Elephantfish (2020)

Callorhinchus milii

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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, New South Wales, Victoria, Tasmania	Southern Australia	Sustainable	Standardised 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 200m [Last and Stevens 2009].

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

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

STOCK STATUS

Southern Australia

Elephantfish are caught in Commonwealth fisheries and in the state-managed fisheries of New South Wales, Victoria and Tasmania. Information is provided for fisheries in each of these jurisdictions. However, given that much of the catch is taken in Commonwealth fisheries, stock status is assessed here primarily using evidence from the Commonwealth Southern and Eastern Scalefish and Shark Fishery (SESSF).

Commonwealth catches (SESSF combined) were around 47 tonnes (t) in the 2019–20 fishing season (51 t in the 2018–19 season). Effort in the Gillnet Hook and Trap Sector (GHTS) sector of the SESSF peaked in 1987 at 99 000 km of gillnet hauled but has decreased to around one-third of this level in recent years. Hook effort has been variable in recent years, increasing from around 2 million

hooks in the 2017–18 season to nearly 2.8 million hooks in the 2019–20 season.

Within Tasmanian State waters, Elephantfish are taken Commonwealth fishers in the SESSF, as well as the multi-gear, multi-species Tasmanian Scalefish Fishery (TSF). Records of total landings peaked at 58 t in the mid 1990s and have declined to less than 10 t in 2018–19. TSF catches account for a generally small proportion of these total landings in Tasmanian State waters, averaging 1.4 t over the last 10 years (maximum of 2.7 t in 2011–12) [Krueck et al. 2020]. Total TSF landings in 2018–19 were 0.8 t. Recreational catches in Tasmania are unknown, but presumed low [Lyle et al. 2019].

In Victoria, Elephantfish were historically landed in low to moderate quantities by commercial bay and inlet fisheries, particularly in Western Port Bay (WPB). However, due to commercial licence buy-backs in WPB and Port Phillip Bay (PPB), there have been no landings in recent years, and the landings from Corner Inlet (CI) are insufficient to support quantitative analyses. Following closure of the commercial net fishery in these bays and inlets, the status of the Victorian stock is estimated using catch and effort information from the recreational fishery in WPB, supplemented by information from the Commonwealth SESSF [Conron et al. 2020].

Historically, catches of Elephantfish in New South Wales have been extremely low, with less than one 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 SESSF, Elephantfish are a bycatch/byproduct of the trawl fishery targeting finfish and the gillnet fleet predominantly targeting gummy shark. Elephantfish has historically been managed as a Tier 4 stock under the SESSF Harvest Strategy Framework using standardised CPUE from the gillnet fleet as an index of abundance. However, applying the Tier 4 harvest control rule to this stock has become increasingly difficult in recent years due to available data, and this has not been done. Instead, in 2018, the Shark Resource Assessment Group recommended rolling over the total allowable catch from the previous year for the 2019–20 season, based on a weight of evidence.

While it has not been possible to output a reliable Recommended Biological Catch (RBC) for this stock from the harvest strategy for the last few years, recent CPUE is above the target reference point [Haddon and Sporcic 2018], and reported catches have been relatively stable and below previous (and accepted) RBCs. Further, the stock is not actively targeted in the fishery and has been classified as low risk through the draft ecological risk assessment (Sporcic et al. In Prep).The above evidence indicates that the biomass of this stock is unlikely to be depleted, and that recruitment is unlikely to be impaired. Further, the above 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 Southern Australia management unit is classified as a

sustainable stock

BIOLOGY

Elephantfish biology [Last and Stevens 2009**]**

Species	Longevity / Maximum Size	Maturity (50 per cent)

Elephantfish	6 years, Females ~1050 mm TL Males ~770 mm TL, 7.2 kg	Age 3–4 years males; 5–6 years females. Size 700 mm

DISTRIBUTION

Distribution of reported commercial catch of Elephantfish

TABLES

Fishing methods				
	Commonwealth	New South Wales	Tasmania	Victoria
Commercial				
Danish Seine	✓			
Demersal Gillnet	✓			
Demersal Longline	✓			
Dropline	✓			
Net				✓
Otter Trawl	✓			
Pelagic Longline	✓			
Unspecified			✓	
Various		✓		
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	70.6847 t	0.3619 t	0.803 t	1.2478 t
Indigenous		Unknown	Unknown	Unknown (No catch under permit)
Recreational		Unknown	Unknown	Unknown

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

New South Wales – Active vessels Cannot be specified due to the Privacy Act as fewer than seven fishers have reported catch.

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

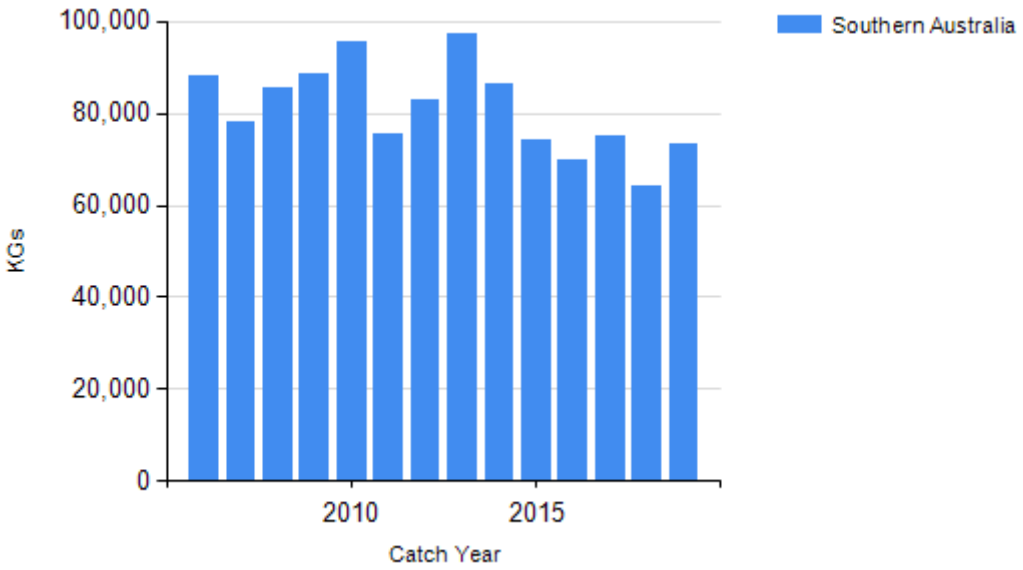
agreement pursuant to Victoria's *Traditional Owner Settlement Act 2010* are also exempt from the need to hold a recreational fishing licence, subject to any conditions outlined in the agreement. Native title holders are also exempt from the need to obtain a recreational fishing licence under the provisions 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 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 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. 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 Elephantfish - note confidential catch not shown

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