle to a consequentialist justification of particular acts of ecosabotage. Then I sketch a version of constrained utilitarianism, which is capable, at least in principle, of justifying some acts of strategic ecosabotage in a democratic society. Keywords: Ecosabotage, justification, argument, consistency, utilitarianism. Thomas Young is in the Philosophy Department Mansfield University, Mansfield, PA, USA. (EV)

Young, Zoe. Review of "The Coconut Revolution", a film by Stampede Productions about the successful ecologically motivated revolution on the South Pacific island of Bougainville, which defeated both the Papua New Guinea authorities and a branch of the multinational Rio Tinto. Organization and Environment, 15, (No. 4, 2002): 482-484. Young is a doctoral candidate at the University of Hull, UK, and makes films with Conscious Cinema in London.

Youngs, Robert L., "'A Right Smart Little Jolt': Loss of the Chestnut and a Way of Life," Journal of Forestry 98 (No. 2, 2000, Feb 01): 17- . The decimation of the American chestnut, versatile and diverse in its products and uses, had a profound and lasting impact on Appalachian people and communities. (v.11,#2)

Younis, Raymond Aaron, Review of Soule, Michael E., Lease, Gary, eds., Reinventing Nature. Responses to Postmodern Deconstruction. Ethics and the Environment 2(1997):203-206. (E&E)

Yu, Douglas. "Free Trade Is Green; Protectionism Is Not." Conservation Biology 8 (1994): 989-996. Many hold that free trade will lead to environmental degradation. But industries that benefit from protection by tariffs also frequently benefit from subsidy by lax environmental standards. Environmentalists can ally themselves with free traders and learn how to use free trade as an ally in environmental reform. Yu is in biology at Harvard University. (v6,#1)

Yu Mouchang, and Wang Yaoxian, eds. *Environmental Ethics*. Beijing: High Education Press, 2004.

Yu, Mouchang, Sheng Tai Xue Zhe Xue (Ecological Philosophy). Kunming: People's Press of Yunnan Province, 1991. In Chinese. 3.60 Yuan. 267 pages. ISBN 7-222-00741-5. Nine chapters. Section I is foundations: holism in ecosystems, the laws of ecology, energy in ecosystems, and the major categories of ecophilosophy. Section II is on the methodology of ecophilosophy. Section III is on ecology and modern society, applying the theory of ecology to practice in environmental affairs. The author sets forth a Marxist ecophilosophy for China. (China)

Yu, Mouchang, "Sheng Tai Lun Li Xue," ("Ecological Ethics"). Chapter 12, pages 297-308, in Chen Ying, Xian Dai Lun Li Xue (Modern Ethics). Chong Qing (in Sichuan Province): Chong Qing Press, 1990. Introduces Aldo Leopold's land ethic, as interpreted by Holmes Rolston and J. Baird Callicott. (China)

Yu, Mouchang, Dan Da Shehui Yu Huan Jing Ke Xue (Contemporary Science and Environmental Science) Shenyang (in Liaoning Province): People's Press of Liaoning Province, 1986. 300 pages. (China)

Yu Mouchang, Ch'eng fa chung ti hsing wu tsou haiang sheng t'au lun li hsüh (Awakening to Retribution: Towards Environmental Ethics). Kuang-tung chiao yü ch'u pan she, 1995. Kuang-cho [Kwangtung], China: Kuang-cho [Kwangtung] Educational Publisher, 1995. ISBN 7-5406-2872-3. The chapters are: 1. Is ecological ethics in existence (rights and values in the natural world). 2. Going toward ecological ethics (Schweitzer, Leopold, and others). 3. Ecological ethics, science and belief (from ecology to ethics, from aesthetics to ethics, from theology to ethics, ecological philosophy and ethics). 4. Is there a general standard for ecological ethics? 5. Moral principles and norms in ecological ethics (respect life and the natural world; not to harm life and the natural world; not to exploit; protect and promote the flourishing of life and ecological uses of nature in economic and social activities). 6. New applications of several moral concepts (the right, fairness, thrift, duty). 7. Ecological Ethics: A new global ethical view. Yu Mouchang is a researcher at the Chinese Academy of Social Sciences, Beijing, and president of the Chinese Society for Environmental Ethics. The Chinese are producing an impressive number of books in

environmental ethics, as this and the following entries testify. (China) (v7, #1).

Yu Mouchang, ed., Chüuan chiu yen chiu chi che hüh ssu k'ao (Global Research and Philosophical Thought). A Global Village Project. Chung kung chung yang tang hsiao, 1995. People's Republic of China, Central Party School Publishers, 1995. ISBN 7-5035-1117-6. (China) (v7, #1)

Yu, Mouchang, "Shengtai zhaxue yu kechixu fazhan (Ecological Philosophy and Sustainable Development)," Zi Ran Bian Lun Fa Yet Jiu (Studies in Dialectics of Nature) 15(no. 2, February, 1999): 47-50. ISSN 1000-8934. (China). (v.10,#1)

Yu Mouchang, "The Development of Genetic Engineering Calls for an Ethic Concerning Gene Transfer." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 3 (September 30, 2000). In Chinese. (EE v.12,#1)

Yu, Mouchang, "The Fundamental Principles of Ecological Ethics," in Seeking Truth, no. 2 (1992): 35-38. Article in Chinese. This is a bimonthly published by the Hei Long Jiang University. There are three fundamental principles of ecological ethics: (1) One ought to cherish and respect life and nature. This is the highest positive principle. (2) One ought not to damage and degrade life and nature. This is the prohibition principle, forbidding extinction and plundering and exploiting nature. (3) One ought to preserve life and nature. This is a selectivity principle, calling for ecologizing economics and social affairs, choosing those forms of social development that do not degrade but rather cherish and respect life and nature. Yu Mouchang is in the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. (China)

Yu Mouchang, Ecological Philosophy, Sanxi People's Press, 2001, Chapters: the rising of eco-philosophy; eco-philosophy is postmodern philosophy; the turn of philosophy; ecological worldview is the philosophical foundation of sustainable development. Professor Yu is at the Institute of Philosophy, Chinese Academy of Social Sciences.

Yu, Mouchang, "Ecoethics: The Moral Philosophy of Foresters" (in Chinese) in Journal of Beijing Forestry University, No. 4, 1992. Beijing Forestry University Press, Beijing, 1992. The traditional pattern in forestry is characterized by a high output of commodity production from forests. But according to ecoethics, forests are valuable in diverse ways. They should be valued not only in terms of economics but also in terms of ecology, aesthetics, and ethics. Ecoethics offers new viewpoints from which to understand forests and forestry and new ways to orient research. Ecoethics can be used as a working philosophy for forest researchers. Hence it provides valuable ideas for the transition from the traditional economic patterns of forestry to a new forest management that seeks to optimize multiple values. Yu Mouchang is with the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. (China)

Yu, Mouchang, Sheng Tai Xue De Xin Xi (Ecological Information) Shenyang (in Liaoning Province): Science and Technology Press of Kiaoning Province, 1982). Written for a popular audience to introduce some fundamental ecological ideas, at a time when ecology was a new subject in China. (China)

Yu Mouchang, Xinshiji Xinshijiao (Eco-Ethics--from Theory to Practice). Beijing: Shengtai Lunlixue, 1999. 362 pages. ISBN 7-81039-950-0. (in Chinese). The Ecological Ethic in Chinese History. Modern Western Environmental Ethics: Schweitzer, Leopold, Singer, Ran Shan Zhu Qui, Rolston. Basic Ecological Ethics on Value in the Natural World. Basic Ecological Ethics on Rights in the Natural World. Ecological Ethics for Politics. Ecological Ethics for the Environment, for Forests, for Land, for Resources, for Consumers, for Business, for Population Growth, for Science, for War and the Military. Yu Mouchang is in the Institute of Philosophy, Chinese Academy of Social Sciences, Beijing. (v10,#4)

Yu, Mouchang, Sheng Tai Lun Li Xue (Ecological Ethics). Xi'an (in Shaanxi Province): Science and

Technology Press. (China)

Yu Mouchang. "On Development of Discipline of Environmental Ethics in China." *Journal of Nanjing Forestry University* No. 1 (2005): 17-22.

Yu Mouchang. "Ecological Civilization: Choice of Socialism with Chinese Characteristics." *Journal of Nanjing Forestry University* No. 4 (2007): 5-11.

Yu Mouchang. "The Philosophical Demonstration of the Intrinsic Value of Nature." *Ethics Research* No. 4 (2004): 65-70.

Yu Mouchang. "Ecological Civilization: New Civilization for Human Beings." *Changbai Journal* No. 2 (2007): 139-41.

Yu Mouchang. *A Theory of Nature Value*. Xian: Shanxi People's Education Press, 2002.

Yu Mouchang. "Marx and Engel's Philosophical Thoughts about the Environment." *Journal of Shandong University* No. 6 (2005): 89-97.

Yu Mouchang. "Nature Value Theory of Ancient China." *History of Chinese Philosophy* No. 2 (2004): 16-23.

