# Stock status summary – Pink Ling – 2020

The fishery scientific assessment summarised in this document is considered adequate to meet the legislative requirements for supporting a Total Allowable Catch (TAC) determination for NSW Pink Ling is that commissioned by the Australian Fisheries Management Authority (AFMA) and published as 'Eastern Pink Ling' in the 'Pink Ling (*Genypterus blacodes*)' section of the Fishery Status Reports by the Australian Bureau of Agricultural and Resource Economics and Sciences, (Paterson et al. 2019); hereinafter referred to as the Commonwealth assessment). The Commonwealth assessment references quantitative stock assessments for Pink Ling, including those for Eastern Pink Ling in 2015 (Cordue 2015) and a 2018 update (Cordue 2018).

The structure of this stock status summary is consistent with a format to inform a species status determination against criteria for the Status of Australian Fish Stocks reports (SAFS; www.fish.gov.au). It does not attempt to replicate the detail of the Commonwealth assessment but cites key information from that assessment. Where data are unavailable or considered insufficient to reliably inform the SAFS criteria the summary has been populated with 'NA', rather than removing the criteria. This format has been maintained to transparently represent the data available and highlight areas where supplementary information, alternate data sources or analyses may be required to improve the assessment and determination of species status into the future.

## Assessment authors and Year

Chick, R.C. and M.B. Lowry. 2020. Stock status summary – Pink Ling - 2020. NSW Department of Primary Industries. Fisheries NSW, Port Stephens Fisheries Institute. 14 pp.

## Biology and stock structure

Pink Ling (*Genypterus blacodes*) are distributed around the south of Australia from the central NSW coast to southern Western Australia, including Tasmania. Pink Ling is a deep-water species commonly associated with muddy bottom on the continental shelf and upper slope at depths of 200–900 m. Pink Ling can grow to a maximum length of 1.6 m and an age of about 26 years. Males and females have been recorded to mature at about 40–46 cm and 50–58 cm total length (TL), respectively.

Patterson et al. (2019) state clear and persistent differences in size and age composition (Morison et al. 2013) and differences in trends in Commonwealth commercial catch rates that indicate the existence of different stocks east and west of South Cape, Tasmania (147° East) but no genetic differences have been identified between these areas (Ward et al. 2001; Patterson et al. 2019).

## Stock Status and assessment method

The Commonwealth assessment classifies the Eastern Pink Ling stock as not overfished and not subject to overfishing (Patterson et al. 2019). This assessment is based on a Commonwealth Tier 1 assessment (AFMA 2017 i.e. a quantitative model-based assessment). The assessment underpinning the Commonwealth management of the Pink Ling stock is that of Cordue (2015), supplemented with an update of that 2015 assessment done in 2018 (Cordue 2018), as cited in Patterson et al. 2019.

Pink Ling (Eastern) were assessed against the SAFS criteria in 2014, 2016 and 2018 and is scheduled for SAFS assessment again in 2020. Status determination in 2014, 2016 and 2018 was **undefined**, **sustainable** and **sustainable** respectively. Status determination for 2020 has yet to be finalised at the time of publication of this report.

## Fishery statistics summary

Fishery statistics underpinning the Commonwealth assessment and summarised here from Patterson et al. (2019) and references therein.

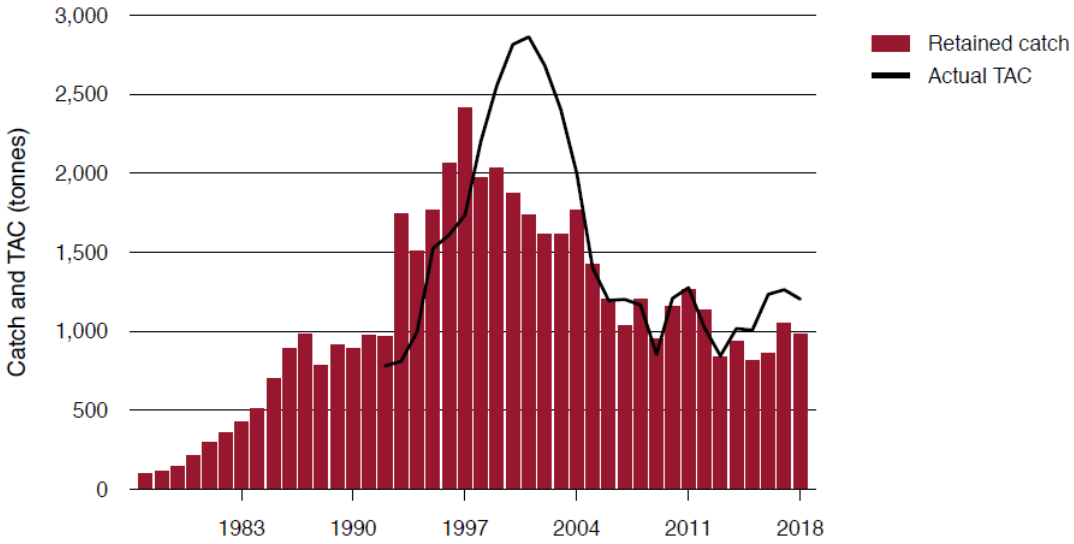
Within the Commonwealth, eastern and western stocks of Pink Ling are assessed separately but managed under a single TAC, with management arrangements in place to constrain fishing on eastern stocks to the eastern catch limit (Patterson et al. 2019). The Eastern Pink Ling stock, described for the Commonwealth assessment, is associated with Commonwealth fishing zones 10, 20 and 30 (with catches from Zone 60 assigned to Zone 30; Cordue 2015).

