METADATA: Digital Distribution Maps of the Birds of the Western Hemisphere

Identification Information

1 Abstract: This data set contains distribution information for all birds occurring in the Western Hemisphere. The goal of this project is to make this distributional information freely available to the public to inform conservation and other land-use decisions. A MOU signed by NatureServe, The Nature Conservancy/Migratory Bird Program, Conservation International/CABS, World Wildlife Fund-US, and Environment Canada governs the development and sharing of these data.

The ArcView shape files contain the known terrestrial range of each species. Ranges may be depicted as polygons where a species is widespread, as points where there are isolated records, or both. Not all vagrant occurrences are depicted, especially those in the US and Canada. The files are arranged in folders by family. The file naming convention, designed to allow manipulation of the files in Arc/Info, is as follows.

POLYGON files are named: gggg_ssss_pl.xxx where gggg are the first 4 letters of the genus name, ssss are the first 4 letters of the specific name, and xxx are the extensions (e.g., shp, dbf) that ArcView attaches to shapefiles.

POINT files are named: gggg_ssss_pt.xxx.

If a genus or species name has fewer than 4 letters, the entire name is used (e.g., the point file for *Ara severa* would be ara_seve_pt.xxx).

If >1 species in the same family has the same first four letters of both the genus and species names, then the numbers 1, 2, etc. are added after the "ssss". Where possible, the "1" is assigned to the species that comes earliest in taxonomic order). For example, point files for the furnariids Asthenes humicola would be named asth_humi1_pt.xxx and Asthenes humilis would be named asth_humi2_pt.xxx.

DBF files accompanying each polygon contain taxonomic information, distribution status, sources and other details about the maps (see Data Attributes section below).

- **2 Use Constraints:** These data may not be used for commercial purposes.
- **3 Dataset Credit:** Users MUST Credit all partners of the MOU in any product produced in any media that uses information contained in this database. Such credit should read:

"Data provided by NatureServe in collaboration with Robert Ridgely, James Zook, The Nature Conservancy — Migratory Bird Program, Conservation International — Center for Applied Biodiversity Science, World Wildlife Fund — US, and Environment Canada — WILDSPACE."

Point Of Contact

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Citation

12 Citation:

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Spatial Reference Information

13 Projection: Unprojected (ESRI Geographic)

14 Projection Parameters: Units: decimal degrees

15 Datum: North American 1983

16 Base Map: Most maps are based on the Digital Chart of the World as a basemap (1:1,000,000 scale), developed by the Defense Mapping Agency of the United States of America. Several edits where performed on this coverage by Environment Canada's Meterological Service of Canada - Ontario Region - Geomatics Unit to correct errors and omissions. For more details see http://map.on.ec.gc.ca/wildspace/hemi-ims.html and click on the link "More About Base Maps." Some Middle American ranges and most South American ranges use a slightly different basemap, called "Lacpol", provided by the GIS lab of the Latin American Science Department of The Nature Conservancy in 2000. Lacpol was produced at a coarser scale than the DCW. The coastlines of the two basemaps rarely vary by more than 1.5 km, although the boundaries of estuaries and islands may vary by as much as 4 km. Both base maps are provided with the CD.

Data Attributes

17 Number of Items in Attribute Table: 13

18 Names of Attributes:

- * Shape Point or Polygon
- * English Name
- * Scientific Name [genus + species (+subspecies)]
- * Authority [name + year; in parentheses if genus has changed]
- * Family
- * Presence Is/was it there (Codes are listed below)
- * Origin How/why is it there (Codes are listed below)
- * Compiler [Name + date]
- * Scale of source map
- * Taxonomic comments
- * Distribution comments
- * References [authors name and publication date]
- * Reviewers [names + dates]

19 Codes:

Presence

- 1 Extant
- 2 Possibly present
- 3 Probably extinct/Historically present but no recent records
- 4 Extinct
- 5 Extirpated purposely (applies to introduced species only)
- 6 Occurs on indicated island chain, but not necessarily on every island in the chain
- 7 Subfossil/fossil

