

Longfin Mako, *Isurus paucus*

Report Card assessment	Undefined Stock		
IUCN Red List Australian Assessment	Vulnerable	IUCN Red List Global Assessment	Endangered
Assessors	Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureaux, N., Romanov, E., Sherley, R.B. & Winker, H.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)		
Report Card Remarks	Bycatch of pelagic longline fisheries; low catches in Australia but no information on population size or trend. Listed on EPBC Act (Migratory), CITES Appendix II, and CMS Appendix II.		

Summary

The Longfin Mako is a large bodied shark that is widely distributed throughout tropical waters but is rarely encountered. It is taken as bycatch in tropical pelagic longline fisheries throughout its distribution. Catches are not adequately monitored and underestimated due to



Source: NOAA Observer Program/Wikimedia Commons. Licence: Public Domain.

common misidentification with the Shortfin Mako. Populations are considered likely to have declined and it is of conservation concern due to its apparent rarity, large maximum size, low number of pups, and continued bycatch in intensive oceanic fisheries. In Australia, the species is reported to be caught occasionally in low numbers in the Eastern Tuna and Billfish Fishery but there is no information on the population size or trend. Therefore, the Longfin Mako is assessed as Vulnerable (IUCN) in Australia (Kyne et al. 2021) and Undefined Stock (SAFS). It is listed on the EPBC Act (Migratory), CITES Appendix II and CMS Appendix II.

Distribution

The Longfin Mako is cosmopolitan in tropical and subtropical waters. In Australia, it is found from Geraldton (Western Australia) across the Northern Territory and Queensland down to Port Stevens (New South Wales) (Last and Stevens 2009).

Stock structure and status

There is currently little information on population size, structure, or trend for the Longfin Mako. It is common in the Western Atlantic and Central Pacific Oceans, but is reported to be rare elsewhere (Compagno 2001). The Longfin Mako is often caught in the same fishing gear but in lower ratios as the more common Shortfin Mako (*Isurus oxyrinchus*). Steep declines in catch rates of the Shortfin Mako in the Atlantic suggest that the Longfin Mako may also be in decline (Rigby et al. 2019). The Longfin Mako are less abundant, less fecund and therefore more vulnerable to fisheries than Shortfin Mako and thus may have been similarly depleted by longline fisheries (Rigby et al. 2019). There is no information on the population trend in Australian waters.

Fisheries

The primary threat to the Longfin Mako is fishing pressure. It is taken as bycatch in pelagic longline fisheries throughout its distribution. It is poorly documented however, as it is often confused with its relative, the more common Shortfin Mako. In Australia, the Longfin Mako is reported to be caught occasionally in very low numbers in the Eastern Tuna and Billfish Fishery (Patterson et al. 2015).

Habitat and biology

The Longfin Mako is found in tropical, epipelagic waters likely occurring in deep waters based on its diet (Compagno 2001). Maximum size is at least 425 cm total length (TL). It has a litters of 2–8 pups. Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 425 cm TL
Age and/or size at maturity (50%)	Males: 229 cm TL Females: >245 cm TL

CAAB Code: 37 010002

Link to IUCN Page: <https://www.iucnredlist.org/species/60225/3095898>

Link to page at Shark References: <http://shark-references.com/species/view/Isurus-paucus>

References

- Baum, J.K., Myers, R.A., Kehler, D.G., Worm, B., Harley, S.J. and Doherty, P.A. 2003. Collapse and conservation of shark populations in the Northwest Atlantic. *Science* 299: 389–392.
- Compagno, L.J.V. 2001. Sharks of the world. *An annotated and illustrated catalogue of shark species known to date. Vol. 2. Bullhead, mackerel and carpet sharks (Heterodontiformes, Lamniformes and Orectolobiformes)*. FAO species catalogue for fisheries purposes. No. 1. Vol. 2. FAO, Rome.
- 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*. Second Edition. CSIRO Publishing, Collingwood, Australia.
- Patterson, H, Georgeson, L, Stobutzki, I & Curtotti, R (ed) 2015, *Fishery status reports 2015*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.
- Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureaux, N., Romanov, E., Sherley, R.B. & Winker, H. 2019. *Isurus oxyrinchus*. *The IUCN Red List of Threatened Species 2019*: e.T39341A2903170.