

# Pink Ling (2018)

*Genypterus blacodes*



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## STOCK STATUS OVERVIEW

Jurisdiction	Stock	Fisheries	Stock status	Indicators
Commonwealth	Western	SESSF (CTS), SESSF (GHTS)	Sustainable	Spawning stock biomass, current and historical fishing mortality
Commonwealth, New South Wales	Eastern	N/A, OTF, OTLF, SESSF (CTS)	Sustainable	Spawning stock biomass, current and historical fishing mortality

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), N/A Not Applicable (NSW), OTF Ocean Trawl Fishery (NSW), OTLF Ocean Trap and Line Fishery (NSW)

## STOCK STRUCTURE

Clear and persistent differences in size and age composition and differences in trends in catch rates indicate the existence of different stocks east and west of South Cape, Tasmania (147° east) [Morison et al. 2013]. However, no genetic differences have been identified between these areas [Ward et al. 2001]. The stocks were previously managed as a single stock, but in 2013 it was agreed that they would be managed separately.

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

## STOCK STATUS

**Eastern** Most of the Eastern Pink Ling catch is taken in the Commonwealth trawl and autoline fisheries within the Southern and Eastern Scalefish and Shark Fishery. In New South Wales, for three years from 1998–99, reported catches of Pink Ling were greater than 40 tonnes (t) per year. Over the following nine years, from 2000–01 to 2008–09, annual catches were < 25 t per year and averaged 16 t per year. Between 2008–09 and 2009–10, the total annual catch increased approximately 30 t to 54.9 t and since 2009–10 annual catches have remained above 40 t per year. In the last two years the annual catch of Pink Ling in New South Wales has exceeded 60 t per year, with 67.7 t reported in 2016–17. In New South Wales, Pink Ling are landed almost exclusively in the Ocean Trap and Line Fishery (range 40–68 t per year) [Chick 2018].

The most recent stock assessment for the Eastern stock of Pink Ling was undertaken in 2015 [Cordue 2015] and estimated that, in 2015, the spawning stock biomass would be 30 per cent of unfished spawning stock biomass. The stock is not considered to be recruitment impaired.

Constant catch scenarios run as part of the assessment suggested that there was little risk to the stock over the next few years of removals up to around 400 t per year, which should allow the Eastern stock to rebuild to the management target within two mean generation times. The Australian Fisheries Management Authority implemented a combined eastern and western Commonwealth Pink Ling total allowable catch (TAC) of 1 154 t for the 2017–18 fishing season. Management arrangements are in place to limit the catch of eastern Pink Ling to 500 t. Logbook-reported catch for the 2017–18 fishing season was 396 t for the Eastern stock. This level of fishing mortality is unlikely to cause the Eastern stock to become recruitment impaired.

On the basis of the evidence provided above, the Eastern biological stock is classified as a **sustainable stock**.

### Western

The most recent stock assessment for the Western stock of Pink Ling was undertaken in 2015 [Cordue 2015] and estimated that, in 2015, the Western spawning stock biomass would be 72 per cent of unfished spawning stock biomass. The stock is not considered to be recruitment impaired.

The 2015 stock assessment produced a recommended biological catch for the Western stock of 990 t. Western catches have been below this level in recent fishing seasons, with 514 t reported in logbooks for the 2017–18 fishing season. This level of fishing mortality is unlikely to cause the Western stock to become recruitment impaired.

On the basis of the evidence provided above, the Western biological stock is classified as a **sustainable stock**.

## BIOLOGY

**Pink Ling biology** [Morison et al. 1999, Smith and Wayte 2004]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Pink Ling	25–30 years, 1600–1 750 mm TL	7–12 years, 700–1 000 mm TL

## DISTRIBUTION



Distribution of reported commercial catch of Pink Ling

**TABLES**

<b>Commercial Catch Methods</b>	<b>Commonwealth</b>	<b>New South Wales</b>
Danish Seine	✓	
Demersal Gillnet	✓	
Demersal Longline	✓	✓
Dropline	✓	✓
Longline (Unspecified)		✓
Otter Trawl	✓	✓
Trotline		✓
Unspecified		✓

<b>Fishing methods</b>	<b>Commonwealth</b>	<b>New South Wales</b>
<b>Charter</b>		
Hook and Line		✓
<b>Commercial</b>		
Danish Seine	✓	
Demersal Gillnet	✓	
Demersal Longline	✓	✓
Dropline		✓
Longline (Unspecified)		✓
Otter Trawl	✓	✓

Trotline		✓
Unspecified		✓
<b>Indigenous</b>		
Hook and Line		✓
<b>Recreational</b>		
Hook and Line		✓
<b>Management Methods</b>		
	<b>Commonwealth</b>	<b>New South Wales</b>
<b>Commercial</b>		
Gear restrictions		✓
Limited entry	✓	✓
Spatial closures	✓	✓
Total allowable catch	✓	
Trip limits	✓	
<b>Indigenous</b>		
Native Title		✓
Section 37 (1d)(3)(9), Aboriginal cultural fishing authority		✓
<b>Recreational</b>		
Bag limits		✓
Licence		✓
Spatial closures		✓
<b>Active Vessels</b>		
	<b>Commonwealth</b>	<b>New South Wales</b>
	44 Vessels in SESSF (CTS), 4 Vessels in SESSF (GABTS), 26 Vessels in SESSF (GHTS),	20 Fishing Business in OTLF,