Yu Mouchang. *Ecological Philosophy*. Xian: Shanxi People's Education Press, 2000.

Yu Yong, ed., Chinese Applied Ethics 2001, The Central Compilation & Translation Press, 2002. include three paper on environmental ethics: "Some theoretical issues of environmental ethics" (by Yang Tongjin), "Environmental value: perspective of utility or perspective of culture"(by Sun Meitang), and "How is environmental philosophy possible"(by Tian Haiping).

Yuan Yan. "Philosophical Implications of Ecologic Ethics." *Journal of Guangxi Normal University* No. 1 (2007): 87-92.

Yuce (Yüce), Nilgün and Peter Plöger, eds., Die Vielfalt der Wechselwirkung. Eine transdisziplinäre Exkursion im Umfeld der Evolutionären Kulturökologie. Freiburg and Munich: Karl Aber Verlag, 2003. An evolutionary ecology of culture, a theoretical project of sweeping scale: ecosystems not only as human life support systems but retaining many structural features of the biological systems from which humans emerged and upon which they remain dependent energetically. Reviewed by Hannes Bergthaller, Environmental Values 13(2004):546-547.

Yuhas, S, "Book Review: Encounters with Nature: Essays by Paul Shepard. Edited by Florence R. Shepard. Island Press, Washington, DC, 1999, 233 pp., \$24.95," Human Ecology 30(no.4, 2002): 558-562.

Yung, Laurie, Yetter, Bob, Friemund, Wayne A., and Brown, Perry J., "Wilderness and Civilization: Two Decades of Wilderness Higher Education at the University of Montana," International Journal of Wilderness 4(no. 2, July 1998):21-24. A summary of the Wilderness Institute of the School of Forestry at the University of Montana, now 23 years old. The authors are associated with the center; Brown is a dean of forestry at the University of Montana. (v.9,#3)

Zabieglik, Stefan, "Filozofia ekologiczna (Ecological Philosophy)," Pismo PG (Newsletter of Gdansk Polytechnic (PG) University) No. 2/3 (22-23), February/March 1996, pages 64-68. In Polish.

Introductions to Rolston, Environmental Ethics; Birch and Cobb, The Liberation of Life; Taylor, Respect for Life; Sepanmaa, The Beauty of Environment; Naess' deep ecology; Lovelock, Gaia; Skolimowski, and others for a Polish audience. Zabieglik is in the Department of Management and Economics, Polytechnic University of Gdansk, Poland (Narutowicza 11/12, 80-952 Gdansk, Poland). (v7,#2)

Zack, Naomi. "Notes on (Chris) Cuomo," Ethics and the Environment 4(1999):57-62. In a symposium on feminism and ecological communities. Distinctions between ecofeminism and ecological feminism, between ecofeminism and nonfeminist deep ecology and environmental ethics. Zack in in philosophy at SUNY, Albany. (E&E)

Zadek, Simon, Review of The End of Economics: Ethics and the Disorder of Progress. Environmental Values 3(1994):273. (EV)

Zadek, Simon, A Theory of Human Need and Human Scale Development. Reviewed in Environmental Values 3(1994):83-85. (EV)

Zaelke, Durwood, Robert F. Housman, and Paul Orbuch, eds., Trade and the Environment: Law, Economics, Policy. Washington, DC: Island Press, 1993. \$ 24.95, paper. 270 pages. What the General Agreement on Trade and Tariffs (GATT) and the North American Free Trade Agreement (NAFTA) are doing and might do to the environment. What issues are involved when one country tries to influence another's environmental standards? How should international environmental standards be set? When and how are low environmental standards a subsidy to labor and to industry, and is this appropriate? The authors are with the Center for International Environmental Law, Washington, DC. (v4,#2)

Zahniser, Ed, "Walk Softly and Carry a Big Map: Historical Roots of Wildlands Network Planning," Wild Earth 10(no. 2, Summer 2000):33- . (v.12,#2)

Zaidi, Iqtidar H. "On the Ethics of Man's Interaction with the Environment: An Islamic Approach." Environmental Ethics 3(1981):35-47. I argue that Islam provides very efficient ethical principles for dealing with the present ecological crisis, a crisis rooted in moral deprivation. I reject the maximization of benefits from natural resources without giving due consideration to the adverse environmental impact of such actions, and argue that this practice is based on injustices generated by factors like greed, extravagance, and ignorance, among others. So far, Western solutions of such problems have generally been based purely on materialistic approaches which place emphasis on secular technological models without any linkage with metaphysical doctrines. Islam recognizes that man by virtue of his creation is a superior being, one for the service of whom the Earth was created; but at the same time man has been made responsible for any departure in his behavior from the ways laid down by Almighty Allah. Human activities, according to Islam, must be based on the idea that this world is a transitory abode, and that a human has to gain God's favor in order to be able to find a better place in the other world. Hence, a person's actions, as manifestations of his or her faith, must be properly and effectively administered, requiring justice, Taqwa (piety), and appropriate knowledge and understanding of environmental problems. Zaidi is in the department of geography, University of Karachi, Karachi, Pakistan. (EE)

Zaikowski, Lori A; Garrett, Jinnie M, "A Three-Tiered Approach to Enhance Undergraduate Education in Bioethics", BioScience 54(no.10, 1 October 2004):942-949(8). The systematic integration of ethics into undergraduate programs is a key component to improving the understanding of ethical issues in science for a broad audience. We propose a three-tiered approach to integrating ethics and social issues that can be readily adapted to particular curricular needs. A concerted incorporation of ethics strategically targeted to each level of undergraduate education will improve the preparation of prospective research scientists, enhance K-12 teacher training, increase the scientific and ethical literacy of the general public, and improve the awareness of health professionals regarding ethics in medicine. After examining textbooks,

programs, and faculty perspectives, we suggest areas in which changes can be made to incorporate ethics into undergraduate education.

Zakin, Susan, Coyotes and Town Dogs: Earth First! and the Environmental Movement. New York: Viking, 1993. 483 pages. \$ 23.50. A fast-paced, fact-filled, and thorough history of Earth First! in the 1980's, often irreverent, tough, funny, opinionated, even outrageous, and yet also a thoughtful survey of Earth First! in the context of the broader conservation movement. Earth First!ers liked their "redneck hippie" image; they led the way emphasizing the importance of ecosystems and bioregions, concepts that have since entered the mainstream of environmentalism. Zakin is an environmental writer whose articles have appeared in publications ranging from the New York Times to Mother Jones. (v4,#3)

Zaleha, Bernard Daley. Review of Sacramental Commons: Christian Ecological Ethics. By John Hart. *Environmental Ethics* 30(2008):217-220. (EE)

Zamani, Gh., Marian Gorgievski-Duijvesteijn, and Kiumars Zarafshani. "Coping with Drought: Towards a Multilevel Understanding Based on Conservation of Resources Theory." *Human Ecology* Vol. 34, no. 5 (2006): 677-92.

Zamir, Tzachi. *Ethics and the Beast: A Speciesist Argument for Animal Liberation*. Princeton: Princeton University Press, 2007. Zamir argues that animal liberation doesn't require a rejection of speciesism. Liberation instead should be based on common moral beliefs and intuitions to attract wide support and understanding. This can result in a robust liberation program that includes commitments not to eat, factory farm, or experiment on animals.

Zaner, Richard M., "Finessing Nature," Philosophy and Public Policy Quarterly 23 (no. 2, 2003):14-19. "We need to consider carefully the ethical implications of substituting technology and genetically innovative means to assist human reproduction--that is, of 'finessing' nature." Zaner is emeritus from medical ethics, Vanderbilt University School of Medicine. (v 14, #3)

Zangwill, Nick, "Formal Natural Beauty," Proceedings of the Aristotelian Society 101(no. 2, January 2001):209-224. "I defend moderate formalism about the aesthetics of nature. I argue that anti-formalists cannot account for the incongruousness of much natural beauty. This shows that some natural beauty is not kind-dependent. I then tackle several anti-formalist arguments that can be found in the writings of Ronald Hepburn, Allen Carlson, and Malcolm Budd."

"Need one consider the underwater-swimming polar bear as a beautiful living thing or a beautiful natural thing or just a beautiful thing. I think this last will do. It is a formally extraordinary phenomenon. It might even turn out to be an artfully choreographed swimmer dressed in a polar bear suit. No matter. It is still a beautiful spectacle. It has a free, formal beauty" (p. 214). Zangwill is in philosophy, University of Glasgow, Scotland. (v.13,#4)

Zarb, John, "Small holding up," The Ecologist 30(no. 9, Dec. 1, 2000):40- . With farming in crisis, we desperately need to find a sustainable alternative form of agriculture. But could it ever work? Yes; in many places around the world, it already is.