The assessment summarised in this report is that for Eastern Pink Ling only, unless otherwise stated in the text. The assessment is detailed in Cordue (2015 and 2018) and summarised in Patterson et al. (2019). Data sources in the assessment are catch histories from Commonwealth trawl and non-trawl (autoline) sectors and total NSW commercial catches (other state catches were small, within rounding error and ignored). Commonwealth discard estimates and landing multipliers were applied to data because Commonwealth trip limits were implemented during 2013 and 2014 resulting in three defined time periods in which there was no limit, a 50 kg limit or a 250 kg trip limit. Commonwealth catches were split by month within fishing method from 2013 (inclusive), allowing corrections to be applied to the three different trip limit periods. Other data were standardised trawl catch per unit effort (CPUE) (including 'period effect' for trip limit periods), length-frequency data by fishing method, zone and depth, and age–length data (Cordue 2015). The 2018 updated assessment (Cordue 2018) removed the 'period effects' from the eastern trawl CPUE analyses as their inclusion resulted in the CPUE time-series having '…an unrealistic increase in 2016 and 2017.' and instead 'discard ratios were applied to tow by tow data before the CPUE standardisation.', to account for discarding due to management measures (Cordue 2018).

## Catch information

The catch information underpinning the Commonwealth assessment is summarised from Paterson et al. (2019).

Combined eastern and western catches of Pink Ling increased steadily from the start of the fishery in about 1977 to reach a peak of 2,412 t in 1997 (Figure 1). Despite TACs continuing to increase from 1997 to 2001, catches declined steadily to about 1,800 t in 2004. From 2004/05 to 2013/14, Pink Ling catches were limited by the TAC. Commonwealth-landed catch in the 2018–19 fishing season was 952 t, comprising approximately 372.2 t for the eastern stock and 479.9 t for the western stock. The weighted average discards between 2014 and 2017 were 35.2 t for eastern pink ling (Castillo-Jordán et al. 2018). State catches were 63.0 t for eastern pink ling (Castillo-Jordán et al. 2018).




Notes: TAC Total allowable catch. Data for 2013–2018 do not include state data.
Sources: Cordue 2013; AFMA catch disposal records (2013–2018 catch data)

**Figure 1** **Pink Ling annual catches (Commonwealth Trawl Sector, Scalefish Hook Sector and states combined and fishing season total allowable catch (TAC) 1977–2018 (from Patterson et al. 2019).**

### Recreational and Indigenous

Inclusion of recreational catch has been raised as an issue for consideration in Commonwealth assessments (SESSF RAG 2017). However, catches of Pink Ling outside the commercial fishing sector are likely negligible.

### Illegal Unregulated and Unreported

The level of Illegal Unregulated and Unreported (IUU) fishing has not been quantified.

