

Giant Guitarfish, *Glaucostegus typus*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern	IUCN Red List Global Assessment	Critically Endangered
Global Assessors	Kyne, P.M., Rigby, C.L., Dharmadi, Gutteridge, A.N. & 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 yet common in Australia where fishing pressure low and managed, BRDs significantly reducing catch. Listed on CITES Appendix II.		

Summary

The Giant Guitarfish is a large demersal continental shelf ray, widely distributed across the tropical and subtropical waters of the Indo-West Pacific, including northern Australia. It is targeted and caught incidentally by multiple fisheries throughout its Indo-West Pacific range and retained for its meat and highly-valued valuable fins. In Australia, it is common in parts of its range and is incidentally caught in trawl and net fisheries, including the Northern Prawn Fishery and Queensland East Coast Trawl Fishery where it is considered at low risk of being unsustainably fished due to low catch levels and high escape rates (100% for large individuals) from mandated Bycatch Reduction Devices (BRDs). If caught in Australia, it is released as elasmobranch retention is prohibited in most northern Australian fisheries. Many parts of the species' range across northern Australia have 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 suspected to have severely reduced and globally, it is assessed as Critically Endangered (IUCN). In Australia, it is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS). The species is listed on CITES Appendix II.



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Distribution

The Giant Guitarfish occurs in tropical and subtropical waters of the Indo-West Pacific from India to the Solomon Islands (Last et al. 2016). It occurs across northern Australia in a wide range from Forster (New South Wales) to Shark Bay (Western Australia) (Last and Stevens 2009).

Stock structure and status

There is limited species-specific information on population trends of the Giant Guitarfish, globally or in Australia. 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, however, it is common in parts of its range and the population is suspected to be stable (Last and Stevens 2009, Kyne et al. 2021).

Fisheries

The Giant Guitarfish is 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, it is caught in the Commonwealth Northern Prawn Fishery (NPF), the Queensland East Coast Trawl Fishery (ECTF) and East Coast Inshore Fishery (Harry et al. 2011, Campbell et al. 2018). It was previously reported from the New South Wales Ocean Trap and Line Fishery (Rowling et al. 2010); however, it was not noted in observer surveys of the fishery from 2009–2020 (Johnson and Barnes 2022). It is possibly caught in the Gulf of Carpentaria (GoC) Developmental Fishery and the Inshore Fishery (Jacobsen et al. 2019a, b), the Northern Territory Demersal Fishery (DF) and Western Australian prawn fisheries. Bycatch reduction devices (BRDs) have been mandated in most of these fisheries since the early-mid 2000s and have entirely reduced the catch of large individuals of the Giant Guitarfish; though they may not be as effective at excluding smaller individuals (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. The Giant Guitarfish 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). It may also be taken in Indigenous fisheries over its range. 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 Giant Guitarfish is demersal on the continental shelf at depths of 0–100 m occurring from close inshore including intertidal and estuarine habitats to offshore waters (Last et al. 2016, Kyne et al. 2021). Maximum size is 284 cm total length (TL) and maximum age is at least 19 years (Kyne et al. 2019, Kyne et al. 2021). Both sexes mature at 6–8 years and 150–180 cm TL (Kyne et al. 2019).

Longevity and maximum size	Longevity: at least 19 years Max size: 284 cm TL
Age and/or size at maturity (50%)	Both sexes: 6–8 years, 150–180 cm TL

CAAB Code: 37 027010

Link to IUCN Page: <https://www.iucnredlist.org/species/104061138/68623995>

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

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