Zarsky, Lyuba, and Hunter, Jason, "Environmental Cooperation at APEC: The First Five Years," The Journal of Environment and Development 6 (no. 3, 1997):222. APEC is the Asia Pacific Economic Cooperation, founded in 1989 by Japan and Australia, now the foremost institution for multilateral diplomacy in the Asia Pacific region. There are 18 member countries, including the U.S. (v8,#3)

Zaslowky, Dyan and T. H. Watkins, eds., These American Lands: Parks, Wilderness, and the Public Lands. Washington, DC: Island Press, 1994. 420 pages. Paper, \$ 22.00. Revised and enlarged from the

1986 edition. Zaslowsky is a correspondent for the New York Times; Watkins is editor of Wilderness magazine. (v5,#1)

Zaslowsky, Dyan. "The Battle of Boulder." Wilderness 58 (no. 209, Summer, 1995):25-33. Good intentions combine with contrary expectations to produce a troubling irony. The Boulder Open Space Department has been a pace setter, strongly supported by the populace in land acquisition and preservation--until they began to limit access and move trails in the name of ecosystem conservation and restoration. One observer says: "This is a conflict between social ecologists and deep ecologists. The deep ecologists are the sort of people who lecture us that human society is a cancer on the planet. We social ecologists see ourselves as a part of the natural environment and believe that the footprints of humans have as much right to be on a trail as the footprints of deer and elk." Zaslowsky covers the Rocky Mountain region for the New York Times. (v6,#3)

Zavalkoff, Anne, "Dis-Located in Nature? A Feminist Critique of David Abram," Ethics and the Environment 9(no. 1, 2004):121-139. This paper draws on Mary Daly's creative, connective use of the written word to challenge David Abram's central argument in The Spell of the Sensuous: that alphabetic writing and literacy are primarily responsible both for dulling human sensory perception and for severing a deep connection between humans and the natural world. It does so by outlining Abram's central claim, investigating the parallels and important differences between Abram's and Daly's work, and examining the strategies for reconnecting with the living world that emerge from Daly's prose. Ultimately, this paper argues that the ways in which people interact with all language have a greater impact on their perception of and connection to the natural world than whether they live in oral or literate communities. Zavalkoff is a doctoral candidate in Educational Studies at the University of British Columbia. (E&E)

Zavestoski, S, "Review of Rothman, HK, The New Urban Park: Golden Gate National Recreation Area and Civic Environmentalism," Society and Natural Resources 19 (no. 1, January 2006): 87-89.

Zavestoski, S., "Review of: Behan, Richard W., Plundered Promise: Capitalism, Politics, and the Fate of Public Lands," Society and Natural Resources 15(no.3, 2002): 282-84. (v.13,#2)

Zebich-Knos, Michele. "Preserving Biodiversity in Costa Rica: The Case of the Merck-INBio Agreement," The Journal of Environment and Development 6(no.2, 1997):180. (v8,#2)

Zechmeister, H. G., Schmitzberger, I., Steurer, B., Peterseil, J. and Wrбка, T., "The Influence of Land-Use Practices and Economics On Plant Species Richness in Meadows," Biological Conservation 114(no. 2, 2003): 165-177.

Zedler, J. B., Callaway, J. C. and Sullivan, G., "Declining Biodiversity: Why Species Matter and How Their Functions Might Be Restored in Californian Tidal Marshes," Bioscience 51(no.12, 2001): 1005-17. (v.13,#2)

Zedler, Joy B. et al., "Restoration of Biodiversity, Overview," Encyclopedia of Biodiversity 5: 203-212. Habitats that have lost populations of native species have potential for biodiversity restoration, that is, the return of species-rich conditions. Attempts to restore biodiversity involve multispecies efforts and single-species reintroductions. Genetic issues in biodiversity restoration involve the potential to reduce intraspecific diversity, especially in reintroduce populations of clonal plants and captive-reared animals. The deliberate introduction of nonindigenous species or species not known to occur naturally at a site does not constitute biodiversity restoration. (v.11,#4)

Zeide, Boris, "Another Look at Leopold's Land Ethic," Journal of Forestry 96(1998):13-19. Leopold is universally praised, but his concept of an ecosystem is hardly currently viable. Ecosystems are not so

stable and integrated but more open and chaotic. Nor does he give any help identifying the extent to which humans must and ought to modify ecosystems. His metaphors can be misleading. Zeide is professor of forestry University of Arkansas at Monticello. With commentary by J. Baird Callicott, "A Critical Examination of 'Another Look at Leopold's Land Ethic,'" pp. 20-26. Leopold may indeed need some revision in his concept of an ecosystem, but his main ideas remain valid, that ecosystems are self-organizing systems with considerable regularity and they can be predictably degraded. Economic is not the only consideration managing landscapes, but sustainable ecosystemic processes are important on a healthy landscape. (v9,#1)

Zeitler, Ulli. "Sustainable Mobility, Personal Freedom and Risk." Pages 47-59 in Peder Anker, ed., Environmental Risk and Ethics. Oslo, Norway: Centre for Development and Environment, University of Oslo, 1995. (v6,#4)

Zelezny, Lynette & Bailey, Megan, "A Call for Women to Lead A Different Environmental Movement," Organization and Environment 19 (no. 1, March 2006).

Zemansky, Gilbert M. "Ethical Tensions in Technical Consulting," Bioscience. 46(no.10, 1996):779. (v7,#4)

Zeng Jiangping, "On the conception from the perspective of ecological ethics", Journal of Jishou University 2001(4).

Zeng Jianping, Yang Fang, "An outline study on Japanese environmental ethic thought", Journal of Jishou University 2002(4).

Zerner, Charles, ed., People, Plants, and Justice: The Politics of Nature Conservation. New York: Columbia University Press, 2000. The social and environmental consequences of market-based nature conservation. Case studies from Asia, Latin America, Africa and the South Pacific. Ecotourism, bioprospecting, oil extraction, cyanide fishing, timber extraction, property rights. v.13,#4)

Zeveloff, Samuel I., L. Mikel Vause, and William H. McVaugh, eds., Wilderness Tapestry. Reno: University of Nevada Press, 1992. 320 pages. \$ 29.95.

Zeveloff, Samuel I. and Cyrus M. McKell, eds., Wilderness Issues in the Arid Lands of the Western United States. Albuquerque: University of New Mexico Press, 1992. \$ 29.95. (v3,#4)

Zeveloff, Samuel I., L. Mikel Vause, and William H. McVaugh, eds., Wilderness Tapestry: An Eclectic Approach. Reno: University of Nevada Press, 1992. About two dozen articles from diverse disciplines, growing out of the North American Interdisciplinary Wilderness Conferences. Includes Wayne Ouderkirk, "Wilderness Restoration: A Preliminary Philosophical Analysis"; Felicia F. Campbell, "The Wilderness Within Us: Women and Wilderness"; many more; and a bibliography of wilderness books. The editors, in zoology, English, and psychology, are all at Weber State University, Ogden, Utah. (v5,#4)

Zhang, Daowei. "State Property Rights Laws: What, Where, and How?" Journal of Forestry 94, no.4 (1996): 10. (v7, #3)

Zhang Dengqiao, and He Wenmo. "On the Problem of Ontology in the Natural Value Theory." Journal of Chongqing University No. 2 (2005): 48-52.

Zhang Dezhao. "The Foundation of Environmental Ethics." Social Science Research No. 4 (2005): 71-75.

Zhang Dezhaoh. *A Study of Intrinsic Value of Environmental Ethics*. Beijing: Chinese Social Sciences Press, 2006;

Zhang, L; Wang, N, "An initial study on habitat conservation of Asian elephant (*Elephas maximus*), with a focus on human elephant conflict in Simao, China", Biological Conservation 112(no.3, 2003):453-459.

Zhang Qizhi, et al., eds. *The Frontier of Environmental Philosophy*. Xian: Shanxi People's Press, 2004. This anthology includes 25 articles of western scholars, such as Naess, Rolston, Plumwood, Attfield, Light, Elliot, and Katz.

Zhang wenbiao, "Buddhism and western environmental philosophy," Academic Journal of Fujian, 2001(6).

Zhang Xinzhang. "The Naturalistic Basis of Environmental Ethics." *Modern Philosophy* No. 2 (2005): 43-46.

Zhang, Yun-fei, The Choice of Environmental Ethics for NIC's [Newly Industrialized Countries]: Case in Korean Experiences. Seoul, Korea: SEODO Publishing House, 2002. ISBN 89-89578-04-3. In English. Population pressures, air, water, soil quality and pollution levels, militarism, trans-boundary problems, relevance of Confucian thought, new ideas in environmental ethics, NGO's in Korea, the Seoul Declaration on Environmental Ethics (June 5, 1997), environmental policy in Korea. Zhang is at the Center Studies for Social Development, Renmin University of China, Beijing, and did this work while a scholar at the Korean Philosophy Department, School of Confucianism and Oriental Studies, Sungkyunkwan University. (v.14, #4)

Zhao, G; Shao, G, "Logging Restrictions in China: A Turning Point for Forest Sustainability," Journal of Forestry 100(no.4, 2002):34-37. (v.13, #3).

Zhao, J, "The Multilateral Fund and China's Compliance With the Montreal Protocol," Journal of Environment and Development 11(no.4, 2002): 331-354.

Zheng Huiz. *Ethics Toward Nature*. Beijing: People's Press, 2006.