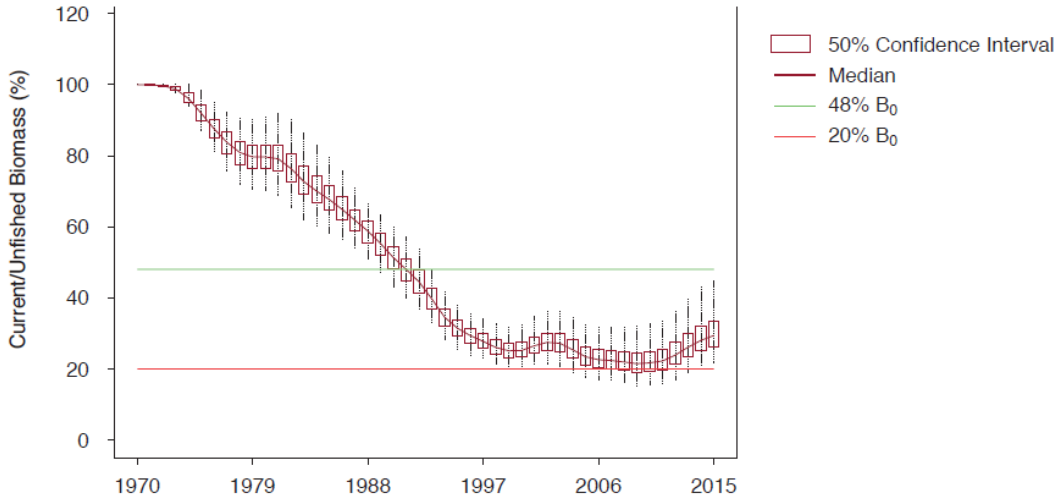
## Spawning stock biomass

Pink Ling (Eastern) spawning stock biomass (SSB) estimates from Tier 1 assessment (integrated quantitative stock assessment; AFMA 2017; Commonwealth of Australia 2007, 2017) and predicted biomass as a proportion of unfished biomass ($B_0$) at constant-catch scenarios with performance indicators (future SSB, probability estimates of being below the limit and year of SSB being at target reference point) are presented in Figure 2 and Table 1 (from Patterson et al. 2017).

The Commonwealth assessment summarised from Paterson et al. (2019) states:

> The Cordue (2015) assessment estimated the median biomass depletions for the eastern stock in 2015 to be $0.30B_0$ (Figure 2).
>
> The 2015 assessment produced an RBC of 250 t for the eastern stock. Projections of eastern stock response to various constant-catch scenarios indicated that catches below 550 t posed a relatively low (<10%) risk (Table 1; Cordue 2015). Subsequently, AFMA set a TAC for the eastern stock of 500 t.
>
> The updated 2018 assessment (Cordue 2018) estimated the median biomass depletions in 2018 to be $0.35B_0$ for the eastern stock.
>
> The total RBC for the 2018–19 fishing season was 1,240 t. The TAC for the 2018–19 season applied for the eastern and western stocks combined was 1,117 t, which was the third year of a three-year MYTAC.
>
> The 2015 assessment estimated the median biomass depletion for the eastern pink ling stock at 30% of the unfished biomass and '…is considered as **not overfished**' (Patterson et al. 2019).
>
> Eastern pink ling catch in 2018–19 was 372 t. Average discards were 35.1 t, and state catch was 63.0 t, bringing the total to 470 t. This exceeds the RBC of 250 t but is below the TAC of 500 t. Although the total mortality of eastern pink ling in 2018–19 was above the RBC, at that mortality level the probability of the biomass being depleted to below 0.2 $B_0$ in 2017 is less than 0.04% (Table 1).
>
> In addition, the updated assessment (Cordue 2018) reported that the biomass depletion was $0.35B_0$ in 2018. Therefore, the eastern stock appears to be recovering since the 2015 assessment under the current approach to TAC setting. On this basis, the pink ling stock is classified as **not subject to overfishing**.

## Spawning stock biomass




Source: Cordue 2015

**Figure 2** Estimated spawning stock biomass for Eastern Pink Ling, 1970 to 2015 (Cordue 2015, cited in Patterson et al. 2017).

**Table 1** Base-case 2015 stock assessment performance indicators for Eastern Pink Ling, showing stochastic projections at a range of future constant catches (Cordue 2015, cited in Patterson et al. 2019).

| Annual catch (t) | $B_{2017}/B_0$ | $B_{2022}/B_0$ | Probability $B_{2017}<0.2B_0$ | Probability $B_{2022}<0.2B_0$ | Rebuild year |
|---|---|---|---|---|---|
| 0 | 0.38 | 0.63 | 0 | 0 | 2020 |
| 300 | 0.35 | 0.48 | 0.01 | 0 | 2023 |
| 400 | 0.33 | 0.43 | 0.02 | 0.01 | 2026 |
| 500 | 0.31 | 0.38 | 0.04 | 0.04 | 2036 |
| 550 | 0.30 | 0.35 | 0.07 | 0.08 | >2050 |
| 600 | 0.29 | 0.32 | 0.09 | 0.13 | >2050 |
| 700 | 0.27 | 0.17 | 0.15 | 0.28 | >2050 |

