

Threatened Species of the Northern Territory

Green Sawfish

Pristis zijsron

Conservation status

Australia: Vulnerable

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable

Territory Parks and Wildlife Conservation Act 1976

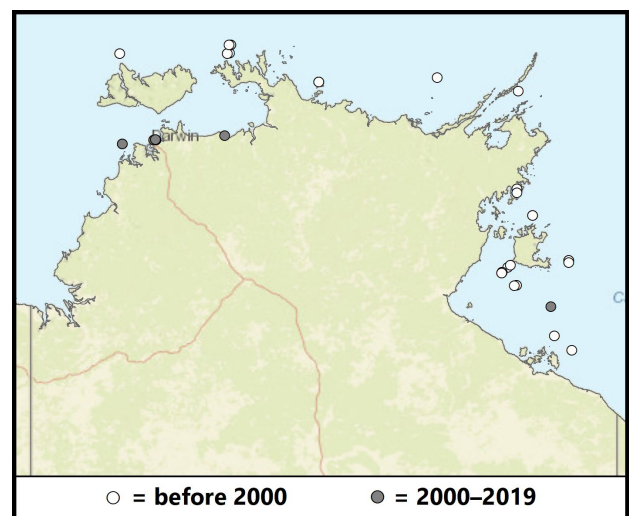
Description

The Green Sawfish is a large, robust, shark-like ray with a typical maximum body length of 7.3 m¹. The rostrum (snout) is slender and has 24 to 28 pairs of lateral 'teeth', which are progressively more closely spaced towards the tip. The body is greenish-brown or olive above and whitish below. The pectoral fins are broadly triangular with broad bases, and the dorsal fins are tall and pointed. The origin of the first dorsal fin is positioned slightly behind, rather than in front of, the pelvic fin origin, and this readily distinguishes this species from the Largetooth Sawfish *Pristis pristis*. The lower lobe of the caudal fin is small and the posterior margin of the caudal fin is almost straight.

Distribution

The Green Sawfish is widely distributed across the western Atlantic, eastern Pacific, eastern Atlantic, and the Indo-West Pacific oceans, but has disappeared or declined over much of this range¹. In Australian waters, it is distributed from Shark Bay/Gathaagudu in Western Australia to Mackay, but it is rare south of Cairns¹.

In the Northern Territory (NT), Green Sawfish have been recorded at widely scattered localities in ocean and coastal waters across the Top End.



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

NT conservation reserves where reported: Garig Gunak Barlu National Park².

Ecology and life-history

The Green Sawfish occurs in waters from 0-100 m depth. It is often found in shallow water with a muddy substrate. The species has been reported to inhabit marine inshore waters, estuaries, lagoons and freshwater, but most records are from marine and estuarine areas³. Juveniles and adults are found in near-shore and estuarine habitats, whilst adults can be found in deeper waters off the continental shelf¹.

Green Sawfish mostly feed on fish, molluscs and crustaceans, which are swept out of the substrate or stunned by side-swipes of the rostrum.

During the wet season, Green Sawfish enter estuaries to pup¹. A female gives birth to up to 12 live pups at a time. Female Green Sawfish reach sexual maturity at about 9 years of age and can live for at least 24 years¹.

Populations in Western Australia, likely the NT, and Queensland are distinct genetic stocks⁴.

Threatening processes

The most significant threat to the Green Sawfish is mortality from coastal, inshore and estuarine fishing activities¹. Incidental capture in commercial prawn and fish trawling, as well as gillnetting, is a significant threat to the Green Sawfish⁵. Illegal targeted fishing may also threaten the species as their flesh is used in the dried fish trade. Fishing appears to have led to the decline of the species in southern Australian states. For example, in the Moreton Bay area of Queensland, there have been no reports of the species since the 1960s⁶ and the last confirmed record from New South Wales was from 1972. Habitat degradation through coastal and riverine development is a significant threat¹. Other forms of habitat degradation (such as bottom trawling and water pollution) and marine debris are additional threats.

In the NT, Green 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 Green Sawfish in the NT is the Fisheries division of the Department of Industry, Tourism and Trade.

The research and management priorities for the Green Sawfish are to: i) further investigate the distribution, fine-scale genetic structure, status, biology, life history and habitat requirements of

the species; ii) monitor and limit the impacts of fishing; and iii) educate fishers on the protected status of sawfish and safe methods of release.

References

- ¹ Harry, A.V., Everett, B., Faria, V., Fordham, S., Grant, M.I., Haque, A.B., Ho, H., Jabado, R.W., Jones, G.C.A., Lear, K.O., Morgan, D.L., Phillips, N.M., Spaet, J.L.Y., Tanna, A. & Wueringer, B.E. 2022. *Pristis zijsron*. *The IUCN Red List of Threatened Species 2022*: e.T39393A58304631. Accessed on 21 August 2023.
- ² Davies, C.L., Tothill, T., Meeuwig, J.J. & Kyne, P.M. 2022. Garig Gunak Barlu National Park Green Sawfish (*Pristis zijsron*) aggregation surveys. Report to the National Environmental Science Program, Marine Biodiversity Hub. Charles Darwin University, Darwin.
- ³ Thorburn, D.C., Peverell, S., Stevens, S., Last, J.D., Rowland, A.J. 2003. Status of freshwater and estuarine elasmobranchs in northern Australia. Report to Natural Heritage Trust, Canberra.
- ⁴ Harrison, L., Dulvy, N. 2014. Sawfish: A Global Strategy for Conservation. IUCN Species Survival Commission's Shark Specialist Group, Vancouver, Canada.
- ⁵ Stobutzki, I., Miller, J.M., Heales, D.S. and Brewer, D.T. 2002. Sustainability of elasmobranchs caught as bycatch in a tropical prawn (shrimp) trawl fishery. *Fishery Bulletin* **100**, 800–822.
- ⁶ Johnson, J.W. 1999. Annotated checklist of the fishes of Moreton Bay, Queensland, Australia. *Memoirs of the Queensland Museum* **43**, 709–762.