

Scalloped hammerhead shark

Sphyrna lewini

PROPOSAL
#43

Proposed action	Listing on CITES Appendix II Listing on Appendix II for look-alike species: <ul style="list-style-type: none">· Great hammerhead (<i>Sphyrna mokarran</i>)· Smooth hammerhead (<i>Sphyrna zygaena</i>)
Lead proponent	Brazil, Costa Rica, Honduras
Co-sponsors	Colombia, Ecuador, European Union, Mexico
Annotation	Entry into effect delayed by 18 months to allow Parties to resolve technical and administrative issues



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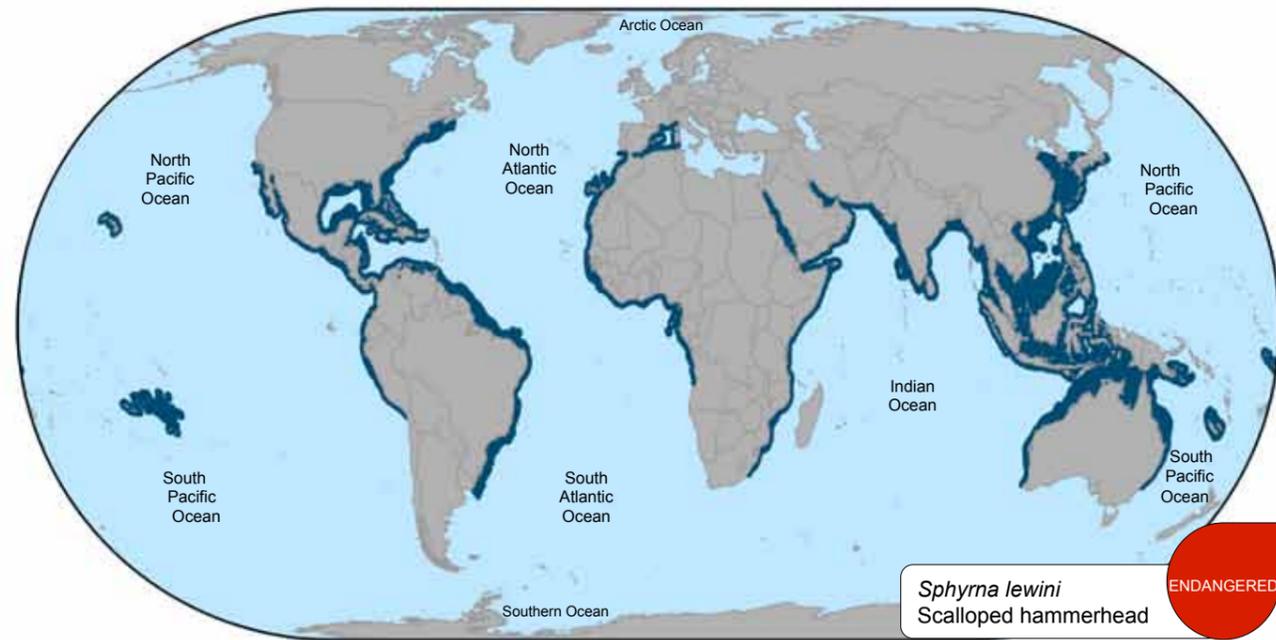
Overview

The scalloped hammerhead (*Sphyrna lewini*) is a globally endangered shark species that has been seriously overfished, primarily for its fins, in targeted and incidental fisheries throughout its range. Great hammerheads (*Sphyrna mokarran*) and smooth hammerheads (*Sphyrna zygaena*) resemble scalloped hammerheads and face similar threats. The fins of these three species are often combined in the international shark fin trade. Strong demand for fins continues to drive targeted and incidental take of hammerheads that is largely unregulated. CITES Appendix II listing is warranted to facilitate compliance with relevant fishing restrictions and establishment of science-based export limits, thereby complementing national and regional efforts toward recovery and sustainable use.



Distribution

The scalloped hammerhead shark occurs in coastal warm, temperate, and tropical seas around the world.



Global distribution of the scalloped hammerhead shark. Source: IUCN

Biological Characteristics

The scalloped, great, and smooth hammerheads are the largest in the Sphyrnidae family, growing to more than three meters. These species are primarily coastal, found to depths of 275 meters or more, and are rarely encountered in the open ocean. Hammerhead sharks are top predators, feeding primarily on smaller fish and invertebrates.

