

# Tiger Flathead (2020)

*Platycephalus richardsoni*



**Timothy Emery:** Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), **Geoffrey Liggins:** New South Wales Department of Primary Industries, **Nils Krueck:** Institute for Marine and Antarctic Studies, University of Tasmania

## STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, New South Wales, Victoria, Tasmania	Southern Australia	Sustainable	Spawning stock biomass, fishing mortality rate

## STOCK STRUCTURE

Tiger Flathead is endemic to Australia and distributed from northern New South Wales to western Victoria, including Tasmanian waters. There is some evidence of regional differences in physical characteristics, growth rates and spawning periods for Tiger Flathead, but biological stock structure has not been studied using genetic or other techniques. A single biological stock is assumed for management purposes [Morison et al. 2013].

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

## STOCK STATUS

**Southern Australia** Tiger Flathead is primarily caught by the Commonwealth managed Southern and Eastern Scalefish and Shark Fishery (SESSF) with small catches from New South Wales, Tasmania and Victoria (where they are among the most commonly targeted flathead species taken by offshore recreational anglers). Stock status classification reported here is based on stock assessments conducted for the SESSF, which include reported State catches.

Tiger Flathead in the SESSF is managed as a Tier 1 stock under the SESSF Harvest Strategy Framework [AFMA 2019a]. The 2016 stock assessment [Day 2016] and subsequent amendment to the assessment [Day 2017] informed the management of the stock for the 2019–20 fishing season. A new Tiger Flathead assessment was undertaken in 2019 [Day, 2019] and will inform management from the 2020-21 season. Tiger Flathead is managed to a target reference point that aims to maintain the spawning stock biomass at 40 per cent of the unfished level (0.40SB0).

The amendment to the 2016 stock assessment [Day 2017] predicted the spawning stock biomass for the 2019–20 fishing season based on a step-down total allowable catch (TAC) would be 41% (0.41SB0), which was just above the target reference point of 40% (0.40SB0). This produced a recommended biological catch (RBC) of 2,826 t, and AFMA set a TAC of 2,468 t for the 2019–20 fishing season. It is important to note that the Tier 1 stock assessment is based on biological parameters relating to Tiger Flathead, which accounts for about 95 per cent of the flathead catch [Morison et al. 2013]. However, the assessment and TAC includes catches of all flathead species because the different species cannot be distinguished in historical data [Emery et al. 2020].

The 2019 stock assessment [Day 2019] estimated the spawning stock biomass to be 32% of the unfished level (0.32SB0) in 2018. The reduction in the estimate of spawning stock biomass from the 2016 assessment was driven by below-average recruitment in 2013 and 2014 (particularly in 2013), as well as a reduction to the 2012 estimate (which still remained above-average) [Day, 2019]. Despite there being a number of years of below-average recruitment, there was uncertainty associated with the persistence of this trend, particularly given that the most recent recruitment estimate from 2015 was above-average [AFMA 2019b]. Assuming average recruitment and restricting catches to the RBC, the spawning stock biomass is predicted to increase to 37% (0.37SB0) by 2023 [Day, 2019]. The stock is therefore unlikely to be depleted and recruitment is unlikely to be impaired.

Landed catch in the Commonwealth Trawl and Scalefish Hook sectors of the SESSF was 1,955.4 t in the 2019–20 fishing season (2 035.8 t in 2018–19 fishing season). Discards have been estimated to be 82.5 t based on the weighted average of the previous four calendar years (2015 to 2018) [Burch et al. 2019], which when combined with landed catch, is below the RBC of 2,826 t calculated in the amendment to the 2016 assessment [Day, 2017].

The total Australian commercial catch of Tiger Flathead in the 2018–19 financial year was 2,167 t (2,056.9 t Commonwealth; 91.1 t New South Wales; 17.1 t Tasmania; 1.7 t Victoria), which is below the RBC. This level of fishing pressure is unlikely to cause the stock to become recruitment impaired.

On the basis of the evidence provided above, the Southern Australia biological stock is classified as a **sustainable stock**.

## BIOLOGY

### Tiger Flathead biology [Klaer 2010]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Tiger Flathead	20 years, males 500 mm TL , females 600 mm TL	3 years, 300 mm TL

## DISTRIBUTION



Distribution of reported commercial catch of Tiger Flathead

**TABLES**

<b>Fishing methods</b>	<b>Commonwealth</b>	<b>New South Wales</b>	<b>Tasmania</b>	<b>Victoria</b>
<b>Charter</b>				
Hook and Line		✓		✓
Rod and reel		✓		✓
<b>Commercial</b>				
Danish Seine	✓			
Demersal Gillnet	✓			
Demersal Longline	✓			
Hand Line, Hand Reel or Powered Reels			✓	
Net				✓
Otter Trawl	✓	✓		
Unspecified			✓	
Various		✓		
<b>Recreational</b>				
Hook and Line		✓	✓	✓
Rod and reel		✓	✓	✓
<b>Management Methods</b>				

	Commonwealth	New South Wales	Tasmania	Victoria
<b>Charter</b>				
Bag and possession limits		✓		✓
Bag limits		✓		✓
Gear restrictions		✓		✓
Licence		✓		
Marine park closures		✓		✓
Size limit		✓		✓
<b>Commercial</b>				
Gear restrictions	✓	✓	✓	✓
Limited entry	✓	✓	✓	✓
Marine park closures	✓	✓		✓
Mesh size regulations		✓		✓
Quota	✓			
Size limit		✓	✓	✓
Spatial closures	✓	✓	✓	✓
Total allowable catch	✓	✓		
Vessel restrictions		✓		✓
<b>Recreational</b>				
Bag and possession limits		✓	✓	✓
Bag limits			✓	✓
Gear restrictions		✓	✓	✓
Licence		✓	✓	✓
Marine park closures		✓		✓
Size limit		✓	✓	✓

