

School Shark, *Galeorhinus galeus*

Report Card assessment	Depleted		
IUCN Red List Australian Assessment	Vulnerable	IUCN Red List Global Assessment	Vulnerable
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Report Card Remarks	Dramatic population reductions in Australia, restrictive Australian catch limits introduced. This species has been assessed in the Status of Australian Fish Stocks Reports (SAFS 2019) as Depleted http://www.fish.gov.au/		

Summary

The School Shark is a widespread shark of temperate areas which has been fished in all parts of its distribution. In southern Australia, where it was primarily fished for meat for fish and chips, the current mature biomass is estimated to be below 20% of the level before commercial target fishing began in the 1920s. As a result, it was listed as Conservation Dependent (EPBC Act) in 2009 and a recovery plan developed. The species has very low biological productivity; maximum age is potentially 60 years, age at maturity in females exceeds 10 years and mature females breed only every third year. Fisheries for the species are managed by Individual Transferrable Quotas in Australia that should allow stocks to gradually rebuild. Increasing abundances of juveniles suggests some population recovery is occurring. In Australia the species is assessed as Vulnerable (IUCN), and assessed in the Status of Australian Fish Stocks Reports as Depleted (SAFS). The global population is assessed as Vulnerable (IUCN).



Distribution

The School Shark is distributed widely in temperate coastal regions of the world. Within Australasia, the species occurs around New Zealand and off southern Australia from Perth (Western Australia) to Moreton Bay (Queensland), including Lord Howe Island (uncertain) and Tasmania (Last and Stevens 2009).

Stock structure and status

The School Shark has six widely separated sub-populations that do not mix; Australasia, Northeast Pacific, Southeast Pacific, southern Africa, Southwest Atlantic and Northeast Atlantic (Ward and Gardner 1997, Chabot and Allen 2009, Hernández et al. 2015). In Australia the biomass has been reduced to below 20% (1990) and pup production at the start of 1997 was 12–18% of the level before commercial target fishing began (Punt et al. 2000, Marton and Curtotti 2014). Declines in juvenile abundance during 1940 to 1950 in Tasmanian nursery areas were attributed to fishing for pregnant females. Continued nursery area sampling during the 1990s (Stevens and West 1997) indicated a substantial further reduction in abundance of pups and small juveniles in Tasmanian and Victorian embayments and estuaries. Recent sampling in these nursery areas has recorded increasing abundances of juveniles suggesting some population recovery may be occurring. While management measures have been introduced to promote recovery, it is unclear whether fishing mortality has been adequately reduced to allow the stock to recover from its recruitment overfished state. Measurable improvements in biomass are yet to be detected, and the stock is considered to be Depleted (see link to SAFS website below).

Fisheries

The primary threat to the School Shark is fishing with gillnets and longlines in southeastern Australia. Historically this species was targeted, but is now only taken as a byproduct of gummy shark targeted fishing. The species has a long history of exploitation for liver oil, meat and fins in target fisheries in most parts of its range. Minor threats include fishing with trawls and other methods. In southeast Australia, the harvest of School Shark began in the mid-1920s. With establishment of the shark meat market in 1964, production rose rapidly to peak during 1969 at 3,158 t. This declined after the ban on the sale of large school sharks in 1972 because of their mercury content but increased again with relaxation of the mercury laws, reaching 3,060 t during 1986. After 1986, the total annual catch from the shark fishery declined to 170 t by 2001 as a result of management restrictions (Walker 1999, Walker and Gason 2009). Recreational catch is currently unknown, but previous records show 7208 animals retained by recreational anglers in South Australia in 2013-2014. The species was listed as Conservation Dependent under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) in 2009 and a rebuilding plan developed. This included a range of regulations and bycatch limits designed to promote population recovery. Approximately 210 t of School Shark were caught in 2017.

Habitat and biology

The School Shark is primarily demersal and occurs from shallow water to well offshore (Compagno et al. 2005). In Australasia, the species is found to about 800 m depth. Life history characteristics vary regionally (Walker 1999). In Australasia, maximum size is 175 cm total length (TL) and individuals take at least 8 years to mature (Walker 1999, Ebert 2003, Walker 2005).

Longevity and maximum size	Longevity: 50 yrs Max size: 175 cm TL
Age and/or size at maturity (50%)	Males: 8-10 years, 126-131 cm Females: 10-15 years, 142 cm

Link to State of Australian Fish Stocks Page: <http://www.fish.gov.au>

Link to IUCN Page: <http://www.iucnredlist.org/details/39352/0>

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

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