

Smooth Stingray, *Bathytoshia brevicaudata*

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| Report Card assessment | Sustainable | | |
| IUCN Red List Australian Assessment | Least Concern | IUCN Red List Global Assessment | Least Concern |
| Global Assessors | Rigby, C.L., Chin, A. & Derrick, D. | | |
| Australian Assessors | Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L. | | |
| Report Card Remarks | Common and wide range, stable catches, protected in most of Western Australia, and considerable refuge in lightly fished and unfished parts of its range. | | |

Summary

The Smooth Stingray is a large continental shelf and slope ray that occurs in temperate waters of the Indo-Pacific. The species is caught incidentally and sometimes retained for its meat and has been assessed nationally in New Zealand as Least Concern. It is common in Australia, and is an incidental catch of trawl and line fisheries with some of the catch retained for its meat; post-release survival is high. It is caught in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) and assessed as at low risk from the fishery. It is also caught in a range of state fisheries, though catch data is limited. It has been assessed as at low risk in the Queensland East Coast Trawl Fishery and at medium risk in the South Australian Spencer Gulf Prawn Fishery, possibly due to potentially limited productivity. In Western Australia, it is protected across most of its range due to its tourism value. It also has refuge in unfished or lightly fished areas of its Australian range. Its vulnerability in southern Australia was assessed as low for both fishing and climate change. Therefore, based on stable catches, high post-release survival, and significant parts of its range either protected or a refuge, the Smooth Stingray is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



Distribution

The Smooth Stingray occurs in mostly temperate waters of the Indo-Pacific in an anti-tropical distribution (Last et al. 2016). In Australia, it has a wide range from Gladstone (Queensland) to Karratha (Western Australia) (Kyne et al. 2021).

Stock structure and status

The species is uncommon in South Africa and New Zealand but common in Japan. In Australia, this is a common species and catches in the Southern and Eastern Scalefish Fishery were stable between 2001–2006 (Walker and Gason 2007, Kyne et al. 2021).

Fisheries

The Smooth Stingray is incidentally caught in a range of fisheries and is sometimes retained for its meat and is assessed as Least Concern in New Zealand (Rigby et al. 2021). In Australia, it is incidentally caught in commercial trawl and line fisheries and in recreational fisheries (Rigby et al. 2021). It is caught in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) with an estimated average annual catch of 89 tonnes between 2001–2006 with a small portion of the catch retained for its meat and the remainder released; post-release survival is high (Walker and Gason 2007, Rigby et al. 2021). Over that period there were fluctuations in catch-per-unit effort but no overall trend (Walker and Gason 2007). It is assessed as at low risk in all Sectors of the SESSF in which it is taken, that is, the Commonwealth Trawl, Great Australian Bight Trawl, and Danish Seine (Sporcic et al. 2021a, b, c). It is also caught in state fisheries though catch data is limited; it is reported as an incidental catch in the New South Wales Ocean Trap and Line Fishery and it is assessed as at low risk in the Queensland East Coast Trawl Fishery and medium risk in the South Australian Spencer Gulf Prawn Fishery, possibly due to potentially limited productivity (PIRSA 2014, Campbell et al. 2018, Rigby et al. 2021, Johnson and Barnes 2022). In Western Australia, it is a minimal catch in the line and gillnet shark fisheries and the South Coast Trawl Fishery (Rigby et al. 2021, M. Braccini pers. comm. 2022) and may also be taken in the small prawn fisheries and Pilbara Fish Trawl Fishery. Bycatch reduction devices (BRDs) have been mandated in most prawn fisheries in Australia since the early-mid 2000s and reduce the catch of the large rays such as the Smooth Stingray by >94% (Brewer et al. 2004). It is protected in Western Australia in the West Coast and South Coast Bioregions due to its tourism value for local communities, and this represents approximately one-quarter of its Australian range (DPIRD 2015, Kyne et al. 2021). The species would have refuge in considerable areas across its range that are unfished or lightly fished (Kyne et al. 2021). The Smooth Stingray's vulnerability was assessed as low for both fishing and climate change (Walker et al. 2021).

Habitat and biology

The Smooth Stingray is demersal and epi-pelagic on the continental shelf and slope at depths of 0–480 m, though it usually shallower than 150 m in Australia (Last et al. 2016). Maximum size is at least 210 cm disc width (DW) and males and female size at maturity is unknown (Rigby et al. 2021). Litter size is 6–10 pups (Last et al. 2016).

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| Longevity and maximum size | Longevity: unknown Max size: at least 210 cm DW |
| Age and/or size at maturity (50%) | Both sexes: unknown |

CAAB Code: 37 035001

Link to IUCN Page: <https://www.iucnredlist.org/species/104039923/104039985>

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

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