Zheng Huizi, "The cultural evolutional base of ecological ethics", Studies in Dialectics of Nature, 2002(7).

Zheng Huizi. "Environmental Ethics and the Naturalistic Fallacy." *Journal of Henen University* No. 3 (2007): 17-22.

Zheng Huizi. "The Scientific Foundations of Environmental Ethics." *Journal of Shanghai Normal University* No. 1 (2005): 12-16.

Zheng Jianping, and Zhang Dezhaoh. "Environmental Ethics and Postmodernism." *Teaching and Research* (2006): 65-72.

Zheng Jianping, and Peng Liwei, "Environmental Justice: Perspective of Developing Countries." *Philosophical Trends* No. 6 (2007): 31-34.

Zheng Jianping. *Environmental Justice: A Study of Environmental Ethical Problems in Developing Countries*. Jinan: Shangdong People's Press, 2007.

Zheng Jianping. *Reflection on Nature: An Inquiry of Western Ecoethical Thoughts*. Beijing: Chinese Social Sciences Press, 2004.

Zheng Jianping. "The Dilemma of Institutionalization of Environmental Ethics." *Morality and Civilization* No. 3 (2006): 54-58.

Zheng Xiaowu. "The Idea of Environmental Ethics of Noncentricism." *Studies in Dialectics of Nature* No. 10 (2006).

Zheng Youxian, "Constructing the System of Eco-ethics," Fujian Luntan (Fujian Forum) 4(1999):42-45. In Chinese. (v.11,#1)

Zhexue Yicong (Philosophy Digest of Translation), (Journal of the Chinese Academy of Social Sciences, Institute of Philosophy, Beijing), 1999, Issue No. 2, contains several articles on environmental ethics, in Chinese translation:

--Rolston, Holmes, III, and Coufal, James, "A Forest Ethic and Multivalue Forest Management," Journal of Forestry 89(no. 4, 1991):35-40.

--Murphy, W. H., "Anthropocentrism: A Modern Version," Science 187(1975):1168-1172.

--Callicott, J. Baird, "Rolston on Intrinsic Value: A Deconstruction," Environmental Ethics 14(1992):129-143. (v10,#4)

Zhexue Yicong (Philosophy Digest of Translation), a journal of the Chinese Academy of Social Sciences, Institute of Philosophy, Beijing, Issue No. 5, Sept. 1994 (ISSN 1002-8854) contains a section on "Environmental Ethics" in which the following articles are translated into Chinese: (1) W. K. Frankena, "Ethics and the Environment," (2) Holmes Rolston, "Respect for Life: Can Zen Buddhism Help in Forming an Environmental Ethic?" (3) Take-Aki Maruyama (Japan), "Earthly Earth Ethics," and (4) Peter Singer (Australia), "All Animals are Equal." (Thanks to Yu Mouchang, Chinese Academy of Social Sciences.) (v5,#4)

Zhi Xu, "Assessing Distributional Impacts of Forest Policies and Products: An Integrated Approach," Evaluation Review 18(no. 3, 1994):281-311. A model of the distributional impacts of forest policies and products that integrates monetary and nonmonetary measures. Case study in structural particleboard technology. Zhi Xu is in Forest Resource Policy and Economics, University of Minnesota. (v.10,#1)

Zhong Xiaobing, Yang Zunliang & Han Jing, "Economic Leverages for Environmental Protection." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no.1 (March 30, 2000). In Chinese. (EE v.12,#1)

Zhou Ding, "Three Main Views on Green Education." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Zhou Shaoqi, "A Brief Discussion on Ecological Civilization and Green Higher Education." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Zhou, Wei; Chen, Baokun, "Biodiversity of Bitahai Nature Reserve in Yunnan Province, China," Biodiversity and Conservation 15 (no.3, March 2006): 839-853 (15).

Zhou Yu, "Construction of Green University at Harbin Institute of Technology in the 21st Century." Huanjing yu Shehui, a Quarterly, (Environment and Society), vol.3, no. 2 (June 30, 2000). In Chinese. (EE v.12,#1)

Zhu Tan, ed, Environmental Ethics: Theory and Practice, Chinese Environmental Science Press, 2001. Chapters: introduction, environmental ethical thoughts in Chinese traditional culture; the rising and development of modern environmental ethics; the theme of environmental ethics: harmony of man and nature; the values of nature; the equality of natures; sustainable development and environmental ethics; population and environmental ethics; environmental ethical issues in science and technology; environmental ethical issues of environmental protection; environmental ethics of consumption; awakening the environmental awareness of the public. Professor Zhu is the president of school of environment at Nankai University.

Zich, Arthur, "China's Three Gorges: Before the Flood," National Geographic 192(no. 3, September 1997):2-33. China's most ambitious project since the Great Wall, the Three Gorges Dam will displace nearly two million people as it swallows up cities, farms, and the canyons of the Yangtze River. The world's mightiest dam is rising on the Yangtze River. Gains: electric power and flood control. Losses: wild canyons and hundreds of thousands of homes. The pros and cons of this major project, now well into construction. (v9,#1)

Ziegler, Rafael, Review of: Hayward, Tim, Constitutional Environmental Rights. Oxford: Oxford University Press, 2005. Environmental Values 14(2005):530-532.

Ziegler, Rafael, "Political Perception and Ensemble of Macro Objectives and Measures: The Paradox of the Index for Sustainable Economic Welfare," Environmental Values 16(2007): 43-60. Macroeconomic measures and objectives inform and structure political perception in large systems of governance. Herman Daly and John Cobb attack the objective and measure of economic growth in *For the Common Good*. However, their attack is paradoxical: 1) they are in favour of strong sustainability, but construct with the ISEW an index of weak sustainability, and 2) they describe humans as persons-in-community, but propose an index based on personal consumption. While the ISEW has attracted much attention, the same cannot be said about the person-in-community ontology developed at length and prominently in their work. This essay therefore aims to reconstruct Daly and Cobb's criticism of growth from the person-in-community approach. It defends the ISEW as a debunking index that is motivated by the person-in-community approach and the economy-ecology scale problem, and that also engages in the politics of scale. But this does not mean that the ISEW is also a measure of sustainable economic welfare. Critics expecting this kind of sustainability index are likely to see contradictions, but not the critical role the ISEW can play for democratic accountability. Understanding the latter makes it possible to see the ISEW as a step in the evolution of political perception and action. Accordingly the essay is also intended as a contribution to the understanding of this role in a situation where sustainability indices continue to be calculated, and renewed efforts at the measurement of welfare and happiness are made. Ziegler is in the Centre Marc Bloch, Berlin.

Zilney, LA, "Review of: Cohen, Maurie J., and Murphy, Joseph, eds. Exploring Sustainable Consumption: Environmental Policy and the Social Sciences," Society and Natural Resources 16(no.8, 2003):755-758. (v.14, #4)

Ziman, John, "Why Must Scientists Become More Ethically Sensitive Than They Used To Be?" Science 282(4 December, 1998):1813-1814. Such increasing ethical sensitivity is "symptomatic of the transformation of science into a new type of social institution. As their products become more tightly woven into the social fabric, scientists are having to perform new roles in which ethical consideration can no longer be swept aside." In classical science, there could be academic disinterestedness, even ethical neutrality; but science today is increasingly integrated with the pursuit of human interests, often at the level of social forces in industry and finance. "Post-academic science has features that make nonsense of the traditional barriers between science and ethics." Science "cannot brush its ethical problems under the

carpet. Science can no longer be 'in denial' of matters that many of us have long tried to bring to the fore." Ziman, from New Zealand, is in theoretical physics at the University of Bristol, UK, and was long chair of the UK Council for Science and Society. (v.9,#4)

Zimdahl, Robert L., "Ethics in Weed Science," Weed Science 46(1998):636-639. Neither basic nor applied weed science is value free; they are value laden. Most of these values rest on an ethical foundation known as utilitarianism. Weed scientists believe that their work should be useful to humans and promote the greatest good for the greatest number. They ought to enter into public discussion about values at stake in their work. Without embarrassment, weed scientists have to learn to ask about the ethical foundations of their science. Zimdahl is in weed science at Colorado State University. (v. 10, #3).

Zimmerman, Michael, Contesting Earth's Future. Reviewed by Richard Owsley. Environmental Ethics 18(1996):425-429. (EE)

Zimmer, Carl, "In Give and Take of Evolution: A Surprising Contribution from Islands," New York Times, November 22, 2005. Islands have typically been thought to be dead ends in evolution, but studies now suggest they can at other times be sources from which continents are re-stocked. They are also places where rapid speciation occurs, often because of isolation and specialized environments. This makes islands more important to conserve as reservoirs of biodiversity.

