

Australian Coral Reef Society Inc.

A society promoting scientific study of Australian Coral Reefs

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www.australiancoralreefsociety.org

16-June-06 The Hon Virginia Chadwick Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville, QLD 4810.

Dear Virginia

Article by Walter Starck - IPABackgrounder May 2005 (Vol 17/1)

The Australian Coral Reef Society (ACRS) is concerned about the content of a recent article by Walter Starck in the IPABackgrounder magazine. Starck has given a rather cavalier view of how the Great Barrier Reef should be managed and used. In short, Starck appears not to be cognisant of a world-wide decline in coral reefs through processes such as overfishing, runoff of nutrients from the land, coral bleaching, global climate change, ocean acidification, pollution and Crown-of Thorns Starfish. Coral Reefs are under threat around the world and regular 'Status of Coral Reefs of the World reports, by Clive Wilkinson, have indicated a continuing loss of coral reef environments each year. Australia does have relatively pristine reefs and the largest continuous reef in the world. However, there are signs of anthropogenic impact on our reefs and we cannot be complacent - especially given what has happened in other parts of the world.

Many Australians believe that we should be adopting a risk-averse approach to managing the Great Barrier Reef, Starck is portrays an opposite view. The implication from his article is that we should dismiss the experiences of other countries and ignore signs of deleterious change on the GBR. By extrapolation he is stating we should wait for something bad to happen before we respond. This approach is exactly how other countries have lost large areas of reef and had great losses in biodiversity and productivity of reef-based fisheries.

The Australian Coral Reef Society is the oldest coral reef society in the world and was founded as the Great Barrier Reef Committee in 1922. The Society has over 250 Australian and overseas members and represents the coral reef research community in Australia. The Society's members are primarily employed through government research and management agencies, as well as private organisations. We hold annual scientific meetings and support postgraduate research on Australia's coral reefs. A central tenant of the Society is to support the sustainable management of coral reefs and so the comments we provide here are drawn from this perspective.

There is broad scientific consensus that coral reefs are heavily affected by the activities of man and there are significant global influences that can make reefs more vulnerable such as global warming (e.g. *The Townsville Declaration on Coral Reef Research &Management*, 2002). It is highly likely that coral bleaching has been exacerbated by global warming, but regardless of how you look at this managers of reefs have to deal with direct effects (e.g. fishing, run off from degraded rivers), that may be controllable and global effects that make management more challenging.

The Experts have direct experience of reefs: Knowledge of what is happening on the GBR and other reefs is through careful observation over thousands of dives (by members of ACRS alone) and from boats, aerial surveys and satellites. Certainly a great deal of research is done at island field stations, but there are also many studies that encompass multiple areas from the northern to southern GBR. Scientists have demonstrated change including: fishing on reefs can remove over 75% of large sought-after species; coral bleaching has increased on reefs of the GBR and inshore reefs are most vulnerable; the loss of fishes can cause great changes in reefs from coral dominated to algal dominated environments.



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Is the Great Barrier Reef Marine Park Authority out of touch? GBRMPA is taking a risk-averse approach to management that is in-tune with the wishes of most Australians – as evidenced by over 20,000 submissions to the recent rezoning scheme, the majority of which were supportive of this approach to management. The Representative Areas Program (RAP) was enforced in 2004 and is now recognized as "world best practice". As you know, support within coastal electorates for more rather than less protection of the GBR was more that 80% in most cases. Thirty-three percent of the Great Barrier Reef marine Park (GBRMP) was made 'no take zones' in 2004, for the protection of coral reef biodiversity and this is a benchmark for zoning elsewhere in Australia and other parts of the world. This was <u>not</u> the result of 'office-focused activities. GBRMPA had broad consultation with multiple stakeholders of the GBR over a period of about 6 years (combined the individuals consulted would have thousands of days experience on the GBR). Without a doubt, RAP is the most carefully thought out and implemented rezoning in the marine environment anywhere in the world and has strong scientific basis to it. RAP will reassure Australians that there is a very low chance that the GBR will follow the degradation of other coral reefs of the world.

Is uncertainty about Global Warming? No - There is almost total consensus among experts that the earth's climate is changing as a result of the build-up of greenhouse gases. The IPCC (involving over 3 thousand of the world's experts) has come out with clear conclusions as to the reality of this phenomenon. One does not have to look further than the collective academy of scientists worldwide to see the string statements on this worrying change to the earth's atmosphere. To deny this, is akin to believing the earth is flat. Coral reefs appear to be particularly sensitive to the recent changes in ocean temperature and acidity. They are truly akin to the canaries that miners used to carry down mines as they are already showing rapid responses to climate change at the global scale. Scientists, managers and policy makers will use reefs to examine the effectiveness of international attempts to understand and respond to the impact of global warming. In addition, managers of the GBR need to manage reefs in the face of global change and take advice on how to maintain reef-resilience. This is often a case if we don't know everything about resilience then leave reefs alone through sensible zoning.

We cannot afford to be cavalier in the way we manage the GBR, or reefs in general. Starck suggests we should take a riskier approach, ACRS disagrees with this view. The Great Barrier Reef supports the social and economic development of north-eastern Australia (about \$4.4 B pa) and therefore needs to be sustained. To achieve this goal managers must take a risk-averse approach otherwise our reefs will suffer as for other parts of the world.

Sincerely,