

Dwarf Black Stingray, *Hemitrygon parvonigra*

Report Card assessment	Undefined Stock		
IUCN Red List Australian Assessment	Data Deficient	IUCN Red List Global Assessment	Data Deficient
Global Assessors	Pierce, S.J.		
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 Dwarf Black Stingray is a small, poorly-known continental shelf species that occurs in a highly restricted range of tropical northwest Australia and is patchily distributed across Southeast Asia. It is only known from a limited number of specimens and it may occur more widely. It is captured in trawl and net gear and retained for its meat in at least Indonesia and Malaysia. In Australia, it may be taken as bycatch in the Western Australian Pilbara Fish Trawl Fishery, which since 2006 has used bycatch reduction devices that have reduced

the capture of rays, has had an effort reduction since 2009, and cannot retain rays as retention of rays is prohibited in all Western Australian commercial fisheries. However, there is no information on the species' post-release mortality, little is known of its biology and resilience to fishing pressure, and its known range within Australian waters is highly restricted. Thus, it is not possible to determine if fishing is causing a population reduction and there is currently inadequate information available to assess the status. Therefore, the Dwarf Black Stingray globally and in Australia is assessed as Data Deficient (IUCN) (Kyne et al. 2021) and Undefined Stock (SAFS).



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Distribution

The Dwarf Black Stingray has been recorded in tropical waters off northwest Australia, Indonesia (Bali), Malaysia (Sabah), the Philippines, and possibly also West Papua (Last et al. 2010, Last et al. 2016). In West Australia, it occurs offshore in a restricted range from north of Montebello Islands to north of Cape Lambert (Last and White 2008). Its patchy distribution suggests it may have a wider range, in at least the Western Central Pacific, than currently known (Last and White 2008).

Stock structure and status

The Dwarf Black Stingray 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 Dwarf Black Stingray is caught incidentally by trawl and net fisheries and known to be retained for its meat in Indonesia and Malaysia (White et al. 2006, Last et al. 2010). In Australia, it has only been reported from research trawl surveys (Last and Stevens 2009). It may be caught in the Western Australian Pilbara Fish Trawl Fishery (PFTF) that operates mainly at 50–110 m and overlaps with its known spatial range. The use of bycatch reduction devices in that fishery has been mandatory since 2006 and has been effective at reducing catches of rays (Wakefield et al. 2017). Further, there have been reductions in effort in the PFTF since 2009 and since 2006, rays are prohibited from retention in West Australia commercial fisheries (Evans and Molony 2010, Gaughan and Santoro 2021). However, post-release mortality is unknown and capture-induced parturition has been reported for other *Hemitrygon* species and dasyatids (Adams et al. 2018). The Commonwealth North West Slope Trawl Fishery, which has low effort with only four vessels active in 2020–2021, does not operate at depths less than 200 m and thus is unlikely to capture the Dwarf Black Stingray (Patterson et al. 2022). The Commonwealth North-west Marine Parks Network came into effect in 2018 which includes zoning and gear restrictions and may provide refuge for the species (Parks Australia 2023).

Habitat and biology

The Dwarf Black Stingray is demersal on the insular and continental shelf and has been recorded at depths of 60–185 m and may also occur shallower (Last et al. 2010, Last et al. 2016). Maximum size is at least 51 cm disc width (DW) and 110 cm total length (TL) (Last et al. 2016). Males mature at approximately 35 cm DW (Last et al. 2016). Nothing else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 51 cm DW (110 cm TL)
Age and/or size at maturity (50%)	Males: ~35 cm DW Females: unknown

CAAB Code: 37 035021

Link to IUCN Page: <https://www.iucnredlist.org/species/195442/104121791>

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

References

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