

IUCN has over 160 members in the Mediterranean region, including 15 governments. IUCN is recognised as an official observer at the United Nations. The IUCN mission is to influence, encourage and assist Mediterranean societies to conserve and use sustainably the natural resources of the region; and to work with IUCN members and cooperate with all other agencies that share the objectives of the IUCN.

Core support to the activities of the IUCN Mediterranean office is provided by the **Junta de Andalucía**, and the **Ministerio de Medio Ambiente**, Spain.

For more information on IUCN Centre for Mediterranean Cooperation, please go to www.iucnmed.org.

All you need to know about



...but didn't have time to ask.

Sharks and their relatives – the rays and chimaeras – are a diverse group of cartilaginous fishes (Class Chondrichthyes) that have evolved over 400 million years. Historically considered of low economic value to large scale fisheries (and therefore neglected by fishery management agencies), today many of these fishes have become the target of directed commercial and recreational fisheries around the world, and are increasingly taken in the bycatch of fisheries targeting other species, primarily in response to the rapidly increasing demand for shark fins, meat and cartilage.

Recognized as Vulnerable:

Because of their life history strategies, many sharks are **highly vulnerable** to over-exploitation leading to population depletion. Some are particularly susceptible to extinction because of their restricted distribution, small population sizes, or other characteristics, including dependence on nursery grounds or specific habitats, behaviour and morphology.

"Sharks, skates, rays and chimaeras are often characterized as long-lived, slow-growing and producing few offspring. These characteristics are associated with low productivity, close stock-recruitment relationships and slow stock recovery in the event of overfishing." UN FAO International Plan for the Conservation and Management of Sharks (IPOA-Sharks)

One may think: If we get rid of sharks, we will have more fish. ..NOT TRUE!

The role of sharks as keystone predators has been studied with the use of an ecosystem model, with interesting conclusions. For example, removal of tiger sharks resulted in a decline in numbers of some important commercial reef fish species, even though the latter were important prey species for the sharks and might therefore have been expected to increase in abundance following loss of sharks from the ecosystem. (This was because the sharks kept populations of other fish predators, notably seabirds, in check).

Finning: What is it exactly?

It is the removal and retention of shark fins and the discarding at sea of the remaining 95% of the body. Shark fins are object of a skyrocketing demand, particularly from Asian markets, where they are sold at very high prices.

The IUCN Shark Specialist Group (SSG) considers that shark finning is a threat to many shark stocks, to sustainable traditional fisheries, to food security and to socio-economically important recreational fisheries. It is, therefore, contrary to the principles of the UN FAO Code of Conduct for Responsible Fisheries (Article 7.2.2 (g)) and to the guiding principles, objective and aims of the FAO IPOA-Sharks.

Several major shark-fishing states (including Brazil, South Africa, USA, Oman, most Australian states and federal waters, and Costa Rica) have now implemented a ban on the retention of fins without shark bodies. The European Community is currently in the final phase of drafting new regulations designed to ban shark finning.

At least 3 reasons to ban finning:

- Finning and discarding of shark bodies is wasteful of protein and other potential products derived from sharks. It prevents socio-economic benefits, and is a threat to food security.
- Finning impedes the collection of the species-specific scientific data that are essential for monitoring catches and landings and implementing sustainable shark fisheries management.
- Finning causes the death of tens of millions of sharks. This potentially threatens the continued survival of rare and vulnerable species and, by removing large numbers of top predators from the oceanic ecosystem, may have unknown ecological impacts which could potentially threaten yields of other commercial species.

Species Conservation: While some sharks are relatively abundant and globally distributed, others are naturally scarce and of high conservation concern. The latter will continue to be removed in small, unreported quantities along with more abundant species and could be driven to very low numbers (potentially even to extinction) by continued finning activity.

Why IUCN/SSG recommends landing sharks "fin on"?

Because it is the simplest way to ensure that a ban on the practice of finning is enforced. Separate landings of fins and carcasses will inexorably lead to more fins in trade than would be possible if finning did not occur and will not curb the practice.

Moreover, landing sharks and rays with fins attached will promote standardised data reporting of official statistics on catches, facilitate species identification, eliminate potential loopholes in enforcement, and may increase the value of the carcass itself.

This is especially important to allow collection of species-specific data. Many shark species are unrecognisable without their fins, as these are the most important criteria for species distinction.

In the Mediterranean species-specific data are not available for sharks, and they are a first step to any sustainable fisheries management plan, much needed.

