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SPECIES BRIEFING DOCUMENT – Wildlife Crime Case Information

Details of specimens

<b>Scientific Name</b>	<i>Cheilinus undulatus</i>
<b>Common Name(s)</b>	Giant Wrasse, Humphead, Humphead Wrasse, Maori Wrasse, Napoleon Wrasse, Truck Wrasse, Undulate Wrasse (English) Napoleon (French) 蘇眉, 龍王鯛, 曲紋唇魚 (Chinese) Mameng (Tagalog)
<b>Specimens Description</b> e.g. live, skin, carcass	Live specimens of all sizes are being traded as food for the live reef food fish trade.  Late stage juveniles are the preferred size range for retailers and consumers because these are a good 'plate-size' fish (between 700 and 1,000 g).
<b>Quantity</b> e.g. head, weight(kg)	According to UNEP-WCMC CITES trade data, at least 64,826 tails live <i>C. undulatus</i> were traded globally between 2006 and 2013. The global reported trade volume peaked in 2008 and declined significantly starting in 2010. In 2013, the legal recorded trade volume dropped to 550 tails (=individuals) and by 2017 to 350 although retail market surveys estimate that twice to 4 times that amount was actually imported based on known turnover rates (i.e. time between fish entering a retail outlet and being sold). This is based on two and a half years of data (Wu and Sadovy de Mitcheson).  Hong Kong, which is by far the largest importer for live <i>C. undulatus</i> , imported at least 62,235 live <i>C. undulatus</i> from Malaysia, Indonesia, and Papua New Guinea from 2005-2013 (Wu and Sadovy de Mitcheson 2016).
<b>Trade Value Estimate</b> Illegal/legal trade value	US\$200/kg (Hong Kong retail price; Wu and Sadovy de Mitcheson 2016); a single, large 40 kg humphead wrasse sold for over US\$5,000 in the Hong Kong market (Erdman and Pet-Soede 1997). One luxury hotel in Hong Kong charged 4,000 HK\$ for a single small fish on 24.3.2019.
<b>Declared Origin of Consignment</b>	The main exporting countries are Indonesia, Malaysia, and the Philippines although only Indonesia exports legally. All exports of

	live wild caught fish or of CITES II listed species are illegal from the Philippines. Malaysia ceased exports in 2009 because they found too few fish remained in national waters to support exports. Only Indonesia legally exports the species now with an annual export quota of 2,000
<b>Declared Destination of Consignment</b>	The major importing countries are China (especially Hong Kong), Taiwan and Singapore.

### Species Global Status and Threats

<b>IUCN Red List Category</b>	Endangered	<b>CITES Appendix</b>	II
<b>Country of Origin (Natural Range)</b>	Widely distributed in coral reefs and inshore habitats throughout much of the tropical Indo-Pacific region, including but not limited to the following countries: American Samoa (American Samoa); Australia (Ashmore-Cartier Is., Lord Howe Is., Queensland); British Indian Ocean Territory (Chagos Archipelago); Cambodia; China; Christmas Island; Cocos (Keeling) Islands; Comoros; Cook Islands; Disputed Territory (Paracel Is., Spratly Is.); Djibouti; Egypt; Eritrea; Fiji; French Polynesia (Tuamotu); Guam; Hong Kong; India (Laccadive Is.); Indonesia; Israel; Japan (Nansei-shoto); Kenya; Kiribati (Gilbert Is., Kiribati Line Is.); Madagascar; Malaysia; Maldives; Marshall Islands; Mayotte; Micronesia, Federated States of ; Mozambique; Myanmar; Nauru; New Caledonia; Niue; Northern Mariana Islands; Palau; Papua New Guinea; Philippines; Pitcairn; Samoa; Saudi Arabia; Seychelles; Singapore; Solomon Islands; Somalia; Sri Lanka; Sudan; Taiwan, Province of China; Tanzania, United Republic of; Thailand; Timor-Leste; Tokelau; Tonga; Tuvalu; United States Minor Outlying Islands (Wake Is.); Vanuatu; Viet Nam; Wallis and Futuna; Yemen.		
<b>Major Threat(s)</b>	<p>This species is primarily threatened by illegal, unregulated and unmonitored commercial fishery to supply the live reef food fish trade (Sadovy et al. 2003). In countries such as Indonesia, Malaysia and the Philippines, which are the largest exporters of live <i>C. undulatus</i>, stock has declined over 90% in two decades.</p> <p>Coral reef habitat this species inhabits are seriously threatened by human activities in the form destructive fish practices (e.g. the use of sodium cyanide) as well as human-induced ocean acidification and climate change.</p> <p>The existing regulatory mechanisms are insufficient in regulating the fishery of this species. Although some countries have imposed</p>		

