

Bluethroat Wrasse (2018)

Notolabrus tetricus



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Fisheries	Stock status	Indicators
New South Wales	New South Wales	N/A	Negligible	Catch
Victoria	Victoria	OF, OW, PPBWPF, VRLF	Sustainable	Catch, effort, catch rates
Tasmania	Tasmania	SF	Sustainable	Catch, effort, catch rates
South Australia	South Australia	MSF NZRLF SZRLF, NZRLF, SZRLF	Sustainable	Catch, effort, catch rates

N/A Not Applicable (NSW), NZRLF Northern Zone Rock Lobster Fishery (SA), SZRLF Southern Zone Rock Lobster Fishery (SA), SF Scalefish Fishery (TAS), OF Ocean Fishery (VIC), PPBWPF Port Phillip Bay and Western Port Bay Fishery (VIC), VRLF Victorian Rock Lobster Fishery (VIC), OW Ocean Wrasse (VIC), MSF || NZRLF || SZRLF Marine Scale Fishery (including Northern & Southern Zone Rock Lobster Fishery) (SA)

STOCK STRUCTURE

Bluethroat Wrasse are found on rocky reefs around south eastern Australia, including southern New South Wales, through Victorian and Tasmanian waters, to South Australia [Edgar 1997]. There is currently no information available regarding the biological stock structure of Bluethroat Wrasse in Australian waters. The species has a planktonic larval duration ranging from 44 to 66 days [Welsford 2003]. Once settled, Bluethroat Wrasse show a high degree of site fidelity [Edgar et al. 2004], suggesting that the exploited populations in each jurisdiction potentially represent different stocks.

Here, assessment of stock status is presented at the jurisdictional level—New South Wales, Victoria, Tasmania and South Australia.

STOCK STATUS

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 approximately 0.8 tonnes (t) per annum, and Bluethroat Wrasse is not a major component of recreational landings [West et al. 2015]. Fishing is unlikely to be having a negative impact on the stock.

South Australia

Bluethroat Wrasse is considered a tertiary species of the South Australia's commercial multispecies, multi-gear and multi-sectoral Marine Scalefish Fishery. The most recent assessment for Bluethroat Wrasse was completed in 2018 [Steer et al. 2018] that considered data to December 2017. Bluethroat Wrasse are taken by commercial and recreational fishers. For the commercial sector, there is a small targeted fishery for which the captured fish are sold either as fresh, ice-slurried product or for the live fish market [Steer et al. 2018]. They are taken as by-product when other more valuable species are targeted, which is also the case for the recreational sector. Numerous species of wrasse are taken by the commercial sector and are reported as Bluethroat Wrasse. As such, it is not possible to differentiate the fishery statistics amongst species. Nevertheless, it is likely since the Bluethroat Wrasse is the largest and most abundant species that has historically dominated the catches.

The primary measures of biomass and fishing mortality are total catch, total line fishing effort and total line catch rates [Steer et al. 2018]. Total commercial catch of wrasse was relatively consistent at around 20 t per year between 1996 and 2011. Since then, it has declined to 13 t in 2017, associated with declining effort. Since 2009, annual catch rates have been relatively stable at a medium level compared with historic levels. 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 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, Bluethroat Wrasse in South Australia is classified as a **sustainable stock**.

Tasmania

In Tasmania, Bluethroat Wrasse are targeted for live fish markets as well as being sold for consumption and utilised as bait for rock lobster (bait usage is likely to be under-reported). Fish marketed live are distinguished in the logbooks and have accounted for over 90 per cent of the total reported catch since 2001–02 [Moore et al. 2018]. Catches of Bluethroat Wrasse have been differentiated to species level in commercial logbooks since 2007. The total reported catch of Bluethroat Wrasse in the Tasmanian Scalefish Fishery in 2017 was 60.1 t [Moore et al. 2018]. Commercial catches, effort and catch rates have been relatively stable for almost a decade. Wrasse are rarely if ever targeted by recreational fishers and generally represent by-catch [Lyle et al. 2014]. Recreational harvests of wrasse (all species) were estimated at 6.4 t in 2012–13, or < 10 per cent of the total commercial catch [Lyle et al. 2014]. The above evidence indicates that at a jurisdictional stock level, the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired. Further, the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired.

On the basis of the evidence provided above, Bluethroat Wrasse in Tasmania is classified as a **sustainable stock**.

