

Mediterranean Sea: most dangerous place on Earth for sharks and rays

More than 40% of shark and ray species in the Mediterranean are threatened with extinction, according to a new report from the IUCN – World Conservation Union

Malaga, Spain, 16 November, 2007 (IUCN) – The first complete IUCN Red List assessment of the status of all Mediterranean sharks and rays has revealed that 42% of the species are threatened with extinction. Overfishing, including bycatch (non-target species caught incidentally), is the main cause of decline, according to the research.

The report, released today by the IUCN Shark Specialist Group and the IUCN Centre for Mediterranean Cooperation, shows that the region has the highest percentage of threatened sharks and rays in the world.

“From devil rays to angel sharks, Mediterranean populations of these vulnerable species are in serious trouble,” said **Claudine Gibson, Programme Officer for the IUCN Shark Specialist Group and co-author of the report.** *“Our analyses reveal the Mediterranean Sea as one of the world’s most dangerous places on Earth for sharks and rays. Bottom dwelling species appear to be at greatest risk in this region, due mainly to intense fishing of the seabed.”*

The report also identifies habitat degradation, recreational fisheries, and other human disturbances as significant threats to the sharks and rays of the Mediterranean.

These are the findings of an expert workshop at which 71 Mediterranean species of sharks, rays and chimaeras (cartilaginous fishes) were assessed using IUCN Red List categories and criteria. Participants deemed 30 species as threatened with extinction, of which 13 are classified at the highest threat level of Critically Endangered, eight as Endangered and nine as Vulnerable. Another 13 species were assessed as Near Threatened, while a lack of information led to 18 species being classified as Data Deficient. Only 10 species are considered to be of Least Concern.

The Maltese Skate (*Leucoraja melitensis*), found only in the Mediterranean, is assessed as Critically Endangered. Bottom trawl fisheries are the main cause for population declines of 80%. The angular roughshark (*Oxynotus centrina*) and three species of angel sharks (*Squatina spp.*) are also Critically Endangered.

The giant devil ray (*Mobula mobular*), which occurs primarily in the Mediterranean, is considered Endangered. Females can grow to five meters (17 feet) and give birth to only one pup per pregnancy. This large size and low reproductive capacity make devil rays especially vulnerable to capture and entanglement in various net fisheries, including illegal driftnets.

The shortfin mako (*Isurus oxyrinchus*) and porbeagle (*Lamna nasus*), both prized for their meat and fins, were found to be Critically Endangered in the Mediterranean. The sandbar shark (*Carcharhinus plumbeus*) is listed as Endangered in the region and even the relatively prolific blue shark (*Prionace glauca*) is considered Vulnerable to extinction here.

“We are particularly concerned about the porbeagle and mako sharks in the Mediterranean,” warned **Dr Alen Soldo of the University of Split in Croatia, an expert on oceanic sharks who participated in the workshop.** *“Our studies reveal persistent fishing pressure well in excess of the reproductive capacity of the species, which led to our decision to categorize them in the highest threat category under the Red List criteria.”*

Only one species, the Portuguese dogfish (*Centroscymnus coelolepis*), has a better conservation status inside the Mediterranean Sea, where it is considered of Least Concern, than globally (Near Threatened). This deep sea shark is found at depths of nearly 4,000 meters and may be protected by a 2005 ban on fisheries below 1,000 meters by the General Fisheries Commission of the Mediterranean (GFCM).

Protection measures in place, and more needed

This deepwater fishing ban, along with prohibitions on driftnets and shark finning (slicing off a shark's valuable fins and discarding the body at sea) may help to lift some of the pressure on sharks and rays in the Mediterranean. However, better enforcement is required to give cartilaginous fish populations a chance to recover.

There are no catch limits for fished species of Mediterranean sharks and rays. Eight species of sharks and rays have been listed on the four international conventions relevant to Mediterranean wildlife conservation, but only three species have received any protection as a result: white and basking sharks are protected in Croatian and European Community waters, while Malta and Croatia protect the giant devil ray.

This week, in Turkey, international fisheries managers are expected to discuss limits on fishing for porbeagle and shortfin mako sharks at the annual meeting of the International Commission for the Conservation of Atlantic Tunas (ICCAT), which guides Mediterranean rules for species taken in tuna fisheries.

