

Mitotic Stingaree, *Urolophus mitosis*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern (Endemic to Australia)	IUCN Red List Global Assessment	Least Concern
Global Assessors	Kyne, P.M., Last, P.R. & Marshall, L.J.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Reasonably abundant, low fishing pressure, and considerable spatial refuge.		

Summary

The Mitotic Stingaree is a small deepwater ray endemic to tropical northwest Australia. It has a restricted spatial and depth range though it possibly occurs more widely. It is possibly caught incidentally in the Commonwealth Northwest Slope Trawl Fishery although that fishery operates at the limit of the species known depth range and interactions are likely minimal. Further, trawl effort is limited in this fishery. If it is caught it would likely be released as it is of little commercial value; though post-release

mortality for trawl caught stingarees is generally high and stingarees typically abort their embryos when captured. Chondrichthyans have been assessed as at low risk in this fishery. The species occurs too deep to be captured in the inshore trawl fishery. The Mitotic Stingaree would receive considerable refuge in state waters where most of the area within the 200 m isobath is protected from trawling. Overall, the species is considered reasonably abundant, it likely has minimal interactions with low effort fisheries, and considerable spatial refuge. Therefore, the Mitotic Stingaree is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



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Distribution

The Mitotic Stingaree is endemic to tropical northwest Australia (Last et al. 2016). It has a restricted range in Western Australia where it is only known from off Port Hedland (Last and Stevens 2009). The extent of occurrence is <20,000 km², though it possibly occurs more widely (Kyne et al. 2021, Last et al. 2021).

Stock structure and status

There is currently no information on population size, structure, or trend for the species. However, it is considered to be reasonably abundant (Kyne et al. 2019).

Fisheries

The Mitotic Stingaree may be caught incidentally by the Northwest Slope Trawl Fishery which targets prawns and scampi (*Metanephrops australiensis*) and operates at 200–600 m depth (Patterson et al. 2022). However, the minimum depth of the fishery is at the maximum known depth of the species and interactions are likely to be minimal. Further, the fishery has limited effort with only 1–6 active vessels and chondrichthyans have been assessed as at low risk in this fishery (Zhou et al. 2009). The species occurs within the spatial boundaries of the Nickol Bay Prawn Managed Fishery; however, this limited effort fishery operates in shallow inshore waters to a maximum depth of approximately 50 m (Gaughan and Santoro 2021), and hence is unlikely to interact with this species. If the Mitotic Stingaree is caught, it would likely be released as it has no commercial value and elasmobranch retention is prohibited within Western Australian commercial fisheries (Evans and Molony 2010). However, post-release mortality for trawl caught stingarees is generally high and urolophids typically abort their embryos when caught which can reduce population viability (Rigby et al. 2016, Adams et al. 2018, Campbell et al. 2018). The species would receive refuge in the Commonwealth North-west Marine Parks Network that came into effect in 2018 and also considerable refuge in state waters; more than 90% of the area within the 200 m isobath of Western Australian northern waters may never have been trawled due to a combination of spatial trawl closures and marine parks (Gaughan and Santoro 2021, Park Australia 2023).

Habitat and biology

The Mitotic Stingaree is demersal on the continental shelf at depths of approximately 100–200 m (Last et al. 2016). Maximum size is 33 cm total length (TL) and males mature at 25 cm TL (Last et al. 2016). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: 33 cm TL
Age and/or size at maturity (50%)	Males: 25 cm TL Females: unknown

CAAB Code: 37 038011

Link to IUCN Page: <https://www.iucnredlist.org/species/60098/68649760>

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

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