SAWSHARKS (2020)

Pristiophorus spp.

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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, Western Australia, New South Wales, Tasmania, South Australia	Southern Australia	Sustainable	Standardised CPUE, catch

STOCK STRUCTURE

This is a multispecies stock comprising three endemic species: the Common Sawshark, *Pristiophorus cirratus*, ranging south of 27°S to depths of >600 m [Raoult et al. 2020]; the Southern Sawshark, *P. nudipinnis*, ranging south of 35°S to depths of >600 m, but with catches skewed to depths <100m [Raoult et al. 2020]; and the Delicate Sawshark, *P. delicatus*, mostly occurring in the waters of north-eastern Australia at depths between 245m and 405m [Last and Stevens 2009, Yearsley et al. 2008].

Biological stock structure is unknown for any of these species.

The majority of the historical catch has been taken in Bass Strait [Walker and Hudson 2005] and these species are primarily assessed and managed in the Commonwealth Southern and Eastern Scalefish and Shark fishery (SESSF). Only Common Sawshark and Southern Sawshark have been reported by observers in fisheries where Sawsharks are caught [Raoult et al. 2020].

Here, assessment of stock status is presented at the management unit level—Southern Australia.

STOCK STATUS

Southern Australia

Most of the reported commercial catch of Sawsharks is taken in the Commonwealth Trawl Sector (CTS), Great Australia Bight Trawl Sector (GABTS) and Gillnet Hook and Trap Sector (GHTS) of the Southeast Scalefish and Shark

Fishery (SESSF). Total catch across all SESSF sectors in the 2019–20 fishing season was 189 tonnes (t) (179 t in the 2018–19 fishing season).

Minor catches of Sawsharks are taken in state waters by local commercial and recreational fishers. Sawshark catches in Western Australia are Negligible (< 10 t per year) [McAuley et al. 2015].

Sawshark catches in New South Wales were less than 13 t during 2018 and <10 t during 2019. Standardised catch rate for Sawsharks in NSW-managed fisheries have been relatively stable since the year 2000 [Raoult et al. 2020]. The majority of New South Wales catch are reported as Common Sawshark. No recreational or indigenous catches are reported for this species in New South Wales.

Within Tasmanian state waters, Sawsharks are taken by SESSF vessels as well as the multi-gear, multi-species Tasmanian Scalefish Fishery (TSF). Maximum total commercial landings of unspecified Sawsharks between 87 t and 128 t were recorded between 1995 and 2001, declining to less than 25 t in more recent years. TSF catches account for a small proportion of total landings in Tasmania, amounting to less than 0.5 t of annual harvest over the last ten years. Numbers of Sawsharks taken by recreational fishers using gillnets and setlines are likely to be low [Lyle and Tracey 2012a, Lyle and Tracey 2012b].

Sawsharks are rarely landed by South Australian fisheries, which is partly a function of reductions in the use of demersal gillnets to target School and Gummy shark. No recreational or indigenous catches have been reported for Sawsharks in South Australia.

This stock is assessed by the Commonwealth using standardised CPUE data for Commonwealth trawl sector. The most recent assessment of Sawshark was conducted in 2018 using data up to 2016 [Haddon and Sporcic 2018]. The results indicate that current CPUE is above the target level and therefore well above the limit reference level. The tier 4 harvest control rule for the stock estimated an overall recommended biological catch (RBC) (for all sectors) of 519 t. Known catches (commercial and recreational) in neighbouring states are deducted from the RBC in the calculation of the TAC for the Commonwealth fleet, resulting in a TAC for 2019–2020 of 430 t (430 t for the 2018-19 season).

The landed catch of Sawshark in Commonwealth fisheries (the SESSF) in the 2019–20 season was 189 t (179 in 2018–19). Total catch for other jurisdictions was 4 t for Western Australia in 2018–19; 12.7 t and 9.6 t for New South Wales during 2018 and 2019 respectively, 0 t for South Australia, 50 kg for the TSF in Tasmania (2018–19).

The above evidence indicates that the biomass of this stock is unlikely to be depleted, recruitment is unlikely to be impaired, and the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired. On the basis of the evidence above, the Southern Australia management unit is classified as a **sustainable stock**.

BIOLOGY

Sawshark biology [Burke et al. 2020, Last and Stevens 2009, Raoult et al. 2016]

Species	Longevity / Maximum Size	Maturity (50 per cent)
SAWSHARKS	15 years, ~1 500 mm TL for Female Common Sawshark, 1 180 mm for males 1 050 mm for female Southern Sawshark, 970 mm for males.	900 mm TL Common Sawshark mature around 800–900 mm TL Southern Sawshark mature around 700–900 mm TL

DISTRIBUTION

Distribution of reported commercial catch of Sawsharks

TABLES

Fishing methods					
	Commonwealth	New South Wales	South Australia	Tasmania	Western Australia
Charter					
Hook and Line			✓		
Commercial					
Danish Seine	✓				
Demersal Gillnet	✓				
Demersal Longline	✓				
Longline (Unspecified)					✓
Otter Trawl	✓	✓			
Trawl	✓				
Unspecified			✓	✓	
Various		✓			
Recreational					
Gillnet				✓	
Hook and Line			✓		
Setline				✓	
Various		✓			

