

## Tropical Sawshark, *Pristiophorus delicatus*

<b>Report Card assessment</b>	<b>Sustainable</b>		
IUCN Red List Australian Assessment	Least Concern (Endemic to Australia)	IUCN Red List Global Assessment	Least Concern
Global Assessors	Rigby, C.L. & Heupel, M.R.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan) and Woodhams, J., Braccini, M., Krueck, N., Peddemors, V. & Rogers, P. (SAFS – all sawsharks combined)		
Report Card Remarks	Minimal fishing pressure with refuge at depth.		

### Summary

The Tropical Sawshark is a deepwater endemic species known only from northeast Australia. It has been captured as bycatch in the Queensland East Coast Trawl Fishery, although the deepwater trawl sector has low fishing effort in the area of occurrence and generally operates only to the upper depth limit of the species. Although a poorly known species, its distribution is



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currently subject to minimal fishing effort, and it is likely to receive refuge at depth. Therefore, it is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (Woodhams et al. 2021).

### Distribution

The Tropical Sawshark is restricted to a confined region in northeast Australia between Gladstone and Cairns off the coast of Queensland (Last and Stevens 2009, Rigby et al. 2016). The only specimens were collected from an exploratory fishing survey of North Queensland in the mid-1980s (Yearsley et al. 2008, Last and Stevens 2009) and from within this range at the Swain Reefs in 2011 (Rigby et al. 2016). The distribution or abundance outside the survey area is unknown (Last and Stevens 2009).

### Stock structure and status

There is currently no information on population size, structure, or trend for the species. However, it is included in the Status of Australian Fish Stocks assessment for other Australian sawsharks, and as part of that assessment is assessed as Sustainable (Woodhams et al. 2021).

## Fisheries

The Tropical Sawshark taken as discarded bycatch in the Queensland East Coast Trawl Fishery (deepwater component of the eastern king prawn sector) (Rigby et al. 2016). This sector has a relatively low fishing effort and the trawlers do not generally operate beyond 200 m depth which the upper limit of the species' depth range. Some recreational fishers and a small number of charter operators target deepwater (>200 m) finfish may also interact with the species (Sumpton et al. 2013). The distribution of the species overlaps with the Coral Sea Fishery, although effort in that fishery is low, with no trawling since the 2006–2007 fishing season (Noriega et al. 2014).

## Habitat and biology

The Tropical Sawshark has been found on the continental slope in depths ranging from 176 to 405 m (Yearsley et al. 2008, Last and Stevens 2009, Rigby et al. 2016). The species grows to at least 95 cm total length (TL) (Rigby et al. 2016), with male's late adolescent at 63 cm TL (Last and Stevens 2009).

Longevity and maximum size	Longevity: unknown Max size: at least 95 cm TL
Age and/or size at maturity (50%)	Unknown

**CAAB Code:** 37 023004

**Link to IUCN Page:** <https://www.iucnredlist.org/species/42720/68641067>

**Status of Australian Fish Stocks Page:** <https://fish.gov.au/report/276-SAWSHARKS-2020>

**Link to page at Shark References:** <http://shark-references.com/species/view/Pristiophorus-delicatus>

## References

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- Noriega, R., Hansen, S. and Mazur, K. 2014. Coral Sea Fishery. In: Georgeson, L., Stobutzki, I. and Curtotti, R. (eds), *Fishery status reports 2013-14*, pp. 48-60. Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.
- Rigby, C.L., White, W.T., and Simpfendorfer, C.A. (2016) Deepwater Chondrichthyan Bycatch of the Eastern King Prawn Fishery in the Southern Great Barrier Reef, Australia. *PLoS ONE* 11(5), e0156036.
- Sumpton, W., McLennan, M., Campbell, M., and Kerrigan, B. 2013. Assessing technology changes and risks to the sustainable management of deepwater line fisheries in southern Queensland. Sustainable Fisheries Unit, Animal Science, Agri-Science Queensland, Department of Agriculture, Fisheries and Forestry, Queensland.
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