

## Collared Carpetshark, *Parascyllium collare*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern (Endemic to Australia)	IUCN Red List Global Assessment	Least Concern
Assessors	Sherman, C.S. & Heupel, M.R.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)		
Report Card Remarks	Small, little-known shark that is taken as bycatch with stable catch rates.		

### Summary

The Collared Carpetshark is a small shark endemic to the subtropical to temperate coast of eastern Australia. Although not targeted by fisheries, this bottom-living species is commonly taken as bycatch and resides in areas of heavy trawling effort. The species is not commercially targeted, is typically discarded, and is believed to have high survival rates. From bycatch rates, the population is inferred to be stable. However, further information should be collected concerning the status of the species as bycatch in trawl fisheries. It is a resilient species and the wide variety of habitats and depths in which the species occurs provide refuge areas where there is little to no fishing pressure. Therefore, the species is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



### Distribution

The Collared Carpetshark is restricted to the east coast of Australia from Mooloolaba (Queensland) to Gabo Island (Victoria) (Last and Stevens 2009). It is often confused with other similar looking species and may be less widely distributed than previously thought.

### Stock structure and status

There is currently no information on population size or structure, though based on fisheries bycatch rates (Graham et al 2001), it can be inferred that the population is stable.

### Fisheries

The species is caught throughout its range, mainly as bycatch in trawl fisheries. Catch in the Southern and Eastern Scalefish and Shark Fishery was estimated to be 9,946 +/- 1,047 kg per year from 2000–2006. There is a low retention rate of 2% (Walker and Gason 2007). Nearly all the catch (98%) is taken by otter trawl in the South East Trawl Fishery sector (SETF) with the remaining catch

coming from Danish seines in the SETF (Walker and Gason 2007). Catch rates have previously remained stable over time (Graham et al. 2001). This species is rarely caught in the northern part of their range as bycatch in the Eastern King Prawn fishery (Kyne 2008).

### Habitat and biology

The Collared Carpetshark is found in a variety of habitats and depths including demersal, coastal, and shelf in temperate waters at depths of 20 to 175 m, possibly as deep as 230 m. Maximum size is approximately 86 cm total length (TL) (Kyne 2008, Last and Stevens 2009). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: ~86 cm TL
Age and/or size at maturity (50%)	Unknown

**CAAB Code:** 37 013002

**Link to IUCN Page:** <https://www.iucnredlist.org/species/41841/68639742>

**Link to page at Shark References:** <http://www.shark-references.com/species/view/Oxynotus-bruniensis>

#### References

- Graham, K.J., Andrew, N.L. and Hodgson, K.E. 2001. Changes in the relative abundances of sharks and rays on Australian South East Fishery trawl grounds after twenty years of fishing. *Marine and Freshwater Research* 52: 549–561.
- Kyne, P.M. 2008. *Chondrichthyans and the Queensland East Coast Trawl Fishery: Bycatch reduction, biology, conservation status and sustainability*. PhD thesis, University of Queensland, Brisbane, 361 pp.
- 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.
- Walker, T.I. and Gason, A.S. 2007. *Shark and other chondrichthyan byproduct and bycatch estimation in the Southern and Eastern Scalefish and Shark Fishery*. Final report to Fisheries and Research Development Corporation Project No. 2001/007. July 2007. vi + 182 pp. Primary Industries Research Victoria, Queenscliff, Victoria, Australia.