# Threatened Species of the Northern Territory

## Largetooth Sawfish

### Pristis pristis

#### **Conservation status**

Australia: Vulnerable Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable Territory Parks and Wildlife Conservation Act 1976

#### Description

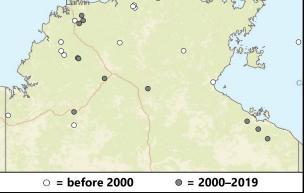
The Largetooth Sawfish is a large, robust sharklike ray with a maximum body length of 7.1 m. The rostrum (snout) has 14–24 pairs of equally spaced lateral 'teeth', from near the base to the tip. The body is yellowish to grey above and white underneath. The Largetooth Sawfish is readily distinguished from other sawfish species in the Northern Territory by the position of its dorsal fin: the front edge of this fin is well forward of, rather than in line with, the pelvic fin. The pectoral fins are broadly triangular and the caudal fin has a concave posterior margin and small lower lobe. Like other rays, it has gill openings (5) on the ventral surface of the head.

#### Distribution

The Largetooth Sawfish has a widespread distribution across the western Atlantic, eastern Pacific, eastern Atlantic, and the Indo-West Pacific oceans, but has disappeared or declined over much of this range<sup>1</sup>.

In Australian waters, the species occurs from 80 Mile Beach in Western Australia to Princess Charlotte Bay on the east coast of Queensland<sup>1</sup>. In the Northern Territory (NT), the Largetooth Sawfish is known to occur in the Keep, Victoria, Adelaide, East Alligator, South Alligator, Daly,





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

Goomadeer, Roper, Katherine, Limnen Bight, Wearyan, McArthur and Robinson rivers<sup>2</sup>.

NT conservation reserves where reported: Kakadu National Park, Keep River National Park and Judbarra/Gregory National Park.

#### **Ecology and life-history**

The Largetooth Sawfish is a euryhaline species found in marine and fresh waters<sup>1</sup>. It occurs in estuaries and river systems (including isolated waterholes) in 0-60 m depth<sup>1</sup>. The species prefers the sandy or muddy bottoms of shallow water. Juveniles primarily occur in freshwater river systems and estuaries and disperse along rivers towards the sea as they age. Adults occur in fresh and marine waters, but mainly in estuaries and marine waters.

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

Female Largetooth Sawfish give birth to between one and twenty live pups every 1-2 years<sup>1</sup>. In Queensland, births occur at the beginning of the wet season. Female Largetooth Sawfish reach sexual maturity at 9 years and can live for at least 36 years<sup>1</sup>.

Genetic research indicates that each river system should be treated as a distinct stock, population and management unit. Each has limited capacity for recovery via immigration following localised declines or extinctions<sup>3</sup>.

#### Threatening processes

The most significant threat to the Largetooth Sawfish is mortality from coastal, inshore and estuarine fishing activities<sup>1</sup>. Habitat degradation through coastal and riverine development, and the creation of barriers to fish passage (dams, bund walls, weirs, crossings etc.) are significant threats<sup>1</sup>. Other forms of habitat degradation (such as bottom trawling and water pollution), marine debris and collection for the aquarium trade are additional threats.

In the NT, Largetooth 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 <u>fisheries@nt.gov.au</u>. 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, Toursim and Trade. The research and management priorities for the Largetooth Sawfish are to: i) further investigate the distribution, 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

<sup>1</sup> Espinoza, M., Bonfil-Sanders, R., Carlson, J., Charvet, P., Chevis, M., Dulvy, N.K., Everett, B., Faria, V., Ferretti, F., Fordham, S., Grant, M.I., Haque, A.B., Harry, A.V., Jabado, R.W., Jones, G.C.A., Kelez, S., Lear, K.O., Morgan, D.L., Phillips, N.M. & Wueringer, B.E. 2022. *Pristis pristis. The IUCN Red List of Threatened Species* 2022: e.T18584848A58336780. <u>https://dx.doi.org/10.2305/IUCN</u>. <u>UK.2022-2.RLTS.T18584848A58336780.en</u>. Accessed on 21 August 2023.

<sup>2</sup> 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.

<sup>3</sup> Feutry, P., Kyne, P.M., Pillans, R.D., Chen, X., Marthick, J., Morgan D.L., Grewe, P.M. (2015) Whole mitogenome sequencing refines population structure of the Critically Endangered sawfish *Pristis pristis*. *Marine Ecology Progress Series* **533**: 237-244.

<sup>4</sup> Pogonoski, J.J., Pollard, D.A., Paxton, J.R. 2002. Conservation Overview and Action Plan for Australian Threatened and Potentially Threatened Marine and Estuarine Fishes. Environment Australia, Canberra.

<sup>5</sup> Sawfish and River Sharks Multispecies Recovery Plan 2015, Commonwealth of Australia.