"Never before have Mediterranean countries had more reason or opportunity to safeguard the region's beleaguered sharks and rays," said **Sonja Fordham, Deputy Chair of the SSG and Policy Director for the Shark Alliance**. *"Country officials should heed the dire warnings of this report and act to protect Threatened sharks and rays through regional fisheries agreements, international wildlife conventions, and national legislation. Such action is necessary to change the current course toward extinction of these remarkable ocean animals."*

The report aims to assist in policy development for the conservation and sustainable use of Mediterranean cartilaginous fishes and provides a range of recommendations to that end. Conservation and fisheries organizations need to collaborate to ensure these measures are urgently implemented to curb the decline of sharks and rays in the region and to also guarantee the sustainability of marine resources - fundamental to the livelihoods of Mediterranean societies.

"Once again, the main concern is not only for each individual species – as important as they are – but for the cumulative impact of this loss of biodiversity," said **Annabelle Cuttelod, Mediterranean Red List Coordinator at the IUCN Centre for Mediterranean Cooperation**. *"We are observing serious changes which will have major consequences over time on all animal life and, ultimately, on the livelihoods of people around the Mediterranean"*.

The IUCN Centre for Mediterranean Cooperation is currently assessing the status of marine fish in the Mediterranean, in collaboration with the IUCN Species Programme and the Turkish Marine Research Foundation (TUDAV). About 30 experts are meeting in Istanbul, Turkey, from 12 to 16 November to analyze this issue.

Notes to editors

The report is entitled "Overview of the Conservation Status of Cartilaginous Fishes (Chondrichthyans) in the Mediterranean Sea" by Rachel D. Cavanagh and Claudine Gibson and is the third in a series of Mediterranean Regional Assessments. Available from: http://iucn.org/places/medoffice/documentos/2007/11/med_shark_rep_en.pdf

- The Red List workshop on which the Mediterranean report was based took place in 2003 in San Marino and was followed by international expert consultation.
- Most sharks and rays are exceptionally vulnerable to overfishing because of their tendency to grow slowly, mature late, and produce few young.
- Most sharks play key roles as top predators in marine food webs. By feeding on the weak and wounded of prey species, sharks help maintain ocean ecosystem function.
- Finning is the practice of slicing off a shark's valuable fins and discarding the body at sea. You can read the IUCN World Conservation Congress Recommendations on shark finning at: http://www.iucn.org/congress/2004/members/Individual_Res_Rec_Eng/wcc3_rec_116.pdf

- The SSG will release its report on the Red List status of the world's oceanic sharks in December, in preparation for an international meeting aimed at exploring options for new global agreements for sharks, convened by the Convention on Migratory Species.
- The annual meeting of International Commission for the Conservation of Atlantic Tunas is being held in Antalya, Turkey from November 12-19, 2007.
- A working group is meeting in Istanbul, Turkey, from 12 to 16 November, to develop Red List Assessments for other marine fish species of the Mediterranean.

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About the World Conservation Union (IUCN)

Created in 1948, the World Conservation Union (IUCN) brings together 84 States, 108 government agencies, 800 plus NGOs, and some 10,000 scientists and experts from 147 countries in a unique worldwide partnership. The Union's mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

The Union is the world's largest environmental knowledge network and has helped over 75 countries to prepare and implement national conservation and biodiversity strategies. The Union is a multicultural, multilingual organization with 1,000 staff located in 62 countries. Its headquarters are in Gland, Switzerland. www.iucn.org

IUCN Red List of Threatened Species

This is the most comprehensive conservation inventory of the world's plant and animal species and a widely used tool for focusing attention on species of conservation concern. The assessments evaluate the conservation status of individual species, identify threatening processes affecting them and, if necessary, propose recovery objectives for their populations. www.iucnredlist.org

IUCN Specialist Groups

These assess species and population health and abundance and classify them under categories ranging from *Extinct* to *Least Concern*. Species deemed *Vulnerable*, *Endangered*, and/or *Critically Endangered* around the world qualify as *Globally Threatened* under Red List criteria.

IUCN Shark Specialist Group (SSG)

The SSG aims to promote the long-term conservation of the world's chondrichthyan (cartilaginous) fishes, effective management of their fisheries and habitats and, where necessary, the recovery of their populations. The SSG is in the process of assessing the status of the roughly 1,000 species of cartilaginous fishes. <http://www.flmnh.ufl.edu/fish/organizations/ssg/ssg.htm>

IUCN Centre for Mediterranean Cooperation

This was opened in 2001 near Malaga, Spain. IUCN has more than 160 members in the Mediterranean region, including governments and NGO. Its mission is to influence, encourage, and assist Mediterranean societies to conserve and use sustainably the natural resources of the region and work with IUCN members and cooperate with all other agencies that share IUCN objectives. www.uicnmed.org

The Shark Alliance is a coalition of NGOs aimed at improving European shark policies. www.sharkalliance.org