

Dusky Shark (*Carcharhinus obscurus*)

Proposed action: Inclusion on CMS Appendix II
Proponent: Honduras



Overview

Shark species around the world face a wide variety of threats, including overfishing for the shark fin industry. The dusky shark is one of the most threatened coastal and occasionally pelagic shark species, with estimates of declines of as much as 99% in the last 30 years in the Atlantic Ocean and 75% in the last 35 years in the Indian Ocean. The dusky shark migrates in waters of the Americas, Africa, Australia, and parts of Asia. Despite the IUCN listing the dusky shark on its Red List of Threatened Species as Vulnerable to extinction globally, there are currently no international protections for this migratory species. Dusky shark populations are being caught at unsustainably high rates for their fins. Although there has been a recent decrease in the proportion of dusky sharks compared to other species in the fin trade, this decrease is most likely due to population declines as there are no large-scale management measures for this species. The increased pressure on the dusky shark since the 1970s may have already pushed the species to the “edge of collapse.” The lack of management, unsustainable fishing practices, and low reproduction rate of the species necessitates better regional, national, and global management. Including it on CMS Appendix II is a first step toward achieving necessary protections.

Biology and Distribution

Dusky sharks are found in the Atlantic, Indo-Pacific, and Mediterranean Oceans. The dusky shark is a large, wide-ranging species and with mainly coastal global distribution in tropical, sub-tropical and temperate oceans. These sharks can occur within the surf zone, but also occur far offshore. They can be found swimming on the surface as well as 400 meters deep off the edge of the continental shelf.

Dusky sharks have very slow reproduction rates. This biological characteristic has resulted in a low intrinsic rate of increase for the species. In the western Atlantic, the rate of population increase ranges from 2.8% to 5.57% annually based on the assumption of a two year reproduction cycle, with roughly 18 to 24 months of gestation. Recent studies show their reproductive cycles may be three years with a one-year interval between pregnancies. Dusky sharks give birth to seven pups on average per gestation period. Based on a three-year reproduction cycle, the Australian population is estimated to increase by 4.9% annually. This low population growth rate makes the dusky shark highly susceptible to overexploitation, which is why stricter management of the species is needed.

Population Status and Threats

The greatest threats to the dusky shark are unmanaged fisheries, being caught as bycatch, and low reproduction rates. These sharks are most often caught as bycatch in swordfish/tuna fisheries that occur close to shore in the Mediterranean, as well as in Atlantic pelagic longline fisheries. In the Mediterranean, dusky sharks are threatened from bycatch by fisheries off the North African coast that use longlines, setlines, and gillnets. While the Mediterranean population was assessed as Data Deficient, the other populations have been studied more closely. Studies show that the Atlantic population has significantly declined due to unmanaged fisheries. This population may have declined by 50-99% from 1950 to 2004, which is one reason why the population was assessed as Endangered in the Northwest and Western Central Atlantic. The United States National Oceanic and Atmospheric Administration (NOAA) estimates a rebuilding time of 400 years for this dusky shark population.

They face similar threats in the Indo-Pacific Ocean. Sports angling for dusky sharks has not significantly decreased in the south-eastern Indian Ocean. The population off the Australian coast was found to have declined over 75% from the 1970s to 2004, most likely due to overfishing. This population is assessed as Near Threatened, but it is close to meeting the criteria for Vulnerable.

Uses

Dusky sharks are caught as both a target species and as bycatch in fisheries targeting other species such as tuna, swordfish, and other sharks. Dusky sharks are used for their fins and meat in both domestic and global markets. Some fisheries use the dusky shark's skin and liver for leather and vitamin A, respectively. The principal demand for dusky sharks in the market is for their fins. Dusky shark fins are one of the most valuable types of fins in the shark fin market. Shark fins can sell for as much as \$700 per kilogram. The high demand for dusky shark fins has resulted in the overexploitation of the species.

Conservation Measures

Dusky sharks lack any international conservation measures. Only a few countries—Australia, South Africa, and the United States—have implemented management measures for this shark. No management protections have been adopted or implemented across most of the dusky shark's range, which is why it is necessary to list this species on CMS Appendix II.

Expert Advice

The CMS Scientific Council recommends the inclusion of the dusky shark on Appendix II of the Convention. The Council found that the species meets all of the criteria for inclusion in Appendix II and should be entitled to the protections provided by such listing. They recommend that, even though good migration data was presented, the amount of data available globally should be increased. The Council recommends the inclusion of the species in Annex 1 of the Sharks Memorandum of Understanding (MOU) as an important first step to improve international cooperation and they encourage Range States to sign the Sharks MOU.

CALL TO ACTION

Benefits from listing this species under CMS Appendix II depend on concrete follow-up actions. If properly implemented, listing these *Carcharhinus obscurus* could:

- improve protection and encourage actions to address threats such as overfishing;
- establish the first international protection for this species; and
- facilitate regional cooperation toward conservation of shared populations and key habitats.

We urge CMS Parties to support inclusion of *Carcharhinus obscurus* on CMS Appendix II at CoP12.

References

Information in this fact sheet is based on the CMS listing proposal and relevant IUCN Red List assessments.