Notes: $B_{2017}/B_0$ Predicted biomass ratio in 2017. $B_{2022}/B_0$ Predicted biomass ratio in 2022. $B_{2017}<B_0$ Biomass below 20 per cent $B_0$ in 2017. $B_{2022}<0.2B_0$ Biomass below 20 per cent $B_0$ in 2022. **Rebuild year** is the projected year for rebuilding to 48 per cent $B_0$.
Source: Cordue 2015

| **Stock assessment methodology** | |
|---|---|
| Year of most recent assessment | 2015 (Cordue 2015), supplemented by Cordue (2018). |
| Assessment method | Commonwealth Tier 1, integrated quantitative stock assessment |
| Main data inputs | Catch – Commonwealth trawl and non-trawl (autoline) sectors; total NSW commercial catches (other state catches were small, within rounding error and ignored) (Cordue 2015)<br>Commonwealth discard estimates and landing multipliers were applied to data due to Commonwealth trip limits implemented during 2013 and 2014 (no limit; 50 kg; and 250 kg trip limit) (Cordue 2015)<br>Standardised CPUE – Commonwealth trawl sector, including 'period effect' for trip limit periods (Cordue 2015).<br>Updated assessment in 2018 removing 'period effect' and including discard ratio to tow by tow data prior to CPUE standardisation (Cordue 2018).<br>Length-frequency data by fishing method, zone and depth (various years from 1998 see Cordue 2015)<br>Conditional age–length data by fishing method (various years see Cordue 2015)<br>Age frequencies data by fishing method (various years see Cordue 2015) |
| Main data inputs (rank)[†] | All main data inputs: assumed minimum rank 2 (medium quality) |
| Key model structure and assumptions | Tier 1 – Integrated quantitative stock assessment (AFMA 2017; Commonwealth of Australia 2003, 2017) |

## Stock assessment methodology

Table describing 2015 model structure (Source: Cordue 2015)

| | | |
|---|---|---|
| Model years | 1970-2015 | Stock status assessed mid-year 2015 |
| Biomass parameterisation | $B_0$ | Estimated parameter. $R_0$ is derived. |
| Recruitment parameterisation | Haist, lognormal prior, sigmaR = 0.7 | Also, a moderate penalty on year class strengths (YCS) averaging to 1. |
| YCS estimated (i.e., recruitment deviations) | East: 1969-1977, 1983-2010<br>West: 1975-2010 | Cohorts 1978-1982 in the east were not well sampled and their YCS were assumed to equal 1. |
| Steepness | 0.75 | As used in 2012. A conservative value – it may be higher. Fixed. |
| Maturity | Logistic at age:<br>$a_{50}$ = 5 yr, ato95 = 2 yr | Approximates the length-based curve used in the 2012 assessment. Fixed. |
| Trawl selectivities | Three blocks in the east: 1970-99, 2000-2006, 2007-2015. Two in the west: 1970- | Estimated in the model. Timing of blocks indicated by events and confirmed by |
| | 2006, 2007-2015. Double normal at age, same for males and females. | data analysis.<br>Separate male and female selectivities in a sensitivity. |
| Non-trawl selectivities | Logistic at age, same for males and females. | Estimated in the model.<br>Separate male and female selectivities in a sensitivity. |
| Growth | Separate male and female von Bertalanffy | Estimated in the model. |
| Length-weight relationship | a 2.93e-9<br>b 3.139 | Fixed at 2012 assessment values. (cm to tonnes) |

Table describing 2018 model structure (Cordue 2018)

| | | |
|---|---|---|
| Model years | 1970-2018 | Stock status assessed mid-year 2018 |
| Biomass parameterisation | $B_0$ | Estimated parameter. $R_0$ is derived. |
| Recruitment parameterisation | Haist, lognormal prior, sigmaR = 0.7 | Also, a moderate penalty on year class strengths (YCS) averaging to 1. |
| YCS estimated (i.e., recruitment deviations) | East: 1969-1977, 1983-2012<br>West: 1975-2012 | Cohorts 1978-1982 in the east were not well sampled and their YCS were assumed to equal 1. |
| Steepness | 0.75 | As used in 2012. A conservative |
| | | value – it may be higher. Fixed. |
| Maturity | Logistic at age:<br>$a_{50}$ = 5 yr, ato95 = 2 yr | Approximates the length-based curve used in the 2012 assessment. Fixed. |
| Trawl selectivities | Three blocks in the east: 1970-99, 2000-2006, 2007-2018. Two in the west: 1970-2006, 2007-2018. Double normal at age, same for males and females. | Estimated in the model. Timing of blocks indicated by events and confirmed by data analysis. Right hand limb has a weakly informed prior to encourage a domed shape |
| Non-trawl selectivities | Logistic at age, same for males and females. | Estimated in the model. |
| FIS selectivities | Double normal at age, same for males and females | Right hand limb has a weakly informed prior to encourage a domed shape |
| Growth | Separate male and female von Bertalanffy | Estimated in the model. |
| Length-weight relationship | a 2.93e-9<br>b 3.139 | Fixed at 2012 assessment values. (cm to tonnes) |