Origin

- 1 Native (year round)
- 2 Native (breeding seasons only)
- 3 Native (nonbreeding seasons only)
- 4 Native (as a passage migrant or wanderer)
- 5 Native (seasonal permanence uncertain)
- 6 Introduced (Alien) [anthropogenically since 1600]
- 7 Either introduced or native
- 8 Reintroduced
- 9 Either reintroduced or introduced
- 10 Vagrant (an unusual record where a species does not regularly occur or migrate; only applicable to points)
- 11 Unknown
- **20 Data Compilation Notes:** Most maps were digitized by eye from the source maps occurring in field guides or species accounts (such as the Birds of North America series). These maps were then reviewed and appropriate corrections made to the database. A list of the references cited in the database for all species follows.
- American Ornithologists' Union. 1998. Check-list of North American birds. 7th edition. American Ornithologists' Union, Washington, DC.
- American Ornithologists' Union. 2000. Forty-second supplement to the American Ornithodlogists' Union Check-List of North American Birds. Auk 117:847-858.
- American Ornithologists' Union. 2002. Forty-third supplement to the American Ornithologists' Union Check-List of North American birds. Auk 119:897-906.
- Anderson, D. L. 1998. Avian diversity in the Rio Platano Biosphere Reserve, Honduras: The influence of indiginous agricultural practices. Unpubl. Master's Thesis, Boise State University.
- Araya, B. and S. Chester. 1993. The birds of Chile. LATOUR, Santiago, Chile.

Atlas of the Breeding Birds of Ontario

- C. J. Ralph. Redwood Science Laboratory. California.
- Canadian Forest Service, Landscape Analysis and Applications Section
- Castro, I. and A. Phillips. 1996. A guide to the birds of the Galapagos Islands. Princeton University Press, Princeton, New Jersey, USA.
- Chardine, J. W., R. D. Morris, and R. L. Norton. 2000. Status and conservation needs of Brown Noddies and Black Noddies in the West Indies. Pp. 118-125 in E. A. Schreiber and D. S. Lee (editors) Status and Conservation of West Indian Seabirds. Society of Caribbean Ornithology Special Publication 1, Ruston, Louisiana, USA.
- Chardine, J. W., R. D. Morris, J. F. Parnell, and J. Pierce. 2000. Status and conservation priorities for Laughing Gull, Gull-billed Terns, Royal Terns and Bridled Terns in the West Indies. Pp. 65-79 in E. A. Schreiber and D. S. Lee (editors) Status and Conservation of West Indian Seabirds. Society of Caribbean Ornithology Special Publication 1, Ruston, Louisiana. USA.
- DeGraph, R.M. and Rappole, J.H. 1995. Neotropical Migratory Birds. Comstock Publishing Associates, Ithaca, NY.
- DeSchauensee, R.M. 1970. A Guide to the Birds of South America. Academy of Natural Sciences of Philadelphia.

