

Abyssal Skate, *Bathyraja ishiharai*

Report Card assessment	Negligible		
IUCN Red List Australian Assessment	Least Concern* (Endemic to Australia)	IUCN Red List Global Assessment	Data Deficient
Global Assessors	Stehmann, M.F.W., Valenti, S.V. & McAuley, R.B.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Deepwater species not currently fished in Australia.		

*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 Abyssal Skate is a medium-sized deepwater species endemic to temperate waters of southern Australia. It is only known from a limited number of specimens and two separate locations in Australia. It may occur more widely but has not been recorded, probably as it occurs on abyssal plains where there are limited research surveys and currently no commercial fishing effort. It is unlikely that it was previously caught in commercial fisheries as its depth range is very deep at 2,320–2,800 m, which is beyond the depth range of finfish that were previously targeted such as Orange Roughy (*Hoplostethus altanticus*) and oreos (*Oreosomatidae*).



The species would receive refuge in the Commonwealth South-west Marine Parks Network and the South Tasman Rise Commonwealth Marine Reserve. Although poorly-known due to its abyssal depth range, the species is not currently fished in Australia. Therefore, the Abyssal Skate is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Negligible (SAFS).

Distribution

The Abyssal Skate is endemic to temperate waters of southern Australia (Last et al. 2016). It has only been recorded from two locations, the Naturaliste Plateau off southwest Australia and off southern Tasmania (Last et al. 2016). It possibly also occurs on the Lorde Howe Rise (Tasman Sea) and off Tanzania which suggests it may occur more widely (Last et al. 2016, Weigmann 2016). However, until the latter record is confirmed, it is considered an Australian endemic species.

Stock structure and status

The Abyssal Skate is known only from a limited number of specimens and there is currently no information on population size, structure, or trend for the species.

Fisheries

The Abyssal Skate is known only from specimens collected during research surveys (Last and Stevens 2009). There are no commercial fisheries that currently, nor likely previously, operate at the abyssal depths at which the species occurs (Patterson et al. 2022). The species would receive refuge in the Commonwealth South-west Marine Parks Network that came into effect in 2018 which include deep abyssal plain habitats, zoning and gear restrictions and possibly also in the South Tasman Rise Commonwealth Marine Reserve implemented in 2007 which prohibits commercial fishing (Patterson et al. 2022, Parks Australia 2023).

Habitat and biology

The Abyssal Skate occurs on the abyssal plains at depths of 2,320–2,800 m (Last and Stevens 2009, Last et al. 2016). Maximum size is at least 123 cm total length (TL) (Last et al. 2016). Nothing else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 123 cm TL
Age and/or size at maturity (50%)	Unknown

CAAB Code: 37 031016

Link to IUCN Page: <https://www.iucnredlist.org/species/161387/68610422>

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

References

- 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.
- Last, P., White, W., Carvalho, M.R. de, Séret, B., Stehmann, M. and Naylor, G.J.P. 2016. *Rays of the World*. CSIRO Publishing, Clayton, Victoria, Australia.
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- Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology* 88(3): 837–1037.