

Blacktip Skate, *Dipturus melanospilus*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern* (Endemic to Australia)	IUCN Red List Global Assessment	Data Deficient
Global Assessors	Duryea, J. & Ebert, D.A.		
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 in its spatial and depth range and significant refuge in the Coral Sea Marine park.		

*The Australian assessment status is more recent than the Global assessment and the shift from DD to LC aligns with a less evidentiary and more precautionary approach to Red List assessments rather than any significant new information.

Summary

The Blacktip Skate is a small deepwater ray endemic to tropical and subtropical waters of eastern Australia in a wide range. It may be incidentally caught in the Line Sector of Coral Sea Fishery (CSF), though effort is limited. Trawling in the CSF is no longer permitted. It may also be incidentally caught in the deepwater eastern king prawn sector of the Queensland East Coast Trawl Fishery (ECTF) though there is limited spatial and depth overlap and the species is assessed as at low risk



from the fishery. Fishing pressure is minimal across its Queensland spatial and depth range and it would also receive significant refuge in the Coral Sea Marine Park. It may be caught in the New South Wales Ocean Trawl Fishery but catches are likely minimal. Therefore, the Blacktip Skate is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).

Distribution

The Blacktip Skate is endemic to tropical and subtropical waters of eastern Australia (Last et al. 2016). It occurs in a wide range from Marion Plateau (Queensland) to Broken Bay (New South Wales) (Last and Stevens 2009).

Stock structure and status

There is currently no information on population size, structure, or trend for the species.

Fisheries

The Blacktip Skate may be caught incidentally in trawl and line fisheries. It may be caught in the Line Sector of the Commonwealth managed Coral Sea Fishery (CSF), that fishes mostly at 30–800 m though the Sector has limited effort with only two vessels active in recent years. Trawling is no longer

permitted in the CSF and trawl effort was historically low (Patterson et al. 2022). It may be caught in the deepwater eastern king prawn sector of the Queensland East Coast Trawl Fishery (ECTF) though there is limited spatial and depth overlap and the species is assessed as at low risk from the ECTF (Campbell et al. 2018). It may also be caught in the New South Wales Ocean Trawl Fishery and although there is no species-specific catch data, catches are likely minimal as skates (Rajidae) and softnose skates (Arhynchobatidae) undifferentiated and combined, were noted in only 4% of observed shots over two years (2017/18–2018/19) (Johnson and Barnes 2023). It would also receive significant refuge since the implementation of the Coral Sea Marine Park in 2014 which includes zoning and gear restrictions (Patterson et al. 2022, Parks Australia 2023).

Habitat and biology

The Blacktip Skate is demersal on the continental slope at depths of 240–695 m (Last et al. 2016). Maximum size is at least 78 cm total length (TL) and males mature at approximately 63 cm TL (Last et al. 2016). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 63 cm TL
Age and/or size at maturity (50%)	Males: ~ 63 cm TL Females: unknown

CAAB Code: 37 031033

Link to IUCN Page: <https://www.iucnredlist.org/species/195450/68621398>

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

References

- Campbell, M., Courtney, A., Wang, N., McLennan, M. and Zhou, S. 2018. *Estimating the impacts of management changes on bycatch reduction and sustainability of high-risk bycatch species in the Queensland East Coast Otter Trawl Fishery*. FRDC Final Report Project number 2015/014, Brisbane, Queensland.
- Johnson, D.D. and Barnes, T.C. 2023. *Observer-based survey of the prawn trawl sectors (inshore & offshore prawn) of the New South Wales ocean trawl fishery. Retained and discarded catch characteristics*. Fisheries Final Report Series | No. 163. NSW Department of Primary Industries.
- Kyne, P.M., Heupel, M.R., White, W.T. and Simpfendorfer, C.A. 2021. *The Action Plan for Australian Sharks and Rays 2021*. National Environmental Science Program, Marine Biodiversity Hub, Hobart.
- Last, P.R. and Stevens, J.D. 2009. *Sharks and Rays of Australia*. Second Edition. CSIRO Publishing, Collingwood, Australia.
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