

Striped Trumpeter (2023)

Latris lineata



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, Victoria, 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 considered to be a single biological stock [Sharples et al. 2023]. Here, assessment of stock status is presented at the biological stock level—Southern Australia.

STOCK STATUS

Southern Australia Striped Trumpeter has a long history of exploitation with annual commercial catches across all jurisdictions combined exceeding 100 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 [Sharples et al. 2023]. Length frequency

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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 [Sharples et al. 2023].

Catch rate data in recent years have 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. Catch MSY analyses indicate depletion to 0.22B₀, however this has a high level of uncertainty with a lower 95% confidence of 0.11B₀ [Sharples et al. 2023]. 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 [Lyle et al. 2019], 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 [Sharples et al. 2023]. 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. Commonwealth commercial catch of Striped Trumpeter has averaged less than 5 t over the last 5 financial years (2017–18 to 2021–22) and was 7.75 t in the 2021–22 financial year.

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

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two decades has totalled < 2 t and was zero in 2021–22. Some recreational fishers target Striped Trumpeter in deeper Victorian waters, and while the magnitude of the recreational harvest is unknown it is likely to be low.

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.

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.

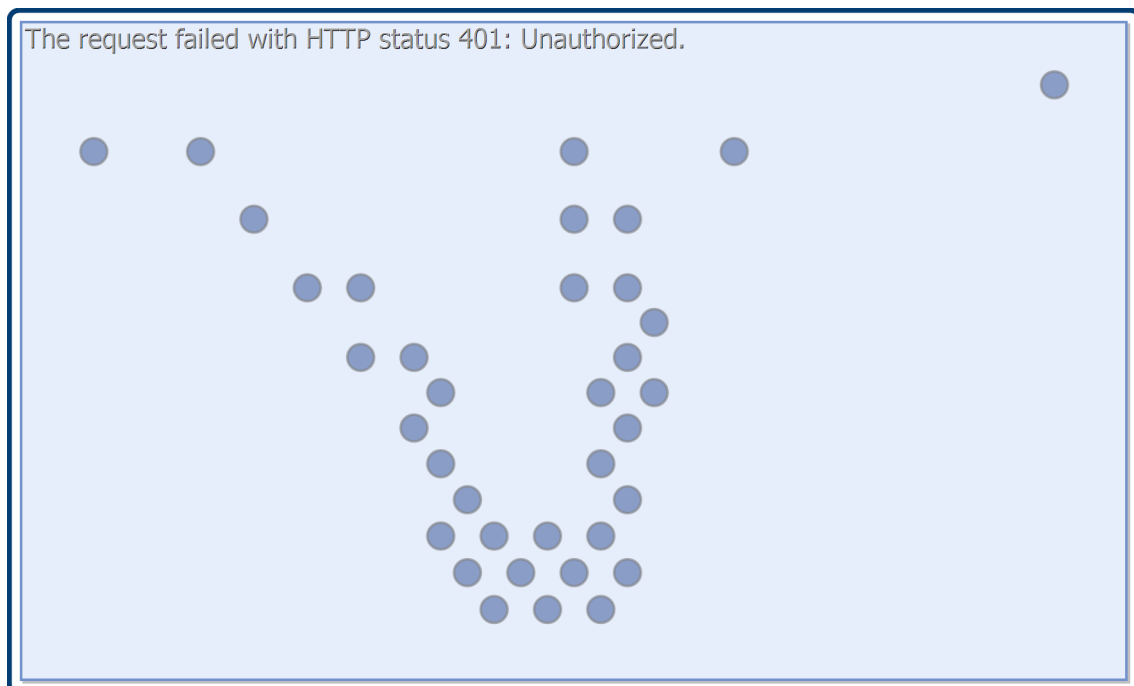
On the basis of the evidence provided above, the Southern Australia biological stock is classified as a **depleted stock**.

