

Port Jackson Shark, *Heterodontus portusjacksoni*

Report Card assessment	Sustainable		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Least Concern
Assessors	Huveneers, C. & Simpfendorfer, C.		
Report Card Remarks	Abundant species that is taken as bycatch but has high post-release survival		

Summary

The Port Jackson Shark is an abundant shark endemic to southern Australian waters. It is a large bycatch of several fisheries across its range, however most individuals are returned to the water alive. Studies have shown that the species is highly resilient to capture stress from gillnet, trawl, and longline gear, suggesting high post-release survival rates. Although there was a localised decline of the population in Bass Strait between 1973 and 2001, this trend has been reversed. In



addition, an ecological risk assessment showed that the Port Jackson Shark is at low risk from several fisheries because of its low catch susceptibility. The effects of fisheries on the Port Jackson Shark in other areas are likely negligible. Habitat modification and other environmental factors do not appear to be a threat to the population. Therefore, the Port Jackson Shark is assessed as Least Concern (IUCN) and Sustainable (SAFS).

Distribution

The Port Jackson Shark is commonly found on the southern Australian continental shelf from Byron Bay (New South Wales) south through Victoria, South Australia, and to Houtman Abrolhos (Western Australia), including Tasmania. Records from York Sound (northern Western Australia) and Moreton Bay (Queensland) are questionable. There is a single record of one individual from New Zealand (Last and Stevens 2009).

Stock structure and status

The Port Jackson Shark is an abundant shark and there is no evidence of population decline in most of its range. Surveys indicate that the number of Port Jackson Sharks in Bass Strait declined from 701 individuals caught per 1,000 km lift hours in 1973-1976 to 169 in 1998-2001 (Braccini et al. 2009). The most recent survey in 2007-2008 reported 204 individuals per 1,000 km lift hours and suggests that the decline has now ceased (Braccini et al. 2009). Overall, this represents an estimated population decline of 71% in 36 years in the Bass Strait. However, standardised Catch Per Unit Effort from the Integrated Scientific Monitoring Program data of the Great Australian Bight and Commonwealth Trawl Sectors between 1994 and 2006 does not show any declining trends (Walker and Gason 2007).

Therefore overall, although some decline in one relatively small part of its range, its status across the whole range appears to be Sustainable (SAFS).

Fisheries

The Port Jackson Shark is caught as bycatch by a range of fisheries throughout its distribution, sometimes in high numbers. Recreational fishers also occasionally catch the Port Jackson Shark in relatively small numbers (Sumner and Williamson 1999, Ryan et al. 2013). However, its flesh and fins are considered to be poor quality and it is rarely used commercially. Most sharks are released alive in all fisheries (Walker et al. 2005, Walker and Gason 2007, Ryan et al. 2013). Moreover, post-release stress studies have shown that the species is very resilient to capture stress from gillnet, trawl, and longline gear (Frick et al. 2009, Frick et al. 2010a, 2010b, Braccini et al. 2012), suggesting that the species is likely to have high post-release survival rates from a range of fishing methods. In Western Australia, the Port Jackson Shark is also taken in small numbers for the marine aquaria trade (Fletcher and Santoro 2013).

Habitat and biology

The Port Jackson Shark is found on coastal reefs on the continental shelf throughout its range, from close inshore to depths of 275 m (Last and Stevens 2009). Size and age at maturity differs substantially between males and females and between regions.

Longevity and maximum size	Longevity: estimated 35 years Max size: 165 cm TL
Age and/or size at maturity (50%)	Males: 6-12 years, 55-82 cm TL Females: 7-17 years, 65-99 cm TL

Link to IUCN Page: <http://www.iucnredlist.org/details/39334/0>

Link to page at Shark References: <http://shark-references.com/species/view/Heterodontus-portusjacksoni>

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