



Humphead wrasse and illegal, unreported and unregulated fishing

Yvonne Sadovy¹

One of the biggest of all reef fishes is the humphead, Napoleon or Maori wrasse (*Cheilinus undulatus*), which is widely distributed on coral reefs of the Indo-Pacific region. The species is listed as threatened on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species of Flora and Fauna (www.iucnredlist.org), and was the first tropical food fish listed on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendix II following the 13th meeting of the Conference of the Parties, in October 2004. This listing, which is binding for all signatories (or countries), of which there are currently 175, requires that any animals traded internationally are part of a sustainable management plan. Appendix II is a powerful means of moving towards sustainable resource use for species that are vulnerable and receive little other management intervention. It is also a test case for our ability to move to a more sustainable mindset for reef fish fisheries, in general. It's been five years since the humphead wrasse was listed on CITES, and this is a good time to look at progress that has been made and identify challenges that remain.

The engagement of CITES in regulating international fisheries trade is a welcome trend and clearly demonstrates growing recognition of CITES as a key tool to complement other conservation and management measures, at national and international levels, for commercially important marine resources. Humphead wrasse presents a good model of the opportunities and challenges for using CITES to regulate the use of marine resources. Progress has been made with regard to humphead wrasse. The structure that the CITES listing has brought to its trade is proving beneficial. However, continuing vigilance and review of the need to fully implement the CITES listing will help to ensure the sustainable use of humphead wrasse for the long term.

Humphead wrasse is one of the highest-valued of all reef fishes in the live reef food fish trade. It is

traded internationally by both sea and air. Primary exporters are in Southeast Asia, notably Indonesia, Malaysia, and the Philippines. Papua New Guinea is also an important exporter. Smaller volumes were once exported from other countries in the western Pacific and Indian Ocean regions. The primary importer of humphead wrasse is the People's Republic of China (China), specifically the southern Province of Guangdong and the Hong Kong Special Administrative Region (Hong Kong).

Since the Appendix II listing came into force in January 2005, several positive steps have been taken for better management of local and international humphead wrasse trade:

- The Food and Agriculture Organization of the United Nations (FAO), the Groupers and Wrasses Specialist Group of the IUCN Species Survival Commission (SSC), and the Government of Indonesia have together produced a stock assessment methodology that enables science-based, non-detrimental findings, which are a prerequisite for Appendix II-listed species to be traded internationally. The field work and fishery modeling work used to develop the model were variously funded or otherwise supported by the CITES Secretariat, FAO, IUCN, the US National Oceanic and Atmospheric Administration, University of Hong Kong, and the Government of Indonesia.
- The Indonesian CITES Scientific Authority has established an export quota of 8,000 humphead wrasse per year, and Malaysia will have export quotas of zero as of 2010 (it is allowing currently held stock to be sold).
- Hong Kong began implementing the Appendix II listing in December 2006 and Malaysia did the same in February 2007. The CITES Management Authority of Hong Kong now checks imports and re-exports, and coordinates verification of CITES permits with Malaysia and Indonesia.

¹ Division of Ecology and Biodiversity, University of Hong Kong, China; IUCN Groupers and Wrasses Specialist Group. Email: yjsadovy@hku.hk



A mature male humphead wrasse in Palau
(photo by Patrick L. Colin).

- Several workshops have been held to discuss national and international action to facilitate CITES-compliant trade, enforcement and implementation challenges, and capacity-building for customs officials, including species identification.
- Regulations have been tightened at the national level in Palau and in Fiji.

