

Australian Angel Shark, *Squatina australis*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Least Concern
Assessors	Walker, T.I., Pogonoski, J. & Pollard, D.A.		
Report Card Remarks	Taken as byproduct in managed fisheries of southern Australia		

Summary

The Australian Angel Shark is a relatively abundant species endemic to eastern and southern Australia. The species is taken as retained byproduct in gillnet and trawl fisheries targeting higher valued species. Catch susceptibility of the Australian Angel Shark is high for demersal trawl. However, large areas of its range are not trawled and fisheries observer data indicate no decline in abundance during 1994–2004. Given this, the species is assessed as Least Concern (IUCN) and Sustainable (SAFS).



Distribution

The Australian Angel Shark occurs from Newcastle (New South Wales, NSW) south and west to Rottnest Island (Western Australia) (Last and Stevens 2009).

Stock structure and status

Population size is suspected to be comparatively large. Scientific observer monitoring of trawl catches during 1994–2004 indicated that overall relative abundance had not declined off southern NSW and eastern Victoria (Walker and Gason 2007). Much of the range is unfished. As such, the population is assessed as Least Concern (IUCN) and Sustainable (SAFS).

Fisheries

The Australian Angel Shark is taken as byproduct in fisheries and marketed off southern NSW and eastern Victoria. It is captured by demersal otter trawl (98%) and Danish seine (2%) in the South East Trawl Sector of the Southern and Eastern Scalefish and Shark Fishery (Walker and Gason 2007). In addition, there are small catches using various methods in inshore fisheries off NSW, Victoria and South Australia (Walker and Gason 2009). Negligible catches are taken by gillnets and hooks, because of their low catch susceptibility to these fishing methods (Walker et al. 2005, Braccini et al. 2009).

Habitat and biology

The Australian Angel Shark is demersal on continental shelves in a variety of habitats such as sand and mud substrates, seagrass beds and adjacent to rocky reefs (Michael 2001). It occurs to a depth of 130 m. Maximum size is 152 cm total length (TL) with males mature at 90 cm TL and females at 97 cm TL (Last and Stevens 2009).

Longevity and maximum size	Longevity: unknown Max size: 152 cm TL
Age and/or size at maturity (50%)	Males: 90 cm TL Females: 97 cm T

Link to IUCN Page: <http://www.iucnredlist.org/details/41862/0>

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

References

- Braccini J.M., Walker, T.I., and Gason, A.S. 2009. GHATF shark survey of population abundance and population size composition for target, byproduct and bycatch species. Report to Australian Fisheries Management Authority. June 2009. iv + 123 pp. Fisheries Research Branch, Department of Primary Industries, Queenscliff, Victoria, Australia.
- Last, P.R. and Stevens, J.D. 2009. Sharks and Rays of Australia. Second Edition. CSIRO Publishing, Collingwood.
- Michael, S.W. 2001. Aquarium sharks and rays: an essential guide to their selection, keeping, and natural history. Microcosm Ltd., Charlotte, Vermont, and T.F.H. Publications, Neptune City, New Jersey.
- 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.
- Walker, T.I. and Gason, A.S. 2009. SESSF monitoring data management, reporting and documentation 2006/07. Final report to Australian Fisheries Management Authority. Project No. R2006/812. June 2009. vii + 177 pp. Primary Industries Research Victoria, Department of Primary Industries, Queenscliff, Victoria, Australia.
- Walker, T.I., Hudson, R.J., and Gason, A.S. 2005. Catch evaluation of target, byproduct, and bycatch species in the shark fishery of south-eastern Australia. *Journal of Northwest Atlantic Fishery Science* 35: 505–530.