

# Bastard Trumpeter (2018)

*Latridopsis forsteri*



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## STOCK STATUS OVERVIEW

Jurisdiction	Stock	Fisheries	Stock status	Indicators
Commonwealth	Commonwealth	SESSF (CTS), SESSF (GHTS)	Negligible	
New South Wales	New South Wales	N/A	Negligible	
Victoria	Victoria	OF	Negligible	
Tasmania	Tasmania	SF	Depleted	Catch, effort, CPUE
South Australia	South Australia	N/A	Negligible	

SESSF (CTS) Southern and Eastern Scalefish and Shark Fishery (Commonwealth Trawl Sector) (CTH), SESSF (GHTS) Southern and Eastern Scalefish and Shark Fishery (Gillnet Hook and Trap Sector) (CTH), N/A Not Applicable (NSW), N/A Not Applicable (SA), SF Scalefish Fishery (TAS), OF Ocean Fishery (VIC)

## STOCK STRUCTURE

The stock structure of Bastard Trumpeter is presently undefined. Bastard Trumpeter are found on exposed reefs and sandy habitats from the central coast of New South Wales, through Victorian and Tasmanian waters, to eastern South Australia [Edgar 1997, Kuitert 1993]. Larval duration is unknown, although other Trumpeter species have larval durations of up to 60 days, suggesting the potential for some connectivity between jurisdictions. Juveniles tend to inhabit shallow coastal reefs until about 4–5 years of age (and approximately 500 mm long) before moving offshore into deeper water as they approach maturity, apparently remaining in that habitat for the remainder of their lives [Harries and Lake 1985, Murphy and Lyle 1999].

Recent information indicates that the stock is considered depleted in Tasmania with negligible catches in other Australian jurisdictions. With current understanding of Bastard Trumpeter population dynamics, it was not possible to reconcile these differences and determine a single stock status for the entire south eastern Australian stock. Management arrangements vary across jurisdictions (for example, size limits) and the fishing fleets in each jurisdiction consist of a small number of vessels with different characteristics, resulting in different patterns of exploitation.

Here, assessment of stock status is presented at the jurisdictional level—Commonwealth, New

South Wales, Victoria, Tasmania and South Australia

## STOCK STATUS

- Commonwealth** The Commonwealth stock is reported as Negligible due to historically low catches in this jurisdiction. Commonwealth commercial catch between 2006 and 2017 averaged less than 2 tonnes (t) per annum. Bastard Trumpeter is subject to a 20 kg trip limit (due to being State managed), which explains low catches through time. Fishing is unlikely to be having a negative impact on the stock.
- New South Wales** Stock status for the New South Wales stock is reported as Negligible due to historically low catches in this jurisdiction and the stock has generally not been subject to targeted fishing. The New South Wales commercial catch in 2012–17 averaged less than 3 t per annum, and Bastard Trumpeter is not a major component of recreational landings. Fishing is unlikely to be having a negative impact on the stock.
- South Australia** Stock status for Bastard Trumpeter in South Australia is reported as Negligible due to historically low catches in this jurisdiction and the stock has generally not been subject to targeted fishing. From 1997–98 to 2016–17, the total reported catch of Bastard Trumpeter in South Australia ranged from 0 to < 50 kg, with average annual catches of less than 20 kg per year. South Australia’s recreational catch of Bastard Trumpeter is not known but considered low as the species is not a major component of recreational landings. Fishing is therefore unlikely to be having a negative impact on the stock.
- Tasmania** In Tasmania, Bastard Trumpeter are taken almost exclusively by gillnet, predominantly as by-product in the Banded Morwong Fishery. Both commercial and recreational fisheries for the species are based almost entirely on immature juveniles. Commercial catches declined steadily since the mid-1990s, when around 50 t were harvested, and have fluctuated around 8 t since 2009–10, with 6.4 t landed in 2016–17 [Moore et al. 2018]. Catches and effort have contracted spatially in recent years, being concentrated primarily around the southeast and southwest coasts of the State [Moore et al. 2018]. Commercial gillnet effort has followed a similar downward trend to that observed for catches since the mid-1990s, while catch rates have remained relatively stable since the mid-2000s at a reduced level [Moore et al. 2018]. Bastard Trumpeter are a popular target for recreational fishers, although the estimated catch in 2012–13 was also a historic low of 7.5 t [Lyle et al. 2014]. Several recent management interventions have been made in recent years to rebuild stocks, including increases in the minimum legal size, introduction of commercial trip limits and reductions in recreational bag and possession limits.
- As Bastard Trumpeter is a byproduct species in the commercial fishery, catch rather than catch rate may be a better indicator of biomass of the species. Consequently, the trend in commercial and recreational catches suggests that current inshore populations are at historically low levels. Given that fishing practices are likely to have remained fairly consistent in recent years, the decline in catches and low, stable catch rate are likely to be indicative of a population that has not substantially rebuilt despite significant management intervention and reductions in both commercial and recreational gillnet effort. Moreover, the current minimum size limit of 380 mm TL is well below the size at maturity [ $> 450$  mm FL, Murphy and Lyle 1999]. The above evidence indicates that the biomass of this stock is likely to be depleted and that recruitment is likely to be impaired. Furthermore,

