TTRAG Advice for the Eastern Tuna and Billfish Fishery (ETBF) for the 2026 Fishing Season

September 2025

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General Summary

TTRAG TACC Recommendations – TTRAG 45, September 2025

In line with the ETBF multi-season TACC setting procedure and previous advice from TTRAG and TTMAC, the AFMA Commission (at their meeting in November 2024) determined TACCs for albacore tuna, bigeye tuna and yellowfin tuna in the ETBF for three fishing seasons (2025, 2026 and 2027). The TACC, overcatch and undercatch for these species are currently determined as:

Quota species	Total Allowable Commercial Catch (tonnes)		Overcatch % (and determined weight)	Undercatch %
Albacore Tuna, 2025, 2026 and 2027	2,500	Whole weight	10% (2 tonnes)	10%
Bigeye Tuna, 2025, 2026 and 2027	1,056	Whole weight	10% (2 tonnes)	10%
Yellowfin Tuna, 2025	*2,400*	*Whole weight*	*10% (2 tonnes)*	*10%*

The RAG confirmed that, in line with section 2.4 of the ETBF multi-season TACC setting procedure, there is no indication that something has changed significantly in the fishery and the fishery data that may warrant alternate TACC advice for albacore tuna and bigeye tuna in the ETBF.

The RAG discussed the increased catch and discards of yellowfin tuna in 2024 as a result of greater availability of yellowfin (a pulse event); and supported the proposed 20% increase to the TACC for yellowfin tuna for the 2026 and 2027 ETBF fishing seasons to support flexibility in how quota is used and increase the retention and utilisation of catch to improve economic productivity in the fishery. The RAG confirmed there were no sustainability concerns or WCPFC compliance concerns if increasing the yellowfin tuna TACC.

Quota species	Total Allowable Commercial Catch (tonnes)		Overcatch % (and determined weight)	Undercatch %
Yellowfin Tuna, 2026 and 2027	2,880	Whole weight	10% (2 tonnes)	10%

For striped marlin, having regard for the SC21 advice that catches of striped marlin should not increase above recent average levels, the RAG confirmed that there was no additional advice and no indications that a TACC of 351 t would not be appropriate for the 2026 ETBF fishing season.

Quota species	Total Allowable Commercial Catch (tonnes)		Overcatch % (and determined weight)	Undercatch %
Striped Marlin, 2026	351	Whole weight	10% (2 tonnes)	10%

For broadbill swordfish, TTRAG advice for the 2026 ETBF fishing season is based on the application of the modified swordfish harvest strategy. The RAG recommended a 1,047 t TACC for broadbill swordfish (no change) for the 2026 ETBF fishing season.

Quota species	Total Allowable Commercial Catch (tonnes)		Overcatch % (and determined weight)	Undercatch %
Broadbill Swordfish, 2026	1,047	Whole weight	10% (2 tonnes)	10%

The RAG noted that, following the updated stock assessment, the stock status of broadbill swordfish in the WCPFC has not changed in terms of the stock being not overfished and unlikely to be subject to overfishing.

The RAG noted that, following the updated stock assessment, the stock status of striped marlin in the WCPFC has changed from potentially overfished to not overfished when assessed against the limit reference point of $D/D_{0.2F=0}$; and to overfished when assessed against the D/D_{MSY} reference point. The stock status of striped marlin has also changed, with respect to fishing mortality, from potentially subject to overfishing to not subject to overfishing.

In providing this advice, the RAG consider:

- Annual fishery indicators, as agreed
- Economic conditions index report
- Climate change and ecosystem status report
- WCPFC advice from the meeting of the Scientific Committee (SC21) in August 2025
- Updated stock assessments for broadbill swordfish and striped marlin

Fishery Updates – Industry Statement

The tuna longline sector is continuing its recovery from the economic impacts of COVID-19 while also contending with ongoing uncertainty in the broader economic environment. Operational costs remain a significant pressure point across the industry. International freight costs and service availability continue to present challenges, particularly for export-reliant operators. Domestic operating conditions have intensified due to a combination of high input costs and structural constraints. Key cost drivers include elevated fuel prices, rising bait costs, a shortage of skilled labour and crew, and substantially higher labour expenses both at sea and in supporting service industries such as vessel maintenance. These pressures are being compounded by adverse weather events on the east coast and restricted access to certain markets.

Within the Eastern Tuna and Billfish Fishery (ETBF), conditions are further constrained by the recent yellowfin tuna pulse fishing event. The lack of flexibility in quota arrangements has limited operators' ability to respond effectively to these biological and market conditions.

These domestic and sector-specific challenges are occurring against a backdrop of oversupplied international and domestic markets. The oversupply has been driven in part by increased Southern Bluefin Tuna longline catches, together with the availability of imported, carbon monoxide-treated tuna. The combined effect has been to further depress prices and reduce the resilience of the ETBF sector.

Stock status overview

The results of the most recent WCPFC stock assessments undertaken for each species are considered, noting that the year of the most recent assessment varies across species (i.e., 2024 for SPA/ALB, 2023 for YFT and BET, 2025 for SWO, and 2025 for MLS/STM). The results indicate, in the table below, based on the median values across the uncertainty grid adopted for each species, that for four of the five quota species (YFT, BET, ALB, SWO) the stock is not overfished (i.e. $SB_{recent}/SB_{F=0}>0.20$) nor is overfishing occurring (i.e. $F_{recent}/F_{MSY}<1.0$), as measured against the Commonwealth Harvest Strategy Policy reference points. For STM, the 2025 stock assessment uses MSY-based reference points for depletion in terms of individuals and, when measured against these reference points, is assessed as **overfished** (D_{recent}/D_{MSY} = 0.77) and **not subject to overfishing** (F_{recent}/F_{MSY}=0.77).

