

Threatened fishes of the world: *Pristis pectinata* Latham, 1794 (Pristidae)

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Common names: Smalltooth sawfish, wide sawfish. **Conservation status:** Listed as endangered globally, and critically endangered in the western Atlantic, by the IUCN; endangered by the American Fisheries Society; and



endangered by the USA under its Endangered Species Act. **Identification:** A large (to at least 550 cm, and possibly 760 cm) sawfish with a rostrum bearing 24–34 pairs of teeth. The rostral teeth are slender, possess a groove along their posterior margin, are relatively evenly spaced, and are present along the entire length of the rostrum. Dorsal fins tall and pointed, with the second almost as large as first. First dorsal fin origin above pelvic fin origin. Pectoral fins with broad bases and straight hind margins. Lower lobe of caudal fin small, with posterior margin of caudal fin almost straight. Drawing by H.L. Todd in Goode (1884). **Distribution:** A widely distributed species of sawfish: western Atlantic from the northeastern USA to northern Brazil, including the Caribbean islands; eastern Atlantic Morocco to Cameroon; occasional records from the Mediterranean; southeastern Africa including the coasts of South Africa east of the Cape of Good Hope, Mozambique and Madagascar; southern Asia including the Red Sea, Persian Gulf, Pakistan, India and Sri Lanka. There are also records from the Philippines and northern Australia, however these records appear to be misidentifications of *Pristis zijsron* (Peter Last, CSIRO Australia, pers. comm.). **Abundance:** In US waters, reports from the late 1800s indicated large numbers occurred in the Gulf of Mexico and along the Atlantic coast. The current level of abundance in US waters is extremely low, with the population on the east coast of Florida mostly extirpated (Snelson & Williams 1981) and the majority of the population restricted to the southwest Florida coast (Seitz & Poulakis 2002, Simpfendorfer 2002). There are no data available on abundance in other parts of its range, but in all areas it appears to have been dramatically decreased due to bycatch in commercial fisheries, recreational fishing, trophy hunting and habitat loss. **Habitat and ecology:** Immature smalltooth sawfish have a high level of dependence on shallow inshore habitats (< 2 m deep), especially around the mouths of rivers and in estuaries. Very young individuals occur on shallow sand and mud banks, often not leaving water < 30 cm deep for extended periods. Adults are known to occur in waters up to 100 m deep. In US waters there was evidence for a seasonal migration of adults along the east coast from winter grounds in eastern Florida to summer grounds in Georgia, South Carolina, North Carolina, Virginia, and at times as far north as New York. Sawfish use their rostrum to stun, injure or kill teleost fishes, and then ingest them whole. Juveniles will also consume shrimp and crabs. **Reproduction:** Little is known of the reproductive biology. Males mature at around 270 cm total length (TL), and females at around 360 cm TL. Litter size is thought to be 15–20, but there is little supporting data for this. The young are born at 60–80 cm TL. Demographic analysis indicates the population has a very slow intrinsic rate of increase (Simpfendorfer 2000). **Threats:** Captured in most fishing gears, but especially in nets. While never targeted, it has been an important bycatch in some commercial fisheries. Regularly caught by recreational anglers who in the past prized the rostrum as a trophy, but who today often release them alive. Smalltooth sawfish are also threatened by a loss of habitat, especially the shallow coastal nursery habitats utilized by the juveniles. **Conservation action:** The smalltooth sawfish was the first elasmobranch listed under the US Endangered Species Act and a recovery plan is being developed. It is a protected species in the US states of Florida and Louisiana. There are no other known conservation actions for this species. **Conservation recommendations:** This species is in need of global conservation action. Recovery plans that include provisions to reduce bycatch in fisheries, educate commercial and recreational fishers about the need for conservation and how to safely release animals alive, and address the loss of nursery habitats, need to be developed.

Goode, G.B. 1884. The Fisheries and Fishery Industries of the United States. Section I. Natural History of Useful Aquatic Animals. Government Printing Office, Washington. 895 pp. & 277 p.

Seitz, J.C. & G.R. Poulakis. 2002. Recent occurrences of sawfishes (Elasmobranchiomorpha: Pristidae) along the southwest coast of Florida (USA). Fla. Sci. 65: 256–266.

Simpfendorfer, C.A. 2000. Predicting recovery rates for endangered western Atlantic sawfishes using demographic analysis. Env. Biol. Fish. 58: 371–377.

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Snelson, F.F. & S.E. Williams. 1981. Notes on the occurrence, distribution, and biology of elasmobranch fishes of the Indian River Lagoon system, Florida. Estuaries 4: 110–120.