

## Freckled Catshark, *Apristurus sinensis*

|  |  |                                    |                |
|--|--|------------------------------------|----------------|
| <b>Report Card assessment</b>          | <b>Sustainable</b>   |                                    |                |
| IUCN Red List<br>Australian Assessment | Least Concern*   | IUCN Red List<br>Global Assessment | Data Deficient |
| Global Assessors                       | Huveneers, C. & Duffy, C.A.J.  |                                    |                |
| Australian Assessors                   | Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)  |                                    |                |
| Report Card Remarks                    | Although taxonomic issues need to be resolved before it can be better understood, in Australia it is mostly beyond the depth of fisheries. |                                    |                |

\*The Australian assessment status is more recent than the Global assessment and the shift from DD to LC aligns with a less evidentiary and more precautionary approach to Red List assessments rather than any significant new information.

### Summary

The Freckled Catshark is a small deepwater shark known from Australia and the South China Sea. In Australia, there are three genetically distinct forms that may all be separate species. Although these taxonomic issues need to be resolved, the species mostly occurs at depths beyond the depths of commercial fisheries in Australia. Thus, it is assessed as globally Data Deficient (IUCN) and in Australia, as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



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### Distribution

The Freckled Catshark is currently known off from Newcastle (New South Wales) to Beachport South Australia) and off North West Cape to Busselton and Ashmore Reef (Western Australia) (Last and Stevens 2009). It is also known from the South China Sea and possibly occurs off New Zealand (Last and Stevens 2009). The distribution of the species is poorly defined due to taxonomic issues.

### Stock structure and status

There are three genetically distinct segments of this population. These may represent separate stocks, but until further information is gathered on this species such a conclusion is premature. There is currently no information on population size or trend for the species, but its rare occurrence in fisheries suggests that there has been little or no decline (Kyne et al. 2021).

### Fisheries

In Australia, most of the depth range of the species is outside the activity of commercial trawl fisheries so it is expected that bycatch levels would be low to negligible. In the Commonwealth Trawl Sector of the Southern and Eastern Scalegfish and Shark Fishery, most areas below 700 m are closed

to trawling, so there is no fishery operating in the depth range of the Freckled Catshark in this area (Penney et al. 2014). The Western Deepwater Trawl Fishery operates within the range of the species, however current effort and catch is low with only two boats active in the 2012–13 fishing season (Marton and Mazur 2014).

### Habitat and biology

The Freckled Catshark is a demersal species from the continental slope. In Australia, it occurs at depths of 940–1,290 m, whereas in the South China Sea it is known from a depth of 537 m (Last and Stevens 2009). Maximum size is at least 75 cm total length (TL) (possibly 82 cm TL). Males mature at 47 cm TL and females at 61 cm TL (Last and Stevens 2009).

|                                   |   |
|-----------------------------------|---|
| Longevity and maximum size        | Longevity: unknown<br>Max size: at least 75 cm TL |
| Age and/or size at maturity (50%) | Males: 47 cm TL<br>Females: 61 cm TL              |

**CAAB Code:** 37 015014

**Link to IUCN Page:** <https://www.iucnredlist.org/species/44225/70709147>

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

### 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.
- Last, P.R. and Stevens, J.D. 2009. *Sharks and Rays of Australia*. Second Edition. CSIRO Publishing, Collingwood.
- Marton, N. and Mazur, K. 2014. *Western Deepwater Trawl Fishery*. In: Georgeson, L., Stobutzki, I. and Curtotti, R. (eds), *Fishery status reports 2013–14*, pp. 271–280. Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.
- Penney, A., Moore, A., Flood, M., Georgeson, L. and Curtotti, R. 2014. *Commonwealth Trawl and Scalefish Hook sectors*. In: Georgeson, L., Stobutzki, I. and Curtotti, R. (eds), *Fishery Status Reports 2013–14*, pp. 128–213. Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.