

Edmund's Spurdog, *Squalus edmundsi*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern	IUCN Red List Global Assessment	Near Threatened
Assessors	Finucci, B. & White, W.T.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)		
Report Card Remarks	In Australia, low fisheries effort and refuge at depth and in the Marine Parks Network.		

Summary

The Edmund's Spurdog is a little known deepwater dogfish that occurs in Western Australia and Indonesia. Nothing is known of its biology, though it is likely to have limiting life history characteristics similar to other deepwater *Squalus* species that render it vulnerable to high levels of exploitation. The



species is captured in relatively large numbers by deepwater longline fisheries in Indonesia, where it is commercially valued. Declines of as much as 97% over 20 years have been documented by fishery-independent surveys in heavily fished *Squalus* species, where data are available off Australia. There is anecdotal evidence to suggest that catches of squaloid sharks have declined at one landing site in Indonesia and thus, the global status is Near Threatened (IUCN). In Australia, it is likely a bycatch of deepwater trawl fisheries off Western Australia though these currently have low effort, and has refuge in deepwater and in the Marine Parks Network. Therefore, the species is assessed as Least Concern (IUCN) in Australia, and Sustainable (SAFS).

Distribution

The Edmund's Spurdog occurs between Bunbury and the Rowley Shoals (Western Australia), and in Bali and Lombok (eastern Indonesia) (Last and Stevens 2009).

Stock structure and status

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

Fisheries

The Australian range in which this species is known to occur falls within the North West Slope Trawl and Western Deepwater Trawl fishery areas. However, fishing effort is small with only a few boats in operation, and although details on bycatch are currently unavailable, given the low fishing effort, it is not likely there is cause for concern. The species, however is caught in large numbers by

deepwater fisheries in Indonesia where it is utilised for its meat, fins, and liver oil. Indonesian deepwater fisheries operate throughout the depth range at which this species is most common. There is anecdotal evidence to suggest squaloid shark catches have declined rapidly at one landing site, Cilacap, in the ten years or more prior to 2006, despite it being only a relatively restricted fishery (White et al. 2006). The species has some refuge from fishing pressure in the deeper portions of its depth range off Australia, and in the Marine Parks Network.

Habitat and biology

Edmund's Spurdog occurs on the continental slope in depths of 200–850 m (mostly 300–500 m). Maximum size is at least 87 cm total length (TL), with males mature by 54 cm TL (Last and Stevens 2009). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 87 cm TL
Age and/or size at maturity (50%)	Males: 54 cm TL Females: unknown

CAAB Code: 37 020046

Link to IUCN Page: <https://www.iucnredlist.org/species/158617/68644689>

Link to page at Shark References: <http://www.shark-references.com/species/view/Squalus-edmundsi>

References

- 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. and Stevens, J.D. 2009. *Sharks and Rays of Australia*. CSIRO Division of Fisheries, Hobart.
- White, W.T., Fahmi, Dharmadi and Potter, I.C. 2006. *Preliminary investigation of artisanal deep-sea chondrichthyan fisheries in Eastern Indonesia*. In: Shotton, R. (ed.) (ed.), In: Deep Sea 2003: Conference on the Governance and Management of Deep-sea Fisheries. Part 2: Conference poster papers and workshop papers, pp. 381–387. FAO, Rome.