Species	Assessment Year	Depletion (biomass)	Depletion (population)		Fishing Mortality (F_{recent}/F_{MSY})
		($SB_{recent}/SB_{F=0}$)	$D_{0.2F=0}$	D_{recent}/D_{MSY}	
Albacore tuna	2024	0.48			0.18
Bigeye tuna	2023	0.35			0.59
Yellowfin tuna	2023	0.47			0.50
Broadbill swordfish	2025	0.50			0.28
Striped Marlin	2025		0.37	0.77	0.77

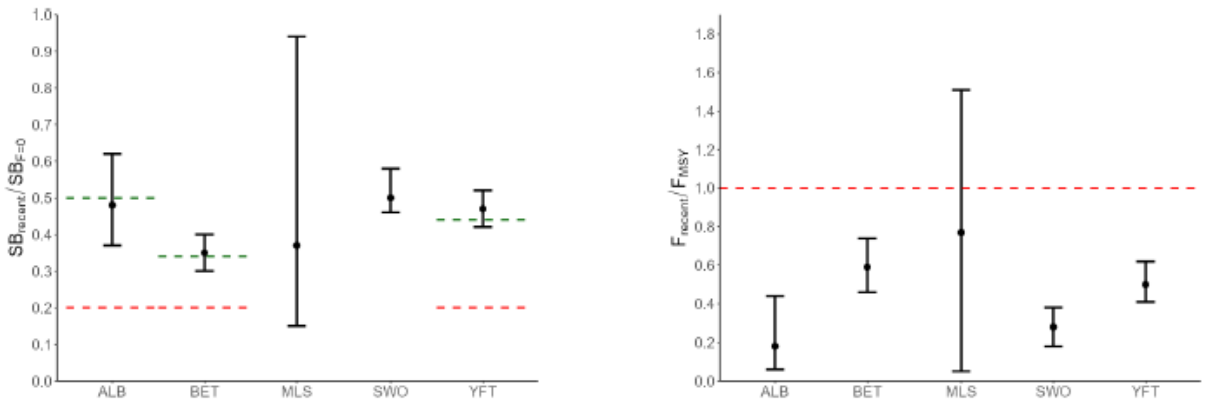


Figure 1: Median value (and 80% probability interval) of the time-dynamic spawning biomass depletion ($SB_{recent}/SB_{F=0}$) and fishing mortality ratio (F_{recent}/F_{MSY}) across the respective uncertainty grid used in the stock assessment for each of the principal tuna species (ALB = south Pacific albacore tuna, BET = Bigeye tuna, YFT = Yellowfin tuna) and swordfish (SWO) in the WCPO. For striped marlin (MLS), the probability interval is 95% and the y-axis is not spawning biomass depletion, but static depletion of total population numbers relative to the unfished total population numbers. For depletion, the dotted red line indicates the Limit Reference Point (LRP) adopted by the WCPFC for tunas while the dotted green line indicates the interim Target Reference Points for skipjack tuna, bigeye tuna and south Pacific albacore tuna, while for fishing mortality, the dotted red line is a generally accepted MSY-based LRP.

WCPFC Regions of Interest

TTRAG takes into consideration information about the ETBF catch relative to the catch of other fleets in regions adjacent to the ETBF. To do this, "Region 5" is used for the three tuna species, "Region 1" is used for the two billfish species, and a third "Australian-New Zealand" region is used for any species. A map of these regions is shown in Figure 2 and a description is as follows:

Region 5

Region 5 is based on two of the nine regions used in the stock assessment models for yellowfin tuna and bigeye tuna within the western central Pacific Ocean (WCPO). Regions 5 and 9, bounded by 10-40°S, and 140-170°E, extend eastwards from the east coast of Australia and comprise both the main area fished by the ETBF fleet and a large proportion of both the Coral and Tasman Seas. For the purpose of this advice these two regions combined will be known as Region 5. Also. In order to encompass all ETBF fishing operations, including those off eastern Tasmania, we extend the southern boundary to 50°S. Note, the regions used in the assessment for South Pacific albacore tuna do not align with those used for the two

tropical tunas, with region bounded by 0-50°S, and 140-150°W divided into three latitudinal zones with boundaries at 10°S and 25°S.

Region 1

Region 1 is one of the two regions used in stock assessments for broadbill swordfish in the south Pacific. This region, bounded by 0-50°S, and 140-165°E, extends eastwards from the east coast of Australia and comprises most of the area fished by the ETBF fleet in recent years. Note, at present no regional structure is used in the assessment for southwest Pacific striped marlin.

Australian-New Zealand Region

This region represents an extension of the eastern boundary of Region 5 to 175°W, encompassing much of the New Zealand exclusive economic zone and adjacent high seas. This region is mainly used to look at relative regional catches of broadbill swordfish and striped marlin in an extended area where there is uncertainty but some potential for stock connectivity with the ETBF. This region is distinct from, and smaller, than the SW-Pacific regions used in the assessments for the two billfish species.

