

Blue Warehou (2018)

Seriolella brama



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Fisheries	Stock status	Indicators
Commonwealth, New South Wales, Victoria, Tasmania	Eastern	CIF, GLF, ITF, OF, OTF, OTLF, SESSF (CTS), SF	Depleted	Biomass, fishing mortality, catch
Commonwealth, Victoria, Tasmania, South Australia	Western	MSF, OF, PPBWPF, SESSF (CTS), SESSF (GHTS), SF	Depleted	Biomass, fishing mortality, catch

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), OTF Ocean Trawl Fishery (NSW), OTLF Ocean Trap and Line Fishery (NSW), MSF Marine Scalefish Fishery (SA), SF Scalefish Fishery (TAS), CIF Corner Inlet Fishery (VIC), GLF Gippsland Lakes Fishery (VIC), OF Ocean Fishery (VIC), PPBWPF Port Phillip Bay and Western Port Bay Fishery (VIC), ITF Inshore Trawl Fishery (VIC)

STOCK STRUCTURE

Blue Warehou is highly mobile with patchy distribution and wide range of spawning areas [Knuckey and Sivakumaran 2001]. Genetic studies have indicated that there are two separate stocks east and west of Bass Strait [Punt 2006, Talman et al. 2004]. The Eastern stock extends offshore from southern New South Wales to southern Tasmania and the Western stock extends offshore from western Tasmania northward to western Victoria. Eastern and Western stocks are assessed separately.

Here, stock status is presented at the biological stock level—Eastern and Western.

STOCK STATUS

Eastern The Australian Bureau of Agricultural and Resources Economics and Sciences has classified Blue Warehou in Commonwealth waters as overfished since 1999 and the species is currently subject to a stock rebuilding strategy [AFMA 2014]. In February 2015, the species was listed as conservation dependent under the

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act, Department of the Environment 2015). A single incidental 118 tonnes (t) total allowable catch (TAC) is applied across both the Western and Eastern stocks [Helidoniotis et al. 2017].

Blue Warehou landings in the Southern and Eastern Scalefish and Shark Fishery (SESSF) peaked in 1991 at nearly 2 500 t. Catches then declined rapidly to below 500 t through the early 2000s. Standardised catch per unit effort (CPUE) for both the Eastern and Western Blue Warehou stocks has been below the limit reference point since 1998, with the exception of the Western stock in 1998 and 2005 [Haddon 2013]. The CPUE data since 2012 is relatively meaningless due to the rebuilding strategy and low catch limits changing fishing practices to active avoidance of Blue Warehou. A stock rebuilding strategy was introduced in 2008 and updated in 2014. In the context of Blue Warehou fishing mortality, this aims to prevent targeted fishing by setting TACs that permit only incidental bycatch. A single incidental 118 t TAC applies across both stocks [Helidoniotis et al. 2017]. Landings have been well below this in recent years, there is some discrepancy between logbooks and landings with the 2015–16 catch reported between 2 t and 6.5 t and the 2016–17 catch at 16 t. Additionally, discards between 2012 and 2015 are estimated at 8.7 t [Thomson and Upston 2016]

In New South Wales, commercial fishery data, including catch of Blue Warehou is available from 1997–98, although in many years the data are classified as confidential. In 1998–99 and 1999–00, Blue Warehou catches of 21.7 t and 10.2 t were reported across all New South Wales commercial fisheries, respectively. From 2000–01 to 2016–17 the total reported commercial catch of Blue Warehou has been < 2.5 t per year, with < 1 t being reported in 13 of those 17 years. Recreational and Indigenous catches of Warehou spp. in New South Wales are unknown. Surveys of recreational and Indigenous catches have either not specified catches of Warehou spp. [West et al. 2015] or reported them into a broader ‘finfish - other’ category [Henry and Lyle 2003].

In Victorian waters, Blue Warehou are caught using seines, mesh nets and longlines within the Ocean and Corner Inlet Fisheries. Catch during the 2017 calendar year is confidential as fewer than five licence holders reported landing Blue Warehou. However, catch has remained relatively stable from 2013–14 to 2016–17 at 1–2 t (VFA 2017). Blue Warehou are not targeted in Victorian waters; however, incidental catch from commercial and recreational fishers occurs. As the majority of catch is taken in the SESSF, catch from Victoria is unlikely to influence the biomass of the biological stock.

Blue Warehou landings in the Tasmanian Scalefish Fishery peaked in 1991–92 at 318 t and have since decreased to 7.6 t in 2016–17 [Moore et al. 2018], with approximately two-thirds of this catch assumed to be from the eastern stock. Recreational catches in Tasmania are estimated periodically with estimates of 32.5 t in 2010 and 15.4 t in 2012–13 [Lyle et al. 2014], with the majority of catches assumed to be from the eastern stock.