Catch	Commonwealth	New South Wales	Tasmania	Victoria
<b>Commercial</b>	2056.9 t	89.9203 t	16.8373 t	1.7492 t
<b>Indigenous</b>		Unknown	Unknown	Unknown (No catch above permit)

<b>Recreational</b>		20.5 t (2013-14)	12 t (2012-13)	Unknown
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**Commonwealth – Commercial (Management Methods/Catch)** Data provided for the Commonwealth align with the Commonwealth Southern and Eastern Scalefish and Shark Fishery for the 2018-19 financial year.

**Commonwealth – Recreational** The Commonwealth 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 Torres Strait. In general, non-commercial Indigenous fishing in Commonwealth waters is managed by the state or territory immediately adjacent to those waters.

**New South Wales – Commercial (Catch Totals)** Catch data provided for New South Wales align with the 2018–19 financial year.

**New South Wales – Recreational (Catch Totals)** Recreational catch estimate of 20.5 t is based on (i) an estimated recreational catch of 39 417 tiger flathead by NSW resident recreational anglers in 2013–14 [West et al. 2015]; and (ii) an assumed mean weight of kept tiger flathead of 0.521 kg/fish. This remains the most reliable estimate of annual recreational catch because the 2017-18 survey estimate of 13 t [Murphy et al. 2020] applies only to 1-3 year recreational licence holders.

**New South Wales – Indigenous (Management Methods)** Customary Fishing Management Arrangements. See <https://www.dpi.nsw.gov.au/fishing/aboriginal-fishing>

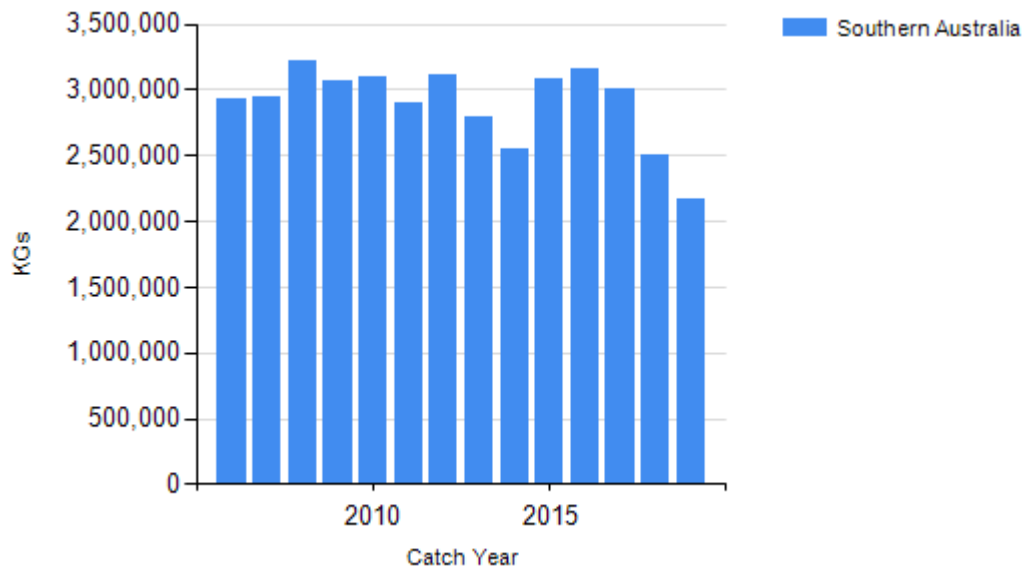
**Victoria – Indigenous (Management Methods)** A person who identifies as Aboriginal or Torres Strait Islander is exempt from the need to obtain a Victorian recreational fishing licence, provided they comply with all other rules that apply to recreational fishers, including rules on equipment, catch limits, size limits and restricted areas. Traditional (non-commercial) fishing activities that are carried out by members of a traditional owner group entity under an agreement pursuant to Victoria's *Traditional Owner Settlement Act 2010* are also exempt from the need to hold a recreational fishing licence, subject to any conditions outlined in the agreement. Native title holders are also exempt from the need to obtain a recreational fishing licence under the provisions of the Commonwealth's *Native Title Act 1993*.

**Tasmania – Commercial (Catch Totals)** 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. A minimum size limit of 320 mm is in place for Tiger Flathead (and Sand Flathead) in Tasmanian waters. A bag limit of 20 fish and a possession limit of 30 fish (Sand and Tiger Flathead) is in place for recreational fishers.

**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.

## CATCH CHART



Commercial catch of Tiger Flathead - note confidential catch not shown

References	
Day, 2016	Day, J 2016, Tiger Flathead ( <i>Neoplitycephalus richardsoni</i> ) stock assessment based on data up to 2015. Australian Fisheries Management Authority and Commonwealth Scientific and Industrial Research Organisation Marine Atmospheric Research, Hobart.
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Emery et al. 2020	Emery, T, Marton, N, Woodhams, J and Curtotti, R 2020, Commonwealth Trawl and Scalefish Hook sectors, in H Patterson, J Larcombe, J Woodhams and R Curtotti (ed.s), Fishery status reports 2020, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra <a href="https://doi.org/10.25814/5f447487e6749">https://doi.org/10.25814/5f447487e6749</a> .
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