

Striped Trumpeter (2020)

Latris lineata



Victorian Fisheries Authority: Victorian Fisheries Authority, **Stephen Mayfield:** SARDI Aquatic Sciences, **Lachlan McLeay:** SARDI Aquatic Sciences, **Steph Blake:** Australian Bureau of Agricultural and Resource Economics and Sciences, **Klaas Hartmann:** Institute for Marine and Antarctic Studies, University of Tasmania

STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, Tasmania	Southern Australia	Depleted	CPUE and catch trends. Size and age frequency data.

STOCK STRUCTURE

Striped Trumpeter have a broad distribution across the southern Australian coast from Western Australia to southern New South Wales. Juvenile movement is limited and restricted to shallow reefs, however adults have been found to undergo long-distance movements including an observation of movement from Tasmania to St. Paul Island (Indian Ocean). However, genetic studies using mitochondrial DNA control region sequences suggest little or no genetic mixing of Striped Trumpeter between Tasmania, New Zealand, and St Paul/Amsterdam Islands, suggesting that long-distance movements as described previously may be too infrequent to result in population mixing at these scales [Tracey et al. 2007]. Genetic testing in Tasmania has found no significant genetic separation of populations in that state [Tracey et al. 2007]. Consequently, Striped Trumpeter is assessed as a single biological stock [Krueck et. al. 2020].

STOCK STATUS

Southern Australia Striped Trumpeter has a long history of exploitation with annual commercial catches across all jurisdictions combined exceeding 100 tonnes (t) several times during the 1990s. Catch rates and catches fell rapidly during the 2000s, with the combined catch dropping below 20 t by 2007–08. The reduction in catch rates drove substantial management changes [Krueck et. al. 2020]. Length frequency and age frequency sampling has been conducted annually in Tasmania from 1998–99 onwards and demonstrates that recruitment is low and sporadic with the last significant recruitment event in 2009–10 [Krueck et. al. 2020]. Catch rate data in recent years has limited utility in assessing the biomass due to the low catch levels and limited targeted fishing across all jurisdictions. However the available data indicates that catch rates have not increased and recruitment has continued to be limited [Krueck et. al. 2020]. The above evidence indicates that

the biomass of this stock is likely to be depleted and that recruitment is likely to be impaired.

Responsibility for the management of Striped Trumpeter was passed to Tasmania in 1996 through an Offshore Constitutional Settlement (OCS) arrangement with the Commonwealth. A memorandum of understanding (MoU) accompanied the OCS, specifying trip limits for Commonwealth only fishers. As part of the Tasmanian Scalefish Fishery management plan, gear restrictions for all commercial scalefish fishers operating in state waters were introduced in 1998. This, however, enabled dual licensed operators (i.e. holders of a Tasmanian licence and a Commonwealth permit for Southern Shark or South East Non-Trawl fisheries) as well as rock lobster fishers to take unrestricted quantities of Striped Trumpeter in offshore waters using their gear allocations. In 2000, the Tasmanian Government introduced a combined trip limit of 250 kg for Striped Trumpeter, Yellowtail Kingfish and Snapper for all fishers (Commonwealth and state) in all waters to limit the potential for expansion of effort directed at these species. Over time, there have been additional management measures targeted at the species, including a spawning closure, a decrease in the recreational possession limit, introduction of a recreational boat limit and several increases in the minimum size limit for the species (currently 55 cm total length (TL), which is still below the size at maturity of 62 cm TL for females and 61 cm TL for males).

The Tasmanian recreational fishery has heavily targeted Striped Trumpeter in the past with an estimated 38 t caught in 2000–01 [Lyle 2005] and an uncertain combined catch of 19 t for both Striped and Bastard Trumpeter in 2007–08 [Lyle et al. 2009]. The most recent estimates of recreational catch for Striped Trumpeter in 2011–12, 2012–13 and 2017–18 are 31.9 t, 15.2 t and 29.1 t, respectively, which all substantially exceeded the commercial catch of the species in these years. Notably, recreational catch estimates do not fully represent catches by charter boats.

The most recent Tasmanian Scalefish assessment found that combined commercial and recreational catches may still be too high to allow for recovery, especially given that the minimum size limit is below the size at maturity. It also noted that there has been no evidence of substantial recruitment since 2009–10 [Krueck et. al. 2021]. Additionally, the cool-temperate marine ecosystems inhabited by Striped Trumpeter are undergoing climate-mediated changes that could potentially affect population recovery and dynamics.

Striped Trumpeter is not targeted in any Commonwealth fisheries. The catch of Striped Trumpeter taken in Commonwealth-managed fisheries has averaged 4.2 tonnes per year for the last 10 years. These low catch levels are considered negligible.

Victoria does not play a significant role in management of Striped Trumpeter and landings are small. The catch taken by Victorian-managed fishers over the past two decades has totalled < 2 t taken by a maximum of two licence holders in any given season fishing a combined average of 4 days per season. This low level of activity precludes the disclosure of annual catches due to confidentiality. Small amounts < 100 kg per annum are taken as by-catch in rock lobster pots. Some relatively specialised recreational fishers also catch Striped Trumpeter in deeper Victorian waters, but the magnitude of the recreational harvest is unknown.

South Australia's commercial catch of Striped Trumpeter over the past 20 years has averaged <20 kg per annum, and the species is not a major component of recreational landings. Fishing in South Australia is unlikely to be having a negative impact on the stock.

