

## Sandbar Shark, *Carcharhinus plumbeus*

|   |  |                                       |            |
|---|--|---------------------------------------|------------|
| <b>Report Card assessment</b>             | <b>Recovering (western stock)<br/>Sustainable (eastern stock)</b>  |                                       |            |
| IUCN Red List<br>Australian<br>Assessment | Near Threatened  | IUCN Red List<br>Global<br>Assessment | Endangered |
| Global Assessors                          | Rigby, C.L., Derrick, D., Dicken, M., Harry, A.V., Pacoureau, N. & Simpfendorfer, C.   |                                       |            |
| Australian Assessors                      | Kyne, P.M., Heupel, M.R., White, W.T. & Simpfendorfer, C.A. (Shark Action Plan)<br><br>and<br>Braccini, M., Pidd, A., Usher, M. & Peddemors, V. (SAFS) |                                       |            |
| Report Card Remarks                       | In Australia, west coast stock is recovering and east coast stock status is sustainable.   |                                       |            |

### Summary

The Sandbar Shark is a coastal, large bodied shark distributed throughout tropical and temperate waters of the globe. It is highly susceptible to fishing pressure due to its vulnerable life history characteristics. It is targeted by fisheries throughout its distribution and forms an important component of many fisheries. Globally, population declines due to fishing pressure have occurred in the Atlantic, Mediterranean and Northwest Pacific. In Australia, overfishing has driven



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decline in the western stock. Management action has occurred to reduce further declines within Australia. As a result, the Sandbar Shark is assessed globally as Endangered (IUCN) and in Australia as Near Threatened (IUCN) (Kyne et al. 2021) and Recovering (western stock) and Sustainable (eastern stock) (Braccini et al. 2021). From November 2023, the species will be listed on Appendix II of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).

### Distribution

The Sandbar Shark is patchily distributed throughout tropical and temperate coastal waters of the world (Last and Stevens 2009). Within Australia, it is found from Esperance (Western Australia), through the Northern Territory, Queensland and to Coffs Harbour (New South Wales) (Last and Stevens 2009).

### Stock structure and status

Globally, Sandbar Sharks have a complex stock structure, with restricted gene flow between and within ocean basins (Portnoy et al. 2010). Within Australian waters there is genetic evidence that there

are separate stocks on the east and west coasts (Portnoy et al. 2010). Conventional tagging results in Western Australia identified no movements to the east coast (McAuley et al. 2005), supporting the conclusion of two stocks in Australian waters. Slow life history characteristics make the sandbar shark highly susceptible to overfishing (Sminkey and Musick 1995). As a result, in many locations globally where it has been fished populations have declined. In Australia, estimates of fishing mortality for the western stock using tag-recapture data demonstrated that the population was being fished at levels above those that would ensure sustainability (McAuley et al. 2007). The introduction of revised management, and the closing of the West Australia (WA) North Coast Shark Fishery (NSCF) reduced fishing pressure to levels that are allowing the recovery of the stock (Braccini et al. 2018, Braccini et al. 2021). As such, the western stock of Sandbar Sharks is assessed as Recovering. The eastern stock is caught mostly in northern New South Wales (NSW), with genetic analysis of effective population size indicating that the current level of removals is sustainable (Blower et al. 2020). As such, the eastern stock is assessed as Sustainable

### Fisheries

Sandbar Sharks are a major component of coastal shark fisheries throughout its distribution (Compagno 1984, Last and Stevens 2009, McAuley et al. 2005). Its fins are highly prized and made up at least 2–3% of fins traded in the world’s largest shark fin trading centre, Hong Kong, in the early 2000s (Clarke et al. 2006), but more recently have been reported to make up less than 1% (Cardenosa et al. 2020). Within Australia, the western stock is caught mostly in the WA Temperate Demersal Gillnet and Demersal Longline Fishery (TDGDLF), and historically in the WA NCSF before it was closed. They are occasionally captured by recreational fishers. The eastern stock is taken mostly in the NSW Ocean Trap and Line Fishery (OTLF) and to a lesser extent the Queensland East Coast Inshore Fin Fish Fishery. New management introduced to the OTLF in 2006 rendered shark fishing uneconomical reducing the pressure on this stock (Broadhurst et al. 2014).

### Habitat and biology

In other parts of the world the Sandbar Shark is a coastal species with the young often found in shallow waters such as tidal flats, estuaries and bays (Grubbs et al. 2007). However, in Australian waters the young occur in more offshore areas (McAuley et al. 2007). Adults are also found further offshore around topographic features such as islands and reefs and can occur down to depths of 280 m. Maximum size is at least 200 cm fork length (FL) (McAuley et al. 2007). Maximum age is estimated to be 35–41 years (McAuley et al. 2006).

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| Longevity and maximum size        | Longevity: estimated 35–41 years<br>Max size: at least 200 cm FL |
| Age and/or size at maturity (50%) | Both sexes: 7–16 years<br>Males: 130 cm FL<br>Females: 145 cm FL |

**CAAB Code:** 37 018007

**Link to IUCN Page:** <https://www.iucnredlist.org/species/3853/2874370>

**Status of Australian Fish Stocks Page:** <https://fish.gov.au/report/305-Sandbar-Shark-2020>

**Link to page at Shark References:** <http://shark-references.com/species/view/Carcharhinus-plumbeus>

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