

marine fish could possibly be threatened with extinction (or rather, that there is no reason to believe that they are any different from other plants and animals in this respect). Misperceptions linger, however. One Party at CoP12, which shall remain nameless, actually suggested in this global forum that it was obvious that 'primitive' groups such as the sharks could never become extinct because they had already survived for such a long time on Earth! No comment. The second reason that commercial fish have not previously been seriously considered for CITES listings is because for many, there are regional fishery management authorities or the Food and Agriculture Organization (FAO) of the United Nations that can, or at least could, deal with threats to the species. In such cases, it is argued, CITES is simply not needed. However, FAO does not actually manage fish and many regions have no, or at least no effective, regional fishery management authority. The third reason given is that there is insufficient information on most fish to properly assess their conservation status. While it is certainly true that

aquatic marine species are difficult to evaluate in terms of their population status, fishery management is often based on similarly inadequate data as that used to determine conservation status and may represent the best available scientific data available. What is obvious, is that if there is clear indication of serious declines in landings or sizes, there is likely to be reason for concern and need for management or conservation action.

The Santiago meeting is considered to have been one of the most politicised of all CoPs, but it also made ground-breaking progress with several listings, including those of commercial fish. One thing is clear: for species that are heavily traded, vulnerable and not effectively managed, CITES is a critically important management and conservation tool. For many species, including our live-traded humphead wrasse, it may well be the only one. Indeed, an Appendix II listing for this species, which would still allow trade, albeit regulated, may be the only means of ensuring its sustainable use long into the future.



## Protecting and managing reef fish spawning aggregations in the Pacific

Andrew Smith<sup>1</sup>

Destructive fishing practices that target key species and degrade fragile coral habitats are among the major threats to the viability of coral reef ecosystems. Many reef fish form aggregations at predictable places and times, frequently for the purpose of spawning. The nature of spawning aggregations makes them extremely vulnerable to elimination by overfishing. It can take as few as two to three years of intensive fishing on spawning aggregations to essentially eliminate breeding populations of fish. There is presently little awareness of — or capacity to address — this threat to the reef fish of the Pacific. The spawning aggregation phenomenon is rarely reflected in fishery management plans or the design of marine protected areas (MPAs).

The Nature Conservancy (TNC) has received grants from the US government's East Asia and Pacific Environmental Initiative, the David and Lucile Packard Foundation, and the Oak Foundation to improve the conservation of reef fish aggregation sites in a number of Pacific Island countries.

Over the next two years, the project will work to improve resource management and spawning aggregation site protection, increase awareness of these resources' vulnerability to overexploitation, and enhance the capacity to manage fish spawning aggregations and MPAs that incorporate these sites. There are three objectives:

1. to develop and facilitate the application of cost-effective management controls on the exploitation of aggregating reef fish resources,
2. to strengthen the capacity to assess, monitor, and manage reef fish aggregations, and
3. to raise the awareness and appreciation among stakeholders of the vulnerability of aggregating reef fish populations and associated ecosystems, the nature and significance of spawning aggregations, and options for improving management.

The project will build on partnerships and activities carried out during the past three years under the Live Reef Fish Trade initiative and the

1. The Nature Conservancy. E-mail: [andrew\\_smith@tnc.org](mailto:andrew_smith@tnc.org)

Protecting Coral Reefs from Destructive Fishing Practices project. Site- and country-level activities will focus on Pacific countries where TNC is presently working: Papua New Guinea, Solomon Islands, Palau, and the Federated States of Micronesia. The project will involve a number of locally based groups — both government and non-governmental — in those countries. The results and lessons learned will be adapted and disseminated for use throughout the Pacific region. The project will:

- develop and facilitate the application of cost-effective and practical monitoring and assessment protocols and an associated training manual for reef fish aggregations for use by Pacific Island fisheries officers and conservation practitioners;
- develop and have adopted relevant policies and guidelines for application at the local through regional levels for the assessment and management of spawning aggregation sites, also taking into account the larger issue of aggregating reef fish management away from these sites;
- develop and implement site-specific management strategies that incorporate customary management practices;
- develop appropriate design and management criteria for marine protected areas (including Locally Managed Marine Areas) for protecting both spawning aggregations and aggregating reef fish;
- increase the skills of our partners in reef fish aggregation site monitoring and assessment;
- develop regional and national “teams” composed of fisheries agency staff, locally based non-governmental organisations, and universities to maximise the resources available to identify, assess, and monitor reef fish spawning aggregations; and
- raise the awareness and appreciation among stakeholders of the limited productivity and vulnerability of aggregating reef fish populations and associated ecosystems, the nature and significance of spawning aggregations, and options for improving management.

For further information contact:

Dr Andrew Smith  
The Nature Conservancy, PO Box 1738, Koror  
PW 96940, Republic of Palau.  
Tel: +680 488.2017, fax: +680 488.4550  
email: [andrew\\_smith@tnc.org](mailto:andrew_smith@tnc.org)



## News from the Marine Aquarium Council (MAC)

**First MAC certified collection area, collectors association, exporters, importer and retailers**

Source: *MAC News*, 3rd Quarter 2002

The world's first to achieve MAC certification were confirmed by the London-based MAC accredited certification company IMS International in August. The Batasan Tropical Fish Collectors Association in Bohol Province, Philippines, and their collection area have been certified, as have the Manila-based exporters Aquarium Habitat, Aquascapes and HD Marineworld. IMS assessed the collection area and the organisations for their compliance with the appropriate MAC Standard in late June 2002. Collection areas are assessed to the Ecosystem and Fishery Management Standard; collectors to the Collection, Fishing and Holding Standard; and exporters to the Handling, Husbandry and Transport Standard.

This world first will be formalised in early October 2002 with the presentation of the MAC Certificate of Registration to the Batasan collectors. The Philippines Government support for MAC Certification and its commitment to backstop this with monitoring and enforcement will be evidenced by the participation in the ceremony by officials from the barangay (local community), municipality, province, and, possibly, national government.

Meanwhile, at the other end of the chain of custody, a Michigan import company and four Midwest retail facilities in the United States were assessed in mid September for their compliance with the MAC Handling, Husbandry and Transport Standard. The initial report by the Vancouver-based MAC Accredited certification company Shizen Megumi sound very promising, and in early October it is likely that these companies will become the first import and retail facilities in the world to realise MAC Certified status.