

Mumburarr Whipray, *Urogymnus acanthobothrium*

Report Card assessment	Undefined Stock		
IUCN Red List Australian Assessment	Data Deficient	IUCN Red List Global Assessment	Data Deficient
Global Assessors	Rigby, C.L., Cheok, J., Darwall, W.R.T. & Simpfendorfer, C.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Poorly-known; information needed on range, catch levels, biology, and post-release mortality.		

Summary

The Mumburarr Whipray is a large, poorly-known euryhaline demersal ray that occurs in northern Australia and southern Papua New Guinea. It is only known from a limited number of specimens, has a relatively restricted range and may be naturally rare or it may occur more widely; it is only recently described and may have been previously misidentified with the Mangrove Whipray, and it occurs in some relatively remote, infrequently surveyed areas with limited fishing effort. It is caught incidentally in trawl fisheries



and is possibly retained for its meat in the Gulf of Papua Prawn Trawl Fishery, Papua New Guinea where it was assessed as at medium risk from the fishery. In Australia, it may be taken in the Northern Prawn Fishery (NPF) which operates in its known range. Mandated bycatch reduction devices are effective at excluding large rays, such as this species, though smaller individuals may still be retained in the nets. If caught, it would be released as retention of elasmobranchs is prohibited, though post-release mortality is unknown. The species may also be taken in commercial gillnet and line, and Indigenous, fisheries, though their effort is limited across its known range. It would receive protection within Northern Territory rivers where it has been recorded as they are within Kakadu National Park where commercial fishing is prohibited. Little is known of its biology and resilience to fisheries and the level of interaction with fisheries is unable to be determined. Thus, it is not possible to determine if fishing is causing a population reduction and as there is currently inadequate information available to assess the status, the Mumburarr Whipray is assessed as globally and in Australia as Data Deficient (IUCN) (Kyne et al. 2021) and in Australia, Undefined Stock (SAFS).

Distribution

The Mumburarr Whipray is known from tropical waters of northern Australia and southern Papua New Guinea (Last et al. 2016a, b). In Australia, it has been recorded from only a few locations ranging from

east of the Wessel Islands, Arafura Sea, Northern Territory to Cambridge Gulf, Western Australia (Last et al. 2016a).

Stock structure and status

The Mumburarr Whipray is known only from a limited number of specimens and there is currently no information on population size, structure, or trend for the species.

Fisheries

The Mumburarr Whipray is caught incidentally in trawl fisheries and possibly in inshore gillnet and line fisheries. It is taken in the Gulf of Papua Prawn Trawl Fishery, Papua New Guinea where it may be retained for its meat and was assessed as at medium risk from the fishery (White et al. 2018, Baje et al. 2021). In Australia, it may be caught in the Commonwealth Northern Prawn Fishery (NPF) which operates in its known range and there are records in the NPF of a congener with which it may have been previously misidentified, that is, the Mangrove Whipray (*Urogymnus granulatus*) (Stobutzki et al. 2000). If caught it would be released as elasmobranch retention is prohibited in the NPF and the mandatory use of bycatch reduction devices (BRDs) since 2001 has dramatically reduced the capture of large rays (>100 cm TL) by 94%, though BRDs are less effective at excluding smaller rays (Brewer et al. 2006). Commercial gillnet and line fisheries, and Indigenous fishing may take this species, though effort is limited across its known Australian range. In the Northern Territory, it receives protection in the rivers in which it has been recorded as they are within the Kakadu National Park and are closed to commercial fishing (Last et al. 2016a).

Habitat and biology

The Mumburarr Whipray is demersal and euryhaline, occurring in marine and estuarine habitats and in brackish waters of tidal rivers, at depths of 2–60 m (Last et al. 2016a). Maximum size is 161 cm disc width (DW) with males mature at 103–110 cm DW (Last et al. 2016a). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: 161 cm DW
Age and/or size at maturity (50%)	Males: 103-110 cm DW Females: unknown

CAAB Code: 37 035032

Link to IUCN Page: <https://www.iucnredlist.org/species/200322937/200322952>

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

References

- Baje, L., Chin, A., White, W.T. and Simpfendorfer, C.A. 2021. Ecological risk assessment of elasmobranchs caught in the Gulf of Papua prawn fishery. Aquatic Conservation: Marine and Freshwater Ecosystems n/a(n/a). doi: <https://doi.org/10.1002/aqc.3692>.
- Brewer, D., Heales, D., Milton, D., Dell, Q., Fry, G., Venables, B., and Jones, P. 2006. The impact of turtle excluder devices and bycatch reduction devices on diverse tropical marine communities in Australia's northern prawn trawl fishery. *Fisheries Research* 81(2-3), 176–88.
- Kyne, P.M., Heupel, M.R., White, W.T. and Simpfendorfer, C.A. 2021. *The Action Plan for Australian Sharks and Rays 2021*. National Environmental Science Program, Marine Biodiversity Hub, Hobart.
- Last, P.R., White, W.T. and Kyne, P.M. 2016a. *Urogymnus acanthobothrium* sp. nov., a new euryhaline whipray (Myliobatiformes: Dasyatidae) from Australia and Papua New Guinea. *Zootaxa* 4147(2): 162–176.
- Last, P., White, W., Carvalho, M.R. de, Séret, B., Stehmann, M. and Naylor, G.J.P. 2016. *Rays of the World*. CSIRO Publishing, Clayton, Victoria, Australia.
- Stobutzki, I., Blaber, S., Brewer, D., Fry, G., Heales, D., Miller, M., Milton, D., Salini, J., Van der Velde, T., Wassenberg, T., Jones, P., Wang, Y., Dredge, M., Courtney, T., Chilcott, K. and Eayrs, S. 2000. *Ecological sustainability of bycatch and biodiversity in prawn trawl fisheries*. Final report on FRDC Project 96/257. CSIRO Marine Research, Cleveland, Australia.

White, W. T., Baje, L. Sabub, B., Appleyard, S.A., Pogonoski, J.J. and Mana, R.R. 2018. *Sharks and Rays of Papua New Guinea*. Australian Centre for International Agricultural Research (ACIAR). Monograph No.189, Canberra.