A number of challenges remain before sustainable international trade can be achieved. The most pressing is illegal, unreported and unregulated (IUU) trade, which occurs at both local and international levels. As examples:

- *There is ongoing poaching by foreign vessels and illegal international trade by sea.* Illegal exports are occurring in Malaysia, Indonesia, the Philippines, and possibly elsewhere. In one high-profile case, the *Hoi Wan* (a Chinese vessel registered in Hong Kong) was apprehended in Tubbataha Marine Park in the Philippines' territorial waters, holding 1,200 live humphead wrasse. Export of live humphead wrasse is illegal in the Philippines, and the vessel had no paperwork authorising fishing of any kind. In a separate case, Taiwanese-flagged ships were reported to have shipped humphead wrasse illegally out of Tawi Tawi, southern Philippines. Also, there appears to be illegal trade in this species from the Philippines to Malaysia.
- *Unmonitored trade out of Singapore and into mainland China undermines enforcement.* According to Hong Kong's customs records, 12 and 6 tonnes of humphead wrasse were imported from Singapore by air in 2005 and 2006, respectively. However, officials of the Wildlife Regulatory Branch, Agri-Food and Veterinary Authority of Singapore indicate that they did not issue any permits for the export of humphead wrasse to Hong Kong in 2005 or 2006, and none of the exports were reported to the CITES Secretariat. Singapore does not have viable populations of humphead wrasse in its waters, so the fish must have entered Singapore from another country and been re-exported. There have been discrepancies in records of trade in humphead wrasse between those of China and Hong Kong. In 2007, for example, the CITES Management Authority of Hong Kong recorded the import of more than 21,000 fish, of which 3,453 were re-exported to China under 45 re-export licences. However, the CITES Management Authority in China's Guangdong provincial office received no applications to import the species and there are no records of seizures of humphead wrasse in Guangdong, which is known to be a major consuming region of humphead wrasse in China.
- *Humphead wrasse sales continue at the national level, despite regulations to protect the species and to ban destructive fishing practices.* In Fiji, for example, the species continues to be sold occasionally in local fish markets and can be obtained by special order at a number of restaurants in Suva, despite national protection for the species. In Indonesia, sodium cyanide continues to be used to catch the species, and undersize (smaller than 1 kg) and oversize (greater than 3 kg) fish continue to be exported illegally.

The biggest threat to the sustainable use of humphead wrasse and one that substantially undermines the efforts of countries to move towards the effective management of the species is IUU trade. Possible measures being discussed to address this problem are:

- Limit international trade to air and land — much of the international trade in humphead wrasse is already conducted by air;
- If shipments by sea are permitted, these should exit and enter through a small number of designated ports and only at times that are specified to management authorities in advance;
- Increase monitoring and verification of trade records by both exporting and importing countries and increase inspections of live fish exports;
- Increase awareness among government officials of the CITES listing for humphead wrasse, including improving the capacity among law enforcement officers to identify the species; and
- Step up enforcement at local markets and other food outlets, including restaurants, and raise awareness of the CITES listing among the general public.

The implications of failing to effectively implement the Appendix II listing under CITES via

national laws are not only that the value of humphead wrasse will be lost to fishers and traders, but also that the climate in which IUU trade is allowed to continue will hamper efforts to manage other species and resources. This species happens to be among the more vulnerable of reef fishes. If this species and its fishery cannot be preserved, then the next most vulnerable species will go the same way, and so on. In the long term, lack of attention to reef fishery management and rampant IUU trade will severely undermine the fisheries themselves and the livelihoods and food they supply. The humphead wrasse is our test case: it is an important trial of CITES Appendix II in supporting and encouraging countries to use sustainable international trade practices. The CITES listing brings international “muscle” to enforcement and funding for assessments as well as international attention to the issue. Currently, a project on illegal trade in humphead wrasse in Southeast Asia, funded by the US government, is being carried out in collaboration with the Trade Records Analysis of Flora and Fauna in Commerce (TRAFFIC) East Asia and World Wildlife Fund in the Philippines. A better understanding of the IUU trade will greatly improve enforcement ability and help to better determine how to improve compliance with the CITES listing and move towards more sustainable international trade.



Juvenile humphead wrasse on sale illegally in southern China (photo by Alex Hofford).