

Deepwater Flathead (2023)

Platycephalus conatus



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth	Great Australian Bight	Sustainable	Spawning stock biomass, fishing mortality, size and age structure, fishery independent survey

STOCK STRUCTURE

The biological stock structure of Deepwater Flathead is unknown; however, it is treated as a single biological stock for management purposes in the Great Australian Bight Trawl Sector (GABTS) of the Southern and Eastern Scalefish and Shark Fishery (SESSF).

Here, assessment of stock status is presented at the biological stock level—Great Australian Bight.

STOCK STATUS

Great Australian Bight

This stock is taken in the Great Australian Bight Trawl Sector (GABTS) of the Southern and Eastern Scalefish and Shark Fishery (SESSF) and stock status is assessed based on the outputs of the Commonwealth stock assessment.

The target reference point for Deepwater Flathead of 43 per cent of the unfished spawning stock biomass [Kompas et al. 2012] was derived from a bio-economic model of the fishery [AFMA 2011]. The 2019 tier 1 assessment [Tuck et al. 2019] estimated spawning biomass in 2018 to be 37% of the unfished (1978) level, and above the 20% of unfished limit reference point. Using the 20:35:43 harvest control rule, Tuck et al. [2019] produced a 3-year average recommended biological catch of 1,238 tonnes (t).

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The 2021–22 Deepwater Flathead Total Allowable Catch (TAC) was set at 1,238 t, which is the second year of a three-year TAC. The 2019 stock assessment suggested no change in depletion rate between 2013, 2016 and 2019 [Klaer 2013; Haddon 2016; Tuck et al. 2019], although the estimate of spawning stock biomass decreased to 4,083 t. The tier 1 assessment provided good fits to the catch rate, length and age data, but a poor fit for the fishery-independent trawl data [Tuck et al. 2019]. There is no evidence of a truncation in size or age structure of Deepwater Flathead [Tuck et al. 2019].

Fishery-independent surveys have been undertaken in the GAB since 2005. The estimated relative abundance has been fairly stable since 2015, though these estimates are between 43% and 63% lower than the 2011 estimate [Knuckey et al. 2011, 2015, 2018, 2021].

Commonwealth landed catch in the 2021–22 fishing season was 701 t [Moore et al. 2022], up from 621 t in 2020–21. The weighted average of the previous 4 calendar years (2017 to 2020) was calculated and used to estimate discards of 1.9 t, with no state catches recorded [Althaus et al. 2021].

The above evidence indicates that the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired. Furthermore, the evidence indicates that the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired.

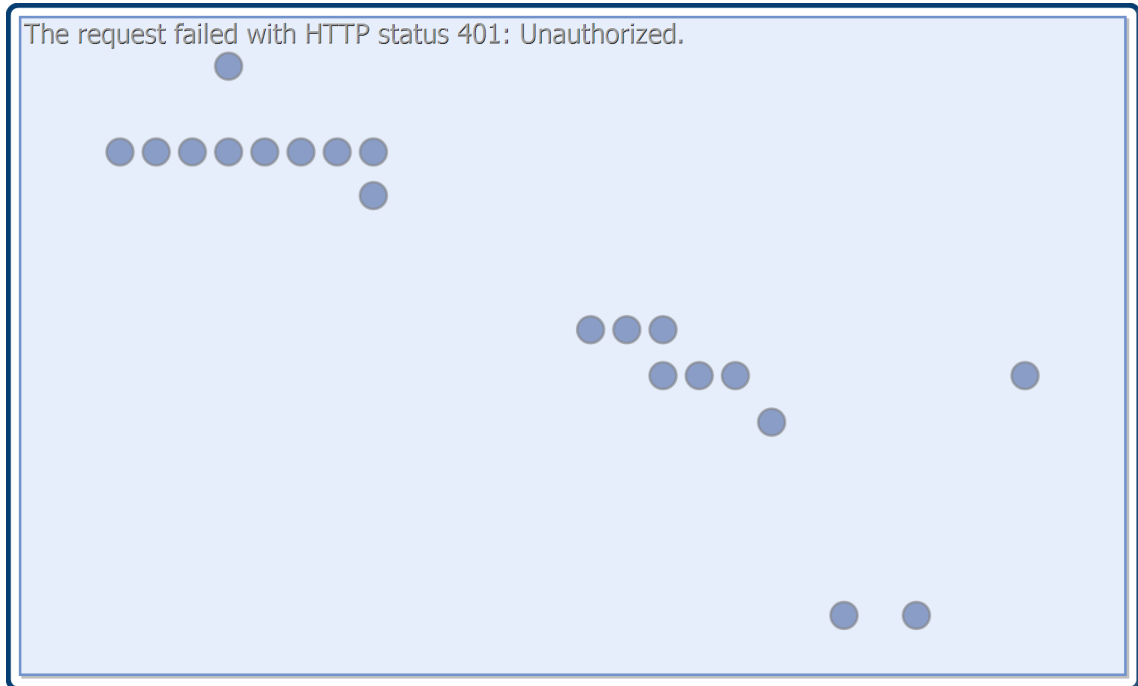
On the basis of the evidence provided above, the Great Australian Bight biological stock is classified as a **sustainable stock**.

