

Proposal #43

Thresher sharks (*Alopias* spp.)

- Bigeye thresher *Alopias superciliosus*

Look-alike species

- Common thresher *Alopias vulpinus*
- Pelagic thresher *Alopias pelagicus*

Proposed action

Include in CITES Appendix II the bigeye thresher shark (*Alopias superciliosus*), as well as the two other “look-alike” species of the genus *Alopias* (common and pelagic threshers).

Proponents

Bahamas, Bangladesh, Benin, Brazil, Burkina Faso, the Comoros, the Dominican Republic, Egypt, the European Union, Fiji, Gabon, Ghana, Guinea, Guinea-Bissau, Kenya, Maldives, Mauritania, Palau, Panama, Samoa, Senegal, Seychelles, Sri Lanka, and Ukraine.



Bigeye thresher shark (*Alopias superciliosus*). © FLPA

Overview

The world’s three threshers – large, wide-ranging sharks characterized by exceptionally long tails – are found in tropical and temperate ocean waters. These low productivity species are at risk in many regions due to demand for their valuable meat and fins (which enter international trade), as well as incidental take in a variety of fisheries. Despite some regional prohibitions, global thresher shark mortality is under-reported and largely unmanaged. Including the genus *Alopias* in CITES Appendix II could improve fisheries and trade data, bolster compliance with existing protections, complement existing commitments under the Convention on Migratory Species (CMS), and facilitate international cooperation toward more comprehensive national and regional conservation measures, thereby enhancing the chances for sustainable use.

Biology & Distribution

Thresher sharks are characterized by long, scythe-like tails that account for half their body length. They use their tails to corral and stun their prey. Threshers feed at mid-trophic levels on a mix of fish and cephalopods. The largest species – the common thresher – can grow to six meters.

Threshers are widespread, migratory sharks found in tropical and temperate ocean zones, from shallow coastal waters to the high seas, at a range of depths. The three species have overlapping distributions. Bigeye threshers are found around the world, generally at low latitudes. The species is considered relatively rare, but with potential for local abundance in certain areas. Common threshers are also found circumglobally in coastal, temperate waters, yet tolerate colder temperatures.

Pelagic threshers occur widely in the Indo-Pacific, but have not been reported in the Atlantic.

Usually producing only two pups per litter after a year-long gestation period, bigeye thresher sharks have the lowest population growth rate of the threshers, and rank among the least productive elasmobranch species. This species is thought to mature at between seven and 15 years of age and live about 20 years. Pelagic threshers also typically have just two pups per litter, and may live to 29 years. The common thresher is the fastest-growing of the three species, and ranks among the more productive shark species. Age at maturity is estimated at five years. Females typically have two to seven pups, after a nine month gestation period, and may live as long as 50 years.

