Whale Shark (Rhincodon typus)

Proposed action: Proponents: Inclusion on CMS Appendix I Philippines, Israel, and Sri Lanka



Overview

Shark species around the world face a wide variety of threats, including overfishing as a target species and as bycatch. Whale sharks are the world's largest living fish. Their migratory patterns cause them to travel between national Exclusive Economic Zones and into the high seas over the short term, while also migrating farther away from shore over their lifetimes. The global population of the whale shark has decreased more than 50% in the last 75 years, resulting in its listing on the IUCN Red List as Endangered globally. The Indo-Pacific populations have decreased even more dramatically, with that subpopulation declining 63%. Whale sharks have protections from other treaties, including the United Nations Convention on the Law of the Sea (UNCLOS) and the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). However, gaps in protection necessitate listing whale sharks under CMS Appendix I. The combination of maintaining the existing Appendix II listing and adding the species to Appendix I of CMS will improve protection and encourage concerted actions to address threats such as bycatch, tourism, and vessel strikes.





Biology and Distribution

Whale sharks are most commonly spotted at a few known coastal feeding areas where the species congregates. Whale shark reproductive ecology is not well known, which could be alleviated through more studies. Tracking methods have shown that over short to medium time frames, whale sharks migrate toward feeding areas in search of prey following cyclical seasonal variations such as temperature and productivity levels. Over their lifetimes, adult whale sharks migrate away from coastal areas and live, almost exclusively, in off-shelf habitats.

Whale sharks are divided into two different subpopulations – Atlantic and Indo-Pacific. Approximately 25% of the global population lives in the Atlantic and 75% lives in the Indo-Pacific. Satellite-linked tagging shows that the Atlantic subpopulation routinely migrates across the boundaries of Belize, Brazil, Cuba, Honduras, and the USA. They have also been known to cross into the Southern Hemisphere. The Indo-Pacific populations commonly migrate between Mozambique and South Africa in the Indian Ocean. They occasionally migrate between Mozambique, Madagascar, the Seychelles and Tanzania.

Population Status and Threats

Research from the last 75 years has revealed that the Indo-Pacific population has decreased 63% and the Atlantic population has decreased by more than 30%. Combining the data sets suggests that the whale shark population has declined globally by more than 50% over the last 75 years, which is why the species has been listed as Endangered globally on the IUCN Red List of Endangered Species.

The greatest threats to the whale shark population are targeted fisheries, bycatch in nets, unsustainable tourism, and vessel strikes. Large-scale takes of whale sharks have increased due to overfishing in several areas, including in southern China. Smaller, opportunistic catches have occurred in Oman. Despite not always being the target catch, whale sharks are often captured and retained when sighted. Tuna fisheries and purse-seine fisheries have been associated with whale shark bycatch. Despite whale sharks not being targeted, over 1,000 individuals are caught per year. Common release practices often result in the injury or death of whale sharks. The lack of consistent management throughout their range makes the whale shark vulnerable to these threats.

Uses

Whale shark meat was in high demand from India and the Philippines prior to protections in those countries increasing in 2001 and 1998, respectively. Their fins have not been highly sought after due to their low quality. The main threat to whale sharks is the number caught as bycatch in large and small-scale fisheries. Some countries use whale sharks as an attractive resource for ecotourism, which ranges from no more than 24 tourists at a time in Cuba to over 250 licensed tour operators in Mexico.

Conservation Measures

Whale sharks are protected in many countries and are listed in several international treaties. Many large-scale whale shark fisheries have closed because of protections for the whale shark that have been implemented over the last twenty years. The species is listed in UNCLOS in Annex I as a Highly Migratory Species. Whale sharks are also listed in CITES on Appendix II. Whale sharks are currently listed on CMS under Appendix II. The above has not provided adequate protection for their main aggregation sites, nor encouraged concerted actions to address threats.

Expert Advice

The CMS Scientific Council strongly recommends the inclusion of the whale shark on Appendix I. The Council found that the species meets all of the criteria for inclusion in Appendix I. Population declines have been observed in all aggregation sites, except near Jeddah in Saudi Arabia. The declines in the Atlantic subpopulation cannot be explained, so the Council recommends handling the observation data carefully. The concerted actions offered by the Parties that proposed the species significantly strengthens this proposal.

CALL TO ACTION

Benefits from listing this species under CMS Appendix I and maintaining the Appendix II listing depend on concrete follow-up actions. If properly implemented, listing *Rhincodon typus* could:

- improve protection and encourage concerted actions to address threats such as bycatch and vessel strikes; and
- facilitate regional cooperation toward conservation of shared populations and key habitats.

We urge CMS Parties to support inclusion of *Rhincodon typus* on CMS Appendix 1 at CoP12.