

Southern Mandarin Dogfish, *Cirrhigaleus australis*

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| Report Card assessment | Undefined Stock | | |
| IUCN Red List Australian Assessment | Data Deficient | IUCN Red List Global Assessment | Data Deficient |
| Assessors | White, W.T. & Valenti, S.V. | | |
| Australian Assessors | Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan) | | |
| Report Card Remarks | Little known of catches and biology. | | |

Summary

The Southern Mandarin Dogfish is a deepwater dogfish in temperate waters of the southwest Pacific. The long dorsal fin spines and demersal habit makes it highly vulnerable to trawl fisheries. It is likely taken as bycatch in the Australian southeast



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trawl fisheries. Very little is known about the biology of this species, however its productivity is presumably low. The lack of information on catches or biology prevent an accurate assessment of status. Given the presumed low productivity and its occurrence in areas where deepwater trawl fisheries operate, further investigation is required. Therefore, the species is assessed as Data Deficient (IUCN) (Kyne et al. 2021) and Undefined Stock (SAFS).

Distribution

The Southern Mandarin Dogfish occurs from Sydney (New South Wales) to eastern Tasmania, and possibly New Zealand (White et al. 2007).

Stock structure and status

The Southern Mandarin Dogfish appears to be locally rare which may be a natural characteristic of this species. There is currently no information on population size, structure, or trend for the species.

Fisheries

The species is likely taken as bycatch in the Southern and Eastern Scalefish and Shark Fishery (including the East Coast Deepwater Trawl and Commonwealth Trawl sectors) that operates within the species' range off eastern Australia. Although not utilised commercially at present, the liver is high in squalene oil that can be of high value.

Habitat and biology

The Southern Mandarin Dogfish occurs on the upper continental slope at depths of 360–640 m (White et al. 2007). Maximum size is 123 cm total length (TL) (White et al. 2007). Size at maturity is unknown; very little is known about the biology of the species.

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| Longevity and maximum size | Longevity: unknown Max size: 123 cm TL |
| Age and/or size at maturity (50%) | Unknown |

CAAB Code: 37 020049

Link to IUCN Page: <https://www.iucnredlist.org/species/161321/68617985>

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

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
- White, W.T., Last, P.R. and Stevens, J.D. 2007. *Cirrhigaleus australis* n. sp., a new Mandarin dogfish (Squaliformes: Squalidae) from the south-west Pacific. *Zootaxa* 1560: 19–30.