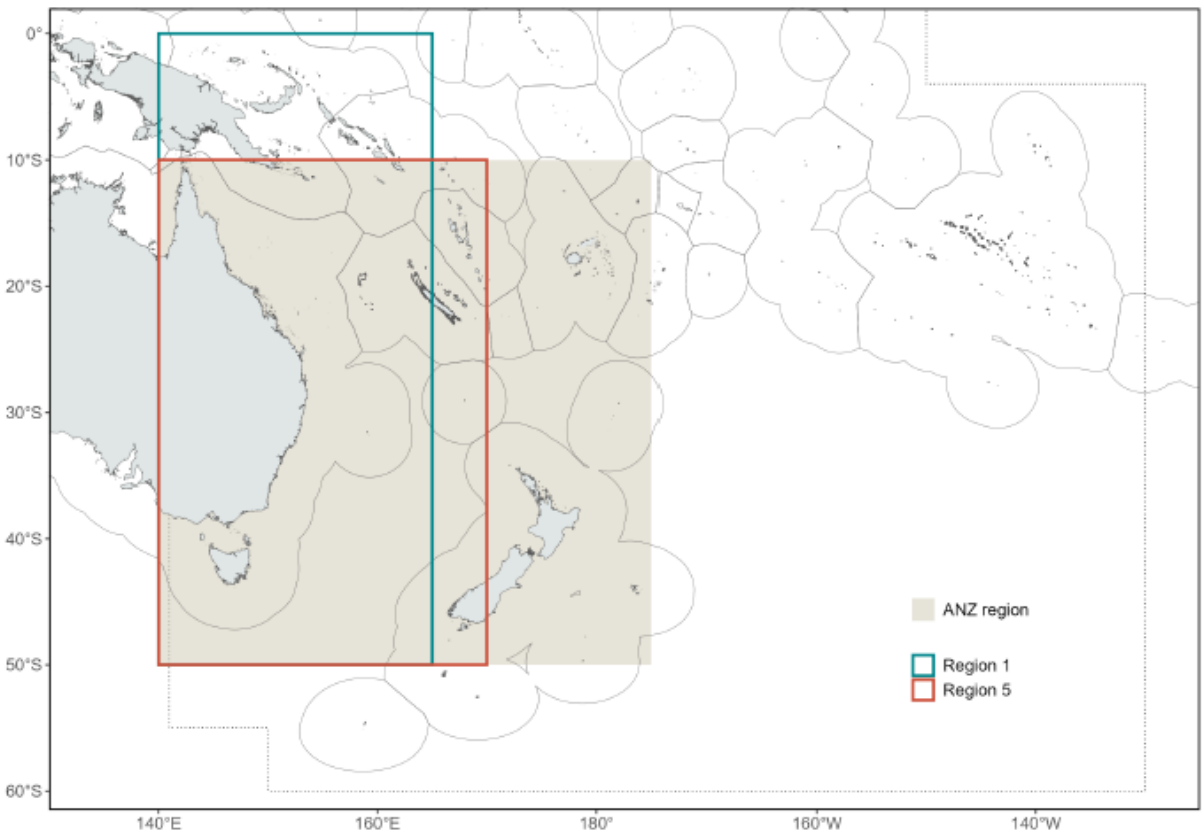


Figure 2: Map showing the boundaries of the three regions used in the analyses described in this paper. The boundaries associated with the exclusive economic zones for the nations within this region are also shown. Region 5 is used for the three tuna species, Region 1 is used for the two billfish species, while the ANZ region is used for all species. The dotted line indicates the boundary of the WCPFC Convention area.

Overview of ETBF catch

Catch data for 2024 for ETBF target species is shown in the table below. In 2024, catch and discards of yellowfin tuna and striped marlin were significantly greater than in 2023.

Species	Logbook reported catch		Logbook reported discards		CDR reported catch		
	Weight (t)	Numbers	Weight (t)	Numbers	Weight (t)	% of TACC	% of Adj. TACC
Albacore tuna	545	47,924	29	3,545	673	26.9	24.5
Bigeye tuna	275	6,849	17	899	300	28.4	25.9
Striped marlin	292	4,264	82	2,344	365	104.1	95.3
Swordfish	664	13,608	24	2,414	697	66.6	60.7
Yellowfin tuna	2,836	71,083	219	12,035	2,564	106.8	97.8

Overview of ETBF effort

Annual effort remained stable, in line with previous years. This is true for number of hooks, sets, and vessel days. There has been no pronounced change in spatial distribution of effort or catch composition in the last three years. Trends for all operational variables remained stable as compared to 2023.

