Blotched Fantail Ray, *Taeniurops meyeni*

Report Card assessment	**Sustainable**		
IUCN Red List Australian Assessment	Least Concern	IUCN Red List Global Assessment	Vulnerable
Global Assessors	Kyne, P.M. & White, W.T.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Australian fishing pressure low, common, BRDs significantly reducing catch, marine parks provide refuge.		

Summary

The Blotched Fantail Ray is a large continental shelf and slope ray distributed across tropical and subtropical waters of northern Australia and across the Indo-Pacific. It is caught incidentally and retained for its meat in at least Southeast Asia where significant population declines have occurred due to mostly unregulated fishing pressure. In Australia, it is caught incidentally in mostly trawl fisheries and likely released as most of these prohibit elasmobranch retention; post-release mortality is unknown. Additionally, many of the trawl fisheries mandate the use of bycatch Reduction Devices (BRDs) which have been shown to reduce the catch of whiprays by >95%. Many parts of the species' range across northern Australia have low fishing effort that is managed and it receives significant refuge in the extensive network of marine parks. The Blotched Fantail Ray is assessed as globally Vulnerable (IUCN) and in Australia, as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).


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Distribution

The Blotched Fantail Ray occurs in tropical and subtropical waters of northern Australia and across the Indo-Pacific from New Caledonia to South Africa, including to Japan (Last et al. 2016). In Australia, it has a wide range from Stradbroke Island (Queensland) to Ningaloo Reef (Western Australia) (Last and Stevens 2009, Last et al. 2016). It may also occur in coastal New South Wales (NSW) as it is found on Lord Howe Island (NSW) (Last et al. 2016).

Stock structure and status

The population is inferred to have declined significantly across Southeast Asia, India, and East Africa due to high levels of mostly unregulated exploitation, whereas in Australia, it is common, fishing pressure is limited and managed, and the population is suspected to be stable (Kyne and White 2015, Kyne et al. 2021).

Fisheries

The Blotched Fantail Ray is taken incidentally across the Indo-Pacific in a variety of fishing gears and is retained for its meat and cartilage (except in Australia) (Kyne and White 2015). In Australia, it is caught in the Commonwealth Northern Prawn Fishery (NPF) and possibly in the Queensland East Coast Trawl Fishery (ECTF), though there are no records from ECTF research surveys. It is also possibly caught in the Northern Territory Demersal Fishery (DF) and Western Australian prawn fisheries and Pilbara Fish Trawl Fishery. Bycatch reduction devices (BRDs) have been mandated in most of these fisheries since the early-mid 2000s and reduce the catch of the whiprays by >95%, though they may not be as effective at excluding juveniles (Griffiths et al. 2006, Gaughan and Santoro 2021). If it is caught, it would be released as elasmobranch retention is now prohibited, although post-release mortality is unknown. The Blotched Fantail Ray was considered potentially at risk of overfishing in the NPF due to estimated fishing mortality being above levels leading to population reduction; however, it was rarely recorded and there was a high level of uncertainty with the estimated fishing mortality rate (Zhou and Griffiths 2008). Catches in Western Australia fisheries are likely minimal as effort is limited and negligible bycatch has been reported in recent years (Gaughan and Santoro 2021). Across northern Australia, many parts of the species' range have low fishing effort and the species would receive refuge in the extensive network of marine parks (Parks Australia 2023).

Habitat and biology

The Blotched Fantail Ray is demersal on the continental shelf and slope at depths of 0–500 m, though it is mainly inshore, and occurs around coral reefs and on sandy substrates (Kyne and White 2015, Last et al. 2016, Weigmann 2016). Maximum size is 180 cm disc width (DW), approximately 330 cm total length, and males mature at 100–110 cm DW (Last et al. 2016). Litter size is up to 7 pups (Kyne and White 2015). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: 180 cm DW
Age and/or size at maturity (50%)	Males: 100–110 cm DW Females: unknown

CAAB Code: 37 035017

Link to IUCN Page: https://www.iucnredlist.org/species/60162/68646736

Link to page at Shark References: https://shark-references.com/species/view/Taeniurops-meyeni

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