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, Bastard Trumpeter in Tasmania is classified as a **depleted stock**.

**Victoria**

Stock status for the Victoria stock is reported as Negligible. Catches have been historically low to negligible (< 500 kg annually in past decade) and the stock has generally not been subject to targeted fishing. The stock has not been overfished in the past and it is likely that the stock can sustain a higher catch than is currently taken. Fishing is unlikely to be having a negative impact on the stock. There is little information available and a stock assessment is not justifiable.

**BIOLOGY**

**Bastard Trumpeter biology** [Murphy and Lyle 1999]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Bastard Trumpeter	20 years, 650 mm TL	Unknown (matures at > 450 mm TL and > 4 years)

**DISTRIBUTION**



Distribution of reported commercial catch of Bastard Trumpeter

**TABLES**

Commercial Catch Methods	Commonwealth	New South Wales	South Australia	Tasmania	Victoria
Demersal Gillnet				✓	
Gillnet				✓	
Hand Line, Hand Reel or Powered				✓	

Reels					
N/A	✓	✓	✓		✓
Unspecified				✓	

Fishing methods	
	Tasmania
<b>Commercial</b>	
Gillnet	✓
Unspecified	✓
<b>Indigenous</b>	
Gillnet	✓
Spearfishing	✓
<b>Recreational</b>	
Gillnet	✓
Spearfishing	✓

Management Methods	
	Tasmania
<b>Commercial</b>	
Area restrictions	✓
Gear restrictions	✓
Limited entry	✓
Size limit	✓
Trip limits	✓
<b>Indigenous</b>	
Bag and possession limits	✓
Bag limits	✓
Size limit	✓
<b>Recreational</b>	
Bag and possession limits	✓
Bag limits	✓
Licence	✓
Size limit	✓

Active Vessels		
	Tasmania	Victoria
	46 Vessels in SF,	1 Licence Holders in OF,

SF Scalefish Fishery(TAS)

OF Ocean Fishery(VIC)

Catch					
	Commonwealth	New South Wales	South Australia	Tasmania	Victoria
Commercial				6.39019t in SF,	
Indigenous				Unknown	
Recreational				7.5 t (in 2012/13)	