## Stock assessment methodology

Sources of uncertainty evaluated

2015 model sensitivities were investigated (after Cordue 2015), including:

- fixed mortality, *M* (low = 0.2, medium = 0.24, high = 0.28), low and high sigmaR (0.5, 0.8)
- alternative maturity ogives (shifted up or down one year)
- a tighter coefficient of variation on the CPUE indices (10%)
- double the effective sample sizes on the age and length frequencies, sex-specific selectivities and inclusion of the fishery independent survey indices
- 2014 trawl age frequency
- the exclusion of the period effects in the CPUE indices

2018 model sensitivities were investigated, including (after Cordue 2018):

| Eastern model | Description |
|---|---|
| M=0.2 | Reference model with M=0.2 |
| M=0.23 (Base) | Reference model with M=0.23 |
| Est. M (Ref.) | The reference model where M is estimated using the posterior from the western assessment |
| M=0.28 | Reference model with M=0.28 |
| Unf. M | Reference model but a uniform prior on M |
| Period CPUE | Using the trawl CPUE indices where period effects were estimated and M estimated |
| Per. M=0.23 | As for "Period CPUE" but with M=0.23 |
| Linkall CPUE | Using the trawl CPUE where all vessels were used as linking vessels and M estimated |
| No FIS | The reference model but with no FIS indices or length frequencies |

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† Main data inputs (rank)

1 – High quality: data have been subjected to documented quality assurance and peer review processes, are considered representative and robust and provide a high level of confidence to support fisheries management decisions.

2 – Medium quality: data have been subjected to some internal quality assurance processes, have some documented limitations, but are still considered sufficiently accurate and informative to be useful to inform management decisions with some caveats.

3 – Low quality: data have been subjected to limited or no quality assurance processes, may be compromised by unknown or documented limitations that have not been fully explored, but are considered the best available information and require a high level of precaution to be exercised when interpreted to inform management decisions.

| **Status indicators and limit reference levels** | |
|---|---|
| Biomass indicator or proxy | SSB (AFMA 2017; Commonwealth of Australia 2007, 2017) |
| Biomass limit reference level | $B_{20}$ ($0.2B_0$) – <$B_{20}$: no targeted fishing, rebuilding strategy will be developed (AFMA 2017) |
| Fishing mortality indicator or proxy | Risk of overfishing i.e. low risk of SSB < $B_{20}$ under future catch scenarios run through base case – implied from Patterson et al. 2019 (despite catches > RBCs) |
| Fishing mortality limit reference level | Not specified within the risk profile outlined (Patterson et al. 2019) |
| Target reference level | $B_{48}$ ($0.48B_0$) (AFMA 2017) |

| **Stock assessment results** | |
|---|---|
| Biomass status in relation to limit | Performance measure above limit - SSB estimated at $0.30B_0$ in the 2015 assessment and $0.35B_0$ in the 2018 update and increasing (Crodue 2015, 2018 and Patterson et al. 2019) |
| Fishing mortality in relation to limit | Not subject to overfishing (Patterson et al. 2019). |
| Previous SAFS stock status | 2014 SAFS status – **Undefined**<br>2016 SAFS status – **Sustainable**<br>2018 SAFS status – **Sustainable** |
| Current SAFS stock status | Sustainable – 2020 status not yet determined at time of publication |

## Fishery interactions

There are interactions between the Commonwealth Trawl and Auto Lining sectors and other commercially fished, by-catch and other species, including threatened and endangered species. Various management and mitigation measures are in place to address many of these issues (AFMA 2018).

The Commonwealth Trawl Fishery interacts with other commercial and non-commercial bycatch and discard marine species, a range of endangered threatened and/or protected species and marine habitats (AFMA 2014; Wayte et al. 2007).

## NSW Fishery

Information presented in figures and tables below is summarised by financial year (July–June).