Scalloped hammerheads form large schools around seamounts and oceanic islands, making them particularly vulnerable to targeted fisheries. High levels of segregation make re-establishment of depleted areas from neighboring regions particularly challenging. This species also exhibits:

- slow growth
- lengthy gestation (8–12 months, likely followed by a one-year resting stage)
- long life (estimated at 30 years for the Northwest Atlantic).

These life history characteristics factor into estimates of an intrinsic rate of population increase of 0.08–0.105 and a generation time of more than 21 years, placing the scalloped hammerhead shark in the lowest productivity category of the UN Food and Agriculture Organization (FAO) guidelines for evaluating the status of commercially

exploited aquatic species (rate of population increase of <0.14 and a generation time of >10 years).

Great and smooth hammerhead sharks are similarly vulnerable to overexploitation, with generation times estimated at 27 and 13 years, respectively.

Fisheries

Hammerhead sharks, particularly *S. lewini*, are both targeted and taken as bycatch in coastal and pelagic fisheries by a variety of gear, including longlines, purse seines, gillnets, and trawls.

The main driver of hammerhead fishing is high demand for the international fin trade. Although consumed and even favored in some countries, hammerhead meat is generally considered unpalatable. Because the demand for hammerhead fins greatly outweighs that for the meat, hammerheads are among the sharks most often subjected to “finning” (slicing off the fins and discarding the body at sea).

As is the case with most shark species, hammerhead shark catches are largely under-reported and unregulated, and there are significant discrepancies between catch and trade statistics. Hammerheads have been found to be among the shark species most commonly taken in illegal fishing operations.

International Trade

Because of their high fin ray count, hammerhead fins are particularly prized for use in the traditional Chinese celebratory dish, shark fin soup. Fins from scalloped hammerheads are regularly exported to Asia along with those of smooth and great hammerheads. Hammerhead fins can sell for more than 100 USD per kg in Hong Kong markets.

Despite data limitations, hammerheads are known to be among the shark species most frequently found in the global fin trade. Studies published in 2006 estimated that the fins of 1.3 to 2.7 million scalloped and smooth hammerhead sharks were entering the shark fin trade annually, and that the three largest hammerheads (scalloped, great, and smooth) made up nearly 6% of the Hong Kong shark fin market.

Shark fin traders in Hong Kong are able to readily identify hammerhead fins from other shark fins. Traders typically sort scalloped and smooth hammerhead fins together and separate great hammerhead fins from those of other species. Scalloped and great hammerhead fins, however, are similarly light in color and thus sometimes combined or mislabeled.

Rapid and inexpensive DNA tests are available for hammerhead parts and derivatives in trade. There are numerous shark species identification guides. Improvement of these tools is ongoing.

Alternative Uses

Shark dive tourism contributes millions of dollars every year to regional economies, presenting viable alternative uses for sharks around the world. Hammerhead sharks consistently rank among the top underwater attractions.

Population Status

IUCN classifies the scalloped, great, and smooth hammerhead shark as threatened species. The scalloped hammerhead and the great hammerhead are categorized on the IUCN Red List as globally *Endangered*, making them the most threatened of all the world’s pelagic and semi-pelagic sharks. Smooth hammerheads are classified by IUCN as globally *Vulnerable*.

The alarming statistics demonstrating dwindling hammerhead abundance include:

- Northwest and Western Central Atlantic (1981–2005): 83–85% *S. lewini* decline;
- South Africa (1978–2003): declines of 64% for *S. lewini*; 79% for *S. mokarran*;
- Southwest Atlantic, Brazil (2000–2008): bottom gillnet hammerhead catch/unit effort fell by 80%;
- West Africa: collapses in large hammerhead landings.

Shark fisheries data are particularly sparse for Indian Ocean fisheries, but the Scientific Committee for the regional tuna commission has warned that scalloped hammerhead populations are at considerable risk from current fishing effort. Globally, the extent and rate of decline of scalloped ham-

merhead populations significantly exceed the qualifying levels for inclusion in CITES Appendix II, while some particularly depleted populations already qualify for Appendix I status (see expert advice below).

Conservation Measures

The scalloped, great, and smooth hammerhead sharks are included in Annex I of the UN Convention on the Law of the Sea (UNCLOS), which signals international recognition of the need for cooperative management of the species but does not carry specific, binding fisheries regulations. Hammerhead sharks are not included in the CMS Appendices, and hence are not covered by the CMS Memorandum of Understanding for Migratory Sharks.