The above evidence indicates that the Eastern stock is depleted and that recruitment is likely to have been impaired.

Fishing mortality has been constrained by the Commonwealth TAC and catches are low in other jurisdictions. The catch restrictions are intended to allow the stocks to recover from their recruitment impaired state; however, measurable improvements are yet to be detected.

On the basis of the evidence provided above the Blue Warehou Eastern biological stock is classified as **depleted**.

Western

The comments above, in relation to the Eastern stock (for Victoria and Tasmania), apply equally here. The Western stock also includes fishing in

Commonwealth waters west of the Bass Strait and in South Australian waters.

Most of the Blue Warehou catch in Commonwealth waters after 1999 has come from the west. Standardised CPUE for the Western stock has been below the limit reference point in since 1995, except for 1998 and 2005 [Helidoniotis et al, 2017]. Therefore, the SlopeRAG recommended RBC of 0 t for 2014–15. The incidental catch allowance comprises trigger of 91 t in the west. The trawl catch decreased from 161 t in 2008–09 to 16 t in 2014–15, of which 12 t was caught in the west.

Warehou species are not differentiated in South Australia’s commercial multi-species, multi-gear and multi-sectoral Marine Scalefish Fishery (MSF). No catches of Warehou species were reported in the MSF during 2017, and total annual catches were zero in all years since 2011. There is no information available on the catch of Warehou species by Aboriginal and Torres Strait Islander people in South Australian waters. The most recent recreational fishing survey in South Australia in 2013–14 indicated that the annual catch of Blue Warehou was zero.

Blue Warehou landings in the Tasmanian Scalefish Fishery peaked in 1991–92 at 318 t and have since decreased to 7.6 t in 2016 17 [Moore et al. 2018], with approximately one-third of the catch assumed to be from the Western stock.

The above evidence indicates that the Western stock is depleted and that recruitment is likely to have been impaired.

Fishing mortality has been constrained by the Commonwealth TAC and catches are low in other jurisdictions. The catch restrictions are intended to allow the stocks to recover from their recruitment impaired state; however, as with the Eastern stock, measurable improvements are yet to be detected.

On the basis of the evidence provided above the Blue Warehou Western biological stock is classified as **depleted**.

BIOLOGY

Blue Warehou biology [Knuckey and Sivakumaran 2001]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Blue Warehou	25 years, ~760 mm TL and 4 kg	3-4 years, mean length at female maturity is about 330 mm LCF

DISTRIBUTION



Distribution of reported commercial catch of Blue Warehou

TABLES

Commercial Catch Methods	Commonwealth	New South Wales	South Australia	Tasmania	Victoria
Danish Seine	✓				
Demersal Gillnet	✓				
Demersal Longline	✓				
Gillnet				✓	
Hook and Line					✓
Net					✓
Otter Trawl	✓				
Unspecified		✓	✓	✓	✓

Fishing methods	Commonwealth	New South Wales	South Australia	Tasmania	Victoria
Charter					
Handline			✓		✓
Hook and Line					✓
Commercial					
Danish Seine	✓				
Demersal Gillnet	✓				
Gillnet				✓	
Hook and Line					✓
Net					✓
Otter Trawl	✓				

Unspecified		✓	✓	✓	
Indigenous					
Gillnet				✓	
Handline		✓	✓	✓	
Recreational					
Gillnet				✓	
Handline		✓	✓	✓	✓
Hook and Line					✓

Management Methods				
	New South Wales	South Australia	Tasmania	Victoria
Charter				
Gear restrictions		✓		
Limited entry		✓		
Commercial				
Gear restrictions	✓	✓	✓	✓
Limited entry	✓	✓	✓	✓
Size limit			✓	✓
Spatial closures	✓	✓		✓
Indigenous				
Bag and possession limits			✓	
Bag limits			✓	
Customary fishing permits				✓
Gear restrictions		✓		
Native Title	✓			
Section 37 (1d)(3)(9), Aboriginal cultural fishing authority	✓			
Size limit			✓	
Spatial closures		✓		
Recreational				
Bag and possession limits			✓	✓
Bag limits	✓		✓	✓

Gear restrictions		✓		✓
Licence	✓		✓	✓
Limited entry				✓
Size limit			✓	✓
Spatial closures	✓	✓		✓

