

Tawny Shark, *Nebrius ferrugineus*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern	IUCN Red List Global Assessment	Vulnerable
Assessors	Simpfendorfer, C., Derrick, D., D., Bin Ali, A., Fahmi, Vo, V.Q., Tanay, D., Seyha, L., Haque, A.B., Fernando, D., Bineesh, K.K., Utzurum, J.A.T., Yuneni, R.R. & Maung, A.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)		
Report Card Remarks	In Australia, it is taken in only small numbers.		

Summary

The Tawny Shark is a widely distributed continental shelf species of the Indian, west and central Pacific Oceans. It is restricted to shallow water habitat that is heavily fished throughout all its range except in Australia. Taken in inshore fisheries (demersal trawls, floating and fixed bottom gillnets and baited hooks) in Indonesia, Thailand, Philippines, Pakistan, and India. Although there are limited data on population declines in these areas, reports of local extinctions in India and Thailand, combined with its narrow habitat range, apparently limited dispersion and low fecundity, indicate that the species is highly susceptible to local inshore fisheries. As a result, it is assessed globally as Vulnerable (IUCN). Within Australia, it is widely distributed and abundant, and captured only in very small numbers in gillnets, coral reef line fisheries, and beach meshing programs. Therefore, the species is assessed as Least Concern (IUCN) (Kyne et al. 2021) and in Australia, Sustainable (SAFS).



Distribution

The Tawny Shark is widespread from southeast Africa and the Red Sea through India, Japan, Philippines, and Indonesia, and into the central Pacific. In Australia, it is found in tropical waters from Rockhampton (Queensland) to Ningaloo (Western Australia) (Last and Stevens 2009).

Stock structure and status

There is currently no information on population size, structure, or trend for the species in Australian waters.

Fisheries

Threats from fishing within Australia are likely to be minimal, there are no target fisheries and it has no commercial value, except possibly for its fins. It is taken in small numbers in the Queensland Coral Reef Finfish Fishery (Heupel et al. 2009), and likely in other reef fisheries as well. Elsewhere it is taken in inshore fisheries throughout much of the rest of its range and used for meat, liver oil, fins, and hide (Last and Stevens 2009). The species is taken in minimal numbers in a prawn trawl fishery in southern Papua New Guinea. In the Gulf of Thailand, it was historically more abundant and it may have been adversely affected by the use of explosives and poisons on reefs in the Indian Ocean and western Pacific, particularly Indonesia and the Philippines (Compagno 2001). The Tawny Shark often forms small aggregations during the day and has a limited home range, with individuals returning to the same area every day after foraging. This behaviour together with small litter size, large size at maturity, and inshore habitat suggest that it is vulnerable to local population depletion in areas of heavy fishing pressure.

Habitat and biology

The Tawny Shark occurs in inshore waters of the continental shelves to a depth of 70 m but more commonly between 5–30 m. Maximum size is at least 320 cm total length (TL). Males mature at approximately 225 cm TL and females at 230 cm TL (Last and Stevens 2009). The species has uterine cannibalism in the form of oophagy where the embryos feed on eggs produced by the mother (Teshima et al. 1995). Litter sizes may be only one pup (Compagno 2001).

Longevity and maximum size	Longevity: unknown Max size: at least 320 cm TL
Age and/or size at maturity (50%)	Males: ~225 cm TL Females: 230 cm TL

CAAB Code: 37 013010

Link to IUCN Page: <https://www.iucnredlist.org/species/41835/173437098>

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

References

- 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.
- Heupel, M.R., Williams, A.J., Welch, D.J., Ballagh, A., Mapstone, B.D., Carlos, G., Davies, C. and Simpfendorfer, C. A. 2009. Effects of fishing on tropical reef associated shark populations on the Great Barrier Reef [Article]. *Fisheries Research*, 95(2–3), 350–361.
- 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.
- Teshima, K., Kamei, Y., Toda, M. and Uchida, S. 1995. Reproductive mode of the tawny nurse shark taken from the Yaeyama Islands, Okinawa, Japan with comments on individuals lacking the second dorsal fin. *Bull. Seikai Natl. Fish. Res. Inst.* 73: 1–12