The commercial fishery data presented in this section of the report includes total Pink Ling catch landed in NSW from 1976/77 to present and catches reported from the NSW Ocean Trap and Line - Line East (OTLLE) from 2009/10. These data are provided as supplementary information to the assessment and to help inform the NSW total allowable catch determination. NSW commercial fishery records have not been consistently reported throughout the history of the fishery (Chick 2018). Catch from 1976/77 to 1996/97 (inclusive) includes catch from outside current NSW waters (i.e. Commonwealth catches). Total catch from 1997/98 is restricted to waters in NSW jurisdiction. From 1993 landing Pink Ling was prohibited in the NSW Ocean Trawl Fishery.

### State-wide fisheries catch

Annual total catch of Pink Ling demonstrated a substantial increase from the mid-1970s, catches showed a peak in excess of 500 t in 1984/85 and ~450 t in 1993/94, with a trough in 1988/89 of ~230 t (Figure 1, Table 1). For three years from 1997/98, reported catches of Pink Ling in NSW were greater than 40 $t.yr^{-1}$. Over the proceeding 9 years, from 2000/01 to 2008/09, annual catches were <25 $t.yr^{-1}$ (range 9.2 t – 24.6 t) and averaged ~16 $t.yr^{-1}$. Between 2008/09 and 2009/10, the total annual catch increased ~25 t to 48.2 t and since 2009/10 annual catches have remained above 37 $t.yr^{-1}$. Since 2013/14 the annual catch of Pink Ling in NSW has exceeded 50 $t.yr^{-1}$, with highest catch since 2009/10 being 65.5 t, landed in 2016/17. Catch in 2018/19 was 53.1 t (Figure 1 and Table 1).

Pink Ling are landed almost exclusively in the OTLLE endorsement (≥99%, range 36.7–65.2 $t.yr^{-1}$; Figure 2 and Table 2), and within the OTLLE, almost exclusively by the setline demersal fishing method (≥88%; range 34.8-62.8 $t.yr^{-1}$; Figure 3, Tables 3).

## NSW Fishery

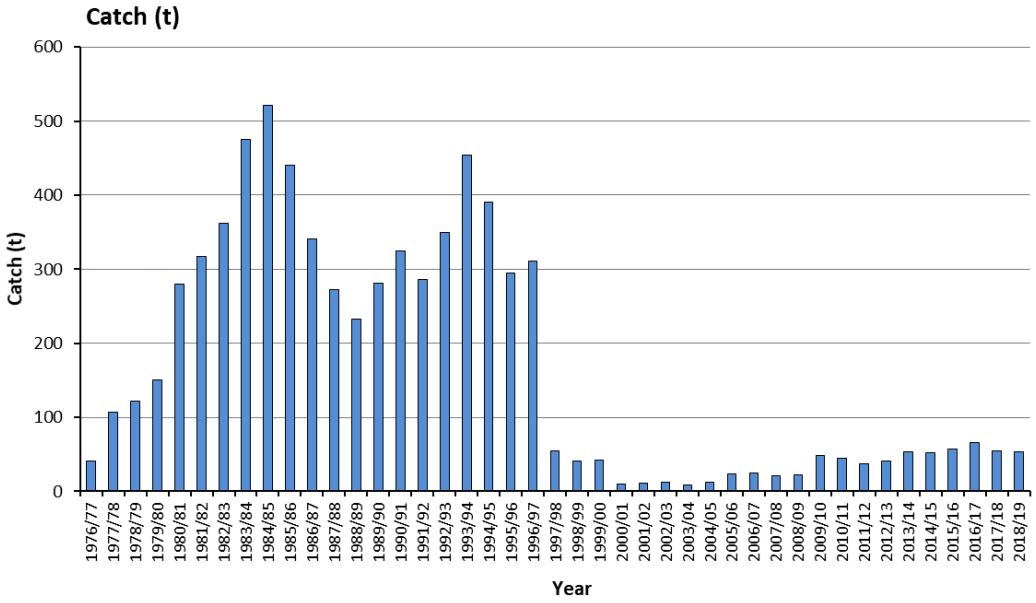


**Figure 3** Annual catch (t) of Pink Ling from all fishing methods reported to NSW from 1976/77 to 2018/19. Catch from 1976/77 to 1996/97 (inclusive) includes that from outside of current NSW jurisdictional waters (i.e. Commonwealth catches). Total catch from 1997/98 is restricted to NSW waters.

