

## Australian Bluespotted Maskray, *Neotrygon australiae*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern	IUCN Red List Global Assessment	Near Threatened
Global Assessors	Sherman, C.S., 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	Sustainably fished in the Northern Prawn Fishery and elsewhere low fishing pressure and significant refuge.		

### Summary

The Australian Bluespotted Maskray is a small continental shelf ray in tropical and subtropical waters of northern and Western Australia, Papua New Guinea (PNG), and Indonesia. It is targeted and taken incidentally and consumed in Indonesia, where there is high fishing pressure, and likely PNG. In Australia, it is only taken incidentally in trawl fisheries and released as it is prohibited from retention, however post-release mortality may be high. It is caught mainly in the Northern Prawn Fishery (NPF), likely in the Northern Territory Demersal Fishery, and also in the Western Australian inshore prawn and fish trawl fisheries. An ecological risk assessment in the NPF found it to be at low risk and elsewhere across its range, the fishing pressure is limited, there are extensive areas of spatial trawl closures and marine parks, and large areas which are either unfished or lightly fished. Therefore, it is assessed as globally Near Threatened (IUCN), and in Australia as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



### Distribution

The Australian Bluespotted Maskray occurs in tropical and subtropical northern and Western Australia, south-western Papua New Guinea, and eastern Indonesia (Last et al. 2016a, White et al. 2017). In Australia, it occurs from north-eastern Gulf of Carpentaria (Queensland) to Shark Bay (Western Australia) (Last et al. 2016b). Its distribution is not entirely resolved due to taxonomic uncertainty in the *Neotrygon* genus (Sherman et al. 2021).

### Stock structure and status

There is currently no information on population size, structure, or trend for the species. It is suspected to be declining overall across its global range; fishing pressure is high in Indonesia (Sherman et al. 2021). In Australia, the population is suspected to be stable (Kyne et al. 2021).

## Fisheries

The Australian Bluespotted Maskray is targeted and taken incidentally in artisanal and industrial fisheries. In Indonesia and likely Papua New Guinea, it is retained and consumed (Sherman et al. 2021). In Australia, it is caught incidentally, mainly in the Commonwealth Northern Prawn Fishery (NPF) and likely in the Northern Territory Demersal Fishery (DF). It is also possibly caught in the Western Australian inshore fisheries, that is, the prawn fisheries: Kimberley, Broome, Nickol Bay, Onslow, Exmouth Gulf, and Shark Bay, and the Pilbara Fish Trawl Fishery (PFTF) (Gaughan and Santoro 2021). It would be released as rays are prohibited from retention in all fisheries in its range (Evans and Molony 2010). However, post-release survival has found to be low in trawl nets in Papua New Guinea (Sherman et al. 2021). Although bycatch reduction devices (BRDs) have been mandatory across all fisheries since the 2000s, their effectiveness is limited at excluding small rays such as this species (Griffiths et al. 2006). The species was considered at low risk of overfishing in the NPF due to estimated fishing mortality being below levels leading to population reduction (Zhou and Griffiths 2008). The DF uses demersal trawls with limited effort and although catch levels of the Australian Bluespotted Maskray are unknown, there are significant areas of the Northern Territory that are lightly fished or unfished (NTG 2019, Kyne et al. 2021). In Western Australia, the fisheries effort and operational area are limited with more than 90% of the area within the 200 m isobath which may never have been trawled due to a combination of spatial trawl closures and marine parks (Gaughan and Santoro 2021).

## Habitat and biology

The Australian Bluespotted Maskray is demersal on the continental and insular shelf at depths of 25–90 m (Last et al. 2016a). Maximum size is 47 cm disc width (DW) and males mature at 28–34 cm DW (Last et al. 2016a, White et al. 2017). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: 47 cm DW
Age and/or size at maturity (50%)	Males: 28–34 cm DW Females: unknown

**CAAB Code:** 37 035004

**Link to IUCN Page:** <https://www.iucnredlist.org/species/104166970/104166982>

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

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