Zimmer, Carl, "Life after Chaos," Science 284(2 April, 1999):83-86. In a special issue of Science on complex systems, with several related articles. "After years of hunting for chaos in the wild, ecologists have come up empty-handed. But the same equations that failed to find chaos are turning up stunning insights into how environmental forces and internal dynamics make populations rise and fall." Although "there is no unequivocal evidence for the existence of chaotic dynamics in any natural population," researchers found that "many were verging on chaos." "To many ecologists, the way nature seems to sit on the edge of chaos, and not plunge deep into it as models predict, is a fascinating puzzle." The studies are reminiscent of those of Stuart Kauffman and his claims that self-organization is stimulated at the edge of chaos. Ecosystems persist in the midst of their perpetual perishing. (v.10,#1)

Zimmer, Carl. "Predicting Oblivion: Are Existing Models Up to the Task?" Science Vol. 317, no. 5840 (17 August 2007): 892-93. Huge numbers of species may be at risk of extinction from climate change, but coming up with precise estimates is proving tough. One method is the climate-envelope model, which analyzes all the places an endangered species is found and looks for features of the climate that those places share. Then the likelihood of global climate change affecting such climates is estimated. But critics worry that the method is inadequate and uncertain.

Zimmerer, Karl S, "Cultural ecology: placing households in human-environment studies - the cases of tropical forest transitions and agrobiodiversity change", Progress in Human Geography 28(no.6, December 2004): 795-806(12).

Zimmerer, Karl S. Changing Fortunes: Biodiversity and Peasant Livelihood in the Peruvian Andes. Berkeley, CA: University of California Press, 1996. \$ 45.00 cloth. Management of plant and animal genetic resources in the context of existing agricultural practices. (v8,#1)

Zimmerer, Karl S., "Cultural ecology: at the interface with political ecology the new geographies of environmental conservation and globalization," Progress in Human Geography 30 (no.1, February 2006): 63-78 (16).

Zimmerman, Michael, Contesting the Earth's Future: Ecology and Postmodernity. Reviewed by Pete A.Y.

Gunter. Ethics and the Environment 2(1997):95-98. (E&E)

Zimmerman, Michael E., J. Baird Callicott, Karen J. Warren, Irene J. Klaver, and John Clark, eds., Environmental Philosophy: From Animal Rights to Radical Ecology. 4th edition. Upper Saddle River, NJ: Pearson/Prentice Hall, 2005. Fourth edition of a time-tested and popular anthology. One new section is "Environmental Continental Philosophy," edited by Irene Klaver. Postmodern theory's ... stance of suspicion has turned out to be a mixed blessing for the environmental movement. Just as feminist theory in the 1980s revealed blind spots in positions taken by many feminists, so postmodern theory in the 1990's criticizes the validity of beliefs and concepts held by many environmentalists. According to Klaver, the phenomenological method developed by German philosopher Edmund Husserl offers a helpful ways for exploring and deepening humanity's relation to natural phenomena" (p. 3). Continental philosophy has been included, at the cost of leaving deep ecology out. (v. 15, # 3)

Zimmerman, Michael, General Editor, J. Baird Callicott, George Sessions, Karen J. Warren, and John P. Clark, Associate Editors, Environmental Philosophy: From Animal Rights to Radical Ecology. Englewood Cliffs, NJ: Prentice-Hall, 1993. Baird Callicott edits part one, Environmental Ethics, with selections from Richard Routley (Sylvan), Peter Singer, Tom Regan, Kenneth Goodpaster, Paul Taylor, Mark Sagoff, Aldo Leopold, Callicott, and Holmes Rolston. George Sessions edits part two, Deep Ecology, with selections from Thomas Berry, Arne Naess, Warwick Fox, and Sessions. Karen Warren edits part three, Ecofeminism, with selections from Carolyn Merchant, Val Plumwood, Ariel Salleh, and Warren. John Clark edits part four, with selections from Murray Bookchin, Janel Biehl, Clark, Joel Kovel and George Bradford. A well-rounded collection with full length articles, not excerpts. (v3,#4)

Zimmerman, Michael, "The Blessing of Otherness: Wilderness and the Human Condition." Pages 245-270 Oelschlaeger, Max, ed., The Wilderness Condition: Essays on Environment and Civilization (San Francisco: Sierra Club Books, 1992). The importance of humans periodically "crossing over" the socially-constructed border separating wilderness from civilization. Wilderness encounter becomes the occasion for coming to know what it means to be civilized. The "otherness" of the wild is a "blessing," for temporary immersion in it enables us to realize the distinctive nature of our humanity, without needing to deny or repress wild nature or to gain rational control over it. "We must learn to acknowledge and to appreciate this otherness or difference as such, especially if we hope to understand the characteristics of our own identity" (p. 264).

Zimmerman, Michael E., Contesting Earth's Future. Reviewed by Arran E. Gare. Environmental Values 6(1997):113-115. (EV)

Zimmerman, Michael E. "Toward a Heideggerian Ethos for Radical Environmentalism." Environmental Ethics 5(1983):99-131. Recently several philosophers have argued that environmental reform movements cannot halt humankind's destruction of the biosphere because they still operate within the anthropocentric humanism that forms the root of the ecological crisis. According to "radical" environmentalists, disaster can be averted only if we adopt a nonanthropocentric understanding of reality that teaches us to live harmoniously on the Earth. Martin Heidegger agrees that humanism leads human beings beyond their proper limits while forcing other beings beyond their limits as well. The doctrine of the "rights of man" justifies human exploitation of nonhuman beings. Paradoxically, however, the doctrine of rights for nonhuman beings does not escape the orbit of humanism. According to Heidegger, a nonanthropocentric conception of humanity and its relation to nature must go beyond the doctrine of rights. We can dwell harmoniously on Earth only by submitting to our primary obligation: to be open for the Being of beings. We need a new way of understanding Being, a new ethos, that lets beings manifest themselves not merely as objects for human ends, but as intrinsically important. Heidegger calls this ethos the "fourfold" of earth and sky, gods and mortals. Humanists argue that Heidegger is wrong to abandon the principle of human rights in favor of the notion that we are obligated to "let beings be," while some radical environmentalists accuse him of being a humanist because he supposedly overestimates the

importance of humankind's ability to speak. Heidegger insists, however, that language makes possible culture, without which there is no human experience of nature. An environmentally sound ethos can arise, according to Heidegger, only from a shift within the cultural heritage of the West. Richard Rorty agrees that we must become open for a new "conversation" with the West, even if this requires abandoning traditionally important fields such as epistemology. The need to develop a new understanding of Being is so great that thinkers from the analytic and continental traditions of philosophy are finally initiating a long-overdue dialogue. For Zimmerman's later position, see: "Rethinking the Heidegger-Deep Ecology Relationship." Environmental Ethics 15(1993):195-224. Zimmerman is in the department of philosophy, Tulane University, New Orleans, LA. (EE)

Zimmerman, Michael E., Callicott, J. Baird, Clark, John, Sessions, George, and Warren, Karen, eds., Environmental Philosophy: Animal Rights to Radical Ecology. Englewood Cliffs, NJ: Prentice Hall, 2000. Now out in a third edition. New features: Mark Sagoff, "Animal Liberation, Environmental Ethics: Bad Marriage, Quick Divorce," which argues that these two important movements cannot be readily reconciled; a rebuttal essay by J. Baird Callicott which argues that animal rights and environmental ethics do have much in common. John Clark, "The Matter of Freedom: Ecofeminist Lessons in Social Ecology." Charles Bliese, "Traditionalist Conservatism and Environmental Ethics." (v.11,#4)

Zimmerman, Michael J., "In Defense of the Concept of Intrinsic Value," Canadian Journal of Philosophy 29(1999):369-410. Intrinsic value, though with a long rich history, including that in G. W. Moore, has come under recent attack. These attacks are unsuccessful, with particular attention to that of Judith Jarvis Thomson. Positive arguments are elusive; nevertheless it seems clear that morally sensitive persons will favor certain things, but not others, for their own sakes. Zimmerman is at the University of North Carolina at Greensboro. (v.12,#3)

Zimmerman, Michael E. "Rethinking the Heidegger-Deep Ecology Relationship." Environmental Ethics 15(1993):195-224. Recent disclosures regarding the relationship between Heidegger's thought and his own version of National Socialism have led me to rethink my earlier efforts [in "Toward a Heideggerean Ethos for Radical Environmentalism." Environmental Ethics 5(1983):99-131] to portray Heidegger as a forerunner of deep ecology. His political problems have provided ammunition for critics, such as Murray Bookchin, who regard deep ecology as a reactionary movement. I now argue that, despite some similarities, Heidegger's thought and deep ecology are in many ways incompatible, in part because deep ecologists--in spite of their criticism of the ecologically destructive character of technological modernity--generally support a "progressive" idea of human evolution. Zimmerman is in the department of philosophy, Tulane University, New Orleans, LA. (EE)

Zimmerman, Michael E. "Feminism, Deep Ecology, and Environmental Ethics." Environmental Ethics 9(1987):21-44. Deep ecologists have criticized reform environmentalists for not being sufficiently radical in their attempts to curb human exploitation of the nonhuman world. Ecofeminists, however, maintain that deep ecologists, too, are not sufficiently radical, for they have neglected the crucial role played by patriarchalism in shaping the cultural categories responsible for Western humanity's domination of Nature. According to eco-feminists, only by replacing those categories--including atomism, hierarchalism, dualism, and androcentrism--can humanity learn to dwell in harmony with nonhuman beings. After reviewing the eco-feminist critique both of reform environmentalism and of deep ecology, I sketch a critical dialogue between eco-feminism and deep ecology. Zimmerman is in the department of philosophy, Tulane University, New Orleans, LA. (EE)

