Threatened Species of the Northern Territory

Dwarf Sawfish

Pristis clavata

Photo: P. Kyne

Conservation status

Australia: Vulnerable
Environment Protection and Biodiversity Conservation Act 1999

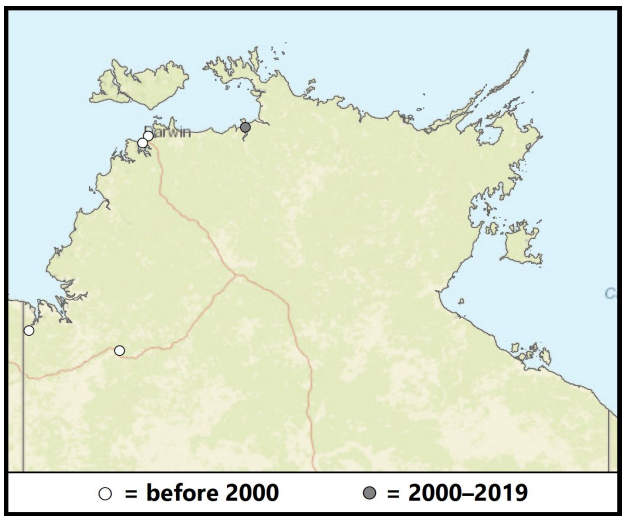
Northern Territory: Vulnerable
Territory Parks and Wildlife Conservation Act 1976

Description

The Dwarf Sawfish is a small, robust, shark-like ray with a maximum body length of 3.2 m[1]. The rostrum (snout) is broad and bears 18 to 22 pairs of equally spaced lateral 'teeth' from near the base to the tip. The body is usually greenish-brown above and white ventrally. Behind each eye is a broad spiracle with large flaps. The pectoral fins are broadly triangular with broad bases, and the dorsal fins are tall and pointed. The first dorsal fin is positioned in line with, or slightly forward of, the origin of the pelvic fin. The lower lobe of the caudal fin is small and the posterior margin of the caudal fin is almost straight.

Distribution

The Dwarf Sawfish was historically distributed throughout the Indo-West Pacific, but has disappeared or declined over much of this range[1]. In Australian waters, it occurs from Port Hedland in Western Australia to Cairns in Queensland[1]. In the Northern Territory (NT), the species has been recorded in numerous river catchments, including the Keep River, Victoria River, Buffalo and Rapid creeks in Darwin Harbour, and the South Alligator River[1–3].



Known localities of the Dwarf Sawfish in the NT (nrmaps.nt.gov.au)

NT conservation reserves where reported: Kakadu National Park.

Ecology and life-history

The Dwarf Sawfish occurs in shallow waters (0–20 m deep) in coastal and estuarine areas of tropical Australia and adults move between those coastal and estuarine habitats[1]. Individuals have also been recorded substantial distances up rivers, almost into freshwater[4]. For example, one individual was found in the Victoria River ~100 km from the river mouth[1]. The Dwarf Sawfish is not known to enter purely freshwater areas[4].

Like other sawfish, the Dwarf Sawfish feeds on fish, which are stunned by side-swipes of the snout. A favoured prey species is Popeye Mullet

Rhinomugil nasutus. The diet also includes molluscs and crustaceans, which are swept out of the mud by the snout.

Dwarf Sawfish can live for at least 34 years[1]. Females reach sexual maturity at about 8 years of age. Generation length is estimated to be 21 years[1]. Sawfish generally have low fecundity and low intrinsic rates of natural increase. Dwarf Sawfish give birth to between 1 and 13 pups every two years, in estuarine areas during the wet season, and juveniles may remain in these habitats for several years[4,5].

Populations in Western Australia, the NT and Queensland are distinct genetic stocks[4].

Threatening processes

The most significant threat to the Dwarf Sawfish is mortality from inshore and estuarine fishing activities[1]. The anatomy of sawfish, especially the rostrum, makes them highly susceptible to entanglement in nets and fishing line. Moreover, the sharp 'teeth' on the rostrum makes handling them dangerous, increasing the difficulty of trying to untangle and release entangled sawfish. The population of Dwarf Sawfish has been significantly reduced as a result of interactions with commercial inshore gillnet fishing equipment[6]. Recreational fishing may also have a negative impact on this species and there is an unquantified level of Indigenous harvest. There has also been a degree of trophy collecting of the rostrum. Habitat degradation through coastal and riverine development is also a significant threat[1,7]. Other forms of habitat degradation (such as bottom trawling and water pollution) and marine debris are additional threats.

In the NT, Dwarf Sawfish caught during recreational fishing must be immediately returned to the water unharmed. Recreational fishers are encouraged to report any interactions with this species (e.g. unintentional capture, entanglement in fishing gear) through NT Fisheries on 08 8999 2144 or fisheries@nt.gov.au. Removal of the snout is not permitted and photographs ('selfies'), particularly those where the snout is lifted, can harm the animal.

Conservation objectives and management

The managing authority for the Largetooth Sawfish in the NT is the Fisheries division of the Department of Industry, Tourism and Trade.

The research and management priorities for the Dwarf Sawfish are to: i) investigate the distribution, fine-scale genetic structure, status, biology, life history and habitat requirements of the species further; ii) monitor and limit the impacts of fishing; and iii) educate fishers on the protected status of sawfish and safe methods of release.

References

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