A MOST PECULIAR FISH
INSIGHTS INTO THE RARELY ENCOUNTERED SAWFISH
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The lack of scientific knowledge of sawfish reinforces their mystique. In fact, the number of species of sawfish extend is still unclear. Until recently this group was thought to comprise seven species, including the Smalltooth Pristis pectinata (see image), Largetooth P. pectiniman, Common Pristis pristis, Freshwater P. microdon, Green or Narrownosed P. nigrop, Dwarf P. clavata and Neotropical Anoxypristis gregoryi. Yet recent genetic analyses may lead to a taxonomic revision of this family. A review of the Pristis species complex, a grouping of three species that have morphological similarities (P. nigrop, P. microdon and P. pectiniman), may indicate that P. microdon and P. pectiniman are one and the same species. However, occurrences of these two species are now so rare that it is difficult to find current samples, with recent genetic analyses relying on samples taken from historical blades.

Sawfish are being increasingly fished for as bycatch and to obtain their rostral “teeth”. When captured, their meat is often sold as fish soup, their fins are often sold as Asian traders for fish soups, their livers are rendered for oil which contains high levels of vitamin A and their skin is highly sought after by the car trade. Unfortunately, the decline of sawfish has been compounded by their leaching history characteristics of tangling, local markets, and very low fecundity, held in common with other cartilaginous fishes. Coastal development also has led to widespread habitat loss and degradation through pollution and increased sedimentation from the erosion of wetlands.

Populations of sawfish species are now at such critically low levels that they are listed under Appendix I of the Convention on International Trade in Endangered Species of Fauna and Flora (CITES), prohibiting all trade and sale of sawfish and a Florida-wide angler encounter program.35 Studies conducted in Australia’s northern and western coastal regions, the Faroe Islands and the Channel Islands in particular, have revealed relatively thriving populations of the Green, Devil and Freshwater Sawfish. These studies are providing insights into populations, growth rates, habitat, social ecology and the identification of critical nursery habitats.28,29 Although insights gleaned from the rapidly expanding field of sawfish research is providing much needed data for their management and conservation, current evidence supports the extinction of these species’ declining populations.

Sawfish, Sawfish, no, I haven’t seen one of them for a long time” shared Daniel Castellanos Sr., a patrón fisher who has historically targeted sharks in Guatemalan and Belizean Caribbean waters and tells of his many sawfish captures between the 60s to the early 70s. It was in the first time that I had heard that sawfish were hard to find these days this was all of hearsay from fishers interviewed informally while conducting shark research in Honduras, Mexico, Guatemala, Mozambique, Kenya, Madagascar and Cuba. Once common in tropical coastal areas and estuaries, during the 20th century sawfish became rare due to widespread killing throughout their respective ranges. In the Caribbean, sawfish were once widespread but now few, at a loss of captures over the past decade and informal interviews with fishers, appear virtually extinct in most of the region.

“Sawfish! Sawfish!” used to be a oft-heard refrain from fishers interviewed informally while conducting shark research in the United States, Israel, Solomon Islands, Belize Caribbean waters and tells of his many sawfish captures between the 60s to the early 70s. It was not the first time I had heard that sawfish were hard to find these days this was all of hearsay from fishers interviewed informally while conducting shark research in Honduras, Mexico, Guatemala, Mozambique, Kenya, Madagascar and Cuba. Once common in tropical coastal areas and estuaries, during the 20th century sawfish became rare due to widespread killing throughout their respective ranges. In the Caribbean, sawfish were once widespread but now few, at a loss of captures over the past decade and informal interviews with fishers, appear virtually extinct in most of the region.

Main image: A 2m long Smalltooth Sawfish Pristis pectinata lying in wait in the Everglades National Park, Florida, US. This species has been fished from junks off the United States Endangered Species Act since 2003 and is listed in the CITES Appendix II image © Doug Perrine.

References

*See this issue online for full references: www.sharktrust.org/members

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Image 2: A taxonomic revision of this family may indicate that P. microdon and P. pectiniman are one and the same species. However, occurrences of these two species are now so rare that it is difficult to find current samples, with recent genetic analyses relying on samples taken from historical blades. Image © Rachel Graham.

Image 3: A recent net capture (18 January 2011) of an 18’’ Indian Ocean Large-toothed Sawfish Pristis microdon near Goa, India. This rare animal sold for 47000 Rs or 1,000 USD, the previous net capture for this species in this area dated over 30 years ago. Image © Unknown.

Image 4: Beau Felson, a researcher at the Mote Marine Laboratory, Florida, receives a Smalltooth Sawfish Pristis pectinata this Critical Endangered species can reach a total length of 550 cm (possibly 735 cm), and has a maximum weight estimated to be between 40 and 70 kg. Image © Colin Simpfendorfer.