

Elephantfish (2023)

Callorhinchus milii



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, New South Wales, Victoria, Tasmania	Southern Australia	Undefined	CPUE, catch, effort

STOCK STRUCTURE

Elephantfish has a broad distribution across much of southern Australia, but actual biological stock structure is unknown. The species is understood to occur in cool, temperate waters around Australia and New Zealand in depths to at least 200 m [Last and Stevens 2009].

The species is caught in relatively low quantities in New South Wales, Victoria and Tasmania, with the bulk of the landed catch reported in the Commonwealth-managed Southern and Eastern Scalefish and Shark Fishery (SESSF).

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

STOCK STATUS

Southern Australia Elephantfish is caught in the Commonwealth-managed SESSF and in New South Wales, Victoria and Tasmania. Stock status classification takes account of catches in all jurisdictions.

Catch of Elephantfish in the shark gillnet and shark hook sectors of the Commonwealth-managed SESSF increased during the 1970s and peaked at almost 120 tonnes (t) in 1985. Landed catch has since declined and has been relatively stable at around 40–50 t in recent seasons.

Within Tasmanian state waters, Elephantfish are taken by Commonwealth fishers in the SESSF, as well as the multi-gear, multi-species Tasmanian Scalefish Fishery (TSF). Records of total landings in Tasmanian state waters peaked at 58 t in the mid 1990s and declined to less than 10 t by 2018–19. TSF catches generally account for a small proportion of the total landings in Tasmanian State waters, being below 2 t for the last 10 years [Sharples et al. 2023]. Total TSF landings in 2021–22 were 1.1 t. Recreational catches in Tasmania are unknown, but presumed low [Lyle et al. 2019].

In Victoria, around 5–10 t of Elephantfish were historically landed by commercial bay and inlet fisheries, particularly in Western Port Bay (WPB), though they were frequently discarded. However, due to commercial licence buy-backs in WPB and Port Phillip Bay there have been no landings in recent years, and the landings from Corner Inlet are insufficient (< 2 t) to support quantitative analyses.

A relatively large recreational fishery for Elephantfish developed in WPB, with annual landings estimated at 45 t in 2008 [Braccini et al. 2008]. Since around that time, Elephantfish abundance has declined in WPB with little targeted effort aimed towards the species in recent years [Bell et al. 2023]. The declining abundance observed in WPB is inconsistent with Commonwealth assessments, which did not show large declines in abundance in Bass Strait and is believed to have occurred due to increasing seagrass abundance reducing the suitability of much of WPB for egg laying [Bell 2012]. This is supported by the fact that Elephantfish were rare in WPB prior to the 1980s when seagrass was abundant, and their abundance increasing throughout the 1980s and 1990s as seagrass declined [Bell 2012].

Historically, catches of Elephantfish in New South Wales have been extremely low, with less than 1 t reported per annum. Total recreational state-wide catches are unknown but presumed to be insignificant. Due to such low historical catches, there has been no assessment of Elephantfish in New South Wales.

In the Commonwealth-managed SESSF, Elephantfish was managed as a Tier 4 stock under the SESSF harvest strategy framework [AFMA 2021] until 2017. It has not been possible to construct a reliable standardised catch-per-unit-effort (CPUE) or Tier 4 analyses in recent years and the TAC for the stock has been established based on a weight of evidence since 2020–21 [AFMA 2020]. In addition, there is substantial uncertainty regarding the discard and recreational catch estimates for the stock. A fulsome description of past analyses and estimates of catch and discards in the SESSF are provided in Davis et al. [2023].

Given the time that has passed since there was an accepted analysis capable of establishing where stock biomass is relative to the limit reference point (i.e. 20% of unfished biomass), and substantial uncertainty regarding estimates of discards and recreational catches, there is insufficient information available to confidently classify the status of this stock.

On this basis, the Southern Australia management unit is classified as an **undefined stock**.