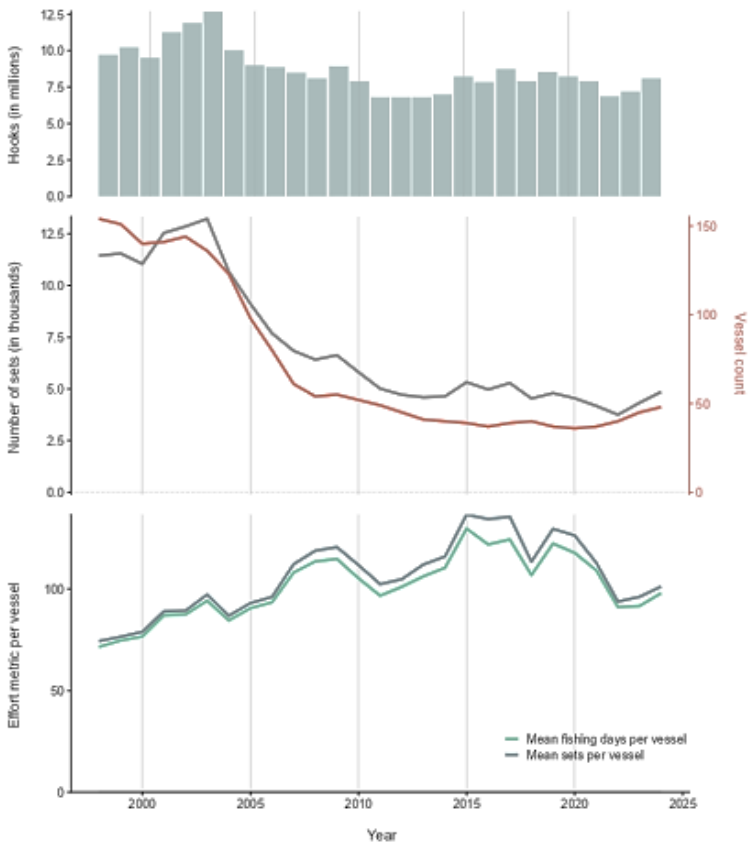
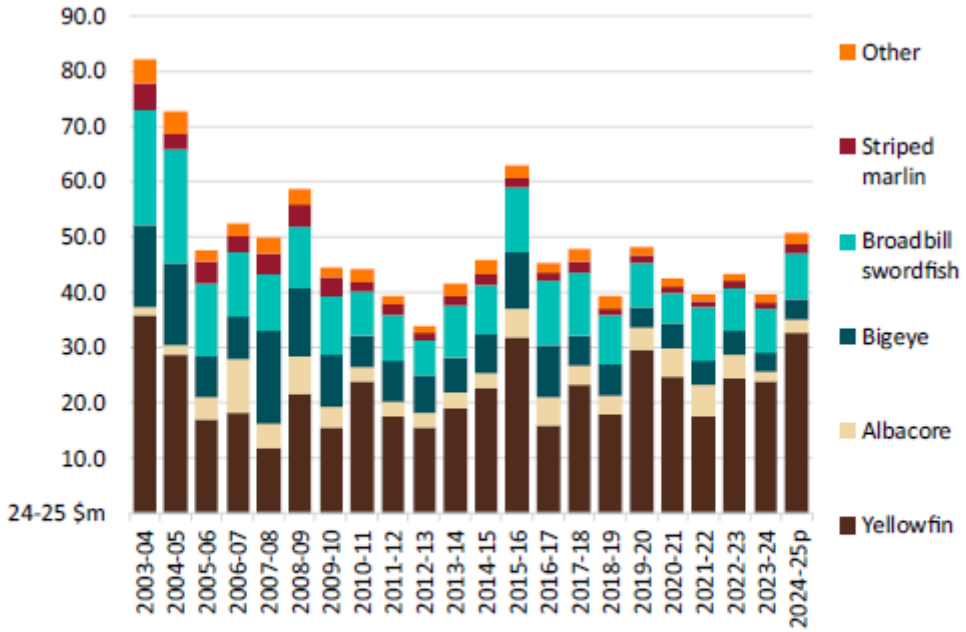


Figure 1: Summary of effort in the ETBF over 1998-2024. Top: annual number of hooks fished. Centre: Number of fishing sets (grey line) and number of active vessels (orange line) per year. A vessel is considered active if it has recorded at least a single set in the calendar year. Bottom: Mean effort metrics by active vessels; the green line shows the mean number of fishing days per vessel and the grey line shows the mean number of sets per vessel.

Overview of economic conditions

A detailed assessment of economic conditions in the ETBF is summarised by ABARES in Attachment A.

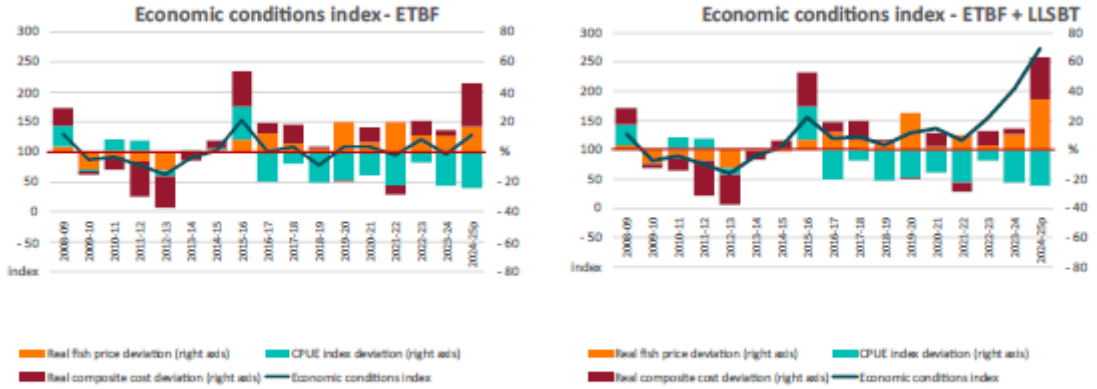
In 2024–25 GVP is estimated to have increased by 28%, with most of this increase driven by higher catch volumes of yellowfin tuna. Gross value of production (GVP) in the ETBF decreased between 2003–04 and 2012–13 from $82.24 million to $34.07 million in real terms (2024−25 dollars), reflecting lower landed catch and falling average prices. Between 2012–13 and 2015–16, GVP increased to an 11-year high of $63.1 million in 2015–16 in real terms (2024−25 dollars). This increase resulted from higher landed catch and rising prices of key targeted species (particularly yellowfin tuna). The decrease in GVP between 2015–16 and 2023−24 largely resulted from lower bigeye tuna, Broadbill swordfish and Yellowfin tuna production value.



