

**DELO NAŠIH ZAVODOV IN DRUŠTEV  
ATTIVITÀ DEI NOSTRI ISTITUTI E DELLE  
NOSTRE SOCIETÀ  
ACTIVITIES BY OUR INSTITUTIONS  
AND ASSOCIATIONS**

**DECLARATION, MANIFESTO FOR IMMEDIATE  
WORLDWIDE SHARK CONSERVATION ACTIONS**

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We, the shark researchers of the world, are compelled to urge the governments of all nations to take immediate steps to conserve remaining shark populations worldwide. There is a dire and immediate need to raise human awareness globally about the threat to shark populations and to promote their management, before it is too late.

Sharks are one of nature's most obvious indicators regarding the health of marine ecosystems; sharks and related species of rays and skates are vital fixtures within the intricate and varied food webs that cover fully most of our planet's surface. Fossil records indicate a tenure of over 400 million years and hundreds of species at or near the top of tidal estuarine, neritic, benthic and pelagic environments. These often maligned creatures represent this planet's original and primary jawed vertebrates and they need protections/regulations against some of the many impacts of modern humanity; commercial and recreational shark fishing, exhibit exploitations, habitat disruption, contamination and pollution continues to denude and poison the character of our planet, and those that dwell there.

Sharks have much more cause to fear humans than the other way around. Modern human fishing practices, both commercial and recreational, are eradicating many species of sharks while disrupting their respective ecologies. As a consequence of increased commercial and recreational pressures on shark populations worldwide, their numbers are now in serious global decline.

Many species, including blue sharks, oceanic whitetips, shortfin makos, piked dogfish, smoothhounds, reef sharks and even the whale shark, are heavily exploited. It is estimated that even if all commercial fishing were to cease, many of the large sharks may not

recover within 50 years, if ever. Ironically, even with shark populations plummeting in both number and former range, they are still being depicted as a hazard to humanity. An estimated 50% of the world shark catch is believed to be taken accidentally while fishing for other species such as tuna and swordfish. This unplanned capture of marine animals is called "bycatch". Pelagic longlines, which are single-stranded fishing lines 18 to 72 kilometres long, with an average of 1500 baited hooks, as well as open ocean drift gill nets (often illegal) literally filter marine life from the seas. In some regions, the number of sharks caught by longline fishermen account for 90% of total captures. As the bony fish fisheries have been depleted, fishermen have compensated by increasing shark captures. However, sharks are often more vulnerable to overfishing than bony fish are due to their slow rate of maturity and low birth numbers.

Having evolved over the past 400 million years at or near to top of the food chain, sharks have developed into creatures with relatively few natural predators. They have thrived despite an arduous reproduction mode consisting of periodic or infrequent copulation followed by long gestation periods whereby they mature slowly and have few young. As apex predators, sharks are not equipped to withstand predation themselves and, for the above reasons, are highly vulnerable to exploitation. Exacerbating the problem is the fact many shark species segregate by size and sex, such that exploitation in a nursery area can be critically devastating. It has been demonstrated that most commercial shark fisheries collapse within a few years due to commercial extinction of the target resource.

Humans catch sharks in order to obtain meat, cartilage, skin, oil and other products. Shark fins are used in Asian cooking to prepare shark fin soups. Recently, the demand for shark fins has increased dramatically, largely due to expanding and developing markets in the People's Republic of China and their competitors in Japan and Taiwan. Shark fins fetch a high price and this has led to the practice of finning sharks at sea, where the fins are sliced off while the rest of the body is discarded overboard. Often, the shark is still alive when finned and will face a slow and agonizing death as it sinks to the seafloor. Almost all species of large and medium-sized sharks are fished for their fins. The gigantic growth industry of shark and shark fin fisheries is no longer relegated to certain Asian cultures but has expanded to markets in Europe, Africa, Central and South America and many developing nations in the Indian and Pacific Oceans. Shark meat and shark byproducts are also increasingly being used as a cheap supplement for livestock and domestic animal feed. Additionally, shark cartilage is fraudulently advertised in pharmaceuticals as serving a role in cancer prevention. This marketing is based on the wrongful assumption that sharks do not suffer from cancer and ignores the mounting scientific

research indicating that shark cartilage cannot either cure or prevent this disease. Some shark products, however, are traditional and viable. Shark liver is rich in vitamins and provides oil and squalene, which are used as lubricants, cosmetics and pharmaceuticals. Likewise, shark skin is used as a type of leather and shark corneas have been used as substitutes for human corneas. Teeth, jaws and taxidermied specimens have been used as decorations and as souvenirs.

It is unclear how many sharks are caught annually, but some conservationists estimate the number to be upwards of 100 million. A recent estimate of sharks killed in the fin trade alone stands at 73 million per year. Annual landings of cartilaginous fish reported to the Food and Agriculture Organization (FAO) of the United Nations amounts to around 800,000 tons, but the actual tonnage is likely to be much higher as a result of under-reporting. Industrial fishing vessels often operate in flagrant violation of fishing regulations and, in recent decades, it has been estimated that shark populations have declined by over 90%.

Humans also play a role in decreasing shark populations as a result of increased habitat destruction, resource depletion and environmental pollution. Toxic chemicals absorbed or ingested by smaller animals are passed up the food chain through consumption. Top predators, like sharks, are at the highest risk of contamination as toxins accumulate within the food chain, becoming most concentrated at the top.

Several shark species are now protected in some countries, but it is not enough. A comprehensive poly-national approach is warranted. Conservation and management of shark fisheries needs to be based upon research in biology, ecology, distribution, abundance and exploitation of sharks, their prey and associated systems.

Despite being important parts of marine ecosystems, shark research is often neglected in favour of the more commercially viable bony fish and collaboration between agencies and academics is often wanting for co-operation. Biological information on the life history of many shark species is necessary to better assess stock status and harvest impact. It is also necessary to better manage fisheries in which sharks constitute a significant level of bycatch. The lack of effective management and policy enforcement in many countries is leading to the

extinction of many shark species. Consequently, the removal of sharks continues to upset and destabilize the ecological balance between predator and prey. The ability of marine ecosystems to support life has been severely crippled and the system is now in danger of collapse.

Therefore, we ask governments of all nations for immediate:

- protection of all endangered shark species;
- total ban on shark finning in national and international waters;
- management of fisheries in which sharks constitute significant bycatch;
- management of directed shark fisheries;
- control of trade and utilization of shark products;
- investment of resources into research on sharks to better assess stock status and harvest impact.

Until this announcement, the petition has been signed by 138 shark researchers.



**Shortfin mako sharks (*Isurus oxyrinchus*) at the Milano fish market, Italy (Photo: A. De Maddalena).**

**Atlantski makoji (*Isurus oxyrinchus*) na milanski ribji tržnici (Foto: A. De Maddalena).**

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