

Endeavour Skate, *Dentiraja endeavouri*

Report Card assessment	Depleting		
IUCN Red List Australian Assessment	Near Threatened (Endemic to Australia)	IUCN Red List Global Assessment	Near Threatened
Global Assessors	Rigby, C.L. & Derrick, D.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Precautionary approach as relatively restricted range, possibly common yet high at-vessel mortality and uncertainty about fishing mortality.		

Summary

The Endeavour Skate is a small deepwater ray endemic to subtropical waters of eastern Australia in a relatively restricted range. It is an incidental catch of trawl fisheries. In Queensland, it was the most common elasmobranch catch in the deepwater eastern king prawn sector of the Queensland East Coast Trawl Fishery (ECTF). Although overall catch rates were low, at-vessel mortality was high and it would be discarded as retention is prohibited; post-release mortality is unknown. It is also



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likely caught in the New South Wales Ocean Trawl Fishery (OTF), though effort in the OTF is limited and the species would have refuge at depth. Mandatory bycatch reduction devices may not be effective at excluding this small species of ray. Given its restricted range, high at-vessel mortality, uncertainty about fishing mortality, and a lack of information on population trends, a precautionary approach is taken, and it is suspected there has been a population reduction and it is depleting. Therefore, the Endeavour Skate is assessed as Near Threatened (IUCN) (Kyne et al. 2021) and Depleting (SAFS).

Distribution

The Endeavour Skate is endemic to subtropical waters of eastern Australia (Last et al. 2016). It occurs in a relatively restricted range from Fraser Island (Queensland) to Crowdy Head (New South Wales) (Last and Stevens 2009).

Stock structure and status

The Endeavour Skate was common in at least the early 1990s (Last and Stevens 1994) and also in Queensland trawl surveys in 2002 (Kyne 2008) but there is no information on its population trend.

Fisheries

The Endeavour Skate is an incidental catch of trawl fisheries. It was the most common incidental elasmobranch catch in the deepwater eastern king prawn sector of the Queensland East Coast Trawl Fishery (ECTF) in 2002 surveys (Kyne 2008). Catch rates were low but at-vessel mortality was high. It would be discarded when caught as elasmobranchs are prohibited from retention; however, post-release mortality is unknown. The species was assessed as at low risk from the ECTF but when uncertainty around fishing mortality was included it moved to precautionary medium risk (Campbell et al. 2018). It may also be taken in New South Wales in the Ocean Trawl Fishery (OTF), though there is no species-specific catch data. The effort is relatively limited and seasonal for the OTF and trawls do not operate to the maximum depth range of the species, providing it some refuge (DPI 2004, Rigby and Derrick 2021, Johnson and Barnes 2023). Bycatch reduction devices (BRDs) have been mandated in the prawn trawl fisheries since at least the early-mid 2000s and significantly reduce the catch of the large rays by >94%, but are less effective at excluding smaller rays such as this species (Griffiths et al. 2006).

Habitat and biology

The Endeavour Skate is demersal on the continental shelf and slope at depths of 110–370 m (Last et al. 2016). Maximum size is at least 37 cm total length (TL) and males mature at approximately 30 cm TL and females at approximately 31 cm TL (as *Dipturus polyommata*; Kyne et al. 2008). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 37 cm TL
Age and/or size at maturity (50%)	Males: ~ 30 cm TL Females: ~31 cm TL

CAAB Code: 37 031043

Link to IUCN Page: <https://www.iucnredlist.org/species/195446/68620738>

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

References

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