Zimmerman, Michael, Callicott, J. Baird, Sessions, George, Warren, Karen J., and Clark, John, eds., Environmental Philosophy: From Animal Rights to Radical Ecology. 2nd ed. Upper Saddle River, NJ: Prentice-Hall, 1998. 463 pages. The second edition of what has been a very popular anthology in

environmental ethics. Baird Callicott adds an article, "Do Deconstructive Ecology and Sociobiology Undermine Leopold's Land Ethic?" Harold Glasser adds "Demystifying the Critiques of Deep Ecology." Karen Warren revises the introduction to ecofeminism. A section on political ecology includes new essays on free market environmentalism, sustainable development, liberal environmentalism, socialist environmentalism, and ecotage. (v9,#2)

Zimmerman, Michael, Contesting Earth's Future: Radical Ecology and Postmodernity. Berkeley: University of California Press, 1994. 447 pages. Cloth \$30.00. Having once interpreted Heidegger as a forerunner of deep ecology, Zimmerman rethinks his position about deep ecology in particular and radical ecology in general (including ecofeminism and social ecology) in view of recent disclosures of the links between Heidegger's thought and Nazism. To what extent does radical ecology (unwittingly) hold views that are consistent with the reactionary attitudes of fascism? In what respects is radical ecology a dimension of "postmodernity," defined as an epoch that questions the progressive optimism of technological modernity? Zimmerman tries to answer these questions in part by assessing the recent debates among deep ecology, social ecology, and ecofeminism.

Appealing to the work of transpersonal theorist Ken Wilber, who maintains that humankind is taking part in a progressive development of consciousness, of which the ecological crisis is a surmountable symptom, Zimmerman tries to mediate the sometimes bitter dispute between deep ecology and social ecology. Though some ecofeminists maintain that "progressive" ideas justify the domination of emotions, the body, woman, and nature, Zimmerman shows the extent to which ecofeminism can and should acknowledge the "emancipatory" dimension of modernity. Finally, recognizing that radical ecology's hope for a low-tech future may well go unfulfilled, Zimmerman explores "critical postmodern" visions of the future high-tech relation between humanity and nature, including the startling vision contained in Donna Haraway's "Cyborg Manifesto." Zimmerman is in philosophy at Tulane University, New Orleans. (v5,#4)

Zimmerman, Michael, J. Baird Callicott, George Sessions, Karen J. Warren, and John P. Clark, eds., Environmental Philosophy: From Animal Rights to Radical Ecology. Englewood Cliffs, NJ: Prentice-Hall, 1993. Anthology for college use, generally with a good balance of positions. (v4,#3)

Zimmerman, Michael E., et al., eds., Environmental Philosophy, Reviewed by David Rothenberg in Environmental Ethics 16(1994):215-218.

Zimmerman, Michael E. "Quantum Theory, Intrinsic Value, and Panentheism." Environmental Ethics 10(1988):3-30. J. Baird Callicott seeks to resolve the problem of the intrinsic value of nature by utilizing a nondualistic paradigm derived from quantum theory. His approach is twofold. According to his less radical approach, quantum theory shows that properties once considered to be "primary" and "objective" are in fact the products of interactions between observer and observed. Values are also the products of such interactions. According to his more radical approach, quantum theory's doctrine of internal relations is the model for the idea that everything is intrinsically valuable because the "I" is intrinsically valuable and related to everything else. I argue that humanity's treatment of nature will become respectful only as humanity's awareness evolves toward nondualism, and that such nondualistic awareness will not be produced by changes in scientific theory alone. Nevertheless, as Callicott suggests, such changes may be harbingers of evolutionary trends in human awareness. I conclude with a sketch of how nondualism, especially in its panentheistic version, provides the basis for environmental ethics. Zimmerman is in the department of philosophy, Tulane University, New Orleans, LA. (EE)

Zimmerman, Michael E. "The Threat of Ecofascism." Social Theory and Practice 21 (no. 2, Summer 1995):207-238. (v6,#4)

Zimmerman, Michael. Science, Nonscience, and Nonsense. Baltimore, Maryland: The Johns Hopkins

University Press, 1995. pp. \$25.95. Zimmerman begins by showing just what science is--how the criteria of skepticism and falsifiability distinguish it from pseudo-science and mysticism. He offers intelligent, entertaining, and sometimes scathing analyses of bad science--from lottery "systems" and creationism to graphologists and homeopaths, from food and product safety scams to outright scientific fraud. In each case he shows exactly what to watch for--how the most outrageously false claims often contain a grain of truth, and how valid scientific findings may be distorted or selectively quoted to serve the ends of government, business, or special interest groups. Zimmerman is the dean of the College of Letters and Science and professor of biology at the University of Wisconsin, Oshkosh (and therefore is not the philosopher Michael Zimmerman who writes in environmental ethics). (v8,#1)

Zimmermann, Jörg, ed., Das Naturbild des Menschen [in German: Man's image of nature], München: Wilhelm Fink, 1982.

Ziner, Karen Lee, "Offshore Harvest of Wind is Proposed for Cape Cod," New York Times (4/16/02): D3. Windmills stir controversy. 170 wind turbines, each the height of a 40 story building, are proposed for Nantucket Sound. They would provide half the electricity for Cape Cod and the islands of Martha's Vineyard and Nantucket (enough power for 500,000 homes and businesses). Advocates argue that harvesting the wind 5 ½ miles off the U.S. coast where there is an "awesome, inexhaustible supply of domestic energy" provides a nonpolluting, renewable, environmentally friendly energy source. Although dozens of wind farms exist in the U.S. and off the coast of Europe, none this large has been built in the U.S. or at sea. Concerns include harm to birds that fly into the turbines, possible effects on fisheries, whether vibrations will affect animals that live on or in the seabed floor, influence these towers might have on ocean currents and radio/T.V. frequencies, and negative consequences for tourism. One opponent argues that "if Nantucket Sound becomes an industrial electrical generation area, then it's no longer a national treasure . . . or wilderness." He also predicts that the turbines will kill so many birds that they will litter the beaches with their bodies. Aesthetics figure in the debate as well. Some claim the 5 by 5 mile grid of carbon-steal turbines each a half mile apart will be ugly; others claim to enjoy looking at wind turbines and see them as "a study in power and grace and a visual testimony to us working with nature."

Zingerli, C., "Colliding Understandings of Biodiversity Conservation in Vietnam: Global Claims, National Interests, and Local Struggles," Society and Natural Resources 18(no. 8, September 2005): 733-747.

Zinn, H. C. and Pierce, C. L., "Values, Gender, and Concern About Potentially Dangerous Wildlife," Environment and Behavior 34(no.2, 2002): 239-56. (v.13,#2)

Zirker, Daniel, and Marvin Henberg, "Amazonia: Democracy, Ecology, and Brazilian Military Prerogatives in the 1990's," Armed Forces and Society 20 (no. 2, Winter 1994):259-281. "As a policy prerogative of the military, a particularly intrusive form of developmentalism is envisaged in Amazonia; civilian allies linked to slash-and-burn cattle ranching, large- and small-scale mining, and massive forestry and agricultural enterprises see themselves, along with the military, as the nationalistic heroes of a nation threatened by ecological imperialism. 'National security' is defined in this context as the colonization of the region: populating, but not democratizing, what they regard as a geopolitical buffer zone." "There is great irony, then, in the apparent attempt by the Brazilian military to seek its salvation by rallying against the ecological 'internationalization' of the Amazon. Military support for the environmentally (and ethically) destructive practices of the status quo promises only to ensure the short-term emergence of yet another ecological and political monoculture." Zirker is in political science, University of Idaho, Henberg (formerly at Idaho) is now vice-president, Linfield College, McMinnville, Oregon. (v6,#4)

Zito, A., L. Bruckner, A. Jordan and R. Wurzel, "Instrument Innovation in an Environmental Lead State: 'New' Environmental Policy Instruments in the Netherlands," Environmental Politics 12(no. 1, 2003): 157-178. (v. 13, # 3)

Zivin, Joshua, Hueth, Brent M., and Zilberman, David, "Managing a Multiple-Use Resource: The Case of Feral Pig Management in California Rangeland," Journal Of Environmental Economics and Management 39 (No. 2, Mar 01 2000): 189- . (v.11,#2)

Zovanyi, Gabor, Growth Management for a Sustainable Future: Ecological Sustainability as the New Growth Management Focus for the 21st Century. Westport, CT: Praeger Publishers, 1998. (v.13,#1)

Zucker, Arthur, "Ferré: Organicistic Connectedness--but Still Speciesistic," Ethics and the Environment 1(no.2, 1996):185-190. An environmental ethics open to the charge of speciesism would be a weak environmental ethics at best. Ferré criticizes the environmental ethics of Callicott and Rolston, presenting his version of an environmental ethics; one he refers to as organicistic. His version does indeed avoid the pitfalls of the environmental ethics of Callicott and Rolston. But, as I show, the charge of speciesism can be leveled against Ferré (and many others). I suggest that properly understood speciesism is so deeply rooted in our concepts that the only hope lies in what I term a thoughtful speciesism. Zucker teaches philosophy at Ohio University. (E&E)

