

Pacific Spookfish, *Rhinochimaera pacifica*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Least Concern	IUCN Red List Global Assessment	Least Concern
Global Assessors	Dagit, D.D. & Kyne, P.M.		
Australian Assessors	Kyne, P.M., Heupel, M.R., White, W.T., Simpfendorfer, C.A. (Shark Action Plan) & Rigby, C.L.		
Report Card Remarks	Deepwater and common species with no current fishing effort in its Australian depth range.		

Summary

The Pacific Spookfish is a large deepwater chimaerid found in tropical to temperate waters of Northwest and Southwest Pacific, and Eastern Indian Ocean. In Australia, it commonly occurs in a wide range across southern and western Australia, including Tasmania and southern seamounts. It was an incidental byproduct of trawl fisheries, previously taken in the Commonwealth Southern and Eastern Scalefish and Shark Fishery (SESSF) and possibly in the South Tasman Rise Trawl Fishery (STRTF), and retained for its flesh. However, there is no longer any fishing in its Australian depth range of 760–1,290 m as trawling deeper than 700 m has been prohibited in the SESSF and the STRTF has been closed. Its vulnerability was assessed as low for both fishing and climate change. The population is suspected to be stable in Australia as there is no current fishing effort in its Australian depth range. Therefore, the Pacific Spookfish is assessed as Least Concern (IUCN) (Kyne et al. 2021) and Sustainable (SAFS).



Distribution

The Pacific Spookfish occurs in tropical to temperate waters of the Northwest and Southwest Pacific and in the Eastern Indian Ocean (Dagit and Kyne 2015). In Australia, it occurs in a wide range across southern and western Australia from Broken Bay (New South Wales) to Northwest Cape (Western Australia) (Last and Stevens 2009).

Stock structure and status

There is currently no information on population size, structure or trend for the species, although it is reported as common along the continental slopes of southern Australia (Last and Stevens 2009).

Fisheries

The Pacific Spookfish was an incidental catch of trawl fisheries. It was a byproduct in the Commonwealth Southern and Eastern Scalefish Fishery (SESSF) with an estimated annual catch of 1.2 tonne between 2000–2006, with 48% of this retained for its flesh (Walker and Gason 2007). Fishing deeper than 700 m in the SESSF has been prohibited since 2007, which would provide the species complete refuge at depth as it occurs deeper than 760 m in Australia; it was assessed as at low risk from the SESSF (Sporcic et al. 2021). It was possibly previously caught in the South Tasman Rise Trawl Fishery (STRTF) which operated at average depths of 900–1,000 m from 1997–2007 (Clark and O’Driscoll 2002, Last and Stevens 2009). The fishery was closed within the Australian Fishing Zone in 2007 to protect the depleted target stocks of Orange Roughy (*Hoplostethus atlanticus*) (Emery 2020, Patterson et al. 2022). The species vulnerability to fishing and climate change was assessed as low (Walker et al. 2021).

Habitat and biology

The Pacific Spookfish is demersal on the continental slope, deepwater troughs and plateaus at depths of 191–1,290 m globally and in Australia at depths of 760–1,290 m (Last and Stevens 2009, Dagit and Kyne 2015). Maximum size is approximately 140 cm total length (TL) with males mature at 105 cm TL and females mature at 125 cm TL (Finucci et al. 2017).

Longevity and maximum size	Longevity: unknown Max size: ~140 cm TL
Age and/or size at maturity (50%)	Males: 105 cm TL Females: 125 cm TL

CAAB Code: 37 044002

Link to IUCN Page: <https://www.iucnredlist.org/species/60146/68642001>

Link to page at Shark References: <https://shark-references.com/species/view/Rhinochimaera-pacifica>

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