IUCN's Work on Sharks and their Relatives in the Mediterranean

IUCN's Species Survival Commission – Shark Specialist Group



IUCN/SSC
Shark Specialist Group



Species Survival Commission

The *Shark Specialist Group* (SSG) is part of the IUCN's Species Survival Commission. With its 130 volunteer members, working around the world, the SSG takes the lead on achieving improved conservation and management of elasmobranchs - sharks, rays, and skates. The Mission of the Shark Specialist Group is *to promote the long-term conservation of the world's chondrichthyan fishes (the sharks, skates, rays, and chimaeras), effective management of their fisheries and habitats, and, where necessary, the recovery of their populations.*

SSG members are increasingly contributing to FAO technical consultations and workshops, and providing advice to States and regional management bodies seeking to develop Shark Plans. Regional shark management training workshops are being organised by the SSG to raise awareness and generate momentum towards implementing the IPOA-Sharks.

IUCN Regional Red List Assessments: Cartilaginous fishes in the Mediterranean Sea

In September 2002, the Shark Specialist Group (SSG) held a short meeting during the international North Atlantic Fisheries Organisation symposium "Elasmobranch fisheries: managing for sustainable use and biodiversity conservation" (Santiago de Compostela, Spain). This meeting, attended by about 50 experts, initiated a process of drafting assessments of the Red List status of Mediterranean sharks.

Preliminary discussions during this meeting indicate it is highly likely that many of the species will be confirmed as being 'Data Deficient' (DD – no adequate information exists to accurately assess extinction risk). **This assessment does not mean that these taxa are not of conservation concern** – indeed in many cases the lack of knowledge of their distribution and/or population may be because of their rarity. **Rather, it highlights the lack of scientific and fisheries research that could provide data on these poorly known fishes.**

Table 1. Existing global Red List assessments for cartilaginous fishes known to occur in the Mediterranean

RL Category	No. of species
Critically Endangered (CR)	1
Endangered (EN)	3
Vulnerable (VU)	7
Lower Risk (LR)	17
Data Deficient (DD)	4
Not Evaluated (NE)	56

Table 2. Preliminary regional Red List assessments for cartilaginous fishes in the Mediterranean. (NB: none are official at this stage*)

RL Category	No. of species
Critically Endangered (CR)	5 (2 may even be regionally extinct)
Endangered (EN)	13 (in Italian seas, elsewhere possibly DD)
Vulnerable (VU)	30 (in Italian seas, elsewhere possibly DD)
Lower Risk (LR)	10 (in Italian seas, elsewhere possibly DD)
Data Deficient (DD)	20
Not Applicable (NA)	10

Future Steps: The IUCN Mediterranean Regional Shark Specialist sub-group

The SSG and the IUCN Centre for Mediterranean Cooperation have launched an initiative to create a Mediterranean regional subgroup to help address information needs about cartilaginous fishes in the Mediterranean Sea. The subgroup is now composed of more than 15 specialists. Their first meeting will take place from 29 September-01 October 2003 in San Marino and will provide an opportunity for Med SSG members to gain a better understanding of, and receive training in, the Red List assessment process, to assess the conservation status of chondrichthyan fishes within the Mediterranean region and to identify species of conservation concern.

How can the UNEP Mediterranean Action Plan on cartilaginous fishes complement the FAO International Plan of Action for Sharks?

Conservation of marine species is a matter of concern to many organisations, and cooperation is needed to achieve this goal. The FAO IPOA-Sharks recognises that 'other forms of cooperation' besides regional and sub-regional fisheries organisations or arrangements may be applied when implementing the IPOA.

The specific actions cited under the fisheries management section (C2) are not genuine "fisheries management actions", but rather complementary actions that could help in achieving sound fisheries management. They are about producing field identification sheets, producing guidelines to reduce by-catch, to establish monitoring programmes (including sightings).

Initial efforts to produce Red List Assessments for Mediterranean cartilaginous fish species have, however, confirmed that there is a significant lack of information on the status of many species. There is an urgent need, through the Mediterranean Action Plan, to promote and encourage research on this group in order to provide a clear and reliable assessment of the status of their stocks, to identify stocks and species that are most in need of conservation and management action, and hence guide future conservation priorities.

Yet while species-specific data are still needed, lack of information should not be used to justify the lack of management for these vulnerable animals. If any marine species demand precautionary management, as set out by the United Nations Food and Agriculture Organization (FAO) Precautionary Approach (1995), it is the sharks and their relatives, because of their well-documented vulnerability to overexploitation.