Source: ABARES.
Note: p preliminary
GVP for 2024-25 is preliminary. Final GVPs will be available for the 2023-24 financial year later in 2024.

The ECI reflects that the ETBF is a multi-species fishery. Nominal GVP weights of the 5 key commercial species in the ETBF were used to calculate ECI and deviations in its component indices from the long-term (2008–09 to 2018–19 average = 100) average. Using the weighted ECI approach, in 2024−25 the ECI increased to be above average levels compared to the decadal average pre the onset of the Covid-19 Pandemic. This outcome is attributed to lower input costs and higher fish prices. Declining catch per unit effort moderating the increase in the ECI during the year. The availability of long line SBT to operators in the fishery on the Australian east coast provides a boost to the ECI with the indicator tracking at well above average with the inclusion of SBT.

Economic conditions index (weighted)



Notes: CPUE is catch-per-unit effort 2008–09 to 2018–19 average = 100 for all indices. Economic conditions index reflects three component indices. Deviation (right axis) represents percentage difference of each component index from long-term average. ECI and deviations in real fish price and real fuel price are calculated using weighted GVP of yellowfin tuna, bigeye tuna, albacore, swordfish and striped marlin.
Source: ABARES adapted from FFA 2018.

Operator boat level profitability was noted to be variable across the fishery. The availability of SBT in the southern part of the fishery is likely to have boosted boat level profits for operators in that area, offsetting the negative impacts of high input costs and lower than average CPUE affecting profitability in the broader fishery. While SBT is not part of the ETBF fishery it is recognised that the availability of SBT quota to the southern part of the fleet is helping that part of the fleet to remain economically viable in the current difficult economic environment. However, the RAG expressed concern about the SBT reported economic indices and suggested that further scrutiny on the data underpinning the indices is applied when compiling the economic conditions index report.

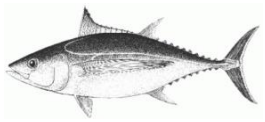
Overview of climate and ecosystem status

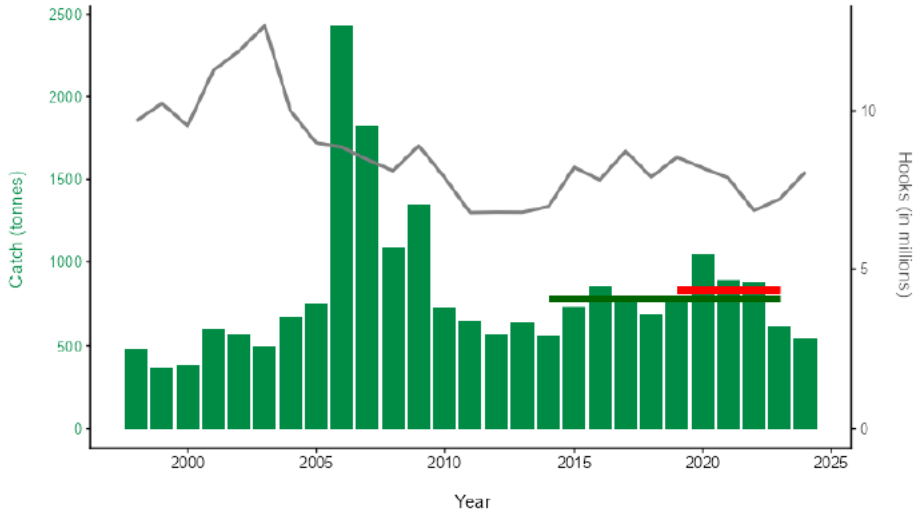
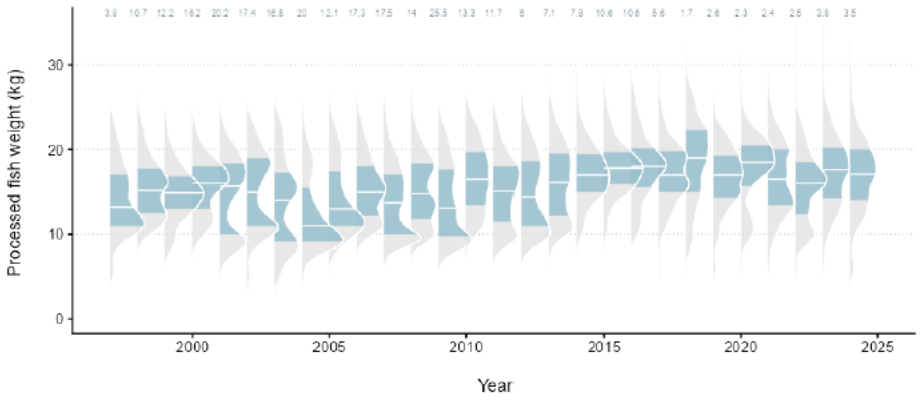
The 2025 Climate and Ecosystem Status Report for the ETBF (Attachment B) provides an update on the current state (or health) of the environment or ecosystem, relative to longer-term trends or target states including climate indicators and forecasts.

The RAG discussed the 2025 report at their meeting in July 2025 and noted there was no specific indicators or information which would affect TACC advice, nor did they raise any major concerns regarding current climate indicators for the fishery.

