

False Argus Skate, *Dentiraja falloarga*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern* (Endemic to Australia)	IUCN Red List Global Assessment	Data Deficient
Global Assessors	Kemper, J. & Ebert, D.A.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Fishing pressure low and significant refuge at depth and in marine parks.		

*The Australian assessment status is more recent than the Global assessment and the shift from DD to LC aligns with a less evidentiary and more precautionary approach to Red List assessments rather than any new available information.

Summary

The False Argus Skate is a small continental shelf and upper slope species endemic to tropical waters of northwest Australia. It may be incidentally caught in fish and prawn trawls and released, as elasmobranchs are prohibited from retention in most fisheries across its range, although post-release mortality is unknown. Bycatch reduction devices have been mandatory in nearly all fisheries it may interact with, though their effectiveness at excluding small rays such as this species is limited. However, the trawl fisheries effort across its range is limited and the fisheries overlap with only part of the species' spatial and depth range. The species has significant refuge from fisheries through a combination of trawl closures and marine parks. Therefore, the False Argus Skate is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



Distribution

The False Argus Skate is endemic to northwest Australia where it occurs in tropical waters from Melville Island (Northern Territory) to Exmouth Gulf (Western Australia) (Last and Stevens 2009, Last et al. 2016).

Stock structure and status

There is currently no information on population size, structure, or trend for the species.

Fisheries

The False Argus Skate may be caught incidentally by trawl fisheries and released, as elasmobranch retention is prohibited in most fisheries across its range, although there is no information on post-release mortality (Evans and Molony 2010, Gaughan and Santoro 2021). It is possibly caught in the

Commonwealth Northwest Slope Trawl Fishery (NSTF) that operates at 200–600 m depths, however, it has limited effort with only 1–6 active vessels and chondrichthyans have been assessed as at low risk in this fishery (Zhou et al. 2009, Patterson et al. 2022). It may also be caught in the Northern Territory Demersal Fishery (DF), and Western Australian prawn fisheries and the Pilbara Fish Trawl Fishery (PFTF). These are mostly limited effort fisheries with the prawn fisheries operating in shallow inshore waters that may only rarely fish to the 60 m minimum depth of the False Argus Skate. The PFTF operates mainly at 50–110 m and thus would overlap only part of the species’ depth range and the DF is at the margin of the species’ range (Gaughan and Santoro 2021, Kyne et al. 2021). Bycatch reduction devices are mandated in all these fisheries, except the NSTF, since the early-mid 2000s and have been shown to reduce the catch of large rays, though they are less effective at excluding small rays such as this species (Griffiths et al. 2006, NTG 2019, Gaughan and Santoro 2021). The species would receive refuge in the Commonwealth North-west Marine Parks Network that came into effect in 2018 and also considerable refuge in state and territory waters; more than 90% of the area within the 200 m isobath of Western Australian northern waters may never have been trawled due to a combination of spatial trawl closures and marine parks, and considerable areas of Northern Territory are closed to trawling (Gaughan and Santoro 2021, Kyne et al. 2021, Park Australia 2023).

Habitat and biology

The False Argus Skate is demersal on the outer continental shelf and upper slope at depths of 60–255 m (Last et al. 2016). Maximum size is at least 49 cm total length (TL) and males mature at approximately 40 cm (Last 2008, Last et al. 2016). Nothing else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 49 cm TL
Age and/or size at maturity (50%)	Males: ~40 cm TL Females: unknown

CAAB Code: 37 031030

Link to IUCN Page: <https://www.iucnredlist.org/species/195447/68620876>

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

References

- Evans, R. and Molony, B.W. 2010. *Ranked Risk Assessment for Bycatch in Multiple Fisheries: a Bioregional Risk Assessment Method*. Fisheries Research Report No. 212. Department of Fisheries, Western Australia.
- Gaughan, D.J. and Santoro, K. (eds). 2021. *Status Reports of the Fisheries and Aquatic Resources of Western Australia 2019/20: The State of the Fisheries*. Department of Primary Industries and Regional Development, Western Australia.
- Griffiths, S. P., Brewer, D. T., Heales, D. S., Milton, D. A. and Stobutzki, I. C. 2006. Validating ecological risk assessments for fisheries: assessing the impacts of turtle excluder devices on elasmobranch bycatch populations in an Australian trawl fishery. *Marine and Freshwater Research* 57: 395–401.
- 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. 2008. New short-snout members of the skate genus *Dipturus* (Rajoidei: Rajidae) from Australian Seas. In: P.R. Last, W.T. White, J.J. Pogonoski and D.C Gledhill (eds), *Descriptions of New Australian Skates*, CSIRO Research Paper No. 021. 53–98.
- Last, P.R. and Stevens, J.D. 2009. *Sharks and Rays of Australia*. Second Edition. CSIRO Publishing, Collingwood, Australia.
- 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.
- Northern Territory Government (NTG) 2019. Application for reassessment under the EPBC Act of the Northern Territory Demersal Fishery. Northern Territory Government.
- Parks Australia 2023. North-west Marine Parks Network. <https://parksaustralia.gov.au/marine/parks/north-west/>.
- Patterson, H., Bromhead, D., Galeano, D., Larcombe, J., Timmiss, T., Woodhams, J. and Curtotti, R. 2022. *Fishery status reports 2022*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.
- Zhou, S., Fuller, M. and Smith, T. 2009. *Rapid quantitative risk assessment for fish species in additional seven Commonwealth fisheries*. Marine and Atmospheric Research, CSIRO, Cleveland, Australia.