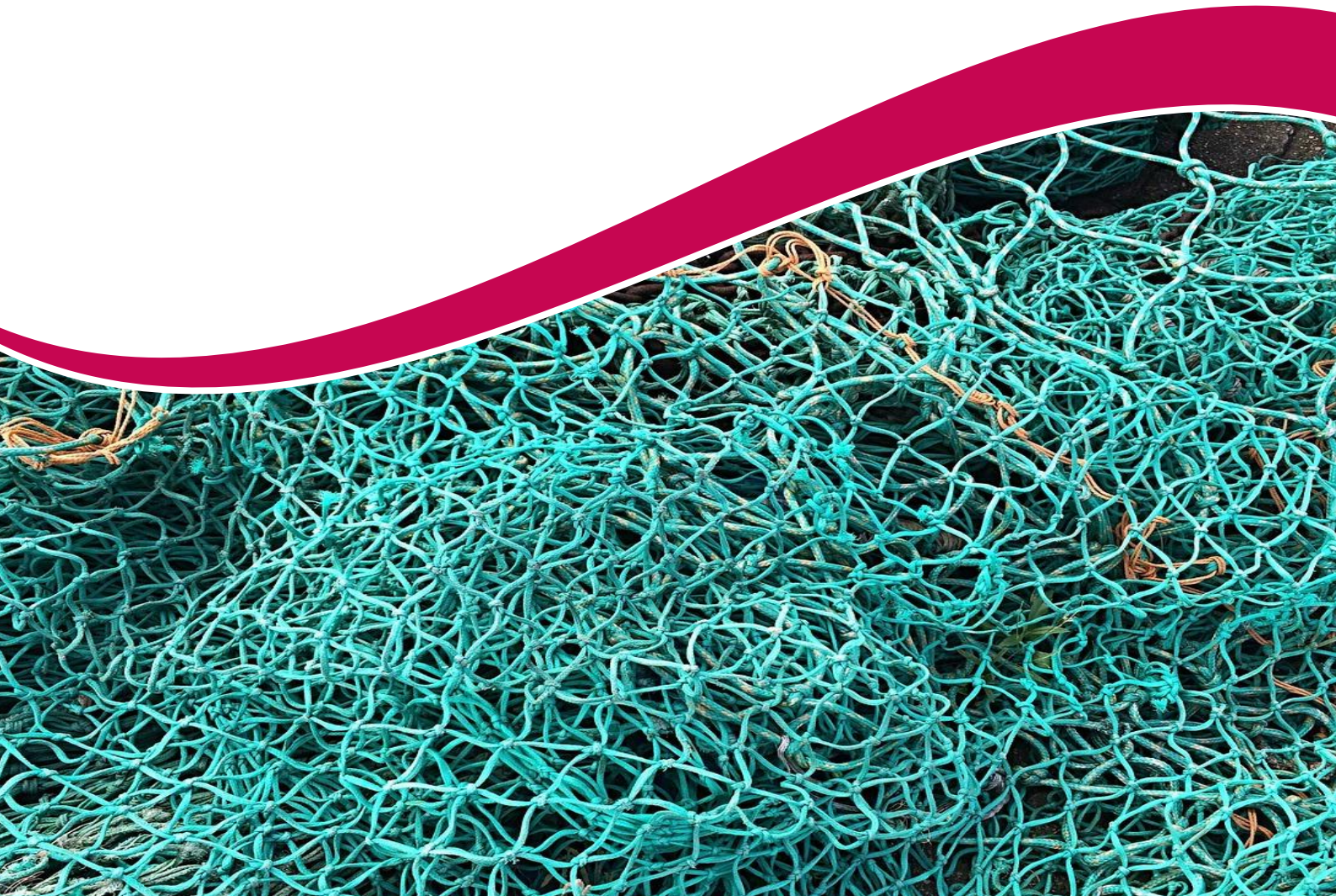
Australian Government

Australian Fisheries Management Authority

Small Pelagic Fishery (SPF)

Species summaries 2025



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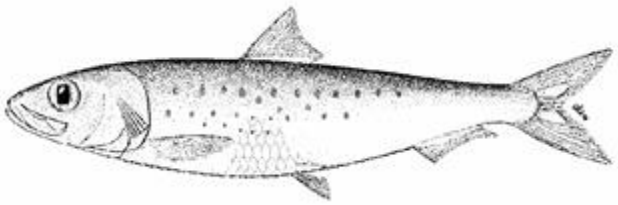
Australian sardine



Sardinops sagax

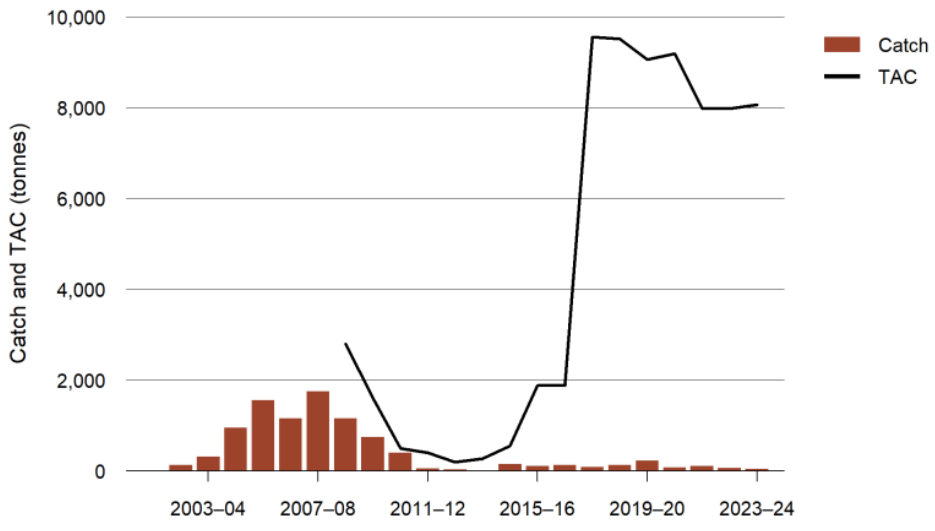
Species Summary			
Common Names	Sardine, pilchard		
Stock assessment	A DEPM Survey was conducted in 2019-20 (Sep), the results of which were first considered for the 2021-22 SPF fishing season. Tier 1 – 5th season.		
Exploitation Rate *** 2025-26 Tier Level**	***Tier 1 – 20% (5 seasons)**	Tier 2 – 10% (5 seasons)	Tier 3 – 5% (no limit)
Estimated biomass	**42,724 tonnes (2019-20 DEPM Survey)** 49,575 tonnes (2015 DEPM Survey)		
Stock Structure	Several studies have found evidence of stock structuring of Australian sardine across temperate and sub-tropical Australia (Dixon, Worland & Chan 1993; Izzo, Gillanders & Ward 2012; Yardin et al. 1998); however, the boundaries were not defined conclusively. Izzo et al. (2017), using an integrated assessment that included genetic, morphological, otolith, growth, reproductive and fishery data, found evidence for at least four isolated stocks. The Status of Australian Fish Stocks Reports (https://www.fish.gov.au/) recognises four Australian stocks: South-western (Western Australia), Southern (South Australia), South-eastern (Victoria, Tasmania and southern NSW), and eastern Australia (southern Queensland to central NSW). Since the Sardine subarea (off eastern Australia) is the only area of the SPF where SPF vessels take Australian sardine, the sardine sub-area is assessed and managed as a single management unit.		
Historical Catch & TAC data (Commonwealth fisheries)			