Victoria

Bluethroat Wrasse are the predominant species harvested by the Victorian Ocean Wrasse (OW) Fishery, primarily to supply the live fish market. Bluethroat Wrasse were historically harvested commercially in Victorian waters under the general Victorian Ocean Fishery (OF) access licence, but in April 2017, a stand-alone transferable Ocean Wrasse licence was created with 22 licences issued. Each licence can be operated throughout the State. Most (i.e. approximately 80–90 per cent) wrasse is now harvested in Victorian waters by the OW fishery

using hook and line, although commercial rock lobster fishers who also hold an OW licence can harvest legal sized wrasse that they catch in their pots. Licence holders with entitlements in other Victorian fisheries, and rock lobster fishers without an OW licence, may only take up to eight wrasse (all species) per day.

Recreational harvest of Bluethroat Wrasse is unknown but thought to be low relative to the current and historic commercial harvest. There is some indication of growing interest in recreational targeting of wrasse in Victoria.

Wrasse catches in Victoria were low prior to the 1990s but increased rapidly to approximately 90 t in 1999 as speculative interests in the wrasse fishery grew. While most of the wrasse catch was historically reported as 'unspecified' wrasse, early studies of the developing wrasse fishery, and more recent reporting to species level suggest that most of the catch would have been Bluethroat Wrasse [Smith et al. 2003, VFA unpublished data]. Since the peak harvest in 1999, harvest and effort continually declined until 2010. From 2010, effort by hand line has been relatively stable at approximately 25–30 per cent of the peak effort recorded in 1999 [VFA 2017a]. State-wide commercial harvest has also been stable since 2010, ranging from approximately 21 to 28 t per year. Standardised and nominal catch rates by hand line are the primary biomass indicators considered for three regional zones (East, West and Central) under a trial harvest strategy for this fishery [VFA 2017b]. The trial harvest strategy has limit and trigger reference points set at 20 per cent and 30 per cent, respectively, of the average standardised catch rates for the reference period 2004–05 to 2014–15. While showing some short-term variability, the catch rates have been relatively stable since 2010, and the key biomass indicator (3 year averaged standardised catch rate) was above the trigger reference points by 14 per cent, 18 per cent and 30 per cent in the West, East and Central zones respectively for the most recent analysis in 2015–16 [VFA 2017b; VFA unpublished data]. More recent catch rate data (2016–17) have not been standardised as many new operators have entered the fishery after license transferability was introduced, and the standardisation procedures require review for the next assessment.

The major reduction in effort and catch since the late 1990s, and the recent stability of catches and catch rates indicate that the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired. Further, the current level of fishing mortality is unlikely to cause the stock to become recruitment impaired.

On the basis of the evidence provided above, Bluethroat Wrasse in Victoria is classified as a **sustainable stock**.

BIOLOGY

Bluethroat Wrasse biology [Barrett 1995, May and Maxwell 1986, Smith et al., 2003]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Bluethroat Wrasse	23 years, 500 mm TL	8 years, 250 mm TL

DISTRIBUTION



Distribution of reported commercial catch of Bluetthroat Wrasse

TABLES

Commercial Catch Methods	New South Wales	South Australia	Tasmania	Victoria
Demersal Longline		✓		
Fish Trap			✓	
Gillnet			✓	
Hand Line, Hand Reel or Powered Reels			✓	
Hook and Line		✓		✓
N/A	✓			
Net				✓
Traps and Pots				✓
Unspecified			✓	✓

Fishing methods	South Australia	Tasmania	Victoria
Commercial			
Demersal Longline	✓		
Fish Trap		✓	
Gillnet		✓	
Hand Line, Hand Reel or Powered Reels		✓	
Hook and Line	✓		✓

Net			✓
Traps and Pots			✓
Unspecified		✓	✓
Indigenous			
Gillnet		✓	
Handline	✓	✓	
Rock Lobster And Crayfish Traps And Pots		✓	
Recreational			
Gillnet		✓	
Handline	✓	✓	✓
Rock Lobster And Crayfish Traps And Pots		✓	
Spearfishing			✓
Management Methods			
	South Australia	Tasmania	Victoria
Commercial			
Bag and possession limits		✓	
Fishing gear and method restrictions			✓
Gear restrictions		✓	
Limited entry	✓	✓	✓
Size limit	✓	✓	✓
Spatial closures		✓	✓
Indigenous			
Bag and possession limits		✓	
Bag limits	✓	✓	
Customary fishing permits			✓
Gear restrictions		✓	
Size limit	✓	✓	
Recreational			

Bag and possession limits		✓	
Bag limits	✓	✓	✓
Gear restrictions		✓	
Licence		✓	✓
Size limit	✓	✓	✓
Spatial closures			✓

Active Vessels	South Australia	Tasmania	Victoria
	38 Licences in MSF, 4 Licences in NZRLF, 4 Licences in SZRLF,	67 Vessels in SF,	5 Licence Holders in OF, 1 Licence Holders in PPBWPF, 1 Licence Holders in VRLF, 20 Licence Holders in OW,

MSF Marine Scalefish Fishery(SA)

