

## Bigeye Thresher, *Alopias superciliosus*

Report Card assessment	Depleting		
IUCN Red List Australian Assessment	Vulnerable	IUCN Red List Global Assessment	Vulnerable
Global Assessors	Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Herman, K., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureau, 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	Australian fishing pressure is low; but regional population has declined. Listed on CITES Appendix II, CMS Appendix II.		

### Summary

The Bigeye Thresher is a large bodied, highly migratory species globally distributed throughout pelagic and coastal waters. Life history characteristics result in low potential rate of population increase and make it highly susceptible to fishing pressure. Because of its pelagic distribution, fishing pressure from pelagic fisheries outside of Australian waters is high. Globally, fishing pressure has caused serious depletion of Bigeye Threshers. In Australia, the species is likely depleting because fishing pressure outside of Australian waters. Catches in Australia are low and strictly managed with individuals encountered often returned to the sea alive. Therefore, it is assessed as globally Vulnerable (IUCN) and in Australia is likely to be Vulnerable (IUCN) (Kyne et al. 2021) and Depleting (SAFS). The levels of connectivity within the region could affect the species stability in Australia; once connectivity is better understood the population status needs to be reassessed. The species is listed on CITES Appendix II and CMS Appendix II (Australian reservation).



The Bigeye Thresher has a circumglobal distribution throughout tropical and temperate waters (Compagno 2001). It is distributed throughout Australian waters apart from areas of the northern coastline such as the Gulf of Carpentaria and around Tasmania (Last and Stevens 2009). It has been recorded off Western Australia, Queensland, New South Wales and South Australia (Last and Stevens 2009).

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### Stock structure and status

There is stock separation between the Indo-Pacific and Atlantic oceans (Morales et al. 2018), but divisions within the Indo-Pacific have not yet been identified. Declines of over 90% have been reported for the Bigeye Thresher in the Indian Ocean, but in the Pacific Ocean the population appears to be stable (Rigby et al. 2019). How these population levels relate to Australian waters is unclear due to

limited data. But given the broad movements and limited understanding of stock structure it is concluded that the Australian population is likely to reflect the regional status and is likely Depleting, but given low catches and stable a Pacific stock is not yet Depleted.

## Fisheries

In Australian waters, the Bigeye Thresher is caught mainly by the Eastern and Western Tuna and Billfish Fisheries using pelagic longlines. However, shark interactions are carefully managed and most are returned alive when they are caught. Outside of Australian waters is caught by extensive pelagic longline fishing in both the Indian and Pacific oceans. It is highly susceptible to fishing pressure because of its life history characteristics. Globally fishing pressure is high throughout much of its range due to widespread pelagic longline fisheries.

## Habitat and biology

The Bigeye Thresher is a highly migratory epipelagic shark species that occurs to depths of at least 720 m (Nakano et al. 2003). Maximum age is estimated to be 20 years for females and 19 years for males (Liu et al. 1998). Maximum size is at least 460 cm total length (TL) (Compagno 2001).

Longevity and maximum size	Longevity: males ~19 years, females ~20 years Max size: 460 cm TL
Age and/or size at maturity (50%)	Males: 270 cm TL Females: 330 cm TL

**CAAB Code:** 37 012002

**Link to IUCN Page:** <https://www.iucnredlist.org/species/161696/894216>

**Link to page at Shark References:** <http://shark-references.com/species/view/Alopias-superciliosus>

## References

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- 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.
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