	Figure 1. Commonwealth Australian Sardine (sub-area only) catch and TAC in the SPF, fishing seasons 2001-2002 to 2023-24 (from Butler et al. 2024)

Catch and TAC (t)

*** incomplete season**

Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
2024-25*	8,130	8,943	363(4.5%)
2023-24	8,060	8,866	55 (<1%)
2022-23	7,970	8,767	73 (<1%)
2021-22	7,980	8,778	113 (<1%)
2020-21	9,190	10,109	102 / (1%)

Climate Sensitivity – Preliminary Projections to 2040	**Neutral.** Preliminary projections indicate (with low-med confidence) abundance will remain steady through to 2040.	**No additional comments on projections for this species** (Fulton et al., 2021)
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.	
ABARES Status	**Biomass: Not overfished**	**Fishing mortality: Not subject to overfishing**

Annual Fisheries Assessment Summary

Key model technical assumptions/ parameters	The adult reproductive parameters used in the biomass calculation are based on the southern sardine stock, not the eastern stock. Ideally parameters are based on the stock being assessed however, sardine parameters are relatively consistent worldwide. As the Commonwealth catch is so low, addressing this knowledge gap is not a current research priority for the fishery. Furthermore, the exploitation rate of 20 per cent is conservative as shown by the MSE testing by Smith et al. (2015) and accounts for uncertainties in the assessment.
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. There were no discernible trends in the CPUE data.
Comments	The annual assessment provided no basis to change previous advice for this stock. Recommended the 2019-20 biomass estimate of 42,724 tonnes be used for the RBC based on the weight of evidence provided by the previous survey for Australian sardine and that it was appropriate to apply the Tier 1 exploitation rate for the 2025-26 season.

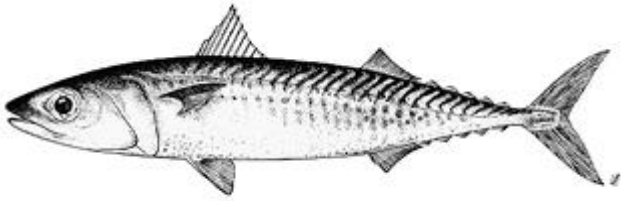
Recommendations		
Recommended Biological Catch (RBC)	2025-26	5th Season at Tier 1 (2019-20 DEPM estimate) 42,724 x 20% = **8,545 tonnes**
Additional Work - AFMA		
State Catch (t)	447	Four-year weighted average, rounded to nearest tonne (NSW Data only - representative of the Sardine sub area)
Recreational Catch (t)	0	No data available
Discards (t)	< 1t	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC.
Other Commonwealth Fisheries Catch (t)	<1t	Three-year average (CTS)
Research Catch Allowance (t)	0	Reported catch <0.1 t for 2024
Provisional TAC		8,100 tonnes (rounded to the nearest 10 tonnes)
RAG Recommendations		
Commercial fishers' interests	No specific commercial fisher interests have been identified.	
Species specific management (target, companion and bycatch)	There are no identified implications for target, companion or bycatch species.	
RAG advice and any dissenting views	**2025-26 TAC recommendation** 8,100 t RBC	
MAC Advice		
The MAC supports the RAGs recommendation of a TAC of 8,100 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.		
AFMA Advice		

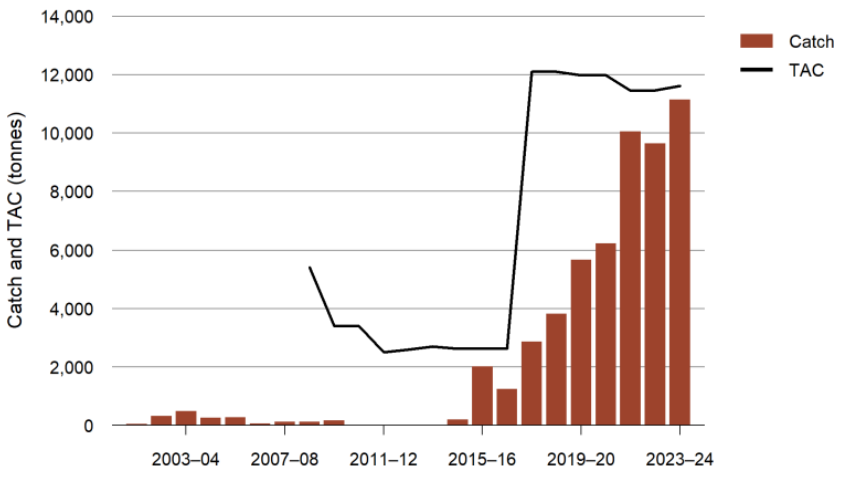
AFMA Management recommends a TAC of 8,100 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
8,130	8,100	10	2	-30

Blue mackerel east

Scomber australasicus



Species Summary			
Common Names	Pacific mackerel, common mackerel, English mackerel, school mackerel, spotted chub mackerel, spotted mackerel, chub mackerel, Japanese mackerel, southern mackerel, slimy mackerel, slimies		
Stock assessment	A DEPM Survey was conducted in 2019-20 (Sep), the result of which were first considered for the 2021-22 SPF fishing season.		
Exploitation Rate * 2025-26 Tier Level	***Tier 1 (5 seasons)** **2024 HS 15%** **2025 Rec HS 20%**	Tier 2 (5 seasons) 2024 HS 7.5% 2025 Rec HS 10%	Tier 3 (no limit) 2024 HS 3.75% 2025 Rec 5%
Estimated biomass	**80,000 tonnes (2019-20 DEPM Survey)** 83,300 tonnes (2014 DEPM survey)		
Stock Structure	The stock structure of blue mackerel is uncertain. Genetic analysis of samples from southern Queensland, Western Australia and New Zealand indicates population subdivisions. Genetic differences were detected between Western Australia and Queensland, and between Western Australia and New Zealand, but not between Queensland and New Zealand (Schmarr et al. 2012). Blue mackerel within the SPF is assessed and managed as separate stocks in the eastern and western subareas.		
Historical Catch data (Commonwealth fisheries)	Figure 2. Commonwealth Blue Mackerel East catch and TAC in the SPF, fishing seasons 2001-02 to 2023-24 (from Butler et al. 2024) 		

	Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
Catch and TAC (t) * incomplete season	2024-25*	11,530	12,683	8,450 / (67%)
	2023-24	11,610	11,716	11,082/ (95%)
	2022-23	11,450	12,595	9,627 / (76%)
	2021-22	11,440	12,584	10,188/ (80%)
	2020-21	11,970	13,167	5,994 / (46%)
Climate Sensitivity – Preliminary Projections to 2040	**Medium**. Preliminary projections indicate (with low-med confidence) a 15-20% decrease in abundance through to 2040.		Decrease in many areas, especially to the northern end of historical distribution, but increase around Tasmania (Fulton et al., 2021)	
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.			
ABARES Status	**Biomass: Not overfished**		**Fishing Mortality: Not subject to overfishing**	

Annual Fishery Assessment Summary

Key model technical assumptions/ parameters	Adult parameters used in the biomass calculation for the blue mackerel (east) stock are from blue mackerel samples collected from western stock during the 2019-20 DEPM survey. There have been some difficulties in catching large, adult spawning blue mackerel on the east coast. A research project to resolve this knowledge gap was undertaken prior to the next scheduled DEPM (2024-25).
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. There were no discernible trends in the CPUE data.
RAG Comments	***SPFRAG recommended adopting the revised SPF Harvest Strategy Tier 1 exploitation rate of 20% (previously 15%).** The 2019-20 (Sep) biomass estimate of 80,000 tonnes be used for the RBC based on the weight of evidence provided by the previous survey for blue mackerel east and that it was appropriate to apply the Tier 1 exploitation rate for the 2025-26 season.

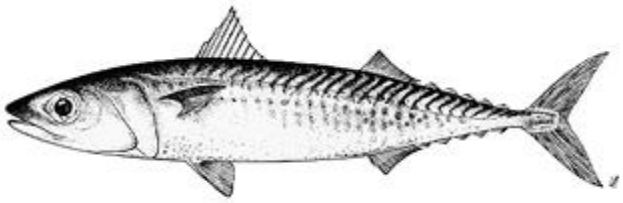
Recommendations

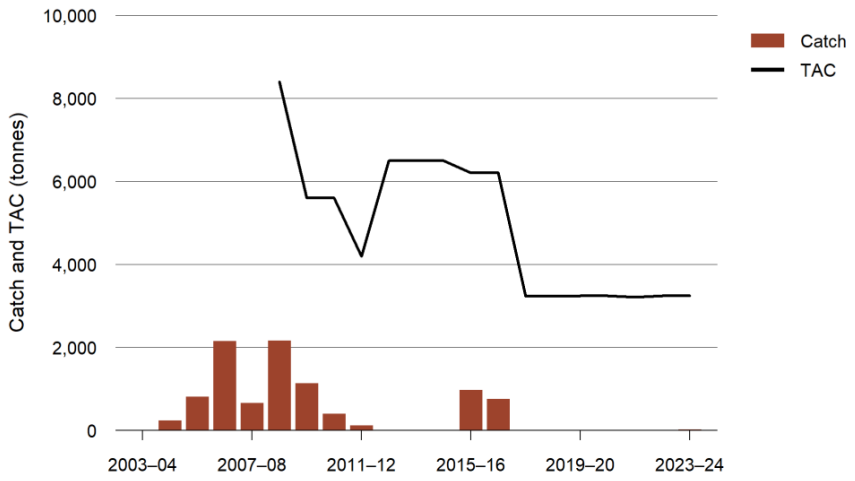
Recommended Biological Catch (RBC)	2025-26	5th Season at Tier 1 (2019-20 DEPM) 80,000 x 20% = **16,000 tonnes**
Additional Work - AFMA		
State Catch (t)	287	Four-year weighted average, rounded to nearest tonne (NSW, Tas and Vic data)
State Recreational Catch (t)	141	NSW data only (Average 2017/18 and 2019/20 Recreational surveys scaled as per Stewart, 2023)
Discards (t)	54	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC.
Other Commonwealth Fishery Catch (t)	4	Three-year average (CTS only)
Research Catch Allowance (t)	0	Reported catch <0.1 t for 2024
Provisional TAC		15,510 tonnes (rounded to the nearest 10 tonnes)
RAG Recommendations		
Commercial fishers' interests		No specific commercial fisher interests have been identified.
Species specific management (target, companion and bycatch)		There are no identified implications for target, companion or bycatch species.
RAG advice and any dissenting views		**2025-26 TAC recommendation** **Revised Tier 1 exploitation rate of 20 % used for calculation.* 16 000 t RBC
MAC Advice		
The MAC supports the RAGs recommendation of a TAC of 15,510 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.		
AFMA Advice		
AFMA Management recommends a TAC of 15,510 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.		

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
11,530	15,510	10	2	+3,980

Blue mackerel west

Scomber australasicus



Species Summary			
Common Names	Pacific mackerel, common mackerel, English mackerel, school mackerel, spotted chub mackerel, spotted mackerel, chub mackerel, Japanese mackerel, southern mackerel, slimy mackerel, slimies		
Stock assessment	A DEPM Survey was conducted in 2005-06 (Feb Mar), the result of which were first considered for the 2006-07 SPF fishing season.		
Exploitation Rate *2025 - 26 Tier Level	Tier 1 (5 seasons) 2024 HS 15% 2025 rec HS 20%	Tier 2 (5 seasons) 2024 HS 7.5% 2025 rec HS 10%	***Tier 3 (no time limit)** **2024 HS 3.75%** **2025 rec HS 5%**
Estimated biomass	**86,500 tonnes (2006 DEPM)** 56,228 tonnes (2005 DEPM)		
Stock Structure	The stock structure of blue mackerel is uncertain. Genetic analysis of samples from southern Queensland, Western Australia and New Zealand indicates population subdivisions. Genetic differences were detected between Western Australia and Queensland, and between Western Australia and New Zealand, but not between Queensland and New Zealand (Schmarr et al. 2012). No finer-scale analyses of blue mackerel have been undertaken to further define stock structure. Blue mackerel within the SPF is assessed and managed as separate stocks in the eastern and western subareas.		
Historical Catch data (Commonwealth fisheries)	Figure 3. Commonwealth Blue Mackerel West catch and TAC in the SPF, fishing seasons 2001-02 to 2023-24 (from Butler et al. 2024). 		

	Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
Catch and TAC (t) *** incomplete season**	2024-25*	3,240	3,564	n/a
	2023-24	3,240	3,564	25 / <1 t
	2022-23	3,240	3,564	n/a
	2021-22	3,210	3,534	n/a
	2020-21	3,210	3,534	n/a
Climate Sensitivity – Preliminary Projections to 2040	**Medium**. Preliminary projections indicate (with low-med confidence) a 15-20% decrease in abundance through to 2040.		Decrease in many areas, especially to the northern end of historical distribution, but increase around Tasmania (Fulton et al., 2021)	
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.			
ABARES Status	**Biomass: Not overfished**		**Fishing Mortality:** **Not subject to overfishing**	

Annual Fisheries Assessment Summary

Key model technical assumptions/ parameters	The most recent DEPM surveys for Blue mackerel (West) was in 2005. The 2005 Survey gave a biomass estimate of 56,228 tonnes. A survey was completed in 2006 off Western Australia (out of Esperance) where almost all samples had eggs and larvae. SPFRAG agreed the biomass to be greater than that of the 2005 survey and agreed to an estimate of 86,500 tonnes.
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. There was no data to review trends in the CPUE.
RAG Comments	***SPFRAG recommended adopting the revised SPF Harvest Strategy Tier 3 exploitation rate of 5% (previously 3.75%).** There was no new data for this stock presented with no catch reported for the current season and limited exploratory fishing undertaken in the western sub-area during the 2024-25 season. The annual assessment provided no basis to change previous advice for this stock.

