

Banded Morwong (2018)

Cheilodactylus spectabilis



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Fisheries	Stock status	Indicators
Victoria	Victoria Banded Morwong Fishery	OF, VBMF, VRLF	Recovering	Catch, CPUE
Tasmania	Tasmania Banded Morwong Fishery	TBMF	Depleting	Stock assessment, CPUE

TBMF Tasmanian Banded Morwong Fishery (TAS), OF Ocean Fishery (VIC), VBMF Victorian Banded Morwong Fishery (VIC), VRLF Victorian Rock Lobster Fishery (VIC)

STOCK STRUCTURE

Banded Morwong is large temperate reef fish species that is targeted by gillnets for the domestic live fish trade. The species is distributed around south eastern Australia, including southern New South Wales, and eastern Victoria and Tasmania, as well as occurring off north eastern New Zealand. It is relatively common in depths of less than 50 m. There is currently no information available regarding the biological stock structure. However, once settled after a relatively long oceanic larval phase, they show a high degree of site fidelity [Buxton et al. 2010, Murphy and Lyle 1999, Ziegler et al. 2006], suggesting that the exploited Victorian and Tasmanian populations are likely to represent distinct populations.

Here, assessment of stock status is presented at the management unit level—Victoria Banded Morwong Fishery and Tasmania Banded Morwong Fishery.

STOCK STATUS

Tasmania Banded Morwong Fishery

From the commencement of the fishery in the 1990s the biomass has steadily declined through to 2017. A CASAL stock assessment model is applied to this fishery incorporating fisheries dependent logbook data and biannual fisheries independent age-frequency data [Moore et. al. 2018]. This model estimates biomass at 38 per cent as compared to a 30 per cent limit reference point [Moore et. al. 2018]. The above evidence indicates that the biomass of this stock is not likely to be depleted and that recruitment is currently unlikely to be

impaired.

The CPUE reached a record low in 2012–13 and has slowly increased since with the exception of 2016–17. As a measure of abundance, CPUE is only reflective of a small range of age classes as older fish tend to move offshore, where they are not susceptible to the fishery. For the total spawning stock biomass, the stock assessment model indicates that fishing pressure at current levels will continue to deplete the stock with an 18 per cent chance of falling below the 30 per cent limit reference point within five years [Moore et. al. 2018]. The above evidence indicates that the current level of fishing mortality is likely to cause the stock to become recruitment impaired.

On the basis of the evidence provided above, the Tasmania Banded Morwong Fishery management unit is classified as a **depleting stock**.

**Victoria
Banded
Morwong
Fishery**

The most recent assessment (undertaken in 2018) has not been published because of the limited number of operators and concerns about confidentiality. This assessment examined nominal catch per unit effort (CPUE) data from 2000–17 and indicated that there was a clear downward trend in relative biomass from 2000–10. During this period CPUE fell 63 per cent from the peak in 2001. The above evidence indicates that the biomass of this stock is likely to be depleted and that recruitment is likely to be impaired. However, for the period 2011–17, catch rates increased greatly and are now similar to catch rates observed in the early 2000s.

However, data from only two operators contributes to high levels of uncertainty. The total catch is currently around 3.5 tonnes (t) based on the permitted take per operator (1 033 fish per year) and an agreed average live weight; some fish are also landed as byproduct from the Victorian Ocean Fishery. The above evidence indicates that the biomass of the stock is likely to be depleted and that recruitment is likely to be impaired. However, for the period 2011–17 these indicators suggest a recovering stock. Furthermore, the above evidence indicates that the current level of fishing mortality should allow the stock to recover from its recruitment impaired state.

On the basis of the evidence provided above, the Victoria Banded Morwong Fishery management unit is classified as a **recovering stock**.