Zuckerman, Ben, and David Jefferson, eds. Human Population and the Environmental Crisis. Boston, MA: Jones and Bartlett, 1996. Jean-Michael Cousteau: "Population: Challenge to Biosphere and Behavior"; Stephen H. Schneider, "The Global Warming Debate: Are There Public Policy Implications?"; John Harte, "On the Sustainability of Resource Use: Population as a Dynamic Factor"; Mildred E. Mathias, "Biodiversity: Where Have All the Species Gone?"; Jodi L. Jacobson, "Gender Bias and the Search for a Sustainable Future"; Anthony C. Beilenson, "Politics and Society: Political Challenges of Confronting Population Growth"; Richard P. Turco, "Global Environmental Engineering: Prospects and Pitfalls." Zuckerman is in astronomy, Jefferson in computer science at UCLA. (v7,#1)

Zuckerman, Den and David Jefferson, eds. Human Population and the Environmental Crisis. Boston: Jones and Bartlett, 1996. 136 pages. \$ 26.25. From a public symposium at UCLA in October 1993. The editors are on the faculty there. (v6,#4)

Zuidema, Pieter A., Sayer, Jeffrey A., Dijkman, Wim. "Forest Fragmentation and Biodiversity: The Case for Intermediate-sized Conservation Areas," Environmental Conservation 23(no.4 1996):290. (v8,#3)

Zuindeau, Bertrand, "Territorial Equity and Sustainable Development," Environmental Values 16(2007): 253-268. The sustainable development (SD) issue is mainly focused on questions of intergenerational equity. The study of intragenerational equity is less common. In this article, I am interested in a particular kind of intragenerational equity, territorial equity. As well as exposing the various territorial inequalities, the literature on SD comprehends territorial equity through possible territorial transfers of sustainability. The reality of these transfers and how to measure them are however, very directly dependent on general conceptions of SD. The text examines analyses that may be inferred from these different ideas. It attempts to reveal the respective limits and to propose a synthesis, which incorporates operational objectives. Zuindeau is in economics and social sciences, University of Lille, France.

Zundel, Alan F. Review of Who Owns America? Social Conflict over Property Rights. Edited by Harvey M. Jacobs. Environmental Ethics 22(2000):423-424.

Zunino, Franco, "The Wilderness Movement in Italy: A Wilderness Model for Europe," International Journal of Wilderness 1(no. 2, December):41-42. There is an Italian Wilderness Society and seven

wilderness areas are established, with various degrees of municipal and regional authority. Franco directs the Associazione Italiana per la Wilderness. (v7,#1)

Zurlo, J., Rudacille, D., and Goldberg, A. M., Animals and alternatives testing: History, science, and ethics. New York: Mary Ann Liebert Inc., Publishers, 1994.

Zwart, H.A.E. "The Birth of a Research Animal: Ibsen's The Wild Duck and the Origin of a New Animal Science." Environmental Values 9(2000):91-108.

Abstract: What role does the wild duck play in Ibsen's famous drama? I argue that, besides mirroring the fate of the human cast members, the duck is acting as animal subject in a quasi-experiment, conducted in a private setting. Analysed from this perspective, the play allows us to discern the epistemological and ethical dimensions of the new scientific animal practice (systematic observation of animal behaviour under artificial conditions) emerging precisely at that time. Ibsen's play stages the clash between a scientific and a romantic understanding of animals that still constitutes the backdrop of most contemporary debates over animals in research. Whereas the scientific understanding reduces the animal's behaviour, as well as its environment, to discrete and modifiable elements, the romantic view regards animals as being at one with (or violently disconnected from) their natural surroundings. Keywords: History of animal research, Ibsen (The Wild Duck), animal ethics. H.A.E. Zwart is in the Center for Ethics, University of Nijmegen, PO Box 9103, 6500 HD Nijmegen, The Netherlands. (EV)

Zwart, Hub, "What is an Animal? A Philosophical Reflection on the Possibility of a Moral Relationship with Animals," Environmental Values 6(1997):377-392. ABSTRACT: Contemporary ethical discourse on animals is influenced partly by a scientific and partly by an anthropomorphic understanding of them. Apparently, we have deprived ourselves of the possibility of a more profound acquaintance with them. In this contribution it is claimed that all ethical theories or statements regarding the moral significance of animals are grounded in an ontological assessment of the animals way of being. In the course of history, several answers have been put forward to the question of what animals really and basically are. Three of them (namely the animal as a machine, an organism and a being that dwells in an apparently restricted world) are discussed. It is argued that the latter (Heideggerian) answer contains a valuable starting point for an ethical reflection on recent changes in the moral relationship between humans and animals. Center for Ethics, Catholic University of Nijmegen, 6500 HD Nijmegen, The Netherlands. (EV)

Zwart, Hub, "Environmental Pollution and Professional Responsibility: Ibsen's A Public Enemy as a Seminar on Science Communication and Ethics," Environmental Values 13(2004):349-372. Dr. Stockmann, the principal character in Henrik Ibsen's A Public Enemy, is a classic example of a whistle-blower who, upon detecting and disclosing a serious case of environmental pollution, quickly finds himself transformed from a public benefactor into a political outcast by those in power. If we submit the play to a 'second reading', however, it becomes clear that the ethical intricacies of whistle-blowing are interwoven with epistemological issues. Basically, the play is about the complex task of communicating scientific (notably microbiological) data to lay audiences. This becomes even more apparent when we realise that Stockmann was a contemporary of real 'microbe hunters' such as Pasteur and Koch. The play's basic message is that epoch-making scientists (such as Pasteur and Koch) not only produced convincing and reliable data from a scientific point of view, but also acquired the skills and insights needed to enter into a dialogue with their cultural and societal environment. Zwart is in philosophy and science studies at the University of Nijmegen, The Netherlands. (EV)

Zwart, I., "A Greener Alternative? Deliberative Democracy Meets Local Government," Environmental Politics 12(no. 2, 2003): 23-48.

Zwart, Ivan, "Local Deliberation and the Favouring of Nature," Environmental Values 16(2007): 485-511. The central contention of theories of deliberative democracy is that deliberative arrangements

should encourage (but by no means guarantee) the support of interests that are general to all. Democratic theorists have also suggested that the natural environment will be a likely beneficiary following public deliberation, given the inherent rationality in supporting interests that will lead to the long-term survival of the planet. This paper addresses the question of general environmental interests through two case studies in Australian local government and argues there are at least three factors that affect the ability of notionally deliberative arrangements to deliver outcomes that appear favourable to the natural environment. Zwart is in Community Engagement and Education Land and Fire Management, Department of Sustainability and Environment, East Melbourne, Victoria, Australia.

Zweers Wim and Jan J. Boersema, eds., Ecology, Technology and Culture. Cambridge, UK: The White Horse Press, 1994. 300 pages. £ 35.00 hardbound, £ 14.94 paper. A collection of twenty articles from the Netherlands, with distinct differences from the Anglo-American tradition and with authors who propose some novel ways of tackling the root causes of environmental degradation. Wim Zweers, "In Search of an Ecological Culture: Environmental Philosophy in the 1990's"; Jan J. Boersema, "First the Jew but also the Greek: In Search of the Roots of the Environmental Problem in Western Civilization"; Paul van Dijk, "Theological-Anthropological Reflections on the Environmental Issue"; Wim Zweers, "Radicalism or Historical Consciousness: On Breaks and Continuity in the Discussion about Basic Attitudes"; Henk Tennekes, "The Limits of Science"; Chung Lin Kwa, "Models and Modernism: Between Anxiety and Hubris"; Pieter J. Schroevers, "Science: A Modest Hope"; Petran Kockelkoren, "The House in the Cat's Claws: A Framework for a Hermeneutics of Nature"; Maarten Coolen, "Toward a Hermeneutics of Nature: On the Necessity of Enduring Distance"; Susanne Lijmbach, "Potter's Bull and Castrated Pigs: Considering the Impossibility of a Hermeneutic Natural Science"; Wouter Achterberg, "Can Liberal Democracy Survive the Environmental Crisis? Sustainability, Liberal Neutrality and Overlapping Consensus"; Frans Jacobs, "Can Liberal Democracy Help us to Survive the Environmental Crisis?"; Bert Musschenga, "Liberal Neutrality and the Justification of Environmental Conservation"; Hans Opschoor, "Market Forces as Causes of Environmental Degradation"; Hans Achterhuis, "The Lie of Sustainability"; Jan van der Straaten, "An Economic Theory of Natural Resources"; Koo van der Wal, "Technology and the Ecological Crisis"; Pieter Tijmes, "The Technological Universe"; Medard Hilhorst, "The Ethical Assessment of New Technologies: Some Methodological Considerations"; Etienne Vermeersch, "The Future of Environmental Philosophy." Zweers is in philosophy at Amsterdam University, Boersema in environmental studies at the State University of Gronigen. (v5,#3)

Zweers, Wim, Participating with Nature: Outline for an Ecologization of our World View. Utrecht, The Netherlands: International Books, 2000. English edition of a work first published in Dutch in 1995. See that entry with English abstract for more detail. (International Books is the English imprint of the Dutch publisher Jan van Arkel. U.S. Distributor: Paul and Company, Publishers Consortium, Inc., 2 Christie Heights St., Leonia, NJ 07605. U.S. price \$ 29.95. UK distributor: Jon Carpenter Publishing, c/o A. Weitzel, 2 Home Farm Cottages, Sandy Lane, St. Paul's Cray, Kent BR5 3HZ.)