Management Methods					
	Commonwealth	New South Wales	South Australia	Tasmania	Western Australia
Charter					
Bag limits					✓
Gear restrictions			✓		
Licence (boat-based sector)					✓
Spatial closures					✓
Commercial					
Effort limits		✓			
Effort limits (individual transferable effort)					✓
Gear restrictions		✓	✓	✓	✓
Individual transferable quota	✓				
Limited entry	✓	✓	✓	✓	✓
Processing restrictions		✓			✓
Spatial closures		✓	✓	✓	✓
Spatial restrictions	✓				
Vessel restrictions		✓			
Recreational					
Area closures				✓	
Bag and possession limits				✓	
Bag limits		✓		✓	✓
Gear restrictions		✓	✓		✓
Licence				✓	
Licence (boat-based sector)					✓
Spatial closures					✓

Catch					
	Commonwealth	New South Wales	South Australia	Tasmania	Western Australia
Charter			Unknown		
Commercial	183.629 t	14.2876 t	0 t	0 t	0 t
Indigenous		Unknown but considered low	Unknown	Unknown but considered low	Undetermined but likely to be negligible
Recreational		Unknown but considered low	Unknown	Unknown but considered low	No sawsharks caught from boats [Ryan et al. 2019], shore-based catches are undetermined

Commonwealth – Recreational The Australian Government does not manage recreational fishing in Commonwealth waters. Recreational fishing in Commonwealth waters is managed by the state or territory immediately adjacent to those waters, under its management regulations. **Commonwealth – Indigenous** The Australian Government does not manage non-commercial Indigenous fishing in Commonwealth waters, with the exception of the Torres Strait. In general, non-commercial Indigenous fishing in Commonwealth waters is managed by the state or territory immediately adjacent to those waters.**Western Australia – Recreational (Management methods)** A recreational fishing from boat licence is required for recreational fishing from a powered vessel in Western Australia.

New South Wales – no catch reported. Commercial fisheries with less than seven active fishers are not presented due to the Privacy Act.

New South Wales – Indigenous (Management Methods)
https://www.dpi.nsw.gov.au/fishing/aboriginal-fishing

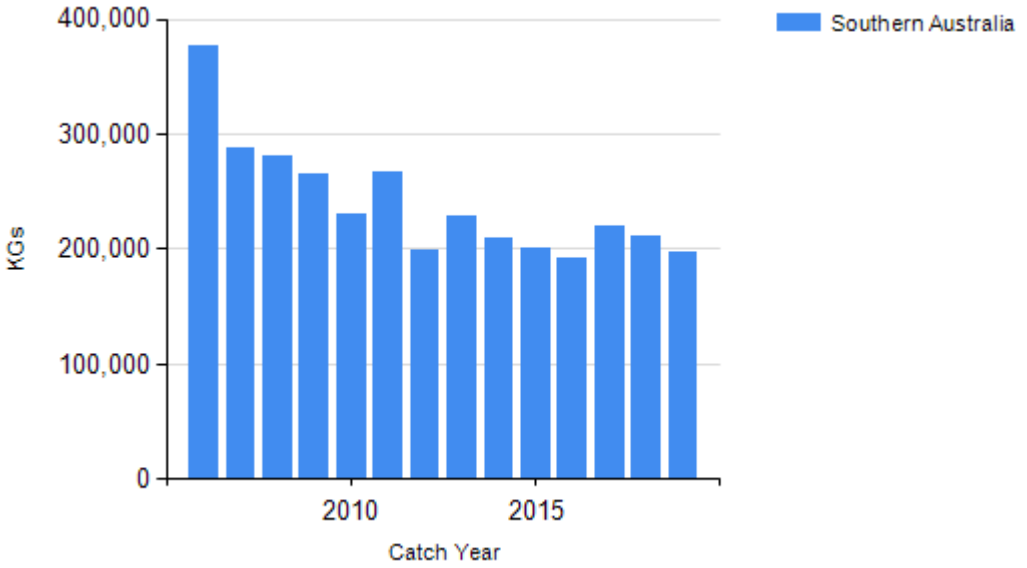
Tasmania – Commercial (catch) Catches reported for the Tasmanian Scalefish Fishery are for the period 1 July to 30 June the following year. The most recent assessment available is for 2018/19.

Tasmania – Recreational (management methods) In Tasmania, a recreational licence is required for fishers using dropline or longline gear, along with nets, such as gillnet or beach seine.

Tasmania – Indigenous (management methods) In Tasmania, Indigenous persons engaged in traditional fishing activities in marine waters are exempt from holding recreational fishing licences, but must comply with all other fisheries rules as if they were licensed. If using pots, rings, set lines or gillnets, Indigenous fishers must obtain a unique identifying code (UIC). The policy document "Recognition of Aboriginal Fishing Activities" details application procedures for issuing a UIC.

New South Wales – Recreational and Indigenous (catch) Given the offshore distribution of Sawsharks, near-shore catches are likely to be negligible.

CATCH CHART



Commercial catch of SAWSHARKS - note confidential catch not shown

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