

ENFORCEMENT INSIGHTS: THE TRADE IN SHARKS AND THEIR FINS

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BACKGROUND

Sharks¹ have been caught and consumed for centuries; however, pressure has increased on wild populations as industrial and artisanal fishing fleets supply demand in global markets. Sharks are targeted mainly for their meat and fins, though their livers, cartilage, and gill rakers are also found in trade. Globally, the markets for shark commodities differ and whilst fins are generally supplied to Asian markets for consumption, the meat is diverted along different trade routes to supply major markets in Europe and South America (Dent and Clarke, 2015).

Sharks and their relatives are particularly vulnerable to overharvesting due to their low fecundity, relatively late age of maturity and slow growth rates (Cortés, 2000). As a result of the declining populations of many shark species and the need for sustainable management of shark populations, international trade regulations have been implemented to regulate trade in selected sharks and their derivatives.

Since the 12th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 2002, a total of 38 species of commercially important shark and ray species are now regulated by CITES.

Relatively few countries record species-specific catch records for sharks, making it difficult to measure fishing pressure on individual species, and most countries report their total capture production (live weight) data for sharks at a higher taxonomic level to the United Nations Food and Agriculture Organization (FAO). The total volume of global reported catches peaked in 2000 (888,336 t) and has since been declining to between 700,000 t and 800,000 t per year (2000–2017). However, it is difficult to know whether overfishing, changes to management of fisheries, changes in reporting, or other reasons explain this decline (Okes and Sant, 2019). Between 2007 and 2017, Indonesia was the largest reported catcher, with an average catch of 110,737,000 kg per year, followed by Spain (78,443,000 kg) and India (67,391,000 kg) (Okes and Sant, 2019). An estimate of the global catch and mortality of sharks from both reported and unreported landings, discards and shark finning in 2000 was estimated to be 1.4 million t, equivalent to 100 million sharks. Between 2000 and 2010 it was estimated that a range of between 63 and 273 million sharks were killed annually (Worm *et al.*, 2013).

Shark trade records reported in the UN Comtrade database are primarily split between meat or fins under different HS Codes². Specific codes for shark fins were introduced from 2012 onwards but it is likely that some trade has still been reported under the more generic codes that were used prior to 2012. Between 2012 and 2019

¹Throughout this report, the term “sharks” refers to all species of sharks, skates, rays and chimaeras (Class Chondrichthyes);

²Harmonised Commodity Description (HS Code) is an internationally standardised system of names and numbers to classify traded products, also known as the Harmonised System of tariff nomenclature.



SCALLOPED HAMMERHEAD SHARK
Sphyrna lewini thrown overboard after
 its fin had been removed, Costa Rica.

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Hong Kong Special Administrative Region (SAR) (Hong Kong), Singapore and China were the largest importers of shark fins, and for the last decade (2009–2019) the largest importers of shark meat were Brazil, Spain, Uruguay, and Italy (UN Comtrade Database, 2020).

The global value of trade in shark commodities was estimated to be USD438.6 million in 2011, a figure which is likely to be below the true value (Dent and Clarke, 2015). The high economic incentives associated with the trade in some shark products, in particular fins, combined with issues such as a lack of adequate traceability systems, lack of enforcement in restricted areas, difficulties in patrolling large geographic expanses, result in unregulated and unsustainable shark fishing globally (Boon, 2017; Carr *et al.*, 2013).

Shark taxa present in legal and illegal trade

Fins are the most valuable part of many sharks and it is estimated that between 26 and 73 million sharks (worth USD400–500 million) are traded each year (Clarke *et al.*, 2007).

Shark fin consumers have distinct preferences for particular species; hammerhead *Sphyrnidae* spp., Oceanic Whitetip *Carcharhinus longimanus*, and Blue *Prionace glauca* sharks are preferred for shark fin soup, whereas dogfish *Squalidae* spp., mako *Isurus* spp. and Tote *Galeorhinus galeus* sharks are favoured for meat.

However, it is difficult to know the impact of species preference on global shark populations due to the lack of species-specific trade statistics (Dent and Clarke, 2015). Genetic analyses conducted in 75 retail outlets in Hong Kong identified an estimated 76 different species of sharks, of which one third were listed in threatened categories by IUCN. The most common species present was the Blue Shark, accounting for an estimated 35% of fins sampled (Fields *et al.*, 2018).

In 2018, authorities in Taiwan seized over 30 t of shark meat at Kaohsiung Xiagang Fishing Harbour, the largest seizure recorded there since revised offshore fishing rules were established in 2006 (Anon, 2018a). This seizure comprised carcasses of Oceanic Whitetip and Silky *Carcharhinus falciformis* sharks. The Oceanic Whitetip is classified as Critically Endangered by IUCN and the global population is estimated to have experienced a reduction of >98%, (Rigby *et al.*, 2019).

