

SMALLTOOTH SAWFISH

(*Pristis pectinata*) proposed for Annex 2

Coastal species that is nearly extirpated in former range in Atlantic Ocean



Overview

The global status of the smalltooth sawfish is assessed by IUCN as Critically Endangered. The smalltooth sawfish has been wholly or nearly extirpated from large areas of its former range in the Western Atlantic Ocean by fishing (trawl and inshore netting) and habitat modification. Records from scientific surveys, anecdotal fisher observations, and fish landings data over its historic range infer a population reduction $\geq 95\%$ over a period of three generations (i.e., 1962 to present). The species of the family *Pristidae* (the Sawfishes) are the most threatened elasmobranchs globally. All species of sawfish are listed in Appendix I of the Convention on International Trade of Endangered Species (CITES), which effectively bans commercial international trade in sawfish or their parts. The species are also listed in Annex I of the CMS and recognized as a highly migratory species by UNCLOS. The smalltooth sawfish, therefore, qualifies for inclusion under Annex 2 of SPAW under criterion 1, 4, 5 and 6.

- Listed as "Critically Endangered" in Western Central Atlantic
- Estimated population declines of $>95\%$
- Dependence on coastal areas and potential seasonal migrations through different jurisdictions requires regional and international cooperation
- Listed on Appendix I of CITES, Annex I of the CMS MoU, and as a Highly Migratory Species by UNCLOS
- Listed as endangered under the U.S. Endangered Species Act (ESA)
- Recovery plan in place in the U.S. since 2009
- High genetic variation should assist recovery

Biology and distribution

The smalltooth sawfish was once common in inshore waters and estuaries worldwide, preferring muddy and sandy bottoms. It is generally accepted that there is one population in the Western North Atlantic, which is distinct from the Eastern North Atlantic. Southwest Florida (US) and the Bahamas are the only known regions where numbers of smalltooth sawfish remain. Both areas have widespread mangrove estuaries which appear to be buffered from seasonal temperature extremes. Both areas also include large national parks that offer habitat protection. Juvenile sawfish use shallow habitats with high coverage of vegetation, such as mangrove forests, as important nursery areas.

In the U.S. there has been a recovery plan in place since 2009. Focus points are: reducing fishing impacts; protecting important habitats; and educating the public. There are also guidelines for fishermen to prevent capture and facilitate the live release of caught specimens.

Guidelines for ecotourism could also

be considered as part of any future recovery plans as this species is especially vulnerable due to the shallow habitats it utilises.

Recent, as yet unpublished, studies have indicated that the age at maturity of the species may be lower than previously thought; between 7 and 12 years. It is also suggested that the genetic variation is quite large (> 90%). These two aspects mean that the species has the potential to recover with the right level of protective measures. Recovery measures should focus on improving the survival of juveniles as well as preventing the mortality of adults. The population dynamics and structure, however, are largely unknown. Juveniles (< 100 cm) have small home ranges, preferring very shallow mud banks (0.5 – 1 m), whereas larger individuals move further afield and are found in deeper coastal waters.



Source: Sawfish Conservation Society

Population status

The smalltooth sawfish is listed by IUCN as *Critically Endangered*, both globally and in the Western Atlantic. The species was widely distributed throughout the tropical and subtropical marine and estuarine waters of the Western Atlantic Ocean. They were found from Uruguay through the Caribbean and Central America, the Gulf of Mexico, and the Atlantic coast of the United States. However, this range has contracted and the smalltooth sawfish has been likely extirpated from large areas of its former range. The species is currently known to occur in the southeastern United States, Bahamas, Cuba, Honduras, and Belize.

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Outside US waters, no data on population size or trends in abundance exist and the only information on trends in the population can be inferred from capture records. Due to the paucity of these data, it is not possible to determine the size or status of the remaining populations of smalltooth sawfish.

Conservation action

The sawfish family (*Pristidae*) are the most threatened elasmobranch species worldwide as a result of their high exposure to coastal shallow-water fisheries and their large body size. Their long tooth-studded saw makes them extraordinarily vulnerable to entanglement in any sort of net gear. The smalltooth sawfish is listed under CITES Appendix I. This means that CITES recognizes that the species is threatened with extinction and that all international commercial trade in wild specimens or their parts is prohibited. It is also listed as a highly migratory under UNCLOS and in Annex I of the Convention of Migratory Species (CMS).

