

Longsnout Dogfish, *Deania quadrispinosa*

Report Card assessment	Recovering		
IUCN Red List Australian Assessment	Near Threatened	IUCN Red List Global Assessment	Vulnerable
Assessors	Finucci, B., Cheok, J., Cotton, C.F., Kulka, D.W., Neat, F.C., Rigby, C.L., Tanaka, S. & Walker, T.I.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)		
Report Card Remarks	In Australia, heavily depleted in part of its range; management measures in place to allow recovery.		

Summary

The Longsnout Dogfish is a poorly-known deepwater species reported from the southeast Atlantic, Indian Ocean, and the western Pacific. In Australia, it is taken as bycatch in the Southern and Eastern Scalefish and Shark Fishery and is one of the main



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species landed. Declines of 87% over 20 years to the mid-1990s have been recorded off New South Wales. This part of its range is still continually fished and there is no evidence that numbers have recovered on these fishing grounds. Following similar documented declines in other deepwater dogfish species in this area, management measures were implemented to promote recovery that included catch limits and spatial and depth closures. The biology of the species is poorly known but likely similar to other deepwater dogfish that have low fecundity, slow growth and high longevity. The dramatic declines observed off Australia indicate that this species is vulnerable to rapid population depletion where it is heavily fished. Therefore, the species is assessed as Near Threatened (IUCN) in Australia (Kyne et al. 2021) and Recovering (SAFS) as there is limited catch in much of its Australian range and management measures were implemented.

Distribution

The Longsnout Dogfish occurs in southern Africa, New Caledonia, New Zealand, and Australia. In Australia, it is found from Moreton Island (Queensland) to Perth (Western Australia) (Last and Stevens 2009).

Stock structure and status

The Longsnout Dogfish does not appear to be as common as other *Deania* species. Research surveys on the New South Wales slope over a 20-year period showed an 87% decline in abundance for the related Longsnout Dogfish *Deania quadrispinosa* (Graham et al. 1997). Outside of this range there is

no information on stock status, although given limited fishing it is likely that across its Australian range the decline is substantially less.

Fisheries

The Longsnout Dogfish is caught in trawl fisheries off Australia and South Africa. Off eastern Australia, commercial fishing activities provide the only threat to this dogfish. The core depth of the species (400 to 800 m) coincided with heavily fished depths by trawlers that operated on the upper slope off New South Wales (NSW). In the period 1975–2000, off central and southern NSW the species was severely affected by trawling, reducing the relative abundance to <13% of historical levels (Graham et al. 2001, Daley et al. 2002, Wilson et al. 2009). Commercial fishing in the Commonwealth Trawl and Scalefish Hook Sectors of the Southern and Eastern Scalefish and Shark Fishery (SESSF) continued to affect this portion of the population, despite a ban on trawling below 700 m depth implemented in 2007 (AFMA 2006). However, more recently a basket quota was introduced for deepwater sharks and catches have declined with reduced effort targeting these species (AFMA 2023).

Habitat and biology

The Longsnout Dogfish is found on the outer continental shelves, upper and middle slopes and off seamounts at depths of 150–1,360 m, but mainly in 400–800 m (Last and Stevens 2009). Maximum size is approximately 118 cm total length (TL), with males mature at 80–90 cm TL and females at 85–100 cm TL. *Deania* species have an extended gestation period, probably with a two or three-year reproductive cycle (Daley et al. 2002, Kyne and Simpfendorfer 2007).

Longevity and maximum size	Longevity: unknown Max size: ~118 cm TL
Age and/or size at maturity (50%)	Males: 80–90 cm TL Females: 85–100 cm TL

CAAB Code: 37 020004

Link to IUCN Page: <https://www.iucnredlist.org/species/161635/68619468>

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

References

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