Stout Whiting (2018)

Sillago robusta



Anthony Roelofs: Department of Agriculture and Fisheries, Queensland, **Karina Hall**: Department of Primary Industries, New South Wales

STOCK STATUS OVERVIEW

Jurisdiction	Stock	Fisheries	Stock status	Indicators
Queensland, New South Wales	Eastern Australia	FTF, N/A, OTF		Standardised CPUE, age composition

N/A Not Applicable (NSW), OTF Ocean Trawl Fishery (NSW), FTF Finfish Trawl Fishery (QLD)

STOCK STRUCTURE

The geographic distribution of the east coast Stout Whiting biological stock is restricted to southern Queensland and northern New South Wales. Genetic analysis of Stout Whiting catches from southern Queensland locations indicate that biological sub-stocks are unlikely to exist [Ovenden and Butcher 1999].

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

STOCK STATUS

Eastern Australia

On average, 80 per cent of the annual commercial catch is taken in Queensland and 20 per cent in New South Wales, with most information being derived from the Queensland fishery. Evidence for the status of Stout Whiting in Queensland waters is therefore used to determine status for the entire biological stock [Hall 2015].

In Queensland, the current annual total allowable catch (<u>TAC</u>) limit for Stout Whiting is 1 090 tonnes (t). The annual <u>TAC</u> is reassessed before the start of each fishing year using both commercial catch rate and age and length data in a decision-support model developed in 2002 [O'Neill et al. 2002]. An annual basket <u>TAC</u> (for combined Stout Whiting and Eastern School Whiting, *Sillago flindersi*) is to be introduced in New South Wales in 2019.

The 2016 relative catch rate index from Queensland and New South Wales waters was 86 per cent of the long-term mean standardised catch rate. Results showed a stable trend in catch rates from 2012–16, with the 2015 and 2014 catch rates 85 per cent of the mean catch rate [QDAF 2018]. This, however, was not updated in 2017. Both fish trawl and Danish seine methods show improving nominal catch rates in recent years while standardised catch rates to 2016 are stable but below the overall mean across the time series. Population

modelling conducted in 2014 indicated that biomass was marginally above the biomass that would produce \underline{MSY} [O'Neill and Leigh 2014]. The above evidence indicates that the biomass of this stock is unlikely to be depleted and that recruitment is unlikely to be impaired.

Two vessels fished for Stout Whiting in the 2017 fishing year, harvesting 1 028 t from Queensland waters, which was approximately 94 per cent of the Queensland annually adjusted TAC [QDAF 2018]. Annual landings of Stout Whiting averaged about 715 t for the fishing years 2014–16, with a maximum harvest in the past 10 fishing years of 1170 t and a maximum historical harvest of 2 400 t in 1995. In New South Wales, 48 Ocean Trawl Fishery (OTF) operators landed an estimated 110 t of Stout Whiting, which was well below the catch landed in 2016 (197 t) and the long-term average of 320 t per year [Hall unpublished]. This decrease in catch coincided with a similar decline in fishing effort by the prawn trawl sector from 2 212 days fished in 2016 to 1 348 days fished in 2017 [Hall unpublished]. The cause of this effort decline is uncertain, but the OTF was undergoing structural reforms during 2017, which may have influenced species targeting. The southern extremity of the Stout Whiting distribution overlaps with the northern end of Eastern School Whiting distribution and reported landings from northern New South Wales are adjusted to account for estimated levels of species misreporting [Hall 2015]. This level of fishing pressure is unlikely to cause the stock to become recruitment impaired.

