

Bigeye Ocean Perch (2020)

Helicolenus barathri



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STOCK STATUS OVERVIEW

Jurisdiction	Stock	Stock status	Indicators
Commonwealth, New South Wales	South East Australia	Sustainable	Catch, CPUE

STOCK STRUCTURE

Ocean Perch is managed as a single stock that includes two species: the Reef Ocean Perch (*Helicolenus percoides*), found at depths 0 - 200m and the Bigeye Ocean Perch (*Helicolenus barathri*), found at depths 200 - 700m. Ocean Perch stock structure is uncertain, but there is probably an east west structuring of stocks [Morison et al. 2013]. The Reef Ocean Perch and the Bigeye Ocean Perch have been assessed separately since 2009, but a single all-areas TAC is set for the two species. Based on the depth of capture and logbook records, most of the landed Ocean Perch taken in Commonwealth fisheries is considered to be Bigeye Ocean Perch. This assessment focuses on Bigeye Ocean Perch.

Early genetic studies suggests separate stocks of Bigeye Ocean Perch within South East Australia [Paxton and Colgon 1993, Park 1995]. However, the results are not definitive and there is merit in investigating the likelihood of differentiation along a latitudinal gradient [Paxton and Colgon 1993].

Here, assessment of stock status is presented at the biological stock level—South East Australia.

STOCK STATUS

South East Australia Bigeye Ocean Perch is primarily caught by the Commonwealth managed Southern and Eastern Scalefish and Shark Fishery (SESSF) with small catches from New South Wales. Stock status classification reported here is based on analyses conducted for the Commonwealth fishery.

In the Commonwealth, Bigeye Ocean Perch is managed to a target reference point that aims to maintain the spawning stock biomass at 40 per cent (0.40SB0) of the unfished level (B0).

Bigeye Ocean Perch in the SESSF is managed as a Tier 4 stock under the SESSF Harvest Strategy Framework [AFMA, 2019]. The 2017 Tier 4 analysis [Haddon & Sporcic, 2017] informed the management of the stock for the 2019–20 fishing season.

The most recent Tier 4 analysis for Bigeye Ocean Perch was conducted in 2017. This analysis indicated that the four year average standardised catch per unit effort (2013–16) was above the target reference point. A recommended biological catch (RBC) of 345 tonnes (t) was generated from the 2017 Tier 4 analysis (to apply to the 2018–19 fishing season). The above evidence indicates that the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired.

The Commonwealth-logbook catch for the 2019–20 fishing season fishing year was 95.4 t (110.1 t in 2018–19 fishing season) [Emery et al. 2020]. Annual landings of Bigeye Ocean Perch by New South Wales State fishers have averaged about 16 t per year (range: 15–21 t) since 2009 [Chick and Johnson 2018] and have averaged 13.98 t between 2017 and 2019. There has been no catch of Bigeye Ocean Perch recorded in South Australian commercial fisheries since at least the 1980s.

Discards from Commonwealth vessels have been estimated to be 39.9 t based on the weighted average of the previous four calendar years (2015 to 2018) [Burch et al., 2019], which when combined with NSW state catch and Commonwealth landings is below the RBC of 345 t calculated from the 2017 analysis [Haddon & Sporcic, 2017]. 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, the South East Australia biological stock for Bigeye Ocean Perch is classified as a **sustainable stock**.

BIOLOGY

Bigeye Ocean Perch biology [AFMA no date, Withell and Wankowski 1988, Kailola et al. 1993]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Bigeye Ocean Perch	47–60 years, 440 mm FL	Females 5 years Males 5–7 years

DISTRIBUTION



Distribution of reported commercial catch of Bigeye Ocean Perch

TABLES

Fishing methods		
	Commonwealth	New South Wales
Charter		
Handline		✓
Commercial		
Danish Seine	✓	
Demersal Longline	✓	
Dropline	✓	
Otter Trawl	✓	
Pelagic Longline	✓	
Various		✓
Recreational		
Handline		✓

Management Methods			
	Commonwealth	New South Wales	South Australia
Charter			
Gear restrictions		✓	
Licence		✓	
Spatial closures		✓	

Commercial			
Gear restrictions	✓	✓	✓
Limited entry	✓	✓	✓
Marine park closures		✓	
Quota	✓		
Spatial closures	✓	✓	✓
Total allowable catch	✓		
Recreational			
Bag limits		✓	
Gear restrictions		✓	
Licence		✓	
Spatial closures		✓	

Catch			
	Commonwealth	New South Wales	South Australia
Commercial	166.767 t	17.2796 t	
Indigenous		Unknown	Unknown
Recreational		Unknown	Unknown

Commonwealth – Commercial (Management Methods/Catch) Data provided for the Commonwealth align with the Commonwealth Southern and Eastern Scalefish and Shark Fishery for the 2018–19 financial year.

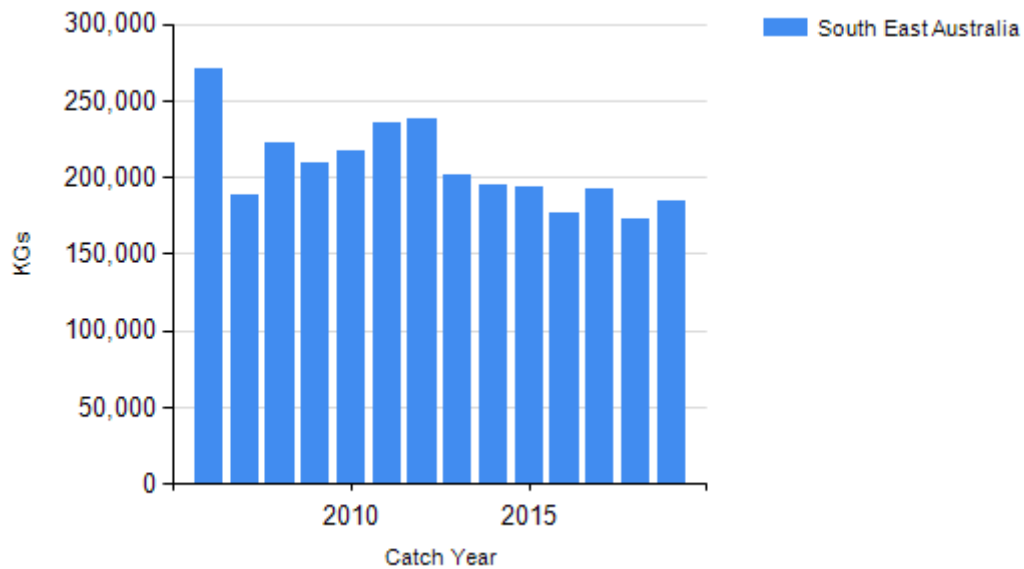
Commonwealth – Recreational The Commonwealth does not manage recreational fishing in Commonwealth waters. Recreational fishing in Commonwealth waters is managed by the state or territory immediately adjacent to those waters, under its management regulations.

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.

New South Wales – Recreational (Catch) Murphy et al. [2020].

New South Wales – Indigenous (Management Methods)
<https://www.dpi.nsw.gov.au/fishing/aboriginal-fishing>

CATCH CHART



Commercial catch of Bigeye Ocean Perch - note confidential catch not shown

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