

Tiger Flathead (2023)

Platycephalus richardsoni



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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 is found on sandy or muddy substrates in continental-shelf and upper-slope waters from Coffs Harbour in northern New South Wales through Bass Strait and around Tasmania to south-east South Australia [Kailola et al. 1993]. 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.

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.

Commonwealth catch of Flathead (mixed basket but predominately Tiger

Flathead) has been historically variable, generally fluctuating between 1,500 tonnes (t) and 4,000 t per year. Catch in recent years has ranged between 2,000 t and 3,500 t [Emery et al. 2022].

Tiger Flathead in the SESSF is managed as a Tier 1 stock under the SESSF Harvest Strategy Framework [AFMA 2021a]. Tiger Flathead is managed to a target reference point that aims to maintain the spawning stock biomass at 40% of the unfished level.

The Flathead assessment is based on biological parameters for Tiger Flathead, which accounts for about 95% of the flathead catch in the SESSF [Day and Klaer 2013]. The 2019 assessment informed the management of the stock for the 2021–22 fishing season [Day 2019]. In 2021, the 2019 assessment was partially updated [Day 2021].

The 2019 Tier 1 stock assessment [Day 2019] estimated the spawning stock biomass to be 32% of the unfished level in 2018, which is above the limit reference point of 20% of the unfished level. 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) [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. Assuming average recruitment and restricting catches to the recommended biological catch (RBC), the spawning stock biomass was predicted to increase to 37% of the unfished level by 2023 [Day 2019]. This led to a single-year RBC of 2,648 t for 2021 and a 3-year average (2020–22) RBC of 2,563 t [Day 2019].

A partial update to the 2019 Tier 1 stock assessment occurred in 2021 using new catch data from 2019 and 2020, and an updated catch-per-unit-effort (CPUE) time series from 1986 to 2020 [Day 2021]. The decision to update the assessment was due to the Flathead CPUE continuing to decline for the Danish-seine fleet since the last assessment in 2019. The partially updated assessment resulted in a downward revision in the projected 2020 spawning stock biomass from 34% to 32% of the unfished level. It was noted that the recent CPUE decline for the Danish-seine fleet was not evident in the eastern trawl and Tasmanian trawl fleets [Day 2021]. Consequently, the South East Resource Assessment Group (SERAG) agreed that there was no strong reason to change their previous RBC advice [AFMA 2021b]. The stock is therefore not considered to be recruitment impaired.

The total Australian commercial catch of Tiger Flathead in the 2021–22 financial year was 2,122.9 t (2,015.1 t Commonwealth; 50.9 t New South Wales; 34.2 t Tasmania; 22.7 t Victoria). The model-based average discard estimate for the 3-year period from 2021 to 2023 was 181 t [Day 2019]. This combined catch (2,122.9 t) is below both the 2021 single-year RBC of 2,648 t and the 3-year average RBC of 2,563 t calculated in the 2019 assessment [Day 2019, 2021]. This level of fishing pressure is unlikely to cause the stock to become recruitment impaired.

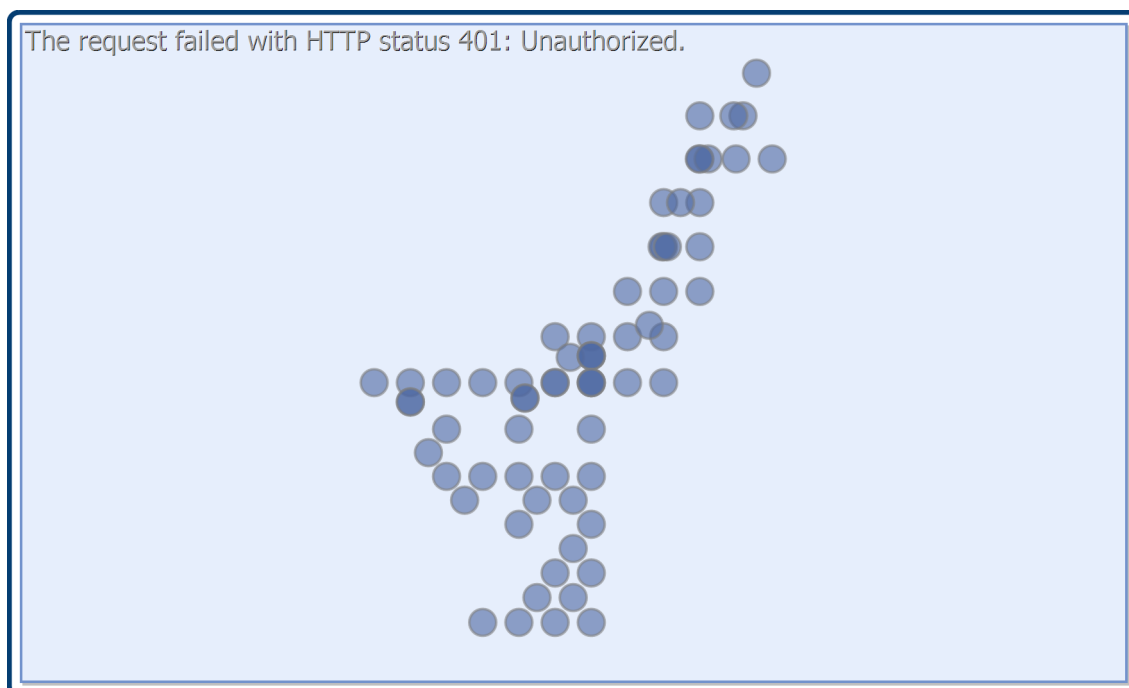
On the basis of the evidence provided above, the Southern Australia biological stock is classified as a **sustainable stock**.