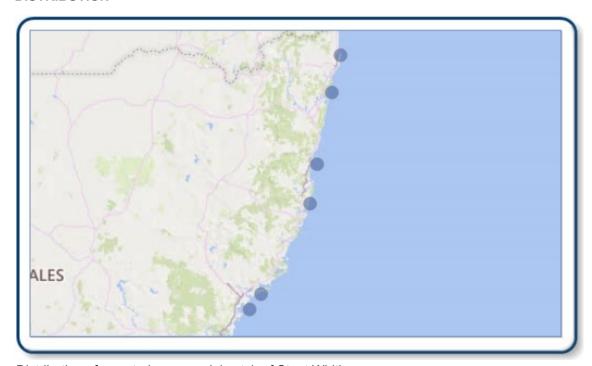
On the basis of the evidence provided above, the Eastern Australia biological stock is classified as a **sustainable stock**.

BIOLOGY

Stout Whiting biology [O'Neill et al. 2002]

Species	Longevity / Maximum Size	Maturity (50 per cent)
Stout Whiting	8 years, 230 mm FL	2–3 years, 14–180 mm FL

DISTRIBUTION



Distribution of reported commercial catch of Stout Whiting

TABLES

Commercial Catch Methods	New South Wales	Queensland
Danish Seine	✓	✓
N/A	✓	✓
Otter Trawl	✓	
Trawl		✓

Fishing methods		
	New South Wales	Queensland
Commercial		
Danish Seine	✓	✓
Otter Trawl	✓	
Trawl		✓
Indigenous		
Hook and Line	✓	
Recreational		
Hook and Line	✓	

Management Methods		
	New South Wales	Queensland
Commercial		
Catch limits		✓
Gear restrictions	✓	✓
Limited entry	✓	✓
Spatial closures	✓	✓
Temporal closures		✓
Vessel restrictions	✓	✓
Indigenous		
Bag limits	✓	
Native Title	✓	
Section 37 (1d)(3)(9), Aboriginal cultural fishing authority	✓	
Recreational		
Bag limits	✓	
Gear restrictions	✓	
Spatial	✓	

closures		
Active Vessels		
	New South Wales	Queensland
	48 Fishing Business in OTF,	2 in FTF,

OTF Ocean Trawl Fishery(NSW)

FTF Finfish Trawl Fishery(QLD)

Catch		
	New South Wales	Queensland
Commercial	1.148t in N/A, 110.195t in OTF,	1027.68t in FTF,
Indigenous	Unknown	Negligible
Recreational	Unknown	Negligible

N/A Not Applicable (NSW), OTF Ocean Trawl Fishery (NSW), FTF Finfish Trawl Fishery (QLD),

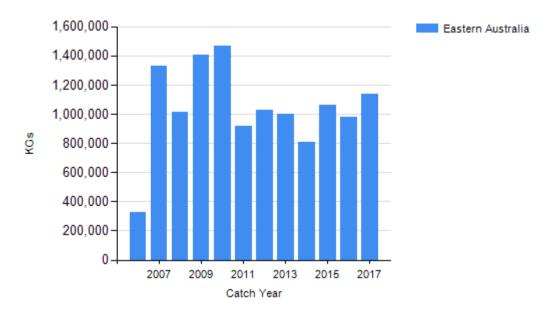
Queensland Queensland reporting period is fishing season (1 January-31 December).

New South Wales New South Wales reporting period is calendar year.

Queensland - Indigenous (management methods) In Queensland, under the *Fisheries Act* 1994 (Qld), indigenous fishers are entitled to use prescribed traditional and non-commercial fishing apparatus in waters open to fishing. Size and possession limits and seasonal closures do not apply to Indigenous fishers. Full exemptions to fishery regulations may be applied for through permits.

New South Wales – Indigenous (management methods) (a) Bag limits - the Aboriginal Cultural Fishing Interim Access Arrangement allows an Indigenous fisher in New South Wales to take in excess of a recreational bag limit in certain circumstances—for example, if they are doing so to provide fish to other community members who cannot harvest themselves, (b) Aboriginal cultural fishing authority- 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 (c) Native title- 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 Stout Whiting - note confidential catch not shown

EFFECTS OF FISHING ON THE MARINE ENVIRONMENT

ENVIRONMENTAL EFFECTS on Stout Whiting

References	
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