	Recommended the 2005/06 (Feb-Mar) biomass estimate of 86,500 tonnes be used for the RBC based on the weight of evidence provided by the previous survey for blue mackerel west and that it was appropriate to apply the Tier 3 exploitation rate for the 2025-26 season.

Recommendations

Recommended Biological Catch (RBC)	2025-26	9th Season at Tier 3 86,500 x 5% = **4,325 tonnes**

Additional Work - AFMA

State Catch (t)	2	Four-year weighted average, rounded to nearest tonne (SA)
Recreational Catch (t)	< 1 t	WA and SA data (Most recent data available averaged over two years)
Discards (t)	< 1 t	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC.
Other Commonwealth Fishery Catch (t)	0	Three-year average
Research Catch Allowance (t)	0	Reported catch < 0.1 t for 2024
Provisional TAC		4,320 tonnes (rounded to the nearest 10 tonnes)

RAG Recommendations

Commercial fishers' interests	No specific commercial fisher interests have been identified.
Species specific management (target, companion and bycatch)	There are no identified implications for target, companion or bycatch species.
RAG advice and any dissenting views	**2025-26 TAC recommendation** **Revised Tier 3 exploitation rate of 5% used for calculation.* 4,325 t RBC

MAC Advice

The MAC supports the RAGs recommendation of a TAC of 4,320 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

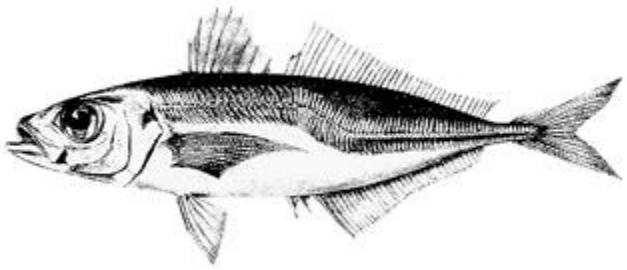
AFMA Advice

AFMA Management recommends a TAC of 4,320 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
3,240	4,320	10	2	+1,080

Jack mackerel east

Trachurus declivis



Species Summary			
Common Names	Cowanyoung, greenback horse mackerel, scaly mackerel, scad, common jack mackerel.		
Stock assessment	A DEPM survey was conducted in 2018-19, the result of which were first used for the 2020-21 fishing season. A DEPM Survey was conducted in 2023-24 but did not provide a robust estimate of biomass that could be used for management advice. The biomass estimate from the 2018-19 survey is used as the basis for management advice for the 2025-26 SPF fishing season.		
Exploitation Rate *** 2025-26 Tier Level**	Tier 1 (5 Seasons) 2024 HS 12% 2025 rec HS 14%	***Tier 2 (10 seasons)** **2024 HS 6%** **2025 rec HS 7%**	Tier 3 (no limit) 2024 HS 3% 2025 rec HS 3.5%
Estimated biomass	**156,292 tonnes (2019 biomass estimate)** 157,800 tonnes (2014 biomass estimate)		
Stock Structure	The stock structure of jack mackerel is unclear. Richardson (1982) found evidence of population subdivision between Western Australia, including the Great Australia Bight, and eastern Australia. Richardson (1982) also found evidence of a Wahlund effect (where multiple populations are detected in a single sample) in east coast samples, suggesting some additional structuring. Similarly, Smolenski, Ovenden & White (1994) found evidence of structuring between New South Wales and south-eastern Tasmania, although the differences appeared not to be temporally consistent. A DEPM survey of western jack mackerel appeared to show some stock separation around the Bonney Coast west of Bass Strait (AFMA 2017d). Recent evidence from DEPM surveys showing that jack mackerel spawns throughout Bass Strait suggest that further investigation of stock structure is warranted. Currently, jack mackerel in the SPF is assessed and managed as separate stocks in the eastern and western subarea.		

Historical Catch data (Commonwealth fisheries)

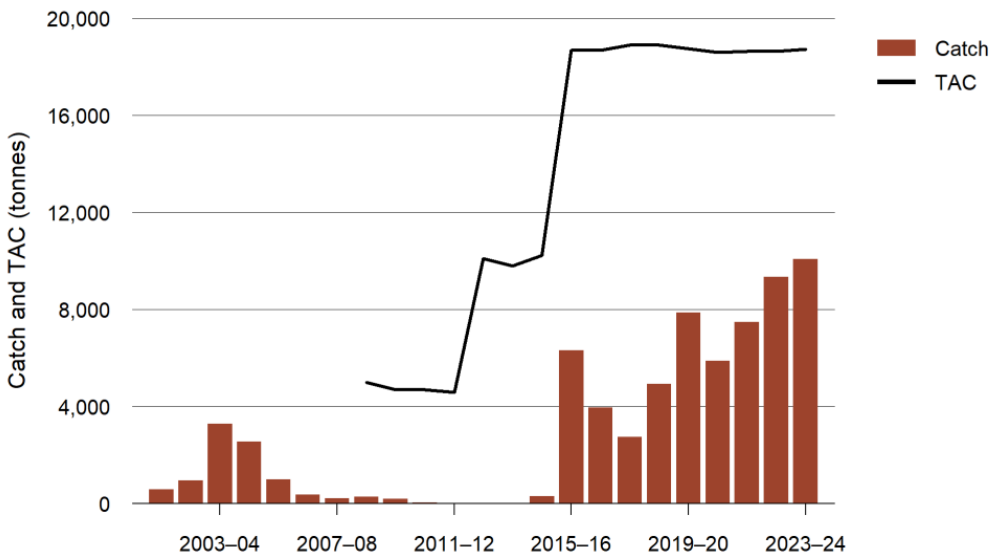


Figure 4. Commonwealth Jack Mackerel East catch and TAC in the SPF, fishing seasons 2001-02 to 2023-24 (from Butler et al. 2024).

Catch and TAC (t)

*** incomplete season**

Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
2024-25*	18,650	20,515	10,472 /(56%)
2023-24	18,720	20,603	10,083 / (53%)
2022-23	18,620	20,482	9,289 / (45%)
2021-22	18,630	20,493	7,452 / (36%)
2020-21	18,580	20,453	5,706 / (28%)

Climate Sensitivity – Preliminary Projections to 2040	**Neutral.** Preliminary projections indicate (with low-med confidence) abundance will remain steady through to 2040.	Trajectory depends on trophic interactions and tuna biomass (Fulton et al., 2021).
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.	
ABARES Status	**Biomass: Not overfished**	**Fishing Mortality: Not subject to overfishing**

Annual Fisheries Assessment Summary

Key model technical assumptions/ parameters	The 2018-19 DEPM and associated adult sampling provided robust estimates of key parameters for this stock.
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. There were no discernible trends in the CPUE data.
RAG Comments **(DRAFT)**	***SPFRAG recommended adopting the revised maximum exploitation rate of 14% for this stock resulting in a Tier 2 exploitation rate of 7% for the 2025-26 season.** A DEPM was conducted for this species in 2024, however it did not provide a robust biomass estimate that could be used for management advice. Recommended the 2018-19 (Jan) biomass estimate of 156,292 tonnes be used as the basis for RBC advice and that it was appropriate to apply the Tier 2 exploitation rate for the 2025-26 season.