Species Summaries

Albacore Tuna (ALB)

South Pacific Albacore Tuna (*Thunnus alalunga*) Stock status: Not overfished, not subject to overfishing Current TACC: 2,500 t	
Indicator	**Comment**
Stock structure	Considered a single stock in the South Pacific.
Stock status	There were no stock status updates for albacore tuna in 2025. The most recent stock assessment for South Pacific albacore tuna was conducted and presented at the WCPFC scientific committee meeting in 2024 (Teears et al., 2024). The assessment results were consistent with the previous 2018 assessment. In summary: • South Pacific albacore tuna are **not overfished**. The median estimate of spawning biomass (SB) depletion for the recent period (2019-2022; $SB_{recent}/SB_{F=0}$) was 0.48 with a range (80% CI) of 0.36–0.62. None of the 100 models in the uncertainty ensemble estimated depletion to be below 0.2. • South Pacific albacore tuna are **not subject to overfishing**. The median estimate of recent (2018-2021) fishing mortality relative to FMSY (F_{recent}/F_{MSY}) was 0.18 with a range (80% CI) of 0.06-0.44. None of the 100 models in the uncertainty ensemble estimated recent fishing mortality to be above F_{MSY}. Last assessment: 2024 Overfished: No Overfishing: No Next assessment: 2027
Catch Catch relative to TACC and WCPFC region	In the ETBF, the 2024 logbook catch of albacore tuna (519 t) was below both the five-year (2019-2023) and ten-year (2014-2023) average catch of albacore tuna in the ETBF (Figure 3). CDR reported catch of albacore tuna in 2024 was 673 t. Catches of albacore tuna in the ETBF reached a peak in 2006 and decreased rapidly up to 2012. Catches increased steadily from 2012 but have declined over the last five years. 2024 catch is lower than in 2023, the lowest catch since 2003. The 2024 ETBF logbook catch of albacore tuna represents **3.7% of the provisional total catch of albacore tuna within Region 5**. The average contribution is 6.3% over the previous five years (2020-2024), with a maximum in recent years of 13.5% in 2006 (Tremblay-Boyer and Williams, 2025a).

	 Figure 3: Total albacore tuna catch (tonnes) and overall effort (hooks) in the ETBF. The average catch is shown for the periods 2014-23 (green) and 2019-23 (red).
Size	The median of processed fish weights increased slightly over time, with bimodality for some years, including 2021 and 2022 (Figure 4).  Figure 4: The distribution in processed weights (kg) of albacore tuna caught in the ETBF. The horizontal line in each annual distribution represents the median weight and shaded blue area the 50th percentiles. Annual sample sizes (in thousands) are included above each size distribution (source: Williams and Tremblay-Boyer 2025c).
CPUE (standardised and nominal)	In line with the ETBF multi-season TACC setting procedure, standardised CPUE for albacore was not assessed in 2025. The standardised CPUE index of albacore tuna has been highly variable over time. **It was below the recent five-year average in 2023** (Figure 5).

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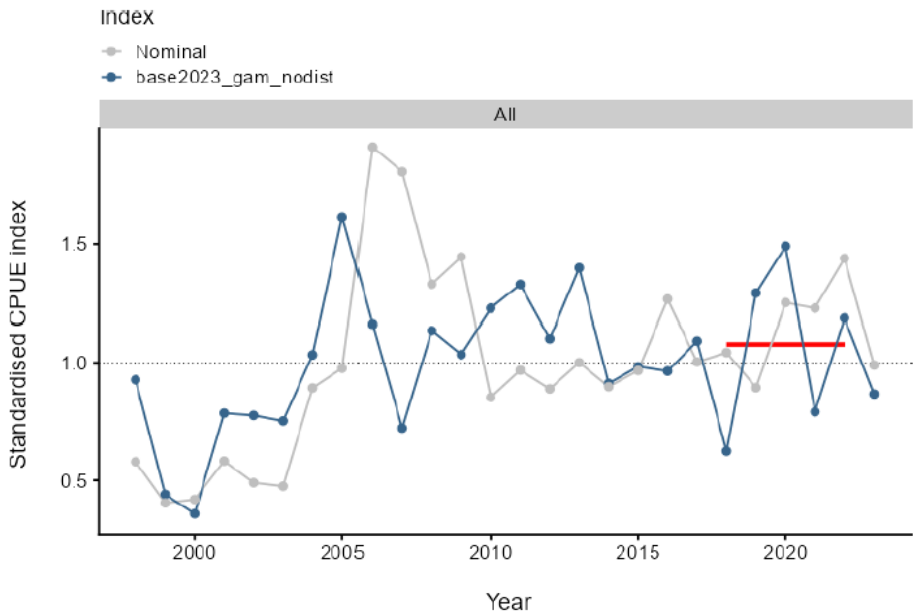