	<p>export quotas (as mandated by CITES), lack of sufficient national and regional fishery management capacity in range countries severely limits the effectiveness of various conservation measures. Many countries now ban exports of this species entirely. This is unusual for a reef fish and a sign of high acknowledged conservation dependency (Gillett 2010).</p>
<b>Notes</b>	<p>As one of the most commercially valuable live reef fish in the market, <i>C. undulates</i> is also the only species of reef fish currently listed in CITES.</p> <p>Hong Kong requires CITES export permits for legal <i>C. undulates</i> imports; import permits/licences are also required for possession of live specimens.</p>

### Victim Impact Statement (Country of Origin)

e.g. Ecological/Social/Economical Impact to the country of origin

<p>The humphead wrasse is of considerable cultural value in some Pacific countries such as Palau, Guam, Fiji, Cook Islands, Yap, Pohnpei and parts of Papua New Guinea.</p> <p>Their presence in coral reefs is important for eco-tourism and the promotion of its conservation will likely benefit other species with smaller ranges that share its habitat. It is also an indicator species of well-developed coral reefs. The species is also one of very few to eat species like the crown-of thorns starfish, which can devastate coral reef habitat- (Sadovy et al. 2003)</p> <p>The fishing methods (cyanide) used for fishing this species can have a negative impact on the ecosystem; repeated cyanide use kills corals and the species is difficult to catch with other methods. Size and density of humphead wrasse in fished areas are significantly lower those in non-fished areas. Non-target species such as smaller fish and corals often die as a result of cyanide. The heavy focus on juvenile fish in trade is problematic as it means that few fish are likely survive to adulthood to replenish populations.</p>
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### Victim Impact Statement (Local)

e.g. Ecological/Social/Economical Impact to Hong Kong

<p>Although the humphead wrasses do occur in Hong Kong, they are very rarely seen and almost all if not all of the animals in the trade probably originated from overseas.</p>
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## Wildlife Welfare Concern

e.g. Specimen's health/transport condition, cruel poaching/slaughtering practice

Live fish are often confined to small holding tanks on fishing vessels after being caught. As many as 30% die during the transportation process. In Hong Kong transfer of animals from boats and between holding tanks can be rough. It is not known if treatment in air shipments is according to IATA regulations for animals but unknown chemicals are typically used to subdue the fish and they are shipped in unnatural densities.

## Disease and Pathogen Concern to Human and Local Environment

e.g. Carrier of zoonotic disease/pathogen/parasite

Eating of this fish, which is often caught with the use of cyanide, has resulted in cases of ciguatera poisoning in humans.

## Relevant Previous Cases

e.g. References to previous cases of relevance, outcome, penalty, post seizure costs passed onto Government and NGOs

Numbers of animals in trade in Hong Kong and China do not reflect the legal quota levels permitted in international trade. Laundering occurs with legally imported animals sold and replaced with smuggled specimens. For many years the species has entered Hong Kong unmanifested and undeclared.