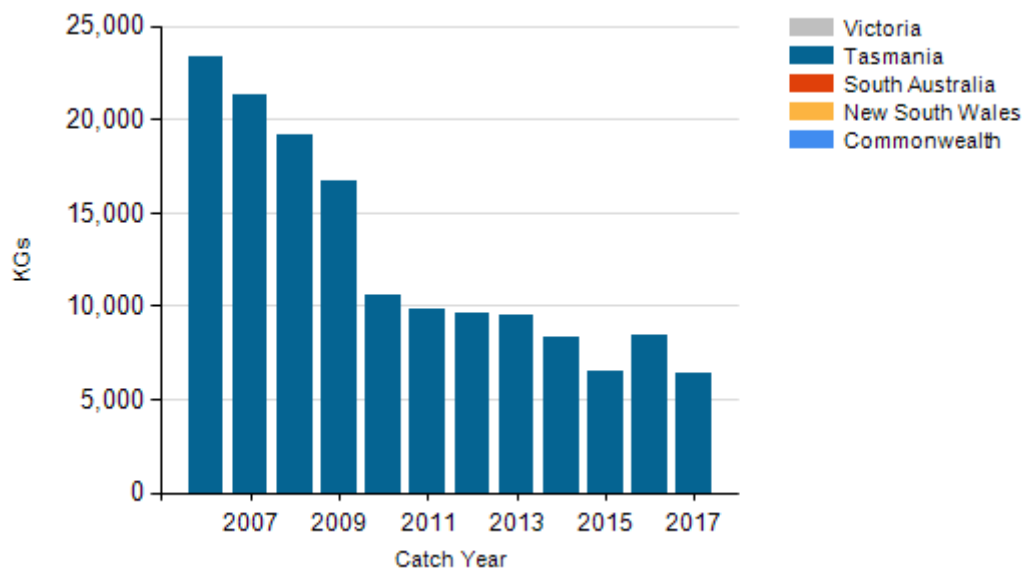
SESSF (CTS) Southern and Eastern Scalefish and Shark Fishery (Commonwealth Trawl Sector) (CTH), SESSF (GHTS) Southern and Eastern Scalefish and Shark Fishery (Gillnet Hook and Trap Sector) (CTH), N/A Not Applicable (NSW), N/A Not Applicable (SA), SF Scalefish Fishery (TAS), OF Ocean Fishery (VIC),

**Tasmania – Commercial (catch)** (a) 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 2016–17; (b) A trip limit of 200 kg is in place for commercial scalefish licence holder; and (c) A trip limit of 30 fish is in place for commercial rock lobster licence holders.

**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. The species is subject to a minimum size limit of 380 mm total length. A bag limit of five fish and a possession limit of ten fish is in place for recreational fishers.

**Tasmania – Indigenous (management methods)** In Tasmania, Indigenous persons engaged in aboriginal 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. Additionally, recreational bag and possession limits also apply. If using pots, rings, set lines or gillnets, Indigenous persons must obtain a unique identifying code (UIC). The policy document Recognition of Aboriginal Fishing Activities for issuing a UIC to a person for Aboriginal Fishing activity explains the steps to take in making an application for a UIC.

## CATCH CHART



Commercial catch of Bastard Trumpeter - note confidential catch not shown

## EFFECTS OF FISHING ON THE MARINE ENVIRONMENT

### ENVIRONMENTAL EFFECTS on Bastard Trumpeter

<b>References</b>	
249	Edgar, G 1997, Australian Marine Life: the plants and animals of temperate waters. Reed Books, Melbourne.
250	Harries, DN and Lake, PS 1985, Aspects of the biology of inshore populations of Bastard Trumpeter, <i>Latridopsis forsteri</i> (Castlneau, 1872) in Tasmanian waters. Tasmanian Fisheries Research, 27: 19–43.
251	Kuiter, RH 1993, Coastal Fishes of South-Eastern Australia. Crawford House Press,
252	Lyle, JM, Stark, KE and Tracey SM 2014, 2012–13 survey of recreational fishing in Tasmania. Institute for Marine and Antarctic Studies, Hobart.
253	Moore, B, Lyle J and Hartmann K 2018, Tasmanian Scalefish Fishery Assessment 2016/17. Institute for Marine and Antarctic Studies, University of Tasmania.
254	Murphy, RJ and Lyle, JM 1999. Impact of gillnet fishing on inshore temperate reef fishes, with particular reference to Banded Morwong, Tasmanian Aquaculture and Fisheries Institute, Hobart.