Figure 5: Nominal and standardised CPUE time series for albacore tuna in the ETBF and the recent five-year average (2018-2022) (source: Tremblay-Boyer and Williams 2024b).
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<td>Economic Conditions Index</td>
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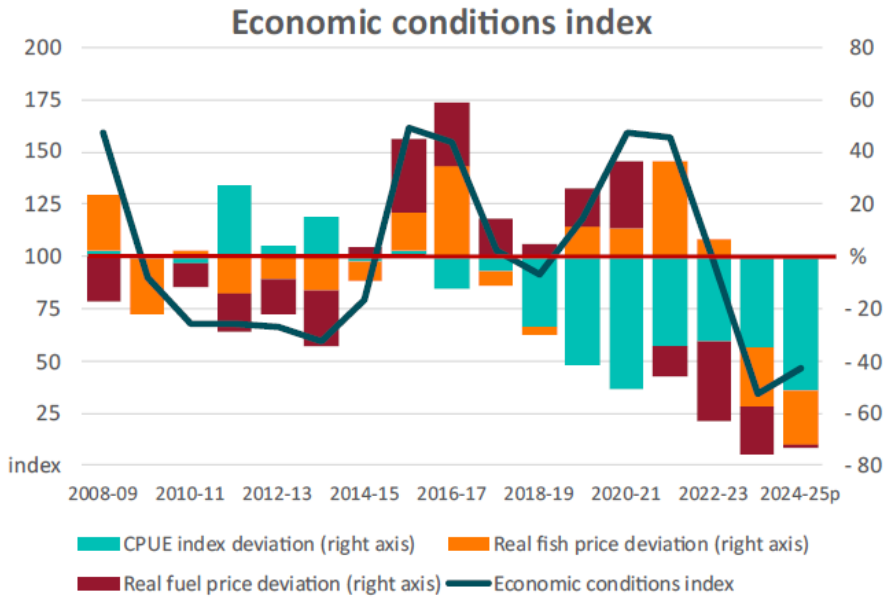
The GVP for albacore tuna in 2024-25 was approximately $2 million and 5% of the GVP in the ETBF. This is slightly greater than, but comparable to the GVP in 2023-24. The ECI and GVP for albacore has declined since 2021-22 due to low catch volumes and low market values, with a slight increase in 2024-25. Total export value for this species has declined in 2023-24 and 2024-24. Thailand remains the main export for Australian albacore followed by Spain, reflecting lesser disruption to containerised transport routes when compared to air freighted product during the pandemic which affected other higher value species.


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<tr>
<td>Climate and Ecosystem status</td>
<td>At this stage, there is no albacore-specific climate information available.</td>
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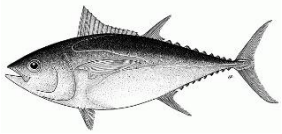
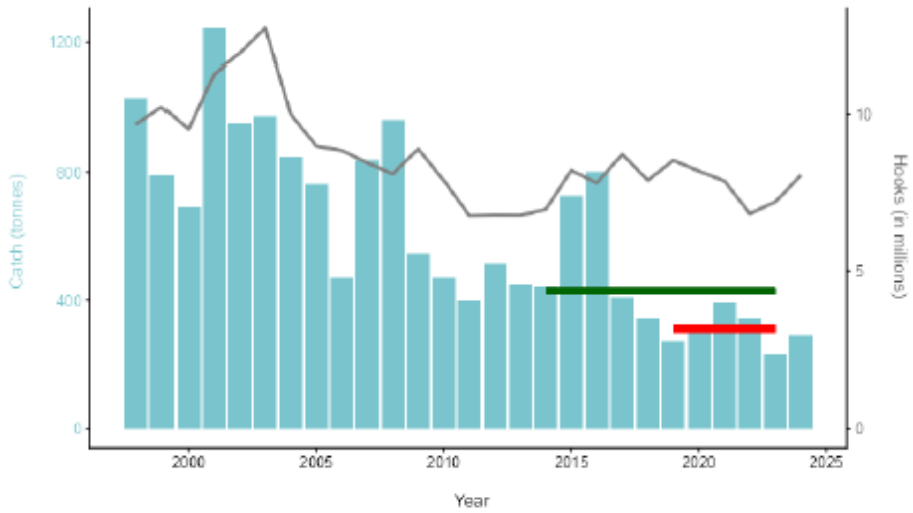
WCPFC management advice	The most recent South Pacific-wide albacore tuna stock assessment was presented in 2024. Stock spawning biomass depletion is above the RP, and F_{recent} is below F_{MSY} for all models in the uncertainty ensemble. The stock is not overfished (0% probability $SB_{recent}/SB_{F=0}$ < LRP) and is not experiencing overfishing (100% probability $F_{recent} < F_{MSY}$). SC20 accepted this assessment for management advice, and expressed relatively high overall confidence in the assessment, noting the model still shows some lack of fit to the CPUE index and troll length frequency data. SC20 recommended that stock structure be accounted for in the future, subject to the results of ongoing genetic research.
TTRAG advice	Albacore tuna are not overfished. The median estimate of spawning biomass (0.52 $SB_{F=0}$) was estimated to be above the level that would be considered overfished (0.2 $SB_{F=0}$). Albacore tuna are not subject to overfishing. Fishing mortality was estimated to be below the level that would achieve maximum sustainable yield (F_{MSY}=1). The RAG confirmed that, in line with section 2.4 of the ETBF multi-season TACC setting procedure, there is no indication that something has changed significantly in the fishery and the fishery data that may warrant alternate TACC advice for albacore tuna in the ETBF.
TACC advice	No further advice in 2025. The albacore tuna TACC determined for the 2025, 2026 and 2027 ETBF fishing seasons is 2,500 t.