Catches in the Commonwealth fisheries, Victoria and South Australia are low. However there are still substantial recreational catches in Tasmania, which combined with the lower commercial catches may be high enough to prevent

recovery. Furthermore there has been no evidence of recovery with the last substantial recruitment taking place in 2009–10. The above evidence indicates that current fishing mortality levels are expected to prevent the stock recovering from a recruitment impaired state.

On the basis of the evidence provided above, the Southern Australia biological stock is classified as a depleted stock.

BIOLOGY

Striped Trumpeter Biology [Krueck et. al. 2020, Tracey and Lyle 2005]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Striped Trumpeter	1.2m, 43 years	Females: 54cm FL, 62cm TL, 6.8 years Males: 53cm FL, 61cm TL, 6.2 years

DISTRIBUTION



Distribution of reported commercial catch of Striped Trumpeter, excluding confidential Victorian catches

TABLES

Fishing methods	Commonwealth	Tasmania
Commercial		
Demersal Gillnet	✓	

Demersal Longline	✓	
Dropline	✓	✓
Gillnet		✓
Hand Line, Hand Reel or Powered Reels		✓
Handline		✓
Handline (mechanised)	✓	
Otter Trawl	✓	
Rod and reel	✓	
Unspecified		✓
Recreational		
Gillnet		✓
Handline		✓

Management Methods		
	Commonwealth	Tasmania
Commercial		
Gear restrictions		✓
Limited entry		✓
Size limits		✓
Temporal closures (spawning season)		✓
Trip limits	✓	✓
Recreational		
Bag/possession limits		✓
Boat limits		✓
Gear restrictions		✓
Size limits		✓

Catch		
	Commonwealth	Tasmania
Commercial	4.67722 t	4.23976 t

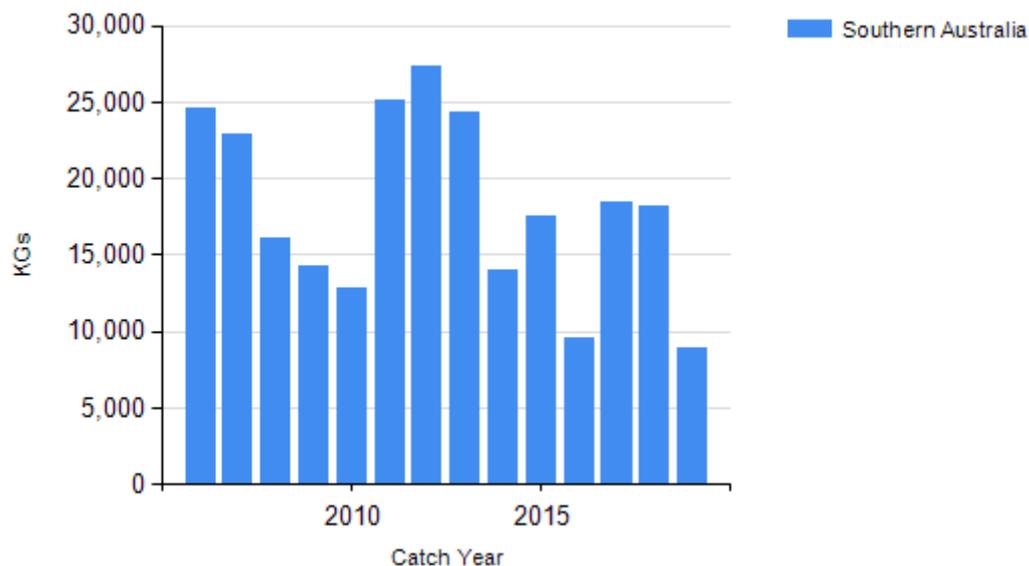
Victoria – Indigenous (Management Methods) A person who identifies as Aboriginal or Torres Strait Islander is exempt from the need to obtain a Victorian recreational fishing licence, provided they comply with all other rules that apply to recreational fishers, including rules on equipment, catch limits, 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 (complete) 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 4 individuals and a possession limit of 8 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://dppwe.tas.gov.au/Documents/Policy%20for%20Aboriginal%20tags%20and%20allotting%20an%20UIC.pdf>).

CATCH CHART



Commercial catch of Striped Trumpeter - note confidential catch not shown

References	
Krueck et. al. 2020	Krueck, N., Hartmann, K., Lyle, J. Tasmanian Scalefish Fishery Assessment 2018/19
Krueck et. al. 2021	Krueck, N., Hartmann, K., Lyle, J. Tasmanian Scalefish Fishery Assessment 2019/20
Lyle 2005	Lyle, J., 2000/01 survey of recreational fishing in Tasmania. Tasmanian Aquaculture and Fisheries Institute,
Lyle et. al. 2009	Lyle, J. M., S. R. Tracey, K. E. Stark, and S. Wotherspoon. 2007-08 survey of recreational

	fishing in Tasmania.
Tracey et al. 2007	Tracey, SR, Smolenski, A, Lyle, JM, 2007 Genetic structuring of <i>Latris lineata</i> at localized and transoceanic scales. <i>Marine Biology</i> 152, 119–128 DOI 10.1007/s00227-007-0666-4
Tracey and Lyle 2005	Tracey, SR and Lyle JM, 2005 Age validation, growth modeling, and mortality estimates for striped trumpeter (<i>Latris lineata</i>) from southeastern Australia: making the most of patchy data. <i>Fishery Bulletin</i> 103, 169–182.