Recommendations

Recommended Biological Catch (RBC)	2025-26	1st season at Tier 2 156,292 x 7% = **10,940 tonnes**

Additional Work - AFMA

State Catch (t)	9	Four-year weighted average, rounded to nearest tonne (NSW, Tas and Vic)
State Recreational Catch	5	Tasmania data only (A/Prof. Tim Ward as per Survey of Recreational Fishing in Tasmania, Lyle et al., 2014; 2019)
Discards (t)	39	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC.
Other Commonwealth Fishery Catch (t)	19	Three-year average (CTS, GAB and GHAT)
Research Catch Allowance (t)	<1	Reported for 2024
Provisional TAC		10,870 tonnes (rounded to the nearest 10 tonnes)

RAG Recommendations

Commercial fishers' interests	Jack mackerel east has been in Tier 1 since the current trawl operation started around 2017 and catch has increased each year with the highest catch of 10,083 tonnes, 53% of the TAC, being caught in 2023-24. The 2024 DEPM result did not provide a robust estimate of biomass that could be used for management advice which does have implications for the commercial sector as an updated biomass estimate is required to maintain the stock at the maximum exploitation rate. At the time of the SPFRAG meeting in December 2024, the current trawl operator and SPFIA expressed an interest in undertaking another DEPM for this stock as soon as possible to support the continued expansion of the fishery. Since that time, industry has changed its position, confirming that they no longer wish to undertake a DEPM for this stock (or redbait east that was scheduled for 2025-26) at this time.
Species specific management (target, companion and bycatch)	There are no identified implications for target, companion or bycatch species.
RAG advice and any dissenting views **(DRAFT)**	**2025-26 TAC recommendation** ***Revised Tier 2 exploitation rate of 7% used in the calculation** **10,940 t RBC** The RAG recommended that Jack mackerel east drop to Tier 2 of the harvest strategy, with the provision to amend undercatch from 10% to 20% to partially offset the decrease in RBC in the 2025-26 season, noting that catches up to 13 000 tonnes would be sustainable. Note that to allow for more catch to be landed in the 2025-26 fishing season under the provision of undercatch, it is the 2024-25 undercatch determination that would need to be amended, requiring an out of session decision by the Commission prior to the start of the 2025-26 season and outside of the current TAC setting process. The undercatch/overcatch provisions recommended below are for the 2025 –26 season and allow for the catch to be taken in the 2026-27 season.

MAC Advice

SEMAC noted SPFRAG advice and that a DEPM survey was undertaken for this stock in 2024 but that the biomass estimate was not robust enough to use for management advice due to the survey missing the peak spawning period. In the absence of an updated biomass estimate, the SPF Harvest Strategy requires the stock drop to Tier 2 for the 2025-26 season that results in a TAC of 10,870 t.

In light of the unusual survey outcome, SEMAC recommended a **transitional TAC of 13 000 t for the 2025-26 fishing season only**, after which it would drop to Tier 2, on the basis that:

- catch in the fishery has continued to grow each year, including the 2024-25 season (catch to date for the current season is around 10,000 t with three months remaining), assuming this trajectory was intended to continue, a TAC of 10,870 could be constraining,
- The purpose of the interim TAC is to alleviate cost pressure on Industry and allow time to transition towards not operating year-round and target blue mackerel east.
- SPFRAG indicated that catches of up to 13,000 t would be sustainable, with AFMA to work out the most appropriate mechanism to allow for the additional catch.

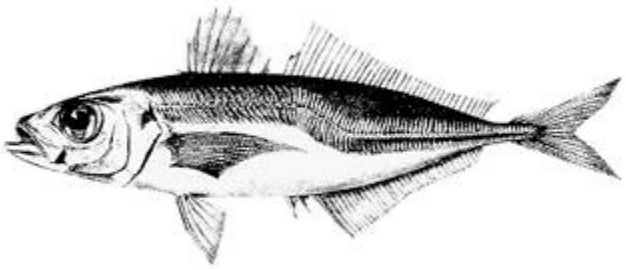
AFMA Advice

AFMA Management recommends a transitional TAC of 13,000 t for the 2025-26 year, after which it will revert to the TAC based on Tier 2 of the Harvest Strategy, with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
18,650	13,000	10	2	-5,650

Jack mackerel west

Trachurus declivis



Species Summary			
Common Names	Cowanyoung, greenback horse mackerel, scaly mackerel, scad, common jack mackerel.		
Stock assessment	A DEPM Survey was conducted in 2016-17 (Dec-Feb) and 2024, the result the most recent survey and the adult parameters obtained in 2014 were considered for the 2025-26 SPF fishing season.		
Exploitation Rate * 2025-26 Tier Level	***Tier 1 (5 seasons)** **2024 HS 12%** **2025 Rec HS 14%**	Tier 2 (10 seasons) 2024 HS 6% 2025 Rec HS 7%	Tier 3 (no limit) 2024 HS 3% 2025 Rec HS 3.5%
Estimated biomass	60,661 tonnes (2024 survey) 34,978 tonnes (2017 DEPM Survey)		
Stock Structure	The stock structure of jack mackerel is unclear. Richardson (1982) found evidence of population subdivision between Western Australia, including the Great Australia Bight, and eastern Australia. However, DEPM surveys suggest that jack mackerel spawns throughout Bass Strait and that separation of eastern and western stocks may occur around the Bonney Coast (AFMA 2017c). Richardson (1982) also found evidence of a Wahlund effect (where multiple populations are detected in a single sample) in east coast samples, suggesting some additional structuring. Smolenski, Ovenden & White (1994) also found evidence of structuring between New South Wales and south-eastern Tasmania, although the differences were not temporally consistent. These studies suggest that further investigation of stock structure in jack mackerel is warranted. Currently, jack mackerel in the SPF is assessed and managed as separate stocks in the eastern and western subareas.		

