

## Greeneye Spurdog, *Squalus chloroculus*

Report Card assessment	Recovering		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Near Threatened
Assessors	Walker, T.I.		
Report Card Remarks	Management measures are expected to rehabilitate depleted populations		

### Summary

The Greeneye Spurdog is a large, deepwater endemic dogfish from southeast Australia. The species has low biological productivity due to its high longevity and low reproductive output. Fishing was intense in some areas where it has caused severe



population reductions. Fishing intensity has since reduced, and management measures such as a low combined Total Allowable Catch of all deepwater dogfish in southeast Australia and a network of refuges have stabilised the population. The management actions are expected to rehabilitate the population. Therefore, the Greeneye Spurdog is assessed as Near Threatened (IUCN) and Transitional Recovering (SAFS).

### Distribution

The Greeneye Spurdog occurs off southern Australia from New South Wales (NSW) to the Great Australian Bight (Last and Stevens 2009).

### Stock structure and status

The Greeneye Spurdog is a recently described species (Last et al. 2007). The relative abundance of populations has varied widely across its distribution range with localised depletion in some localities and comparatively high abundance in others (Walker and Gason 2007). Declines in the population indicated by both fishery-dependent monitoring and fishery-independent scientific surveys show that Greeneye Spurdog is vulnerable to rapid population decline where it is heavily fished.

### Fisheries

The primary threat to the Greeneye Spurdog is fishing. Fishing is intensive on trawl grounds around southeast Australia, where there is evidence that this species has been severely depleted in some localities, but less so in others. Mean annual catch for the period 2000–2006 was as 212 t. This catch is taken by demersal trawl (89%), automatic longline (7%), and other methods (4%), with 95% and 5% from depths less than and greater than 600 m, respectively (Walker and Gason 2007). Catch rate of

'greeneye dogsharks' declined by ~97% from 1976–1977 to 1996–1997 between the Sydney area (central NSW) and the Eden-Gabo Island area (southern NSW–northern Victoria) (Graham et al. 2001). It is likely that *Squalus chloroculus*, *S. montalbani* and *S. grahmi* were all caught during these surveys (K. J. Graham pers. comm. 2007). *Squalus chloroculus* was possibly the predominant species in the southern survey areas (Ulladulla and Eden-Gabo Island) (K. J. Graham pers. comm. 2007). Subsequent monitoring of commercial trawl catches indicated for the period 1996–2006 that overall relative abundance was stable off New South Wales, but declined rapidly during 1999–2003 before stabilising at a low level in the Great Australian Bight and off South Australia.

### Habitat and biology

The Greeneye Spurdog occurs on the upper to mid continental slope at depths of 216 to 1,360 m (Last et al. 2007). The females have a long, triennial breeding cycle (Rochowski et al. 2015).

Longevity and maximum size	Longevity: estimated at least 26 years Max size: males at least 99 cm TL
Age and/or size at maturity (50%)	Males: 9-12 years, 63 cm TL Females: 16 years, 80 cm TL

**Link to IUCN Page:** <https://www.iucnredlist.org/species/161360/5406265>

**Link to page at Shark References:** <http://www.shark-references.com/species/view/Squalus-chloroculus>

### References

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