

Painted Maskray, *Neotrygon leylandi*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern (Endemic to Australia)	IUCN Red List Global Assessment	Least Concern
Global Assessors	Pierce, S.J. & Kyne, P.M.		
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 and significant spatial refuge across its range.		

Summary

The Painted Maskray is a small continental shelf species endemic to tropical and subtropical waters of Western Australia in a relatively restricted area from Eighty Mile Beach to Shark Bay. It is caught incidentally in fish and prawn trawls and released, as rays are prohibited from retention in all Western Australian commercial fisheries. However, post-release mortality is unknown but is suspected to be high. Bycatch reduction devices have been mandatory in all the Western Australian trawl fisheries since the early-mid 2000s and have reduced ray catches.



The effort in the northernmost trawl fisheries is limited and the fisheries overlap with only part of the species' range while within the area of the more southerly trawl fisheries, there is a high level of spatial protection. More than 90% of the Painted Maskray's range within the 200 m isobath may never have been trawled due to a combination of trawl closures and marine parks. Overall, fishing effort is very low across its range where there is also significant spatial refuge. Therefore, the Painted Maskray is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).

Distribution

The Painted Maskray is endemic to Western Australia where it occurs in tropical and subtropical waters from Eighty Mile Beach to Shark Bay (Last and Steven 2009, 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 considered moderately common off northwest Australia (Last and Stevens 2009).

Fisheries

The Painted Maskray is incidentally caught by fish and prawn trawl fisheries and released, as rays have been prohibited from retention in West Australia commercial fisheries since 2006 (Evans and Molony 2010). However, post-release survival has found to be low for *Neotrygon* species in trawl nets in Papua New Guinea (White et al. 2019). The Western Australian Pilbara Fish Trawl Fishery (PFTF) operates mainly at 50–110 m yet overlaps with only part of the species' spatial and depth range. The use of bycatch reduction devices (BRDs) has been mandatory since 2006 and has been effective at reducing catches of rays (Wakefield et al. 2017). Further, there have been reductions in effort in the PFTF since 2009 (Gaughan and Santoro 2021). The species' range overlaps partly with four state-managed prawn fisheries: Nickol Bay, Onslow, Exmouth Gulf, and Shark Bay. The first two operate in shallow, inshore waters but are both low effort fisheries that overlap with only part of species' spatial range. BRDs have been mandatory since 2005 and trawlers are used which improve bycatch survival (Gaughan and Santoro 2021). In the latter two fisheries, BRDs have been mandatory since the early 2000s. More than 90% of the area within the 200 m isobath of state waters may never have been trawled due to a combination of spatial trawl closures and marine parks (Gaughan and Santoro 2021). The Commonwealth North West Slope Trawl Fishery, which has low effort, does not operate at depths less than 200 m and thus is unlikely to capture the Painted Maskray (Patterson et al. 2022). The Commonwealth North-west Marine Parks Network came into effect in 2018 which includes zoning and gear restrictions and likely provides refuge for the species (Parks Australia 2023).

Habitat and biology

The Painted Maskray is demersal, mainly on the inner continental slope at depths 15–90 m though it also occurs offshore to a depth of 200 m (Last et al. 2016). Maximum size is approximately 27 cm disc width (DW) and at least 53 cm total length (TL) (Last et al. 2016). Litter size is 1–3 pups (Last et al. 2016).

Longevity and maximum size	Longevity: unknown Max size: ~27 cm DW and 53 cm TL
Age and/or size at maturity (50%)	Unknown

CAAB Code: 37 035013

Link to IUCN Page: <https://www.iucnredlist.org/species/60156/68636690>

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

References

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