Historical Catch data (Commonwealth fisheries)

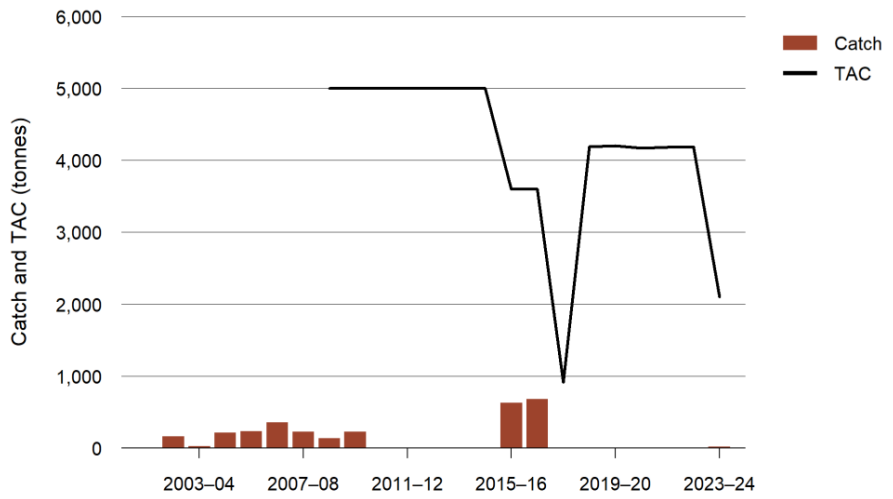


Figure 5. Commonwealth Jack Mackerel West catch and TAC in the SPF, fishing seasons 2003-04 to 2023-24 (from Butler et al. 2024).

Catch and TAC (t)

*** incomplete season**

Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
2024-25	2,100	2,310	0 / (0%)
2023-24	2,100	2,310	19 / (<1%)
2022-23	4,190	4,609	0 / (0%)
2021-22	4,180	4,598	0 / (0%)
2020-21	4,170	4,590	0 / (0%)

Climate Sensitivity – Preliminary Projections to 2040	**Neutral.** Preliminary projections indicate (with low-med confidence) abundance will remain steady through to 2040.	Trajectory depends on trophic interactions and tuna biomass (Fulton et al., 2021).
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.	
ABARES Status	**Biomass: Not overfished**	**Fishing Mortality: Not subject to overfishing**

Annual Fisheries Assessment Summary

Key model technical assumptions/ parameters	A limited number of adult samples were collected during the 2017 and 2024 jack mackerel west DEPM survey, hence adult parameters obtained from the 2014 eastern jack mackerel survey were used as input into the biomass calculation for the western stock. Both the 2024 DEPM survey only

	covered the very eastern portion of the western stock and for this reason the estimate is considered conservative.
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. There was no data to review trends in the CPUE.
RAG Comments	***SPFRAG Recommended adopting the revised SPF Harvest Strategy Tier 1 exploitation rate of 14% (previously 12%).** The RAG considered the 2024 survey for the western stock was appropriately captured and the new biomass estimate (60,661 tonnes) was considered conservative; and should be used as the basis for the RBC returning Jack mackerel West to the Tier 1 exploitation rate for the 2025-26 season.

Recommendations

Recommended Biological Catch (RBC)	2025-26	1st Season at Tier 1 60,661 x 14% = 8,493 tonnes

Additional Work - AFMA

State Catch (t)	1	Four-year weighted average, rounded to nearest tonne (SA and WA minimal data available)
Recreational Catch (t)	0	No recreational catch available
Discards (t)	0	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC.
Other Commonwealth Fishery Catch (t)	0	Three-year average
Research Catch Allowance (t)	0	Reported catch <0.1 t for 2024
Provisional TAC		8,490 tonnes (rounded to the nearest 10 tonnes)

RAG Recommendations

Commercial fishers' interests	No specific commercial fisher interests have been identified.
Species specific management (target, companion and bycatch)	There are no identified implications for target, companion or bycatch species.

RAG advice and any dissenting views	**2025-26 TAC recommendation** **Revised Tier 1 exploitation rate of 14% used in the calculation* 8,490 t RBC

MAC Advice

The MAC supports the RAGs recommendation of a TAC of 8,490 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

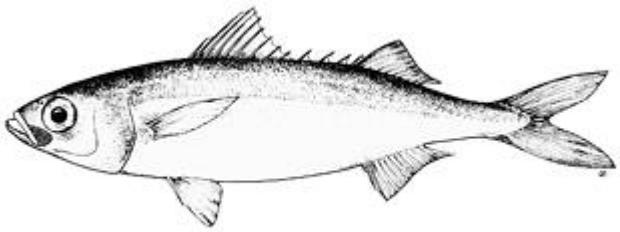
AFMA Advice

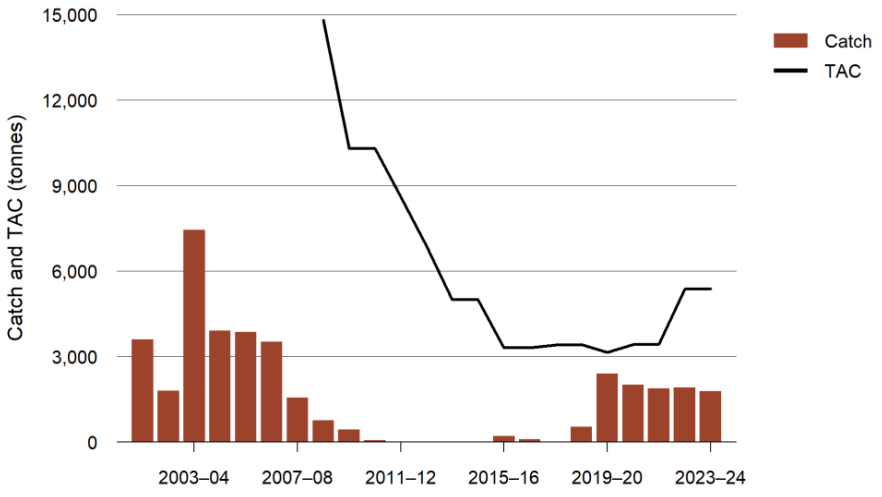
AFMA Management recommends a TAC of 8,490 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
2,100	8,490	10	2	+6,390

Redbait east

Emmelichthys nitidus



Species Summary			
Common Names	Pearl fish, picarel, red baitfish, red herring, southern rover, cape bonnetmouth		
Stock assessment	A DEPM Survey was conducted in 2020-21 (Oct), the result of which were first considered for the 2022-23 SPF fishing season. Tier 1 – 3rd season.		
Exploitation Rate * 2025-26 Tier Level	***Tier 1 (5 Seasons)** **2024 HS 10%** **2025 Rec HS 12%**	Tier 2 (10 Seasons) 2024 HS 5% 2025 Rec HS 6%	Tier 3 (no limit) 2024 HS 2.5% 2025 Rec HS 3%
Estimated biomass	**54,000 tonnes (2020-21 DEPM survey)** 68,886 tonnes (2005 DEPM survey)		
Stock Structure	The stock structure of redbait in Australia has not been studied. Recent DEPM surveys that suggest redbait spawns continuously around southern Tasmania indicate that the stock structure of this species needs to be investigated. Redbait within the SPF is assessed and managed as separate stocks in the eastern and western subareas		
Historical Catch data (Commonwealth fisheries)	 Figure 6. Commonwealth Redbait East catch and TAC in the SPF, fishing seasons 2003-04 to 2023-24 (from Butler et al. 2024).		

	Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
Catch and TAC (t) * incomplete season	2024-25*	5,390	5,929	1,768 / (32%)
	2023-24	5,380	5,918	1,788 / (33%)
	2022-23	5,370	5,907	1,948 / (33%)
	2021-22	3,440	3,784	1968 / (52%)
	2020-21	3,420	3,735	1992 / (53%)
Climate Sensitivity – Preliminary Projections to 2040	**Medium.** Preliminary projections indicate (with low-med confidence) a 30% decrease in abundance through to 2040.		Strongest declines expected in the central Great Australian Bight (Fulton et al., 2021).	
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.			
ABARES Status	**Biomass: Not overfished**		**Fishing Mortality:** **Not subject to overfishing**	

Annual Fisheries Assessment Summary

Key model technical assumptions/ parameters	The most recent DEPM survey results for the redbait east stock is from 2020 (RBC 54,000 tonnes) The previous DEPM survey results are from 2005 and 2006. The DEPM surveys gave biomass estimates of 86,990 tonnes (2005) and 50,782 tonnes (2006). The biomass estimate for this stock was the average biomass estimate from the 2005 and 2006 DEPM surveys (68,886 tonnes).
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. No discernible trend in weekly CPUE data.
RAG Comments	***SPFRAG Recommended adopting the revised SPF Harvest Strategy Tier 1 exploitation rate of 12% (previously 10%).** The annual assessment provided no basis to change previous advice for this stock. Recommended the 2020-21 (Oct) biomass estimate of 54,000 tonnes be used for the RBC based on the weight of evidence provided by the previous survey for Redbait east and that it was appropriate to apply the Tier 1 exploitation rate for the 2025-26 season.

Recommendations

Recommended Biological Catch (RBC)	2025-26	3rd Season at Tier 1 54,000 x 12% = **6,480 tonnes**

Additional Work - AFMA

State Catch (t)	1	Tas data only for 2020-21 and 2021-22 averaged
Recreational Catch (t)	0	No recreation catch available
Discards (t)	10	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC.
Other Commonwealth Fishery Catch (t)	3	Three-year average (CTS)
Research Catch Allowance (t)	< 1	Reported catch <0.1 t for 2024
Provisional TAC		6,470 tonnes (rounded to the nearest 10 tonnes)

RAG Recommendations

Commercial fishers' interests	No specific commercial fisher interests have been identified.
Species specific management (target, companion and bycatch)	There are no identified implications for target, companion or bycatch species.
RAG advice and any dissenting views	**2025-26 TAC recommendation** **Revised Tier 1 exploitation rate of 12% used in the calculation* 6,470 t RBC Recommendation accepted by the RAG.

MAC Advice

The MAC supports the RAGs recommendation of a TAC of 6,470 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

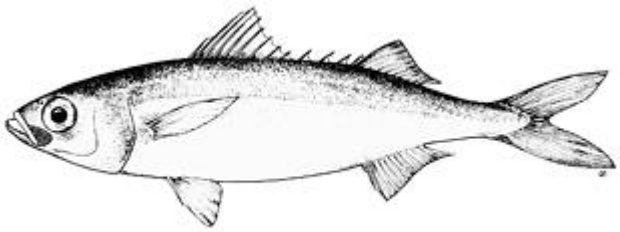
AFMA Advice

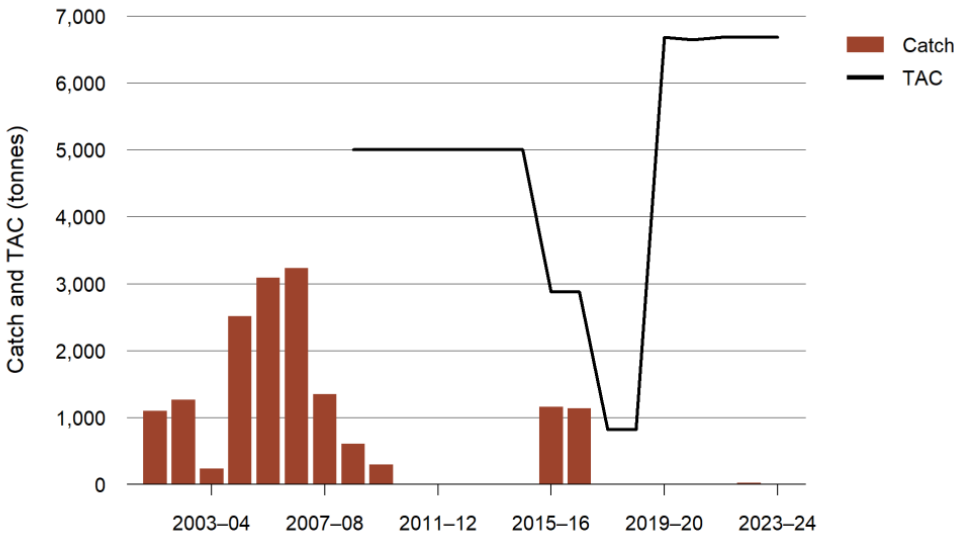
AFMA Management recommends a TAC of 6,470 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
5,390	6,470	10	2	+1,080

Redbait west

Emmelichthys nitidus



Species Summary			
Common Names	Pearl fish, picarel, red baitfish, red herring, southern rover, Cape bonnetmouth		
Stock assessment	A DEPM Survey was conducted in 2017-18 (Oct), the result of which were first considered for the 2019-20 SPF fishing season. Tier 2 – 2nd season.		
Exploitation Rate * 2025-26 Tier Level	Tier 1 (5 Seasons) 2024 HS 10% 2025 Rec HS 12%	***Tier 2 (10 seasons)** **2024 HS 5%** **2025 Rec HS 6%**	Tier 3 (No limit) 2024 HS 2.5% 2025 HS 3%
Estimated biomass	**66,787 tonnes (2017-18 DEPM Survey)**		
Stock Structure	The stock structure of redbait in Australia has not been studied. Recent DEPM surveys that suggest redbait spawns continuously around southern Tasmania indicate that the stock structure of this species needs to be investigated. Redbait within the SPF is assessed and managed as separate stocks in the eastern and western subareas.		
Historical Catch data (Commonwealth fisheries)	 Figure 6. Commonwealth Redbait West catch and TAC in the SPF, fishing seasons 2003-04 to 2023-24 (from Butler et al. 2024).		

