

Bottlenose Wedgefish, *Rhynchobatus australiae*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Near Threatened	IUCN Red List Global Assessment	Critically Endangered
Global Assessors	Kyne, P.M., Rigby, C.L., Dharmadi & Jabado, R.W.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Severe global population reductions, common in Australia where fishing pressure low and managed, though suspected population decline prior to management. Listed on CITES Appendix II and CMS Appendix II.		

Summary

The Bottlenose Wedgefish is a large demersal continental shelf ray in the tropical and subtropical waters of northern Australia and the Indo-West Pacific. It is targeted and caught incidentally by multiple fisheries and retained for its meat and highly-valued valuable fins (except in Australia). In Australia, it is common and *Rhynchobatus* species are caught incidentally in a range of fisheries, including the Northern Prawn Fishery and Queensland East Coast Trawl Fishery where they are considered at low risk of being unsustainably fished. Bycatch reduction devices (BRDs) have been mandated in most of the fisheries since the early-mid 2000s and reduce the catch of *Rhynchobatus spp.* by ~37%. If caught, it would be released as elasmobranch retention is prohibited in most northern fisheries. Many parts of the species' range have relatively low fishing effort and the species would receive refuge in the extensive network of marine parks. Outside of Australia, it is subject to intense and unregulated fisheries and its population is inferred to have severely declined, including in Australian regional waters. The Australian population has likely undergone some decline prior to management. Therefore, the Bottlenose Wedgefish is assessed globally as Critically Endangered (IUCN), and in Australia, as Near Threatened (IUCN) (Kyne et al. 2021) and Sustainable (SAFS). The species is listed on CITES Appendix II and CMS Appendix II (Australian reservation).



Distribution

The Bottlenose Wedgefish occurs in tropical and subtropical waters of the Indo-West Pacific from Mozambique to the Solomon Islands (Last et al. 2016). It occurs across northern Australia in a wide range from Crowdy Head (New South Wales) to Lancelin (Western Australia) (Last and Stevens 2009, Kyne et al. 2021).

Stock structure and status

There is limited species-specific information on population trends of the Bottlenose Wedgefish, globally or in Australia, in part due to previous taxonomic confusion of the *Rhynchobatus* species. Globally, the population is inferred to have declined severely throughout much of its distribution, due to current and ongoing high levels of exploitation and demand for its high-value fins (Kyne et al. 2019). In Australia, it is common (Kyne et al. 2021) and the fishing pressure is relatively low and managed, though the population has likely undergone some decline.

Fisheries

The Bottlenose Wedgefish is targeted and taken incidentally across the Indo-West Pacific in a variety of fishing gears and is retained for its meat and highly-valued fins (except in Australia) (Kyne et al. 2019). In Australia, species-specific catch levels are difficult to determine due to the taxonomic confusion. *Rhynchobatus* species are caught in the Commonwealth Northern Prawn Fishery (NPF), the Queensland East Coast Trawl Fishery (ECTF) and East Coast and Gulf of Carpentaria (GoC) Inshore Fisheries (Harry et al. 2011, Campbell et al. 2018). It is possibly caught in the Gulf of Carpentaria Developmental Fishery (Jacobsen et al. 2019a, b), the Northern Territory Demersal Fishery (DF) and Western Australian prawn fisheries and Demersal Gillnet and Longline Fisheries (Braccini et al. 2021). Bycatch reduction devices (BRDs) have been mandated in most of these fisheries since the early-mid 2000s and have reduced the catch of *Rhynchobatus* spp. by 37% (Brewer et al. 2004). If it is caught, it would be released as elasmobranch retention is now prohibited, except in the Queensland GoC Inshore Fishery, although post-release mortality is unknown. *Rhynchobatus* spp was considered at low risk of overfishing in the ECTF and the NPF due to estimated fishing mortality being below levels leading to population reduction (Zhou and Griffiths 2008, Campbell et al. 2018). 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 Bottlenose Wedgefish is demersal on the continental shelf at depths of 0–60 m (Kyne et al. 2019). The maximum size is 300 cm total length (TL) with males mature at 110–130 cm TL and females at approximately 155 cm TL (White and Dharmadi 2007, Kyne et al. 2019). Litter size is 7–19 pups (White and Dharmadi 2007).

Longevity and maximum size	Longevity: unknown Max size: 300 cm TL
Age and/or size at maturity (50%)	Males: 110–130 cm TL Females: ~155 cm TL

CAAB Code: 37 026005

Link to IUCN Page: <https://www.iucnredlist.org/species/41853/68643043>

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

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