BIOLOGY

Striped Trumpeter Biology [Sharples et. al. 2023; 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



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

TABLES

Fishing methods		
	Commonweal th	Tasmania
Commercial		
Danish Seine	✓	
Demersal Gillnet	✓	
Demersal Longline	✓	✓
Dropline	✓	✓
Gillnet		✓
Hand Line, Hand Reel or Powered Reels		✓
Handline		✓
Otter Trawl	✓	
Recreational		
Gillnet		✓
Handline		✓

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

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Boat limits		✓
Gear restrictions		✓
Size limits		✓

Catch			
	Commonwealth	Tasmania	Victoria
Commercial	7.75344 t	4.37944 t	0 t

Commonwealth – Commercial (Management Methods/Catch). Data provided for the Commonwealth align with the Commonwealth Southern and Eastern Scalefish and Shark Fishery for the 2021–22 financial year.

Commonwealth – Recreational. The Australian government does not manage recreational fishing in Commonwealth waters. Recreational fishing in Commonwealth waters is managed by the state or territory immediately adjacent to those waters, under its management regulations.

Commonwealth – Indigenous. The Australian government does not manage non-commercial Indigenous fishing in Commonwealth waters, with the exception of Torres Strait. In general, non-commercial Indigenous fishing in Commonwealth waters is managed by the state or territory immediately adjacent to those waters.

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*.

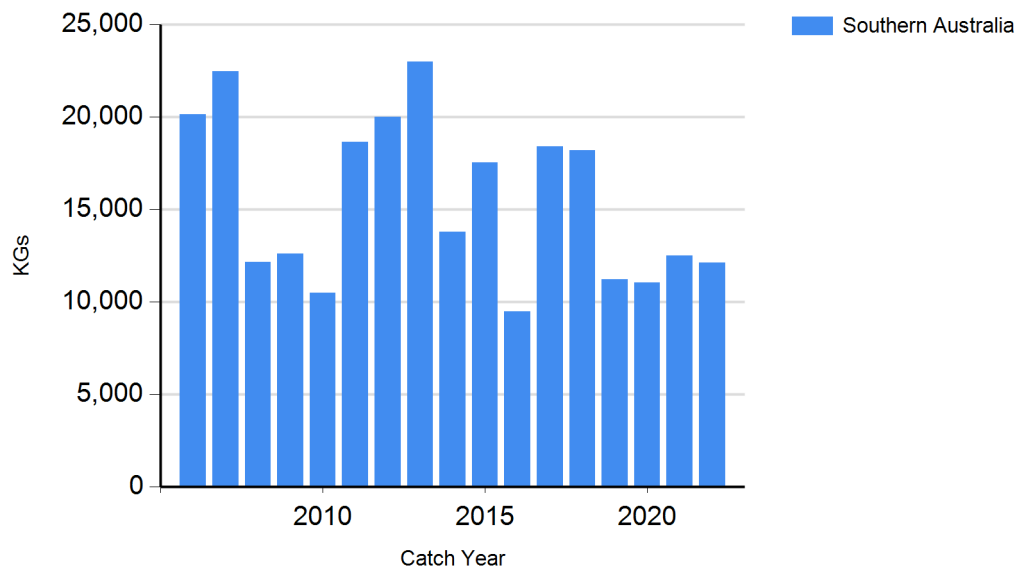
Tasmania – Commercial (Catch). Catches reported for the Tasmanian Scalefish Fishery are for the period 1 July to 30 June the following year. The most recent (complete) assessment available is for 2021–22.

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 four individuals and a possession limit of eight 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://fishing.tas.gov.au/Documents/Policy%20for%20Aboriginal%20tags%20and%20alloting%20an%20UIC.pdf>)

CATCH CHART

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Commercial catch of Striped Trumpeter - note confidential catch not shown.

References	
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Tracey et al. 2007	Tracey, SR, Smolenski, A and 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.
Sharples et al. 2023	Sharples, R, Cresswell, K, Hartmann, K and Krueck, N 2023, Tasmanian Scalefish Fishery Assessment 2021/22. Institute for Marine and Antarctic Studies, University of Tasmania, Hobart, Australia
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