

Whitespotted Skate, *Dentiraja cerva*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Near Threatened (Endemic to Australia)	IUCN Red List Global Assessment	Near Threatened
Global Assessors	Rigby, C.L., Treloar, M.A., Sherman, C.S. & 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	Likely historic population reduction, though fishing pressure since declined, and it is a productive species with some areas of refuge.		

Summary

The Whitespotted Skate is a small continental shelf and deepwater ray endemic to temperate waters of southern Australia in a wide range. It was the most abundant shelf skate in the Great Australian Bight. It is caught in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) and mostly released; post-release mortality is unknown. This species has high quality flesh and an estimated 30% of 'mixed skates' are currently retained in the SESSF. Significant declines in all skate species were noted in SESSF surveys over 20 years from 1977–1997. This species was not noted in the surveys, as they were at the margin of the species' range, however it has likely undergone some population decline due to the high historical fishing pressure. The pressure has since declined and it is now assessed as at low risk from the SESSF. The species would have some refuge in the western part of its range and Bass Strait where there is lower fishing effort and in the network of marine parks in its range. The species vulnerability to both fishing and climate change was assessed as low. Given the historic high fishing pressure and significant levels of historic catch, it is suspected the Whitespotted Skate has undergone some population decline, though pressure has since declined, it is a productive, and it has refuge in some parts of its range. Therefore, the Whitespotted Skate is assessed as Near Threatened (Kyne et al. 2021) and Sustainable (SAFS).



Distribution

The Whitespotted Skate is endemic to temperate waters of southern Australia (Last et al. 2016). It occurs in a wide range from Gabo Island (Victoria) to Recherche Archipelago (Western Australia) (Last and Stevens 2009).

Stock structure and status

There is currently no information on population size, structure, or trend for the species. However, it was the most abundant continental shelf skate in the Great Australian Bight (Last and Stevens 2009).

Fisheries

The Whitespotted Skate is an incidental catch of trawl fisheries. It is caught in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) with an estimated annual average catch of 37 tonnes between 2000–2006 with nearly all catch released and post-release mortality unknown (Walker and Gason 2007, Rigby et al. 2021). The species has high quality meat and is possibly now retained as in recent years, an estimated 30% of ‘mixed skates’ are retained in the SESSF (Last and Stevens 2009, Daley and Gray 2020). There was a decline of 75–88% in mean catch rates of deepwater skates in the SESSF over 20 years from 1977–1997 (Graham et al. 2001). This species was not caught in those surveys as its range is at the margin of the survey grounds; however, it has likely gone undergone some population decline in southeast Australia due to the historically high levels of fishing pressure (Rigby et al. 2021). Fishing pressure has since declined significantly in the SESSF and the Whitespotted Skate is now assessed as at low risk in the Sectors of the SESSF in which it is taken, that is, the Commonwealth Trawl and Great Australian Bight Trawl (Sporcic et al. 2021a, b). It is also caught in the Spencer Gulf Prawn Fishery and is assessed as at low risk from the fishery (PIRSA 2014). Fishing effort is limited in the western part of its range and in Bass Strait, providing some refuge (Kyne et al. 2021). It would also some receive refuge in the Commonwealth South-east and South-west Marine Parks Networks which include zoning and gear restrictions (Parks Australia 2023). The species vulnerability to both fishing and climate change in southern waters was assessed as low (Walker et al. 2021).

Habitat and biology

The Whitespotted Skate is demersal on the continental shelf and slope at depths of 60–470 m (Last et al. 2016). Maximum size is 66 cm total length (TL) and maximum age estimated to 9 years (Treloar 2008). Males mature at 5 years and 47 cm TL and females at 5 years and 49 cm TL (Treloar 2008).

Longevity and maximum size	Longevity: estimated 9 years Max size: 66 cm TL
Age and/or size at maturity (50%)	Males: 5 years, 47 cm TL Females: 5 years, 49 cm TL

CAAB Code: 37 031003

Link to IUCN Page: <https://www.iucnredlist.org/species/161329/68620560>

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

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