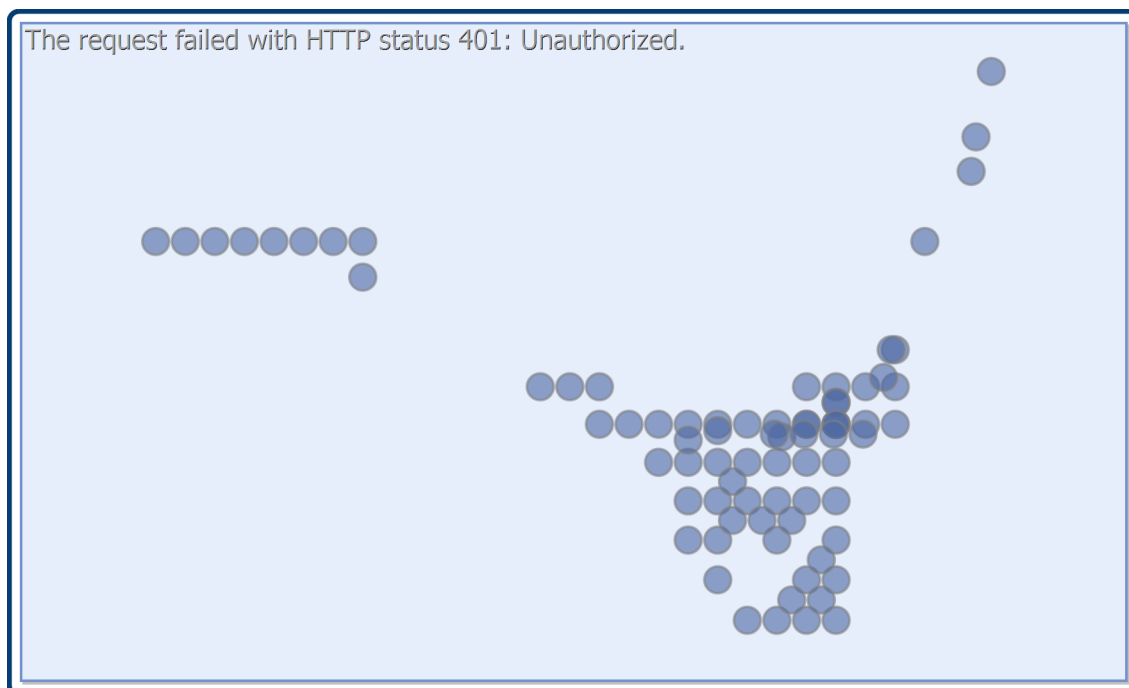
BIOLOGY

Elephantfish biology [Last and Stevens 2009]

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Species	Longevity / Maximum Size	Maturity (50 per cent)
Elephantfish	6 years; females 1,050 mm TL, males 770 mm TL; 7.2 kg	Females 5-6 years, males 3-4 years; 700 mm TL

DISTRIBUTION



Distribution of reported commercial catch of Elephantfish

TABLES

Fishing methods	Commonwealth	New South Wales	Tasmania	Victoria
Commercial				
Danish Seine	✓			
Demersal Gillnet	✓			
Demersal Longline	✓	✓		
Hook and Line				✓
Net				✓
Otter Trawl	✓	✓		
Unspecified			✓	
Various		✓		

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Recreational				
Gillnet			✓	
Hook and Line		✓	✓	

Management Methods			
	Commonwealth	New South Wales	Tasmania
Commercial			
Area restrictions	✓		✓
Catch limits			✓
Effort limits		✓	
Gear restrictions		✓	✓
Individual transferable quota	✓		
Limited entry	✓	✓	✓
Possession restrictions		✓	✓
Spatial closures		✓	
Total allowable catch	✓		
Recreational			
Bag and possession limits		✓	✓
Bag limits			✓
Licence		✓	✓

Catch	Commonwealth	New South Wales	Tasmania	Victoria
Commercial	50.9608 t	0.1311 t	0 t	1.17985 t
Indigenous		Unknown	Unknown	Unknown (No catch under permit)
Recreational		Unknown	Unknown	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 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 – Indigenous (Management Methods).

<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.

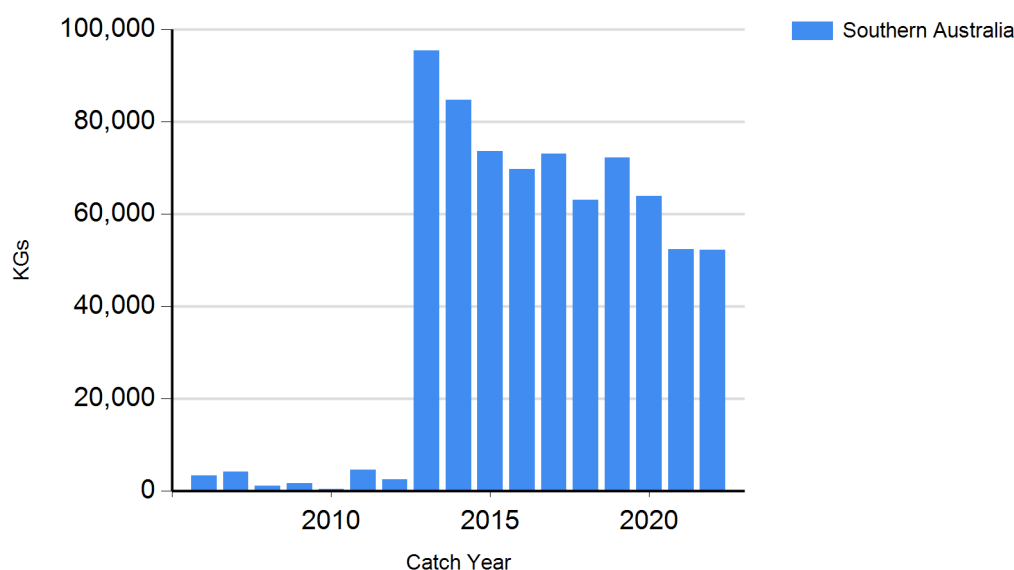
Tasmania – Recreational (Management Methods). In Tasmania, a recreational licence is required for fishers using dropline or longline gear, along with nets, such as gillnet or beach seine. A bag limit of two individuals and a possession limit of four individuals is in place for recreational fishers.

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 Elephantfish - note confidential catch not shown

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