Shark producers and consumers

Hong Kong is the world’s largest consumer and trader of shark fins and between 2000 and 2011 recorded average annual shark fin imports of 10,490 t, with a reported import value of USD302 million (UN Comtrade Database, 2020). Hong Kong also acts as a key re-exporter of shark fins and since 2009, Viet Nam has overtaken mainland China as the predominant importer of shark fin re-exports from Hong Kong (Shea and To, 2017). Top exporters of shark fins to Hong Kong between 1998 and 2013 (based on data reported to FAO) were Spain, Taiwan, United Arab Emirates (UAE), Singapore and Japan (Shea and To, 2017). Singapore and the UAE are not known shark producers but instead likely act as transit points for shark fin shipments exported from Africa, the Middle East, India and Sri Lanka (Shea and To, 2017). In 2017 a seizure of 1,280 kg of shark fins suspected to be from CITES-listed hammerhead and Oceanic Whitetip sharks was seized in Hong Kong in containers shipped from India, Egypt, Kenya and Peru without the required CITES permits (Anon, 2017a).

Countries within the EU collectively rank second in global shark catches, particularly Spain which was amongst the top three shark catchers between 2007 and 2017 (Fowler and Séret, 2010; Okes and Sant, 2019). Exports of shark fins from Spain are almost entirely destined for markets in mainland China and Hong Kong, and between 2000 and 2012, 80% of the total volume (2,648 t) had been exported by Spain (Dent and Clarke, 2015). In 2015, 59 t of shark bodies, including 4.5 t of shark fins from Shortfin Mako Shark *Isurus oxyrinchus* and Blue Shark, were seized from a fishing vessel at the Port of Vigo (Greenpeace, 2015). The sharks were caught in New Zealand and the fins had been removed from the shark bodies prior to unloading, against EU Regulations (Anon, 2015a). EU countries have also been implicated as major transit hubs for global shark fin shipments, often from countries in West Africa en route to Asia (Fowler and Séret, 2010): in 2019, 1.2 t of shark and skate fins exported from Liberia were seized at Brussels International Airport, destined for Hong Kong (Anon, 2019).

Pelagic Threshers *Alopias pelagicus* being brought ashore to be auctioned for their fins and meat, Ecuador. ►

There are a number of key exporters and re-exporters of fins from America to Asia, including Mexico, Ecuador, Peru and Uruguay (Okes and Sant, 2019). In 2018, an estimated 25 t of Blue Sharks and Pelagic Threshers *Alopias pelagicus* were seized (estimated to be 25,000 individuals) at the Peruvian Port of Callo. The shipment had been exported from Ecuador, destined for mainland China (Anon, 2018b). In 2015, fins from an estimated 200,000 sharks were seized in the city of Manta, Ecuador, destined for Asian markets (Anon, 2015b).

The USA is a relatively important producer of shark products and between 2000 and 2011 exported an average of 171 t of shark fins annually, predominantly to Asian markets (Dent and Clarke, 2015). The USA has also been highlighted as a transit location for shipments from South America (Ferretti *et al.*, 2019). In February 2020 over 500 kg of shark fins were seized at Miami International Airport, imported from an unreported country in South America and destined for an unreported country in Asia. It was concluded that 40% of the shipment was illegally traded and included fins from a number of CITES-listed species: Silky Shark, threshers *Alopias* spp. and hammerheads Sphyrnidae spp. (National Geographic, 2020).

Trafficking methods

The predominant transport method for shark fins seized on entry to Hong Kong is by sea, followed by air transport. In April 2017, China Southern Airlines announced a ban on shark fin shipments, joining at least 43 other carriers in banning shark fin shipments and 17 of the 19 largest container shipping lines (accounting for an estimated 71% of the global market) have also banned shark fin cargo (WildAid, 2018). It should be noted that these are carriage policies adopted by companies and do not in themselves represent legal regulation.

In 2018, 980 kg of shark fins, including Whale Shark *Rhincodon typus*, were seized in Hong Kong from a Singapore Airlines shipment that had been sent from Colombo, Sri Lanka, transiting Singapore. The consignment had been declared to contain “dry seafood” (Anon, 2018c). Similarly, there are examples of shipments seized in India in 2017 and 2018, with 6,000 kg and 8,000 kg of shark fins seized respectively. In both cases the cargo had been declared to contain “fish products”, “dried marine products” and “fish maw” to evade detection and both shipments were intended to be transported by sea (Anon, 2017b; Anon, 2018d). In 2013 India banned the act of shark finning and in February 2015 issued a prohibition on all shark fin exports.

Shark fins seized in Cape Town, South Africa, 2019. ►



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Crime convergence

An operation carried out in Tanzanian waters in 2018 led to the seizure and apprehension of three fishing vessels with Chinese, Malaysian and Tanzanian flags, each found to be carrying cargoes of shark fins. On board the Chinese and Malaysian fishing vessels were Tanzanian and Indonesian fishermen who allegedly had been denied access to water and food, proper accommodation and had been threatened at gun point. All three vessels were escorted to Tanzanian ports for legal action on the grounds of shark-finning and labour abuses (Anon, 2018e).

The illegal harvesting and trade of sharks for their products to supply global markets is one factor resulting in additional pressure on over-exploited shark species, particularly those that are threatened with extinction. Furthermore, illegal catch and trade of shark populations is undermining efforts to regulate a legal and sustainable trade in species currently not threatened with extinction. In order to combat the illegal, unreported, and unregulated (IUU) fishing contributing to the shark fin trade, effective traceability systems that can demonstrate the origin and legality of shark products need to be established and will be fundamental in strengthening the CITES process. Furthermore, traceability systems can facilitate the gathering of data on species, origins and quantities in order to generate species-specific information that can be fed into existing or new management measures for sharks.



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