**SESSF (CTS)** Southern and Eastern Scalefish and Shark Fishery (Commonwealth Trawl Sector)(CTH)

**SESSF (GABTS)** Southern and Eastern Scalefish and Shark Fishery (Great Australian Bight Trawl Sector)(CTH)

**SESSF (GHTS)** Southern and Eastern Scalefish and Shark Fishery (Gillnet Hook and Trap Sector)(CTH)

**OTLF** Ocean Trap and Line Fishery(NSW)

Catch	
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	Commonwealth	New South Wales
Commercial	730.641t in SESSF (CTS), 218.363t in SESSF (GHTS),	0.201t in N/A, 67.478t in OTLF,
Indigenous	Unknown	Unknown
Recreational	Unknown	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), N/A Not Applicable (NSW), OTF Ocean Trawl Fishery (NSW), OTLF Ocean Trap and Line Fishery (NSW),

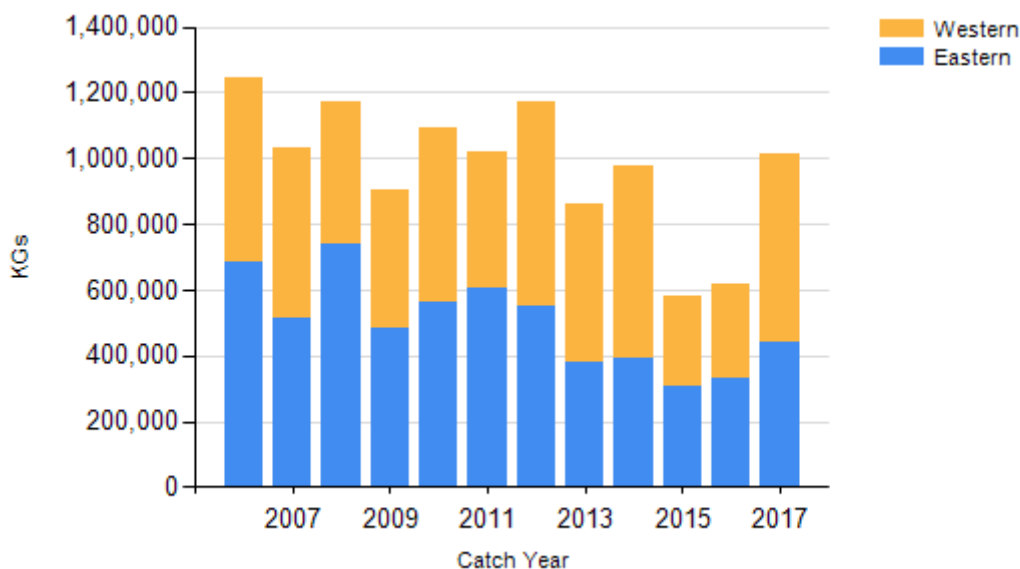
**Commonwealth – Commercial (Management Methods)** Trip limits apply to the Eastern stock.

**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 the 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 – 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.

## CATCH CHART



Commercial catch of Pink Ling - note confidential catch not shown

## EFFECTS OF FISHING ON THE MARINE ENVIRONMENT

**ENVIRONMENTAL EFFECTS on Pink Ling**

<b>References</b>	
1163	Ward, RD, Appleyard, SA, Daley, RK and Reilly, A 2001, Population structure of Pink Ling ( <i>Genypterus blacodes</i> ) from south-eastern Australian waters, inferred from allozyme and microsatellite analyses, <i>Marine and Freshwater Research</i> , 52: 965–973.
1164	Chick, RC 2018, Stock status summary and supplementary information – Ocean Trap and Line Fishery (Line Fishing – Eastern Zone) – Pink Ling ( <i>Genypterus blacodes</i> ). NSW Department of Primary Industries, Port Stephens Fisheries Institute: 32pp.
1165	Cordue, PL 2015, The 2015 stock assessment update for eastern and western Pink Ling, Innovative Solutions Ltd Client Report for the Australian Fisheries Management Authority, AFMA, Canberra.
1166	Morison, AK, Green, CP and Smith, DC 1999, Estimates of mortality of Ling based on historical length and otolith collections from the eastern sector of the SEF, ARF Project 95/95-10.
1167	Smith, ADM and Wayte, SW (ed.s) 2004, The South East Fishery 2003, Fishery assessment report compiled by the Southern and Eastern Scalefish and Shark Fishery Assessment Group, Australian Fisheries Management Authority, Canberra.
1168	Morison, AK, Knuckey, IA, Simpfendorfer, CA and Buckworth, RC 2013, South East Scalefish and Shark Fishery: draft 2012 stock assessment summaries for species assessed by GABRAG, ShelfRAG and Slope/DeepRAG, report to AFMA, Canberra.