

SHARKS AT RISK

ANIMAL WELFARE INSTITUTE



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INTRODUCTION

Sharks have ruled the oceans for more than 400 million years, evolving into the nearly 500 species known today. Now, however, their numbers are plummeting and their future is uncertain.

Sharks (and their closest relatives, rays) differ physically from other fish (known as bony fish) in a variety of ways that enhance their efficiency as predators. Unlike bony fish, sharks' skeletons are composed of tough, but light and supple cartilage. This significantly reduces a shark's body mass, so that substantially less energy is needed for propulsion through the water. Sharks' dynamics are improved further by a covering of tooth-like scales called dermal denticles that make the skin rough (and very

tough) but reduce turbulence. Sharks do not have gas-filled swim bladders for buoyancy like bony fish; instead their liver, which can make up one third of their body mass, is filled with a light oil called squalene.

Although they have no natural predators, sharks' unique physical characteristics make them targets of hunting by humans. Over 100 species of shark are targeted each year, primarily for their fins (for shark fin soup), but also for their meat, liver, oil, gills, teeth, cartilage and skin.

Despite their role as top predators, sharks are vulnerable to over-hunting because they mature late in life, grow slowly, and produce very few young. In this respect, their life cycle more closely resembles whales and dolphins than that of fellow fish. In some species, individuals do not reach sexual maturity until the age of 20, and they can have a gestation period lasting up to two years. Unlike bony fish, sharks give birth to a handful of live young, known as pups, instead of a large number of eggs. Once reduced, shark populations are extremely slow to recover. Some shark populations have declined by as much as 90 percent and some shark fisheries that collapsed in the first half of last century still have not recovered.

THE SHARK FIN TRADE

As many as 73 million sharks are killed annually for their fins, which are used primarily to make shark fin soup for Chinese and other Asian markets. The commercial value of shark fins is so high (as much as \$300/lb) that fishermen often take *only* the fins and discard the rest. In a process known as "finning," the sharks are typically brought aboard fishing vessels and have their fins sliced off while they are fully conscious. The mutilated animals are then thrown back into the sea to die. By keeping only the fins, fishing vessels can take more sharks on a single voyage, making the hunting ruthlessly efficient and increasing the likelihood of draining the oceans of sharks.





Mike A. McCoy/Marine PhotoBank

A pile of sharks and another of fins line the dock after a Taiwanese fishing vessel was seized for violating Palau's ban on shark fishing.

In addition to targeted hunting, many millions of sharks are caught accidentally each year as “bycatch” in another fishery. In some longline fisheries, sharks comprise more than a quarter of the total catch. Many bycaught sharks are also finned opportunistically.

The top shark fishing nations are India, Indonesia, Taiwan, Spain and Argentina. However, fishermen all over the world engage in shark fishing. Despite the worldwide decline in shark populations caused by overfishing, many countries do not have any legal mechanisms in place to manage shark fisheries—and those that do tend to rely on weak, incomplete, or poorly enforced laws.

Although shark finning is banned or restricted in almost 60 countries—including the United States and member states of the European Union—and 15 nations or territories ban *all* shark fishing, not all countries with finning regulations require that shark carcasses be landed with fins attached. Instead, like several regional fishery management bodies, they employ a fin-to-carcass

ratio whereby the total weight of the fins must not exceed a certain percentage of the total weight of the carcasses (often 5 percent). However, once fins are removed, it is nearly impossible for enforcement officials to determine what species the fins were taken from, making enforcement very difficult and allowing fishermen to flout the law by mixing and matching bodies and fins from various sharks.

Scientists, conservationists and enforcement officials are in agreement that if sharks are fished, the only way to effectively enforce a ban on shark finning is to require that they must be brought to shore with their fins naturally attached to their bodies.

To protect sharks at the market level, several countries, including Egypt and the Bahamas, as well as several U.S. states and at least 20 Canadian cities, have enacted laws to prohibit the possession and sale of shark fins.



Fiona Ayerst/Marine PhotoBank

Gillnets are responsible for the deaths of millions of animals. Bull sharks are one of many shark species that die as bycatch from this unregulated fishing method.



STATUS OF SHARKS

Of 1,045 species of sharks and rays (also targeted for their fins) assessed by the International Union for Conservation of Nature (IUCN) Red List, 30 percent were determined to be globally Threatened (Vulnerable, Endangered or Critically Endangered) or Near Threatened with extinction. For another 47 percent, there were insufficient data to accurately assess their extinction risk. Species globally threatened with extinction include the well-known whale shark, basking shark and great white shark.