Analysis of six basic attitudes to nature: the despot, the enlightened ruler, the steward, the partner, the participant, mystic union. A note on the concept of nature in Dutch nature conservation. Intrinsic value, ecologism, participating with nature. Ecological metaphysics, epistemology in ecological perspective. Ecological aesthetics. Ecological spirituality, including Christianity and ecology. Towards a new connection: ecologism as postmodernism. Zweers was long at the Philosophy Department, Amsterdam University.

Zweers, Wim, Participating in Nature: Outline for an Ecologization of Our World-View [in Dutch]. Utrecht: Uitgeverij Jan van Arkel, 1995. 528 pp. ISBN 90-6224-342-8. Part I: Basic Attitudes Towards Nature (pp. 7-79): 1. The Relevance of Basic Attitudes (Basic Attitudes and Paradigms; Basic Attitudes and Social Structure), 2. A Closer Look at Six Basic Attitudes (Man as Despot; as Enlightened Ruler; as Steward; as Partner of Nature; as Participant in Nature; 'Unio Mystica'), 3. Evaluation and Definition of Standpoints (Anthropocentrism; Reformism; Radicalism; The Role of Government in the Discussion on

Basic Attitudes: Towards a Translation in Policy Terms? (with a digression on the concept of nature in Dutch nature conservation). Part II: Participation and Intrinsic Value (pp. 79-177): 1. The Environmental Crisis and the Opposition Between Man and Nature (From 'Nature' to 'Environment'; The Opposition Between Nature and Culture), 2. 'Ecologism' as the Essential Alternative (Ecological Ethics; Values of Nature: From Instrumental to Intrinsic), 3. The Intrinsic Value of Nature (Basis and Scope of the Concept; Recognition Versus Attribution; Non-differentiability; The Importance of 'Human-ness'), 4. Participating in Nature (Biological; Social-cultural (with a digression on Participating Technology); Psychological). Part III: The Ecological View of Reality (pp. 177-299): 1. 'Deep Ecology' as a Starting Point, 2. Ecological Metaphysics (Totality: Solidarity or Unity?; Dynamics; Meaning and 'Sense'), 3. Epistemology from an Ecological Perspective (Nondualism; Personal Experience; Corporality and Emotionality (with a personal digression on the integration of experiences in piano playing), 4. Experience of Nature and the Concept of Culture (Karl Mannheim's View on Culture; Hermeneutics of Nature), 5. Historical Framework. Appendix: On Ecologism and Feminism (Women 'Closer to Nature?'; Oppression of Women and Exploitation of Nature; The Image of Man (sc.: masc.) from the Perspective of Oppression. Part IV: Varieties of Ecologism (pp. 299-457): 1. The Varieties and the Connections Between Them; 2. The Scientific Variety (Quantum Physics: David Bohm; Biology: Rupert Sheldrake), 3. The Aesthetic Variety (The Aesthetic Attitude: Sensuousness and Contemplativity; Nature as an Aesthetic Object: Art as a Sign of Nature, Nature as a Sign of Art, Towards a Contextual Theory of Natural Beauty), 4. The Spiritual Variety (Introduction: On Spiritual Traditions (with a personal digression on the experience of the starry sky as an amateur astronomer); Ecological Spirituality (Motives, Conceptual Research, Solidarity versus Identification, Self-realization through Solidarity, Solidarity with 'Gaia' (with a personal digression on the experience of mountain climbing and 'trekking'), Christianity and Ecological Spirituality). Part V: Conclusion--Towards a New Alliance: Ecologism as Postmodernism (pp. 457-92): 1. Looking Back, 2. On the Integration of Reflection and Experience, 3. On the Two Cultures, 4. Constructive Postmodernism. Literature, Name Index, Subject Index (pp. 492-528).

Wim Zweers is one of the foremost environmental philosophers in the Netherlands, and has published and edited numerous articles and books in the field. With Wouter Achterberg, during the last decade Zweers has developed this discipline in the Low Countries until it has reached its actual status of being fully recognized by both the academic community and policy-makers alike. This book is his (temporary?) definitive statement on this subject, recapitulating, systematizing, and expanding all he has written before. His position is mostly 'radical' (but not necessarily 'radical ecocentrist') since he stresses the need for a fundamental cultural transformation. In many parts congenial with deep ecological views, Zweers nevertheless has some serious reservations about some aspects of deep ecology. Although influenced by Anglo-American writers like Rolston and Callicott, he maintains a distinctly European-continental approach. (v6,#4)

Zweers, Wim, Participeren aan de natuur: Ontwerp voor een ecologisering van het wereldbeeld [in Dutch: Participating in nature; a design for an ecologized worldview], Utrecht: Jan van Arkel 1995. An English translation is forthcoming. A plea for a participatory philosophy of nature. Zweers has been one of the leading forces behind the rise of environmental philosophy in the Netherlands. (v.11,#1)

Zweierta i my (Animals and Us) is published four times a year in Poland. The current issue (number 1[6]) contains an interview with the chair of the Hunting Management Department of Poznan Agricultural Academy, concerned with a new Polish game law, which moves toward privatizing of hunting and the implications of this for animal welfare. Many wish to open Poland up to more tourist hunting with hunters from other nations in Europe. There is also discussion of a new Polish Animal Welfare Act, currently being considered in the Polish Parliament. There is an article by Jan Wawrzyniak, "Ciemna strona utylizyzmu (The Dark Side of Utilitarianism)." Utilitarianism is a destructive philosophy treating the environment instrumentally as an object to be used for human whims. (v4,#4)

Zwierzeta i my [Animals and Us], a Polish journal devoted to animal welfare issues, published its first

issue, Number 1, in September 1991. The editor and founder is Alina Kasproicz, and a supporting group is the Polish Society for the Prevention of Cruelty to Animals. The editorial statement says that the purpose of the journal is to change present social consciousness and attitudes toward nonhumans and to promote a new way of thinking about the nonhuman environment, a new approach called an ecological conscience. Opening articles include one by a Catholic author and one on law and animals. Jan Wawrzyniak has a short article, "Podstawowe informacje dla obrońców nieludzkich istot żywych" [Basic Information for Defenders of Nonhuman Living Beings], directing Polish readers to many sources available in the West. There will be six issues a year, one in English. Editor's address: ul. Dabrowskiego 25 m 3, 60-840 Poznan. Phone 462-85. (v2,#4)

Zwierzeta i my (Animals and Us) continues to be published as the Polish journal for animal welfare issues. Recent issues are No. 3, with articles on animal abuse issues within Poland, an article on vegetarianism, on Albert Schweitzer's reverence for life philosophy, on zoos and hunting in Poland, and No. 4, with articles on the abuse of geese and ducks to produce fat livers for export to Western Europe, with some translations from Konrad Lorenz's works on geese into Polish, and an article about wolf-reintroduction in Poland and its protection as an endangered species. (Thanks to Jan Wawrzyniak.) (v3,#4)

Zwierzeta i my (Animals and Us), a Polish journal devoted to animal welfare, has now published issue no. 2. Articles on protests against "bloodless" bullfights, on cross country racing of horses over obstacle courses, the first installment of a concise history of animal martyrdom, on pitbulls in Poland, on the ethic of reverence for life in the light of ecology (with particular reference to Albert Schweitzer), on cruelty in business, on slaughtering practices, and on hunting. (v3,#2)

Zwinger, Ann, and Zwinger, Susan, eds., Women in Wilderness. San Antonio, TX: Tehabi Books/Harcourt Brace, 1995. 99 pp. \$ 19.95. Vignettes from adventurous women who crave wild places. Susan Zwinger writes: I go into wilderness to bear the burden of too much beauty. ... There is nothing like the exquisiteness and strength of the natural world. ... it demands both attunement and atonement." Ann Zwinger is a Colorado naturalist, artist, and writer. Susan Zwinger is her daughter, an activist, poet, and environmental writer who lives in Washington State, author of Stalking the Ice Dragon, which chronicled her solitary Alaskan odyssey. (v7,#4)

Zygon: Journal of Religion and Science, "Humanity's Encounter with Nature," is a special issue from December 1989. The issue contains papers from a section on this theme during the conference, "The World Community in Post-Industrial Society, August 21-September 8, 1988 in conjunction with the Seoul Olympiad. Many of the papers are international in orientation. (v1,#1)