BIOLOGY

Banded Morwong biology [Ewing et al. 2007, Ziegler et al. 2007]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Banded Morwong	96 years, 578 mm FL	2.5 years, 320 mm FL

DISTRIBUTION



Distribution of reported commercial catch of Banded Morwong

TABLES

Commercial Catch Methods	Tasmania	Victoria
Gillnet	✓	
Hook and Line		✓
Net		✓
Traps and Pots		✓
Unspecified	✓	✓

Fishing methods	Tasmania	Victoria
Commercial		
Gillnet	✓	
Net		✓
Unspecified	✓	✓
Recreational		
Gillnet	✓	
Spearfishing	✓	✓

Management Methods	Tasmania	Victoria
Commercial		
Effort limits	✓	✓
Limited entry	✓	✓
Seasonal closures	✓	✓

Size limit	✓	✓
Spatial closures		✓
Total allowable catch	✓	✓
Indigenous		
Customary fishing permits		✓
Recreational		
Bag limits	✓	✓
Licence		✓
Possession limit		✓
Seasonal closures	✓	
Size limit	✓	✓
Spatial closures		✓

Active Vessels	Tasmania	Victoria
	21 Vessels in TBMF,	3 Licence Holders in OF, 2 Licence Holders in VRLF,

TBMF Tasmanian Banded Morwong Fishery(TAS)

OF Ocean Fishery(VIC)

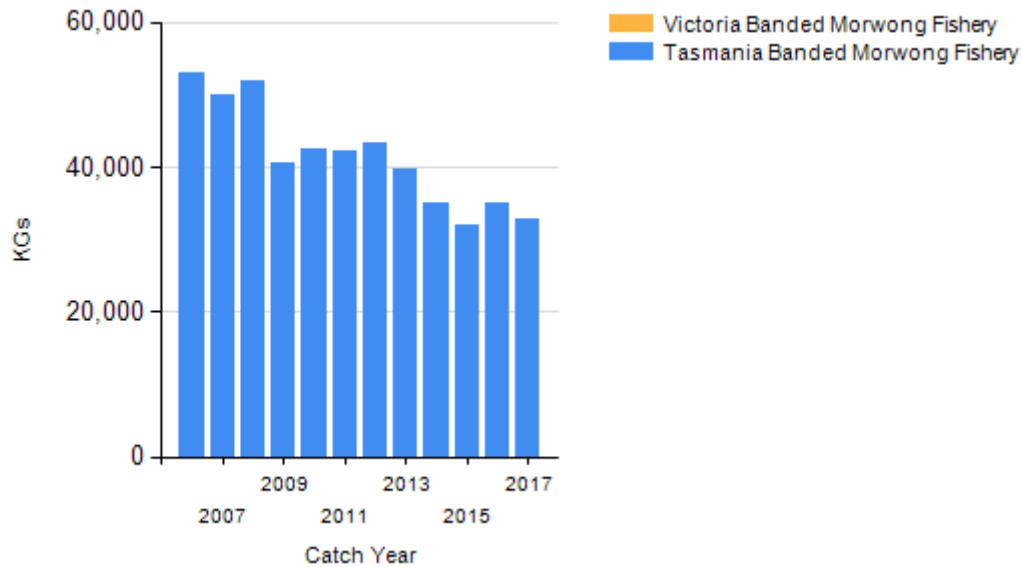
VRLF Victorian Rock Lobster Fishery(VIC)

Catch	Tasmania	Victoria
Commercial	32.7136t in TBMF,	0t in VBMF,
Indigenous	No Catch	Unknown (No catch under permit)
Recreational	0.5 t (2012–13)	Unknown

TBMF Tasmanian Banded Morwong Fishery (TAS), OF Ocean Fishery (VIC), VBMF Victorian Banded Morwong Fishery (VIC), VRLF Victorian Rock Lobster Fishery (VIC),

Commercial catch of Banded Morwong - note confidential catch not shown

CATCH CHART



Commercial catch of Banded Morwong - note confidential catch not shown

EFFECTS OF FISHING ON THE MARINE ENVIRONMENT

ENVIRONMENTAL EFFECTS on Banded Morwong

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