

Eastern Numbfish, *Narcinops nelsoni*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern (Endemic to Australia)	IUCN Red List Global Assessment	Least Concern
Global Assessors	Rigby, C.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Fishing pressure low across its known range and Coral Sea Marine Park provides significant protection.		

Summary

The Eastern Numbfish is a small deepwater ray endemic to tropical northeast Australia in a relatively restricted range. It may occur more widely, as there have been few surveys and relatively limited fishing effort across its range. The species may be caught incidentally by commercial trawls in the Coral Sea Fishery (CSF) however, that fishery has had historically low effort and trawling is no longer permitted. It may be captured in the Line Sector of the CSF,



although it also has low effort and with no commercial value, the Eastern Numbfish is likely released if caught; the CSF has chondrichthyan handling practices to maximise post-release survival. The species would also receive significant protection from the Coral Sea Marine Park. It may interact infrequently with Queensland managed fisheries, though it has not been reported from those fisheries that mostly operate further south than the southern limit of its known range. It was reported as abundant in the locations from where it has been recorded and fishing effort is very low across its range where there is also significant spatial refuge. Therefore, the Eastern Numbfish is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).

Distribution

The Eastern Numbfish is endemic to tropical waters off northeast Australia (Last et al. 2016). It has a relatively restricted known range from east of Dunk Island to Rockhampton (Queensland) (Last and Stevens 2009). It may have a wider range of occurrence given that there have been few surveys and relatively limited fishing effort across its range (Last et al. 2016).

Stock structure and status

There is currently no information on population size, structure, or trend for the species. However, it was abundant in the locations where it has been recorded (Carvalho 2008).

Fisheries

The Eastern Numbfish has been collected from research surveys and as bycatch in the 1980s from the Trawl Sector of the Commonwealth managed Coral Sea Fishery (CSF) (Carvalho 2008). Trawl fishery effort has historically been low with most of the effort outside the known range of the species, and since 2006–2007 there has been virtually no trawl activity and as of 2018–2019, trawling is no longer permitted (Patterson et al. 2022). The species may be caught in the Line Sector of the CSF, though this sector has limited effort with only 1–2 vessels active in recent years (Patterson et al. 2022). The species is likely released if caught as it has no commercial value and the CSF has implemented chondrichthyan handling practices to maximise post-release survival (AFMA 2010). The Eastern Numbfish has also received significant protection since 2014 with the implementation of the Coral Sea Marine Park, which includes zoning and gear restrictions (Patterson et al. 2022, Parks Australia 2023). The species may interact with Queensland managed fisheries yet this is unlikely to be frequent. The deepwater eastern king prawn sector of the East Coast Trawl Fishery has not recorded this species and the Deepwater Fin Fish Fishery uses benthopelagic rather than demersal gear and has very limited effort. Additionally, both fisheries mostly operate further south than the southern limit of the Eastern Numbfish’s known range (DEEDI 2010, Pears et al. 2012, DAF 2019).

Habitat and biology

The Eastern Numbfish is demersal on the outer continental shelf and upper slope at depths of 140–540 m (Last et al. 2016). Maximum size is at least 35 cm total length (TL) with males and females mature at 20–26 cm TL (Carvalho 2008, Last and Stevens 2009). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 35 cm TL
Age and/or size at maturity (50%)	Males: 20–26 cm TL Females: 20–26 cm TL

CAAB Code: 37 028008

Link to IUCN Page: <https://www.iucnredlist.org/species/195460/68635060>

Link to page at Shark References: <https://shark-references.com/species/view/Narcinops-nelsoni>

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