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

Fishing methods	Commonwealth	New South Wales	Tasmania	Victoria
Charter				
Hook and Line		✓		✓
Rod and reel		✓		✓
Commercial				
Danish Seine	✓			
Demersal Gillnet	✓			
Demersal Longline	✓			

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Dropline	✓			
Midwater Trawl	✓			
Net				✓
Otter Trawl	✓	✓		
Unspecified			✓	
Various		✓		
Recreational				
Hook and Line		✓	✓	✓
Rod and reel		✓	✓	✓

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

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Recreational				
Bag and possession limits		✓	✓	✓
Bag limits			✓	✓
Gear restrictions		✓	✓	✓
Licence		✓	✓	✓
Marine park closures		✓		✓
Size limit		✓	✓	✓

Catch				
	Commonwealth	New South Wales	Tasmania	Victoria
Commercial	2015.11 t	50.9096 t	34.1938 t	22.6724 t
Indigenous		Unknown	Unknown	Unknown (No catch above permit)
Recreational		5 t (2019–20)	12 t (2012–13)	Unknown

Commonwealth – Commercial (Management Methods/Catch). Data provided for the Commonwealth align with the Commonwealth Southern and Eastern Scalefish and Shark Fishery for the 2021–22 financial year.

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 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 – Recreational (Catch). Recreational catch estimate of 5.02 t is based on (i) an estimated recreational catch of 5 399 tiger flathead by NSW recreational anglers holding 1–3 year recreational licences in 2019–20 [Murphy et al. 2022]; (ii) an assumed mean weight of kept tiger flathead of 0.521 kg/fish and (iii) a scaling factor of 1.786 to scale the catch of 1–3 year licence holders to that of all recreational anglers [Stark and West 2023].

New South Wales – Indigenous (Management Methods). Cultural 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*.

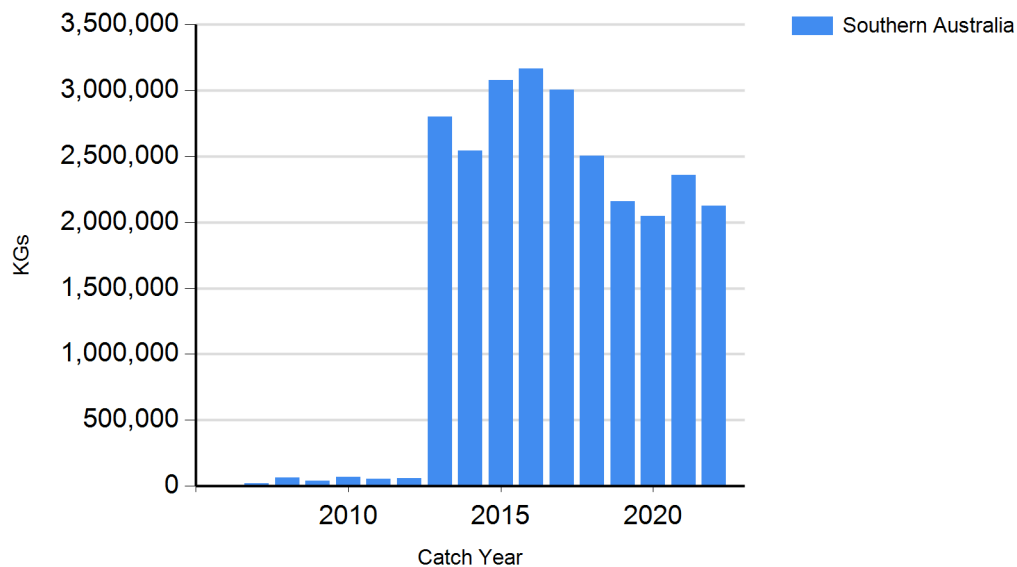
Tasmania – Commercial (Catch). Catches reported for the Tasmanian Scalefish Fishery are for the period 1 July to 30 June the following year. The most recent assessment available is for 2021–22 [Sharples et al. 2023].

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 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. For details, see the policy document 'Recognition of Aboriginal Fishing Activities' <https://fishing.tas.gov.au/Documents/Policy%20for%20Aboriginal%20tags%20and%20alloting%20an%20UIC.pdf>

CATCH CHART

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Commercial catch of Tiger Flathead - note confidential catch not shown

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AFMA 2021a	AFMA 2021a, Harvest strategy framework for the Southern and Eastern Scalefish and Shark Fishery: amended (2021), Australian Fisheries Management Authority, Canberra.
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