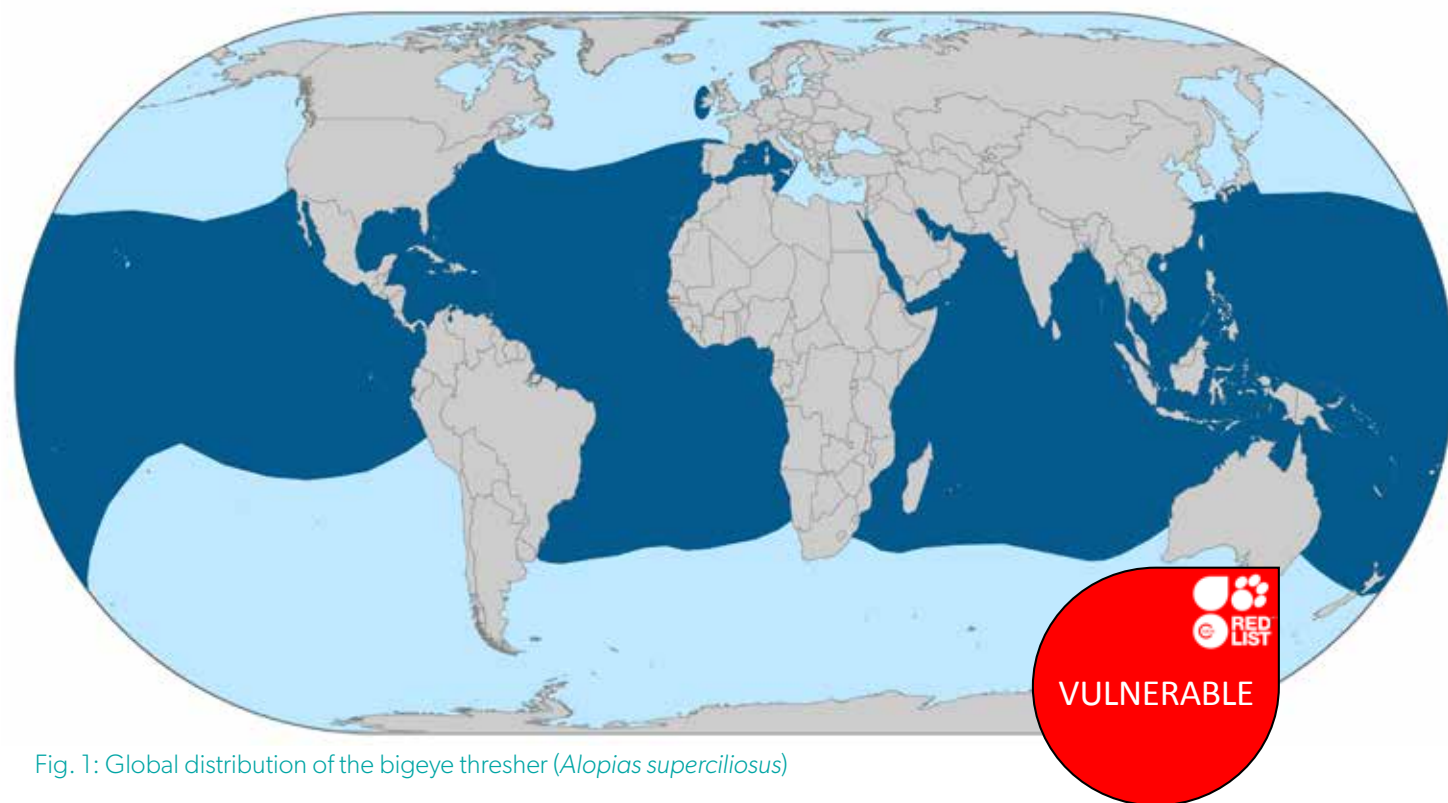


Fig. 1: Global distribution of the bigeye thresher (*Alopias superciliosus*)

Fisheries

Thresher sharks are targeted and taken incidentally in a variety of pelagic and coastal fisheries around the world. They are caught primarily on longlines, but also in gillnets, purse seines, trawls, and traps. Directed thresher fisheries and the retention of incidental catches are driven by demand for meat and, to a lesser extent, fins.

Food and Agriculture Organization (FAO) data indicate 183,000t of thresher sharks catches between 1999 and 2014, mostly from the Pacific. Total reported catches peaked in 2011 at ~22,000t; ~19,000t were reported in 2014. Worldwide reported catch of bigeye threshers ranged from 49–30t/year from 2000 to 2009, and have fluctuated in recent years, from 27t in 2010 to 40t in 2014.

Indonesia, Ecuador, Sri Lanka, and the US account for the highest reported thresher shark catches. Overall, thresher catches are considered under-reported, particularly for the Indian Ocean, and continue to go completely unrecorded in many countries. Those that are reported are rarely identified to species, and there is a general lack of information on size, weight, and sex.

International Trade

Although considered low value relative to other sharks, the fins of threshers do enter the global trade driven by East Asian demand for shark fin soup (a Chinese celebratory dish). A 2006 study of Hong Kong markets estimated that the fins of between 350,000 and 3.9 million thresher sharks entered international trade per year (~2.3% of the global shark fin

trade at the time). In a 2014 study, threshers made up only 0.1% of shark fins analysed. Experts warn that key sampling and methodology differences make comparisons between these two studies problematic, and not valid as evidence for changes in population abundance. Whereas thresher shark meat is usually consumed locally, landings from international waters would fall under CITES “introduction of the sea” provisions.

Other Uses

Thresher sharks are used primarily for their meat, which is commercialized around the world. While bigeye thresher meat is not known to be widely eaten, meat from common and pelagic threshers is more highly regarded for human consumption than that of most other shark species. Thresher skin has been made into leather, and the livers have been used for oil. Threshers are fished by recreational anglers in many countries, including the US, Canada, United Kingdom, Italy, South Africa, Australia, and New Zealand. In a few places, most notably the Philippines, thresher sharks are key attractions for divers.

Population Status

On the International Union for Conservation of Nature (IUCN) Red List of Threatened Species™, all three thresher sharks are classified as globally *Vulnerable*. The IUCN Shark Specialist Group has highlighted family Alopiidae as the seventh most threatened elasmobranch family.

Global quantitative abundance estimates and species-specific trends for thresher sharks are generally lacking and hindered by a paucity of fisheries data. The population declines that have been identified have been attributed to fishing pressure.

In Ecological Risk Assessments commissioned by the International Commission for Conservation of Atlantic Tunas (ICCAT) and Indian Ocean Tuna Commission (IOTC), bigeye

threshers ranked first of 16 Atlantic elasmobranch species, and second among 17 Indian Ocean species, in terms of vulnerability to overfishing.