- Fillman, D. Wildlife Technician at Canadian Wildlife Service, Environment Canada. Personal communiciation, 1998.
- Garrigues, R. 2002. Personal communication.
- Gauthier, J. and Aubry, Y. (eds) 1996. The Breeding Birds of Quebec.
- Geomatics Unit, Client Services Branch, Meteorological Service of Canada Ontario Region
- Godfrey, E.W. 1986. Birds of Canada (Revised Edition). National Museums of Canada, Ottawa.
- Hancock, J. and J. Kushlan. 1984. The Herons Handbook. Harper & Row, New York.
- Hilty, S. J., J. A. Gwynne, and G. Tudor. 2003. The birds of Venezuela, 2nd edition. Princeton University Press, Princeton, New Jersey, USA.
- Howell, S.N.G., and S. Webb. 1995. A guide to the birds of Mexico and northern Central America. Oxford University Press, Oxford, UK.
- Isler, M. L. and P. R. Isler. 1999. The tanagers. Smithsonian Institution Press, Washington, DC. Johnsgard, P. A. 1993. Cormorants, darters, and pelicans of the world. Smithsonian Institution Press, Washington, DC.
- Lindsey, K., B. Horwith, and E. A. Schreiber. 2000. Status of the Magnificent Frigatebird in the West Indies. Pp. 58-64 in E. A. Schreiber and D. S. Lee (editors) Status and Conservation of West Indian Seabirds. Society of Caribbean Ornithology Special Publication 1, Ruston, Louisiana, USA.
- Morrison, R.I.G. and Ross, R.K. 1989. The Atlas of Nearctic Shorebirds on the coast of South America. Canadian Wildlife Service Special Publication, Ministry of Environment, Canada.
- Ortiz-Pulido, R. and R. Díaz. 2001. Distribución de colibríes en la zona baja del centro de Veracruz, México. Ornitología Neotropical 12:297-317.
- Pacheco, J. F., P. S. M. Fonseca & R. Parrini (2003) Coletânea cronológica de registros recentes de Harpia harpyja (L.) para os estados do Rio de Janeiro e Espírito Santo. Atualidades Orn., Ivaiporã 111:7.
- Patuxent Wildlife Research Center. 2002. Waterbird monitoring database. Patuxent Wildlife Research Center, Laurel, Maryland. (http://www.pwrc.usgs.gov/cwb/)
- Peterson, R.T. 1980. A Field Guide to the Birds of Eastern and Central North America. Houghton Mifflin Company, Boston.
- Peterson, R.T. 1990. A Field Guide to Western Birds. Houghton Mifflin Company, Boston.
- Poole, A. and F. Gill. 1992--. The Birds of North America Series. Academy of Natural Sciences of Philadelphia and the American Ornithologists Union, Washington, D.C.
- Poole, A. F. and F. B. Gill. 1992--. The birds of North America. The American Ornithologists' Union, Washington, D.C. and The Academy of Natural Sciences, Philadelphia, PA.
- Raffaele, H., J. Wiley, O. Garrido, A. Keith, and J. Raffaele. 1998. A guide to the birds of the West Indies. Princeton, NJ: Princeton Univ. Press.
- Rappole, J.H., Morton, E.S., Lovejoy, T.E. and Ruos, J.L. 1983. Nearctic Avian Migrants in the Neotropics. U.S. Department of the Interior, Fish and Wildlife Service and World Wildlife Fund, Washington D.C.
- Ridgely, R. S. 2001, 2002. Unpublished data.
- Ridgely, R. S. and P. J. Greenfield. 2001. The birds of Ecuador: Status, distribution, and taxonomy. Cornell University Press, Ithaca, NY, USA.
- Ridgely, R.S. & J. A. Gwynne, Jr. 1989. A Guide to the Birds of Panama. 2nd edition. Princeton University Press, Princeton, USA.
- Robbins, M. B. and F. G. Stiles. 1999. A new species of Pygmy-Owl (Strigidae:Glaucidium) from the Pacific slope of the northern Andes. The Auk 116: 305-315.
- Saliva, J. E. 2000. Conservation priorities for Roseate Terns in the West Indies. Pages 87-95 in E. A. Schreiber and D. S. Lee (editors) Status and Conservation of West Indian Seabirds. Society of Caribbean Ornithology Special Publication 1, Ruston, Louisiana, USA.
- Saliva, J. E. 2000. Conservation priorities for Sooty Terns in the West Indies. Pp. 103-108 in E. A. Schreiber and D. S. Lee (editors) Status and Conservation of West Indian Seabirds. Society of Caribbean Ornithology Special Publication 1, Ruston, Louisiana, USA.
- Schreiber, E. A. 2000. Status of Red-footed, Brown and Masked Boobies in the West Indies.

 Pages 46-64 in E. A. Schreiber and D. S. Lee (editors) Status and Conservation of West

- Indian Seabirds. Society of Caribbean Ornithology Special Publication 1, Ruston, Louisiana, USA.
- Scott, S. L. 1983. Field Guide to the Birds of North America. National Geographic Society, Washington, D.C.
- Sibley, D. A. 2000. The Sibley guide to birds. Alfred A. Knopf, New York.
- Stiles, F.G. and A. F. Skutch. 1989. A guide to the birds of Costa Rica. Cornell University Press, Ithaca, USA.
- U.S. Fish and Wildlife Service. 1995. Brown Pelican. Endangered and threatened species of the southeastern United States (The Red Book), FWS Region 4. (http://endangered.fws.gov/i/b/sab2s.html)
- Zook, J. L. 2002. Distribution maps of the birds of Nicaragua, Costa Rica, and Panama. Unpublished.

Metadata Reference Information

21 Metadata Date: 15 May 2002

22 Creation Date: 17 March 2003

23 Most recent Update: 17 March 2003

24 Update Notes: First complete compilation of maps for all avian species of the Western Hemisphere. Includes complete list of references.