Published Date: 1 March 2019

Longsnout Dogfish, *Deania quadrispinosa*

Report Card assessment	**Recovering**		
IUCN Red List Australian Assessment	Refer to Global Assessment	IUCN Red List Global Assessment	Near Threatened
Assessors	Ebert, D.A. & Valenti, S.V.		
Report Card Remarks	In Australia, heavily depleted with management measures implemented but recovery expected to be slow		

Summary

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 where declines of 87% over 20 years have been recorded. 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. Deepwater fisheries are expanding in some parts of the species' range outside Australia. 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) and in Australia, Transitional Recovering (SAFS) because although management is in place, recovery has not yet been shown and is expected to take decades.

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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. In Australia, it is taken in the Southern and Eastern Scalefish and Shark Fishery where declines in catch rates of 87% were documented over a 20 year period for the species (Graham et al. 2001). However, significant parts of its Australian range are unfished, providing a refuge to a significant part of the stock. Given the protections implemented to address conservation concerns about other deepwater shark species overall the population is likely to be stable, and possibly increasing. As such, it is assessed as Recovering (SAFS)

Fisheries

The primary threat to the Longsnout Dogfish is fishing. The species is a discarded bycatch of 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 implemented in 2007 (AFMA 2006). A plan of management was then implemented with catch limits and spatial and depth closures to promote recovery of the overfished deepwater dogfish populations, with recovery estimated to take many decades (AFMA 2012)

Habitat and biology

The Longsnout Dogfish is found on the outer continental shelves, upper and middle slopes and off seamounts at depths of 150 to 1,360 m, but mainly in 400 to 800 m (Last and Stevens 2009). *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

Link to IUCN Page: http://www.iucnredlist.org/details/161635/0

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

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