

Thresher Sharks

Common Thresher *Alopias vulpinus*

Bigeye Thresher *Alopias superciliosus*

Pelagic Thresher *Alopias pelagicus*

Proposed action Inclusion on CMS Appendix II

Proponents European Union



NAGO/SWFSC

Overview

Thresher Sharks, wide-ranging, largely oceanic species found in warm and temperate seas, make up one of the world's most vulnerable and threatened shark families. These highly migratory, low-productivity species are at risk in many regions due to demand for their valuable meat and fins, 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 CMS Appendix II could bolster compliance with existing protections and facilitate international cooperation toward more comprehensive national and regional conservation measures, thereby enhancing the chances for sustainable use.



Biology and Distribution

Thresher Sharks are characterized by long, scythe-like tails that account for half their body length. High-order predators, they use their tails to corral, disorient, and stun schooling fishes and pelagic invertebrates. The largest species – Common Threshers – can grow to six meters in length (nearly 20 feet).

Common and Bigeye Thresher Sharks travel great distances, generally far from shore in warm and temperate seas around the world. The Pelagic Thresher has similar habits in the Pacific and Indian Oceans, but has not been recorded in the Atlantic. Tagging studies have demonstrated movements across national boundaries (including onto the high seas) between the United States and Central America.

Thresher Sharks are exceptionally vulnerable to overfishing due to slow growth, late maturity (4–14 years), lengthy gestation (9–12 months), and few young (2–4 per litter).

Population Status and Threats

The IUCN Shark Specialist Group (SSG) has classified all three Thresher Shark species as globally *Vulnerable* on the IUCN Red List, and has highlighted family *Alopiidae* as the second most threatened family of sharks and the seventh most threatened elasmobranch family.

Thresher Sharks are targeted and taken incidentally in a variety of pelagic and coastal fisheries around the world. Reported landings are highest in Asia. This fishing pressure, combined with their exceptionally low productivity and inadequate limits, has led to population declines in many regions. Serious under-reporting of catches, particularly for the Indian Ocean, hinders robust assessment of Thresher population health.

Faced with poor fisheries data, scientists associated with the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Indian Ocean Tuna Commission (IOTC) have conducted Ecological Risk Assessments for sharks taken in longline fisheries. In terms of vulnerability to overfishing, Bigeye Threshers ranked first of 16 elasmobranch species in the Atlantic analyses, while Bigeye and Pelagic Threshers ranked second and third, respectively, among 17 Indian Ocean species.

Common Thresher Sharks are doing relatively well off the west coast of the United States, where – thanks to comprehensive fisheries management – the population is recovering from overfishing in the late-1980s and early-1990s, and is estimated to be above the level associated with maximum sustainable yield.

Destruction of key Thresher Shark habitats, such as inshore nursery grounds, poses a risk to the health of populations.

Uses

The meat of Thresher Sharks is more highly regarded for human consumption than that of most other shark species, and is commercialized around the world. The Common Thresher has the highest quality flesh and is the most important shark in US West Coast, commercial, highly-migratory-species fisheries. Thresher Shark fins are relatively

common in the global trade driven by Asian demand for shark fin soup. 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, like Philippines, Thresher Sharks are key attractions for divers and snorkelers.

Conservation Measures

ICCAT has banned retention of Bigeye Thresher Sharks while the IOTC prohibits retention of all three Thresher species. While several ICCAT and IOTC Parties have since adopted complementary national regulations, overall compliance with these measures is lacking. Regional Fishery Management Organizations governing the vast Pacific range of Thresher Sharks have not yet adopted conservation measures for these species, and areas considered as key Thresher Shark habitats lack protection.

Several Thresher Shark range states, including French Polynesia and Bahamas, have banned commercial shark fishing and/or trade. Elsewhere, there are few national Thresher-specific fishing regulations. Spain and Philippines protect all thresher species; Croatia protects Common Threshers. Vessels from other EU Member States cannot target Common Threshers or retain Bigeye Threshers. The US bans retention of Atlantic Bigeye Threshers and has catch limits for Atlantic and Pacific Common Threshers. All of these measures could benefit from enhanced monitoring and complementary actions for adjacent waters through which Threshers migrate.

Expert Advice

The CMS Scientific Council's Fish Working Group has endorsed the proposal to include Thresher Sharks in CMS Appendix II. Such listing is in line with conclusions reached in 2007 based on an IUCN SSG review.

CALL TO ACTION

Beneficial impacts from listing species under CMS Appendix II depend on concrete follow-up actions and specific regional agreements by range states. If properly implemented, listing Thresher Sharks on CMS Appendix II could:

- drive improved compliance with existing protections;
- facilitate regional cooperation toward conservation of shared populations and key habitats; and
- enhance national efforts to ensure recovery and sustainable fishing mortality.

We urge CMS Parties to support inclusion of Thresher Sharks on CMS Appendix II at CoP11

References

Information in this fact sheet is based on the CMS listing proposal, the relevant Ecological Risk Assessment reports, 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.
- Camhi, M.D., Valenti, S.V., Fordham, S.V., Fowler, S.L. & Gibson, C. 2009. *The Conservation Status of Pelagic Sharks and Rays: Report of the IUCN Shark Specialist Group Pelagic Shark Red List Workshop*. IUCN Species Survival Commission Shark Specialist Group, Newbury, UK.
- Camhi, M.D., Fordham, S.V. & Fowler, S.L. 2008. Domestic and international management for pelagic sharks. In: *Sharks of the Open Ocean: Biology, Fisheries and Conservation* (eds. M.D. Camhi, E.F. Pikitch & E.A. Babcock). Blackwell Publishing, Oxford, UK.
- NOAA Fisheries Service. Common Thresher (*Alopias vulpinus*) Fact Sheet. Southwest Fisheries Science Center. (Download at <https://swfsc.noaa.gov/>).