Active Vessels	South Australia	Tasmania	Victoria
	0 Licences in MSF,	25 Vessels in SF,	3 Licence Holders in CIF, 2 Licence Holders in GLF, 3 Licence Holders in OF, 1 Licence Holders in PPBWPF, 2 Licence Holders in ITF,

MSF Marine Scalefish Fishery(SA)

SF Scalefish Fishery(TAS)

CIF Corner Inlet Fishery(VIC)

GLF Gippsland Lakes Fishery(VIC)

OF Ocean Fishery(VIC)

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

ITF Inshore Trawl Fishery(VIC)

Catch	Commonwealth	New South Wales	South Australia	Tasmania	Victoria
Commercial	25.7t in SESSF (CTS), 0.54933t in SESSF (GHTS),	0t in OTF, 0t in OTLF,	0t in MSF,	7.56762t in SF,	
Indigenous	Unknown	Unknown	Unknown	Unknown	Unknown (no catch under permits)
Recreational	Unknown	Unknown	Unknown	15.4 t (in 2012–13)	Unknown

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), OTF Ocean Trawl Fishery (NSW), OTLF Ocean Trap and Line Fishery (NSW), MSF Marine Scalefish Fishery (SA), SF Scalefish Fishery (TAS), CIF Corner Inlet Fishery (VIC), GLF Gippsland Lakes Fishery (VIC), OF Ocean Fishery (VIC), PPBWPF Port Phillip Bay and Western Port Bay Fishery (VIC), ITF Inshore Trawl Fishery (VIC),

New South Wales – Indigenous (Management Methods) (a) The Aboriginal cultural fishing authority is the authority that Indigenous persons can apply to take catches outside the recreational limits under the *Fisheries Management Act 1994* (NSW), Section 37 (1d)(3)(9), Aboriginal cultural fishing authority; and (b) In cases where the *Native Title Act 1993* (Cth) applies fishing activity can be undertaken by the person holding native title in line with S.211 of that Act, which provides for fishing activities for the purpose of satisfying their personal, domestic or non-commercial communal needs. In managing the resource where native title has been formally recognised, the native title holders are engaged with to ensure their native title

rights are respected and inform management of the State's fisheries resources.

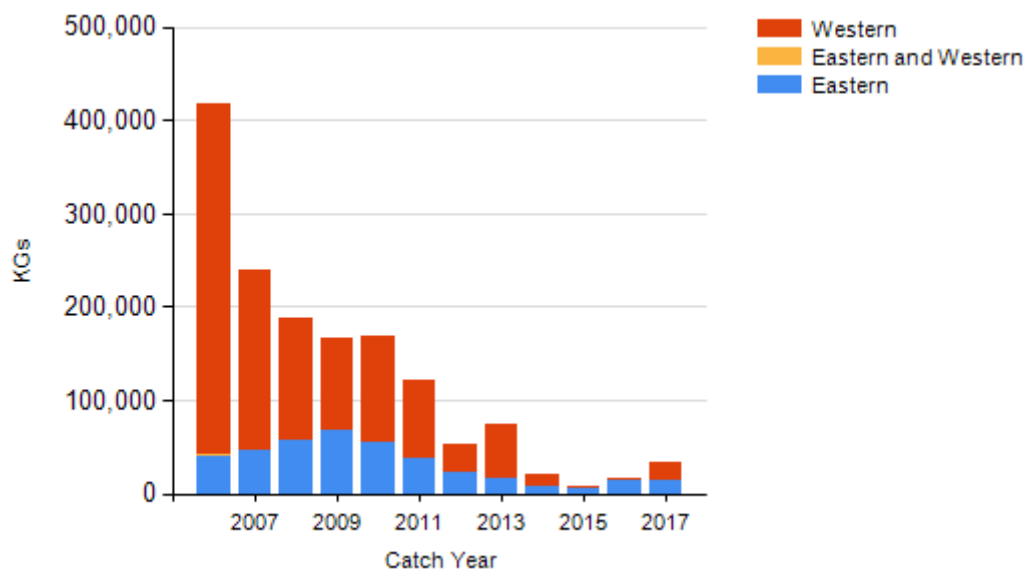
Tasmania – Commercial (catch) Catches reported for the Tasmanian Scalefish Fishery are for the period 1 July to 30 June the following year. The most recent assessment available is for 2016–17.

Tasmania – 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 250 mm total length. A bag limit of 10 fish and a possession limit of 20 fish (all Warehou 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.

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.

CATCH CHART



Commercial catch of Blue Warehou - note confidential catch not shown

EFFECTS OF FISHING ON THE MARINE ENVIRONMENT

ENVIRONMENTAL EFFECTS on Blue Warehou

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