

Saddled Swellshark, *Cephaloscyllium variegatum*

Report Card assessment	Depleting		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Near Threatened
Assessors	Kyne, P.M. & Barratt, P.J.		
Report Card Remarks	Documented population declines and ongoing fishing pressure; research needed on population size		

Summary

The Saddled Swellshark is a rare species endemic to the east coast of Australia on the continental shelf and upper slope. The southern portion of its range (southern Queensland and New South Wales) receives high trawling effort from prawn and fish trawl fisheries, and >30% declines have been documented off New South Wales. Current fishing effort, however, in the northern portion of its range (central and northern Queensland) is low. Any future expansion of trawling effort in the north would increase risk. There is almost



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no information on its biology. The majority of its depth range is on the upper continental slope where the area of available habitat is narrow. Given the species' apparent rarity, relatively restricted range and the intensity of trawling in the southern half of its range, it is considered likely to be close to Vulnerable (IUCN). Research is required to determine population size and, therefore, more accurately assess its conservation status. If the species is found to have significant refuge at depth in unfished areas of the north, an assessment of Least Concern may prove more appropriate in the future. However, it is currently exposed to intensive fishing pressure in parts of its range. Therefore, the species is assessed as Near Threatened (IUCN) and Transitional Depleting (SAFS).

Distribution

The Saddled Swellshark occurs from off Rockingham Bay (Queensland) to off Tathra (New South Wales). It may also occur on the Britannia Seamount (off southern Queensland) (Last and White 2008, Last and Stevens 2009).

Stock structure and status

The Saddled Swellshark is thought to be quite rare. Catch of the species declined by >30% between the 1970s and 1990s on the New South Wales upper slope in the southern part of its range (Graham et al. 2001). This decline was originally thought to pertain to "Whitefin Swell Shark" (*Cephaloscyllium* sp. *A sensu* Last and Stevens, 1994, which was recently described as *C. albipinnum* Last, Motomura and White, 2008) but it now appears more likely to have been Saddled Swellshark (Last et al. 2008).

Fisheries

The southern portion of the species' range (southern Queensland and New South Wales) receives high trawling effort from prawn and fish trawl fisheries. The documented declines of the species as a result of intensive fishing pressure (Graham et al. 2001) demonstrates the effect of upper slope commercial trawling. Fishing effort on the New South Wales upper slope remains high (Penney et al. 2014). Furthermore, confusion between congeners confounds accurate species-specific status assessments. Current fishing effort, however, in the northern portion of its range (central and northern Queensland) is low. The majority of its depth range is on the upper continental slope where the area of available habitat is narrow. Any future expansion of trawling effort in the north would increase risk.

Habitat and ecology

The Saddled Swellshark occurs on the outer continental shelf and uppermost slope, at depths of 114 to 606 m. Maximum size is at least 74 cm total length (TL) with males mature at 55-60 cm TL (Last and White 2008, Last and Stevens 2009). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: at least 74 cm TL
Age and/or size at maturity (50%)	Males: 55-60 cm TL Females: unknown

Link to IUCN Page: <https://www.iucnredlist.org/species/42707/10745430>

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

References

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