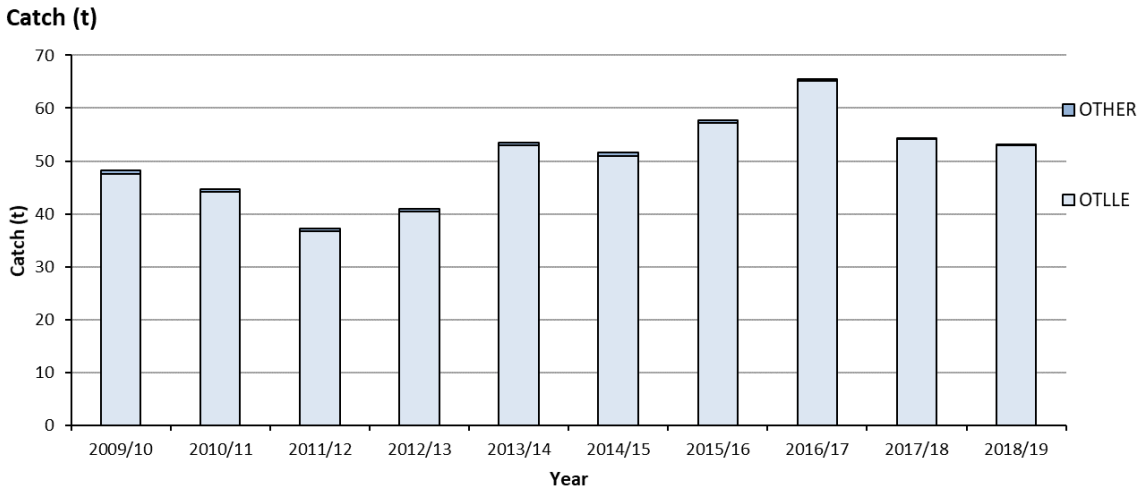


**Figure 4** Annual catch (t) of Pink Ling from NSW Ocean Trap and Line - Line East (OTLLE) and all other endorsement codes (other) from 2009/10 to 2018/19.

## NSW Fishery

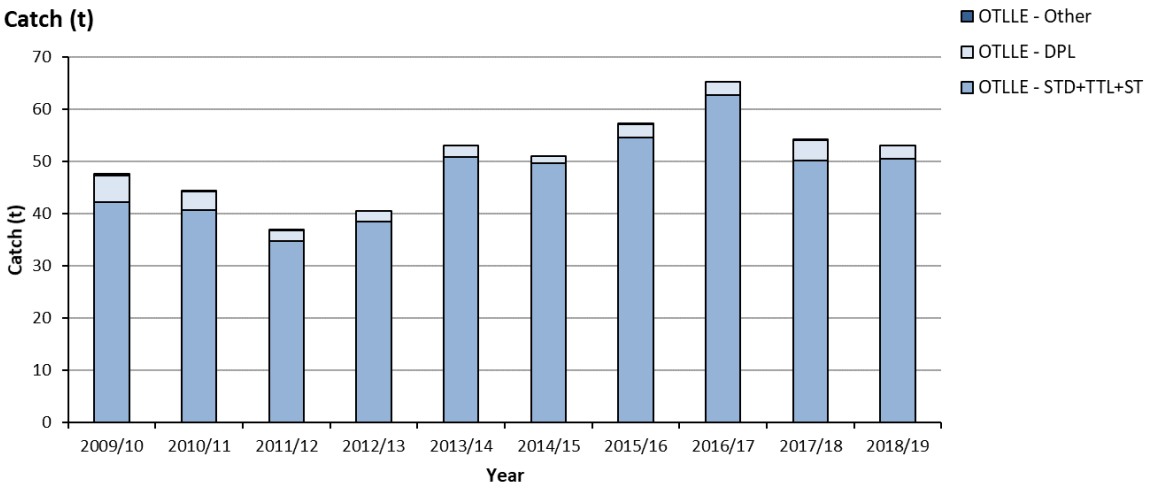


**Figure 5** OTLLE – fishing methods - Annual catch (t) of Pink Ling in NSW Ocean Trap and Line - Line East (OTLLE) by dropline (DPL), setline (demersal (STD), trotline (TTL) and unspecified setline (ST)) and other methods (Other) from 2009/10 to 2018/19.