BIOLOGY

Deepwater Flathead biology [Kailola et al. 1993; Stokie and Talman 2003; Stokie and Krusic-Golub 2005; Brown and Sivakumaran 2007]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Deepwater Flathead	Females 26 years, 820 mm TL Males 19 years, 590 mm TL	Females 5–6 years, 430 mm TL Males 4–5 years, 430 mm TL

DISTRIBUTION



Distribution of reported commercial catch of Deepwater Flathead

TABLES

Fishing methods	Commonwealth
Commercial	
Danish Seine	✓
Otter Trawl	✓

Management Methods	Commonwealth
Commercial	
Gear restrictions	✓
Limited entry	✓
Spatial closures	✓
Total allowable catch	✓

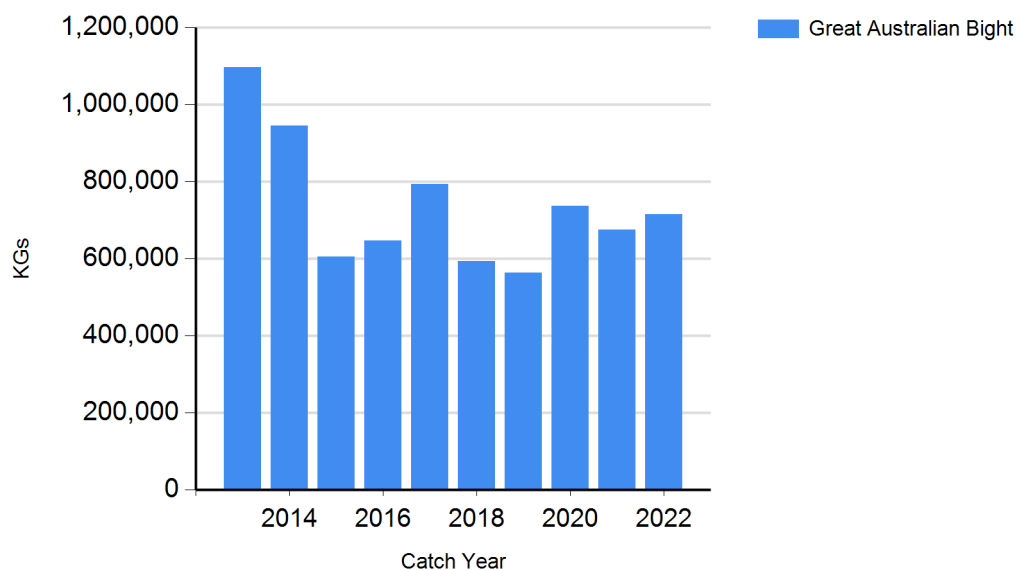
Catch	
	Commonwealth
Commercial	714.645 t

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

CATCH CHART



Commercial catch of Deepwater Flathead — note confidential catch not shown

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