NZRLF Northern Zone Rock Lobster Fishery(SA)

SZRLF Southern Zone Rock Lobster Fishery(SA)

SF Scalefish Fishery(TAS)

OF Ocean Fishery(VIC)

PPBWPF Port Phillip Bay and Western Port Bay Fishery (VIC)

VRLF Victorian Rock Lobster Fishery(VIC)

OW Ocean Wrasse(VIC)

Catch	New South Wales	South Australia	Tasmania	Victoria
Commercial		13.4182t in MSF NZRLF SZRLF,	60.0927t in SF,	26.4915t in OW,
Indigenous		Unknown	Unknown	Unknown (No catch under permit)
Recreational		Unknown	6.4 t (all wrasse species in 2012–13)	Unknown

N/A Not Applicable (NSW), NZRLF Northern Zone Rock Lobster Fishery (SA), SZRLF Southern Zone Rock Lobster Fishery (SA), SF Scalefish Fishery (TAS), OF Ocean Fishery (VIC), PPBWPF Port Phillip Bay and Western Port Bay Fishery (VIC), VRLF Victorian Rock Lobster Fishery (VIC), OW Ocean Wrasse (VIC), MSF || NZRLF || SZRLF Marine Scale Fishery (including Northern & Southern Zone Rock Lobster Fishery) (SA),

Victoria – Indigenous (Management methods) In Victoria, regulations for managing recreational fishing may not apply to fishing activities by Indigenous people. Victorian traditional owners may have rights under the Commonwealth's *Native Title Act 1993* to hunt, fish, gather and conduct other cultural activities for their personal, domestic or non-commercial communal needs without the need to obtain a licence. Traditional Owners that have agreements under the

Traditional Owner Settlement Act 2010 (Vic) may also be authorised to fish without the requirement to hold a recreational fishing licence. Outside of these arrangements, Indigenous Victorians can apply for permits under the *Fisheries Act 1995* (Vic) that authorise fishing for specific Indigenous cultural ceremonies or events (for example, different catch and size limits or equipment). There were no Indigenous permits granted in 2017 and hence no Indigenous catch recorded.

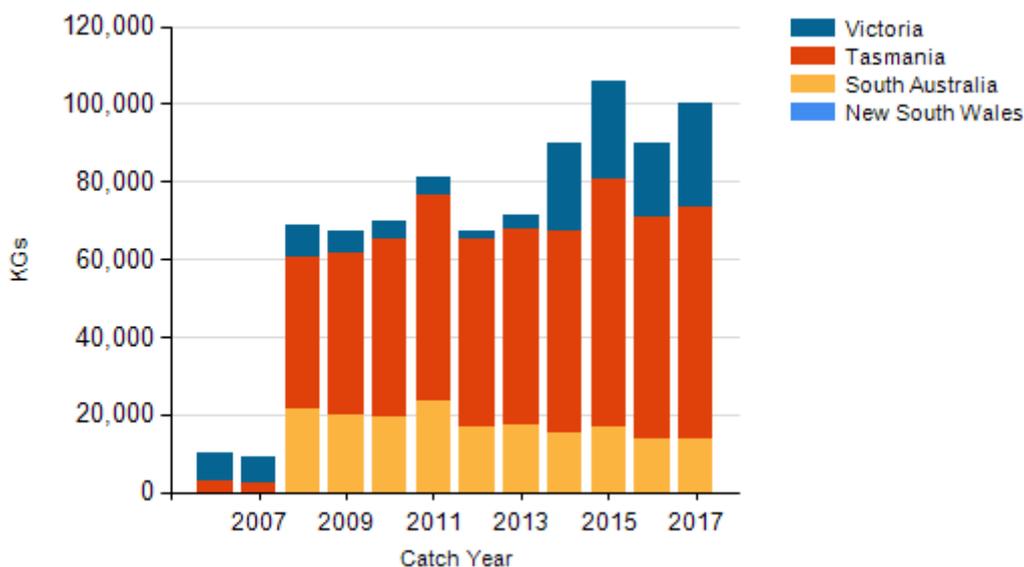
Tasmania – Commercial (catch) Catches reported for the Tasmanian Scalefish Fishery are for the period 1 July to 30 June the following year. The most recent assessment available is for 2016–17.

Tasmania – Commercial (catch) A trip limit of 30 kg for landed dead Wrasse is in place if not the holder of a Wrasse licence.

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 minimum size limit of 300 mm is in place for all Wrasse species in Tasmanian waters. A bag limit of five fish and a possession limit of ten fish (all Wrasse species) 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 Bluethroat Wrasse - note confidential catch not shown

EFFECTS OF FISHING ON THE MARINE ENVIRONMENT

ENVIRONMENTAL EFFECTS on Bluethroat Wrasse

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