There are no hammerhead quotas under the Regional Fisheries Management Organizations (RFMOs). EU proposals to prohibit retention of hammerhead sharks have been rejected by the Indian Ocean Tuna Commission (IOTC) and the Inter-American Tropical Tuna Commission (IATTC). The Western and Central Pacific Fisheries Commission (WCPFC) has designated the scalloped, great, and smooth hammerhead sharks as a “key shark species,” but has not adopted any hammerhead fishing restrictions.

In 2010, the International Commission for Conservation of Atlantic Tunas (ICCAT) adopted a binding hammerhead Recommendation that applies only to ICCAT-managed fisheries and includes a number of exceptions. The measure banned retention, transshipment, landing, storage, and sale of species in the family Sphyrnidae, except for the bonnethead shark (*S. tiburo*), with exemptions for developing countries that ensure hammerhead fins are not traded. There has been little reported compliance or monitoring for this measure. Moreover, as with other RFMOs, ICCAT lacks the mandate, resources, and expertise to regulate international trade in sharks.

In 2012, the General Fisheries Commission for the Mediterranean (GFCM) agreed to prohibit take of these three hammerhead species and other sharks listed on Annex II of the Barcelona Convention, but implementation plans remain unclear.

Furthermore, because hammerhead sharks are largely coastal, they are therefore not as likely to benefit from RFMO actions as oceanic species.

There are very few domestic, hammerhead-specific fishing regulations for these circumglobal species. Croatia provides national protection for the smooth hammerhead. Spain prohibited the retention of all species of hammerhead sharks in 2009. The USA limits domestic hammerhead catches. Both the USA and the EU have prohibited retention of hammerhead sharks in pelagic Atlantic fisheries, in line with the 2010 ICCAT measure.

Shark finning bans alone are wholly insufficient for reversing declines in hammerhead sharks.

CITES History

The USA and Palau proposed the scalloped, great, and smooth hammerhead sharks for listing in CITES Appendix II at CoP15 in 2010. The proposal received support from a majority of Parties, but not the two-thirds' majority required for adoption. In 2012, Costa Rica listed the hammerhead shark in CITES Appendix III, thereby requiring CITES export permits for all hammerhead products leaving Costa Rica, and a certificate of origin for hammerhead imports from all other CITES Parties.



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Expert Advice

TRAFFIC has recommended that Parties support the proposal to list hammerhead sharks, based on its conclusions that all three species meet the decline criteria for Appendix II (*Resolution Conf. (Rev. CoP15) Annex 2a Criterion A*), as regulation is required to ensure they do not become eligible for inclusion in Appendix I. In addition, based on the difficulty of differentiating among fins from the three species, TRAFFIC finds that the great and smooth hammerheads also meet the criteria for inclusion in Appendix II under the look-alike criteria (*Resolution Conf. (Rev. CoP15) Annex 2b Criterion A*).

The ad hoc Expert Panel convened by FAO to review CITES proposals for marine species found that the scalloped hammerhead shark meets the biological criteria for listing on Appendix II, and that the great and smooth hammerhead sharks fulfill the Appendix II listing criteria stipulated in the look-alike clause. Both the IUCN/TRAFFIC analyses and the FAO Expert Panel report note that some hammerhead populations already meet the decline criteria for inclusion in Appendix I. The CITES Secretariat recommends that this proposal be adopted.

Call to action

Listing the hammerhead shark under CITES Appendix II is:

- **Warranted under the listing criteria;**
- **Essential to ensuring that international trade is held to sustainable levels;**
- **Complementary to fisheries management efforts;**
- **Key to improving data on fisheries and trade; and**
- **Consistent with international and regional policy commitments.**

Our coalition urges CITES Parties to vote in favor of Proposal #43 to list the scalloped, great, and smooth hammerhead sharks (*Sphyrna lewini*, *Sphyrna mokarran*, and *Sphyrna zygaena*) on CITES Appendix II at CoP16.

References

Information in this fact sheet is based on that in the listing proposal, the associated IUCN/TRAFFIC analyses, the TRAFFIC Recommendations, the 2012 FAO Ad Hoc Expert Panel report, the CITES Secretariat's findings, and:

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