	Year	Agreed TAC (t)	TAC after unders/overs (t)	Catch(t) / % TAC Caught
Catch and TAC (t) * incomplete season	2024-25*	3,340	3,674	n/a
	2023-24	6,680	7,348	10 / (>1%)
	2022-23	6,680	7,348	n/a
	2021-22	6,680	7,348	n/a
	2020-21	6,640	7,308	n/a

Climate Sensitivity – Preliminary Projections to 2040	**Medium.** Preliminary projections indicate (with low-med confidence) a 30% decrease in abundance through to 2040.	Strongest declines expected in the central Great Australian Bight (Fulton et al., 2021).
Climate Change	Further information on climate sensitivity analyses and biomass trajectories, are reported in Summary of Commonwealth Fishery Climate Sensitivity (Appendix to 'Fulton, E.A. et al (2021) Guidance on Adaptation of Commonwealth Fisheries management to climate change. CSIRO Report for FRDC. Hobart.'), as well as the Atlantis ecosystem modelling of the effect of climate on key fishery species.	
ABARES Status	**Biomass: Not overfished**	**Fishing Mortality: Not subject to overfishing**

Annual Fisheries Assessment Summary

Key model technical assumptions/ parameters	The most plausible model biomass estimate ranged between 51,765 tonnes and 102,867 tonnes. With no solid reason to reject either estimate and for consistency with the approach taken with other stocks, the median biomass estimate of 66,787 tonnes was used as the basis for the Scientific Panel's (now replaced by SPFRAG) recommended biological catch level.
Weekly CPUE Trends	The weekly CPUE is monitored for evidence of localised depletion. If a general decrease in CPUE occurs after consistent effort within a given grid cell, this may be evidence of localised depletion occurring. However, there are a number of factors, not just fishing effort, which can also influence CPUE. SPFRAG review this information annually. There was no data to review trends in the CPUE.
RAG Comments	***SPFRAG Recommended adopting the revised SPF Harvest Strategy Tier 2 exploitation rate of 6% (previously 5%).** There was no new data for this stock presented given there had been limited fishing in the SPF season in the western sub-area in recent years. The annual assessment provided advice that Redbait west will remain in Tier 2 for the 2025-26 season, as no new surveys have been completed since 2018. Recommended the 2017-18 (Oct) biomass estimate of 66,787 tonnes be used for the RBC, based on the weight of evidence provided by the previous survey for Redbait east and that it was appropriate to apply the Tier 2 exploitation rate for the 2025-26 season.

Recommendations		
Recommended Biological Catch (RBC)	2025-26	2nd season at Tier 2 66,787 x 6% = **4,007 tonnes**
Additional Work - AFMA		
State Catch (t)	0	Four-year weighted average, rounded to nearest tonne
State Recreational Catch (t)	0	No data available
Discards (t)	0	Rate based on previous three years, by method and applied to the RBC to get tonnage. If one method is not expected to fish in upcoming year, the discard amount attributed to that method does not get deducted from the RBC (<1.0)
Other Commonwealth Fishery Catch (t)	0	Three-year average
Research Catch Allowance (t)	0	Reported catch < 0.1 t for 2024
Provisional TAC		4,010 tonnes (rounded to the nearest 10 tonnes)

RAG Recommendations	
Commercial fishers' interests	No specific commercial fisher interests have been identified.
Species specific management (target, companion and bycatch)	There are no identified implications for target, companion or bycatch species.
RAG advice and any dissenting views	**2025-26 TAC recommendation** **Revised Tier 2 exploitation rate of 6% used in the calculation* 4,007 RBC Recommendation accepted by the RAG.

MAC Advice
The MAC supports the RAGs recommendation of a TAC of 4,010 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

AFMA Advice

AFMA Management recommends a TAC of 4,010 tonnes for the 2025-26 fishing year with undercatch and overcatch provisions set at 10 per cent, and a determined amount of 2 t.

2024-25 agreed TAC (t)	2025-26 recommended TAC (t)	Overcatch & Undercatch (%)	Determined amount (t)	Change in TAC (t)
3,340	4,010	10	2	+670

References

AFMA. (2017). Small Pelagic Fishery Scientific Panel meeting 8, minutes, 16 and 17 November 2017. *Australian Fisheries Management Authority, Canberra*.

Anthony D.M. Smith, T.M. Ward, F. Hurtado, N. Klaer, E. Fulton, A.E. Punt . (2015). Review and update of harvest strategy settings for the Commonwealth Small Pelagic Fishery. *FRDC Project No 2013/028*.

Butler, I, Patterson, H, Bromhead, D, Galeano, D, Timmiss, T, Woodhams, J and Curtotti, R 2024, Fishery status reports 2024, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, DOI: https://doi.org/10.25814/bfnc-9160. CC BY 4.0.

Dixon, P. W. (1993). Stock identification and discrimination of pilchards in Australian waters, using genetic criteria. *Centre for Marine Studies, University of New South Wales, Sydney*.

Fulton, E.A. et al (2021) Appendix to Guidance on Adaptation of Commonwealth Fisheries management to climate change. *CSIRO Report for FRDC*. *Hobart*

Izzo C, Ward T, Ivey A, Suthers I, Stewart J, Sexton S, Gillanders B. (2017). Integrated approach to determining stock structure: implications for fisheries management of sardine, Sardinops sagax, in Australian waters. *Reviews in Fish Biology and Fisheries volume*.

Izzo, C, Gillanders, BM & Ward, TM . (2012). Movement patterns and stock structure of Australian sardine (Sardinops sagax) off South Australia and the east coast: implications for future stock assessment and management, final report, FRDC project 2009/021, SARDI publication F2011/000487-1. *South Australian Research and Development Institute Aquatic Sciences, Adelaide*.

Lyle, J.M, Stark, K.E. and Tracey, S.R (2014). 2012-13 Survey of Recreational Fishing in Tasmania. *Institute for Marine and Antarctic Studies Report, University of Tasmania, Hobart, Tas., Australia*

Lyle, J. M., Stark, K. E., Ewing, G. P., & Tracey, S. R. (2019). 2017-18 Survey of recreational fishing in Tasmania. *Institute for Marine and Antarctic Studies Report, University of Tasmania, Hobart, Tas., Australia*

Noreiga, R, Davis, K & Dylewski. (2022). Small Pelagic Fishery in Patterson, H, Bromhead, D, Galeano, D, Larcombe, J, Timmiss, T, Woodhams, J and Curtotti (eds), Fishery status reports 2022. *Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra*, 70-85.

Richardson, B. (1982). Geographical distribution of electrophoretically detected protein variation in Australian commercial fishes. I. Jack mackerel (Trachurus declivis [Jenyns]). *Australian Journal of Marine and Freshwater Research, vol. 33*, 917-926.

Schmarr, D. W. (2012). Discriminating stocks of blue mackerel using a holistic approach: a pilot study', in JR McKenzie, B Parsons, AC Seitz, R Keller Kopf, M Mesa & Q Phelps (eds), . *Advances in fish tagging and marking technology, American Fisheries Society Symposium 76*, 397-417.

Smolenski, A, Ovenden, J & White, R. (1994). Preliminary investigation of mitochondrial DNA variation in jack mackerel (Trachurus declivis, Carangidae) from south-eastern Australian waters. *Australian Journal of Marine and Freshwater Research, vol. 45*, 495-505.

Stewart, J. 2023. NSW Stock Status Summary 2022/23 – Blue Mackerel (Scomber australasicus). NSW Department of Primary Industries, Fisheries. 12 pp

Yardin, MR, Dixon, PI, Coyle, T, Syahailatua, A & Avramidis, M. (1998). Stock discrimination of Sardinops sagax in south-eastern Australia', in TM Ward, M Kinloch, GK Jones & FJ Neira (eds), A collaborative investigation of the usage and stock assessment of baitfish 76 in southern and eastern Australia with special . *Fisheries Research and Development Corporation, Canberra*, 85-174.