**Table - 1** Annual catch (t) of Pink Ling by all fishing methods reported to NSW from 1976/77 to 2018/19. Catch from 1976/77 to 1996/97 (inclusive) includes that from outside of current NSW waters (i.e. Commonwealth catches). Total catch from 1997/98 is restricted to NSW waters.

| Year | Total catch (t) | Year | Total catch (t) |
|---|---|---|---|
| 1976/77 | 41.0 | 1997/98 | 55.2 |
| 1977/78 | 107.3 | 1998/99 | 41.4 |
| 1978/79 | 121.3 | 1999/00 | 42.3 |
| 1979/80 | 150.7 | 2000/01 | 10.0 |
| 1980/81 | 279.5 | 2001/02 | 11.4 |
| 1981/82 | 317.7 | 2002/03 | 12.4 |
| 1982/83 | 361.9 | 2003/04 | 9.2 |
| 1983/84 | 475.6 | 2004/05 | 12.9 |
| 1984/85 | 521.8 | 2005/06 | 23.9 |
| 1985/86 | 441.0 | 2006/07 | 24.6 |
| 1986/87 | 341.2 | 2007/08 | 21.3 |
| 1987/88 | 272.2 | 2008/09 | 22.2 |
| 1988/89 | 232.1 | 2009/10 | 48.2 |
| 1989/90 | 280.7 | 2010/11 | 44.7 |
| 1990/91 | 324.8 | 2011/12 | 37.3 |
| 1991/92 | 285.8 | 2012/13 | 41.0 |
| 1992/93 | 350.0 | 2013/14 | 53.4 |
| 1993/94 | 454.7 | 2014/15 | 51.6 |
| 1994/95 | 391.1 | 2015/16 | 57.7 |
| 1995/96 | 295.4 | 2016/17 | 65.5 |
| 1996/97 | 311.2 | 2017/18 | 54.2 |
| | | 2018/19 | 53.1 |

**Table - 2** Annual catch (t) and percentage of total catch of Pink Ling in NSW Ocean Trap and Line - Line East (OTLLE) and all other endorsement codes (other) from 2009/10 to 2018/19.

| Year | Catch and percent total catch | | | | |
|---|---|---|---|---|---|
| | OTLLE | | OTHER | | Total |
| | Catch (t) | % total | Catch (t) | % total | Catch (t) |
| 2009/10 | 47.6 | 98.81 | 0.6 | 1.19 | 48.2 |
| 2010/11 | 44.2 | 98.91 | 0.5 | 1.09 | 44.7 |
| 2011/12 | 36.7 | 98.60 | 0.5 | 1.40 | 37.3 |
| 2012/13 | 40.5 | 98.75 | 0.5 | 1.25 | 41.0 |
| 2013/14 | 53.0 | 99.18 | 0.4 | 0.82 | 53.4 |
| 2014/15 | 51.0 | 98.85 | 0.6 | 1.15 | 51.6 |
| 2015/16 | 57.2 | 99.12 | 0.5 | 0.88 | 57.7 |
| 2016/17 | 65.2 | 99.63 | 0.2 | 0.37 | 65.5 |
| 2017/18 | 54.1 | 99.76 | 0.1 | 0.24 | 54.2 |
| 2018/19 | 53.0 | 99.77 | 0.1 | 0.23 | 53.1 |

**Table - 3** Annual catch (t) of Pink Ling and percentage of total catch in Ocean Trap and Line-Line East (OTLLE) by dropline (DPL), setline (demersal (STD), trotline (TTL) and unspecified setline (ST)) and other methods from 2009/10 to 2018/19.

| Year | Catch and percent total catch | | | | | | |
|---|---|---|---|---|---|---|---|
| | OTLLE-DPL | | OTLLE (STD, TTL, ST) | | OTHER | | OTLLE Total (t) |
| | Catch (t) | % total | Catch (t) | % total | Catch (t) | % total | |
| 2009/10 | 5.1 | 10.63 | 42.2 | 88.70 | 0.3 | 0.68 | 47.6 |
| 2010/11 | 3.6 | 8.04 | 40.6 | 91.86 | 0.0 | 0.10 | 44.2 |
| 2011/12 | 1.9 | 5.28 | 34.8 | 94.64 | 0.0 | 0.09 | 36.7 |
| 2012/13 | 2.0 | 4.89 | 38.5 | 95.11 | 0.0 | 0.00 | 40.5 |
| 2013/14 | 2.1 | 3.94 | 50.9 | 96.06 | 0.0 | 0.00 | 53.0 |
| 2014/15 | 1.4 | 2.69 | 49.6 | 97.31 | 0.0 | 0.00 | 51.0 |
| 2015/16 | 2.6 | 4.49 | 54.6 | 95.47 | 0.0 | 0.04 | 57.2 |
| 2016/17 | 2.5 | 3.78 | 62.8 | 96.22 | 0.0 | 0.00 | 65.2 |
| 2017/18 | 4.0 | 7.33 | 50.1 | 92.65 | 0.0 | 0.02 | 54.1 |
| 2018/19 | 2.4 | 4.62 | 50.5 | 95.38 | 0.0 | 0.00 | 53.0 |

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