THE CONSEQUENCE OF LOSING SHARKS

As “apex” predators, feeding at the top of the food web, sharks help maintain the balance of healthy marine ecosystems—keeping prey species in check, culling the sick and weak, and scavenging dead organisms. In fact, studies have shown that top predators like sharks actually lead to greater biodiversity. However, depletion of sharks on the scale occurring today allows populations of their prey species to increase, which can lead to imbalances in the ecosystem and even collapses of important fisheries. For example, depletion of sharks in the Atlantic Ocean

has contributed to a population explosion of rays and skates and a collapse in their prey, scallops. Sharks need protection, not just for their own sake, but for the health of the wider marine environment.

SHARK CONSERVATION

With many shark populations declining sharply amid growing global demand, the UN’s Convention on International Trade in Endangered Species of Wild Fauna



Rob Mesch

Oceanic whitetip shark



Blue shark

and Flora (CITES) has begun to regulate trade in shark products. On CITES Appendix II, basking and whale sharks were listed in 2002; the great white shark in 2004; and three species of hammerhead sharks, porbeagle and oceanic white-tipped sharks, plus the two species of manta rays, in 2013. Listing on Appendix II means that countries exporting products from these species will have to collate trade data and issue an export permit for each specimen exported, and first determine that international trade will not harm the species. It is hoped that monitoring and regulation by CITES will help generate high quality research on sharks and the threats facing them, and ensure better control of international trade.

PUBLIC IMAGE

Sharks' negative public image as man-eating monsters impedes conservation efforts even though fatal shark attacks are extremely rare—in fact, more people die each year from lightning strikes. Clearly, humans pose a far more significant threat to sharks than the reverse.



Chris Fallows/apexpredators.com

say NO to SHARK FIN SOOP

ANIMAL WELFARE INSTITUTE

SHARK FIN SOUP

The pectoral and dorsal fins of sharks are the main ingredients in shark fin soup. Although shark fin itself is tasteless and the flavor of the soup comes from other ingredients, the soup is viewed as a delicacy and status symbol in Asia, commonly served at weddings and other special events. Although it is traditionally an expensive dish (with a price tag upwards of US\$100 a bowl), it is

Please give this card to a restaurant that sells shark fin products.

LET SHARKS KEEP THEIR FINS!



www.pretoma.org

讓鯊魚留著他們的鰭吧

increasingly sold more cheaply. As economies grow in Asia, a dish once reserved for the elite is now available to many more consumers, and is in demand in many Asian communities around the world.

CONSUMPTION/HEALTH ISSUES

Many health organizations warn against the consumption of sharks and other large, long-lived fish, which tend to accumulate high levels of mercury that can be toxic to humans. Studies have shown that shark fins can contain high levels of mercury.

Though shark fin soup remains widely available and legal, including in most U.S. states, awareness-raising efforts by animal protection and conservation groups, including AWI, are reducing both supply and demand. Some restaurants have withdrawn shark fin soup from the menu while others offer an imitation version; some companies have pledged not to serve shark fin soup at functions and many consumers have vowed to stop eating it.

Please give this card to a restaurant that sells shark fin products.

Dear Restaurant Owner,

You are receiving this because you sell shark fin products.

Many sharks are threatened with extinction but they are still killed for their fins, which is bad for marine ecosystems.

Consuming shark fins can also be dangerous to human health.

PLEASE STOP SELLING SHARK FIN PRODUCTS.

尊敬的餐館所有人：

您收到此郵件是因貴餐館銷售魚翅產品。

許多鯊魚正瀕臨滅絕，但它們卻仍然因魚翅被捕殺，這對海洋生態系統非常有害。

食用魚翅還對人體健康有害。

請停止銷售魚翅產品

say **NO** to
SHARK FIN
SOUP
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Andy Murch

Silky shark

SHARKS MORE VALUABLE ALIVE THAN DEAD

Shark-watching from boats and recreational diving with sharks are increasingly popular and lucrative, creating a strong incentive for local communities to protect their shark populations. Whale shark tourism alone is worth an estimated US\$47.5 million worldwide.

YOU CAN MAKE A DIFFERENCE

Help sharks by not purchasing any shark products: Visit www.awionline.org/sharkfinsoup for a list of restaurants in the United States selling shark fin soup. Please do not eat at these restaurants, but rather voice your distaste to the management. If you find a restaurant selling shark fin products that is not included on the list, email us at nosharkfinning@awionline.org so we may verify and add it. Educate others about the problems associated with shark fin soup and encourage them to take a stand against purchasing, consuming or serving shark fin products.

Please write the Secretary General of the United Nations to request a global ban on shark finning and a requirement that if sharks are fished, they must be brought to shore with their fins naturally attached to their bodies (Secretary General, UN Headquarters, First Avenue at 46th Street, New York, NY 10017).



Animal Welfare Institute

For over 60 years, AWI has been a leading voice for animals around the globe. Please join our efforts to reduce the suffering inflicted on animals by humans.

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www.awionline.org/joinus.



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