Common thresher sharks off the west coast of North America were rapidly depleted by a drift gillnet fishery in the late 1970s. Through subsequent fishing limits, the population was stabilized by the mid-1980s and has since been rebuilt to nearly unexploited levels. A Pacific-wide assessment for bigeye threshers, initiated by the Western and Central Pacific Fisheries Commission, is currently underway.

Conservation Measures

ICCAT prohibits bigeye thresher sharks (parts or whole) from being retained, transshipped, landed, stored, sold, or offered for sale. IOTC adopted the same rules for all three thresher species. While several ICCAT and IOTC Parties have since adopted complementary national regulations, evidence of compliance with and effectiveness of these measures is generally lacking, particularly in the Indian Ocean. Moreover, threshers are still regularly caught incidentally, with post-release mortality rates estimated at ~50%.

Spain and Sri Lanka prohibit retention of all thresher species; Croatia protects common threshers. Vessels from other EU Member States are not allowed to target common threshers or keep bigeye threshers. Thresher shark fishing is restricted in Australia and New Zealand. The US bans retention of Atlantic bigeye threshers and has fishing limits for Atlantic and Pacific common threshers. A number of thresher shark range states, including Egypt, French Polynesia, Honduras, and Maldives have banned commercial shark fishing and trade. All of these measures could benefit from enhanced monitoring and complementary actions for adjacent waters through which threshers migrate.

All three threshers are listed on CMS Appendix II and covered under the CMS Memorandum of Understanding (MoU) for Migratory Sharks. CMS Parties and MoU Signatories have thus committed to cooperate toward thresher shark conservation.

Expert Advice

The FAO expert advisory panel convened in 2016 to assess CITES proposals concerning commercially exploited aquatic species considered the bigeye thresher shark as a “low productivity species” and determined that “there is no reliable evidence of a decline of bigeye thresher that would meet Appendix II listing criteria.” The panel noted several possible benefits of a properly implemented Appendix II listing, including better monitoring, reporting, and control of thresher sharks entering international trade, which should help to ensure legal and sustainable sourcing, enable stock assessments and subsequent management, and complement existing fishery measures.



Thresher sharks at a fish market. © Sonja Fordham

Proposal #43 Thresher sharks (*Alopias* spp.)



Pelagic thresher shark (*Alopias pelagicus*). © Kelvin Atken

In their joint analysis, IUCN and TRAFFIC consider that some thresher shark populations may be relatively stable, while fisheries elsewhere are likely unsustainable, and conclude that “it is unclear for any of the species whether this level of decline would satisfy the criteria for inclusion in Appendix II in Annex 2a Res. Conf. 9.24 (Rev. CoP16),” but that “if any of the species were listed in Appendix II, the others in the genus would meet the criteria in Annex 2b (look-alike criteria).” TRAFFIC recommends CITES Parties accept the thresher shark listing proposal, as inclusion in Appendix II would be in the best interest of the species, serving as a much-needed platform for international cooperation to address unsustainable trade, and the means to improve catch reporting, and thus population assessment and fisheries management.

References

Information in this factsheet is based on the relevant listing proposals, IUCN Red List assessments (www.iucnredlist.org), the report of the FAO expert panel, FAO landings data, analyses by IUCN and TRAFFIC, and:

Dulvy, N.K., Fowler, S.L., Musick, J.A., Cavanagh, R.D., Kyne, P.M., Harrison, L.R., Carlson, J.K., Davidson, L.N.K., Fordham, S.V., *et al.* 2014. Extinction risk and conservation of the world's sharks and rays. *eLife* 3: e00590.

Teo, S.L.H., Rodriguez, E.G. & Sosa-Nishizaki, O. 2015. Status of common thresher shark along the west coast of North America. NOAA Technical Memorandum NMFS. NOAA-TM-NMFS-SWFSC-557. Southwest Fisheries Science Center, National Marine Fisheries Service, La Jolla, California.

Young, C.N., Carlson, J., Hutchinson, M., Kobayashi, D., McCandless, C., Miller, M.H., Teo, S. & Warren, T. 2016. Status review report: common thresher shark (*Alopias vulpinus*) and bigeye thresher shark (*Alopias superciliosus*). Final Report to National Marine Fisheries Service, Office of Protected Resources. March 2016. 199 pp.

Call for Action

Listing thresher sharks under CITES Appendix II would be:

- in line with the precautionary approach;
- helpful for improving data on fisheries and trade;
- important for ensuring that international trade is held to sustainable levels;
- complementary to national, regional, and global conservation commitments; and
- beneficial in preventing depletion and associated negative effects on ecosystems and economies.

Our coalition urges CITES Parties at CoP17 to:

Support Proposal 43 to include all three thresher sharks in CITES Appendix II.

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