According to a report released by TRAFFIC, as many as 1,197 live *C. undulatus* were counted on sale in three Hong Kong retailing seafood markets in November 2014 to December 2015 (Wu and Sadovy de Mitcheson 2016). Remarkably, 157 tails were observed in November to December 2014 alone, while, accordingly to AFCD, only 149 tails were legally imported during the year of 2014, meaning that illegal import of live *C. undulates* certainly takes place. In response, the AFCD seized at least 13 tails of *C. undulatus* from four traders, starting in December 2015. No fish were legally imported at all in 2015 despite constant market presence in all months. Since average turnover rates are less than 2 weeks, most of these fish must have entered Hong Kong illegally.

In 2010, a shipment of 53 live *C. undulates* from Indonesia was found with a valid export permit for only 50 fish (AFCD, in litt. to Joyce Wu, May 2015). Three fish were seized and the remainder was allowed to be imported.

### **KCS3128/2018**

Restaurant fined \$4,000 for using an expired possession licence.

### **KTS7860/2018**

Restaurant fined \$5,000 for having no export permit from the country of origin.

**KTS7347/2018**

Restaurants fined \$2,000 - \$2,500 per charge, for having more fish than permitted on their Licences.

**KTS10785/2019**

Restaurant fined \$75,000 (reduced by 30% for PG) for possessing two wrasse without a licence.

China

In December 2007, the Quarantine Bureau in Guangzhou Baiyun airport seized ten boxes of unauthorized *C. undulatus* which were smuggled in amongst 40 boxes of legitimate LRFF from Malaysia (Huang, 2007). The ten boxes of *C. undulatus* were confiscated and destroyed and the company fined CNY1,000. This case indicated that *C. undulatus* were traded alongside other LRFF and also revealed that at least some *C. undulatus* and other LRFF had been imported to mainland China without transit through Hong Kong.

Philippines

On 21 December 2006 a Hong Kong-licensed fishing vessel named Hoi Wan carrying tonnes of illegally caught fish was seized by Philippine officials off the waters of the strictly protected Tubbataha Reef National Marine Park in the Sulu Sea. Tonnes of high-value fish, including 359 *C. undulatus*, were discovered in the vessel's hold. The crew did not possess necessary CITES or Philippine government permits to buy, catch or possess the fish.

## Wildlife Forensics

Can be identified morphologically by the prominent bulge on its forehead. There are a few sequences available online (<https://blast.ncbi.nlm.nih.gov/Blast.cgi>) if you would like to do species identification by barcoding.

## Further Expert Comment

e.g. local knowledge about species, future conservation concerns, invasive risks, IUCN/CITES up-listing proposals

Prof. Yvonne Sadovy de Mitcheson (University of Hong Kong), Co-chair of IUCN Groupers and Wrasses Specialist Group, is the expert on conservation and biology of the humphead wrasse.

More information on the biology, threats and conservation of this species can be found in the following sources.

Gillett R (2010) Monitoring and management of the humphead wrasse, *Cheilinus undulatus*. FAO Fisheries and Aquaculture Circular. No. 1048. Rome, FAO.

Sadovy Y, Kulbicki M, Labrosse P, Letourneur Y, Lokani P, Donaldson TJ. 2003. The humphead wrasse, *Cheilinus undulatus*: synopsis of a threatened and poorly known giant coral reef fish. *Reviews in Fish Biology and Fisheries* 13:327-364.

Russell B. (Grouper & Wrasse Specialist Group). 2004. *Cheilinus undulatus*. The IUCN Red List of Threatened Species 2004: e.T4592A11023949.  
<http://dx.doi.org/10.2305/IUCN.UK.2004.RLTS.T4592A11023949.en>

Wu J, Sadovy de Mitcheson Y. 2016. Humphead (Napoleon) Wrasse *Cheilinus undulatus* trade into and through Hong Kong. TRAFFIC. Hong Kong, SAR.

### Illustration/Photographs (if available)





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