Bigeye Tuna (BET)

Bigeye Tuna
(*Thunnus obesus*)
Stock status: Not overfished, not subject to overfishing
Current TACC: 1,056 t



Indicator	Comment
Stock Structure	Considered a single stock in the Pacific Ocean. Connectivity between ETBF and equatorial regionals uncertain but may be small.
Stock status	There were no stock status updates for bigeye tuna in 2025. The most recent stock assessment for Bigeye tuna was presented at the WCPFC scientific committee meeting in 2023 (Day et al., 2023). Results were similar to the 2020 stock assessment (Ducharme-Barth et al., 2020), except that the stock was estimated to be more depleted (lower depletion level), and fishing mortality was estimated to be lower in the 2023 assessment (Day et al., 2023). Uncertainty in these estimates was also lower in the 2023 assessment. In summary: • Bigeye tuna are **not overfished**. The median estimate of spawning biomass (SB) depletion for the recent period (2018-2021; $SB_{recent}/SB_{F=0}$) was 0.35 with a range (80% CI) of 0.30–0.40. None of the model runs estimated depletion to be below 0.2.

	• Bigeye tuna are **not subject to overfishing**. The median estimate of recent (2017-2020) fishing mortality relative to FMSY (F_{recent}/F_{MSY}) was 0.59 with a range (80% CI) of 0.46-0.74. None of the model runs estimated recent fishing mortality to be above F_{MSY}. Last assessment: 2023 Overfished: No Overfishing: No Next assessment: 2026
Catch Catch relative to TACC and WCPFC region	In the ETBF, the 2024 logbook catch of bigeye tuna (292 t) is below both the five-year and ten-year average catch in the ETBF (Figure 5). CDR reported catch of bigeye tuna in 2024 was 300 t. Catches of bigeye tuna in the ETBF have declined since a peak in 2016, and reached the lowest level in 2023. Catch in 2024 was greater than in 2023. The 2024 ETBF logbook catch of bigeye tuna represents **25.8% of the provisional total catch of bigeye tuna within Region 5**. The average contribution is 23.0% over the previous five years (2020-2024), with a maximum of 37.7% in 2016 (Tremblay-Boyer and Williams, 2025a).  Figure 5: Total bigeye tuna catch (tonnes) and overall effort (hooks) in the ETBF. The average catch is shown for the periods 2014-23 (green) and 2019-23 (red).
Size	The distribution of processed fish weights of bigeye tuna has been variable over time (Figure 6) and across size classes (Figure 7), with no clear directional trends. There is clear bi-modality in the distribution of sizes in several years (e.g. in 2019, 2021 and 2023), potentially indicating progression of cohorts through the years (Tremblay-Boyer and Williams, 2025c).

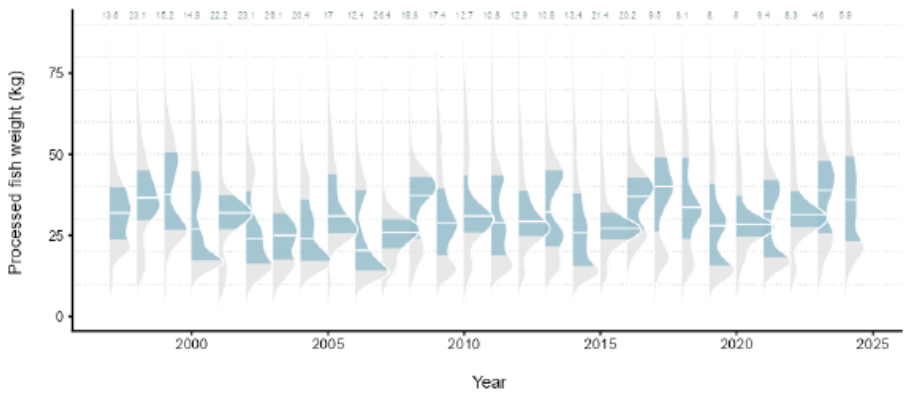


Figure 6: The distribution in processed weights (kg) of bigeye tuna caught in the ETBF. The horizontal line in each annual distribution represents the median weight and shaded blue area the 50th percentiles. Annual sample sizes (in thousands) are included above each size distribution (source: Williams and Tremblay-Boyer 2025c).

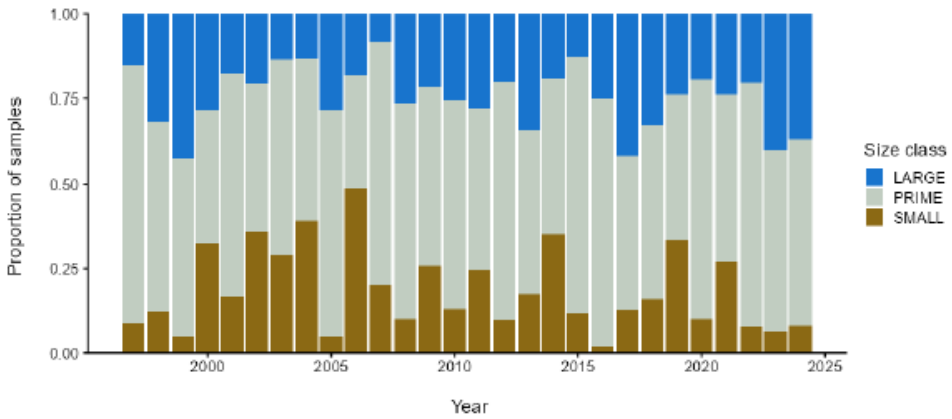


Figure 7: Size distribution of bigeye tuna caught in the ETBF across small, prime, and large size classes (source: Williams and Tremblay-Boyer 2025c).

CPUE (standardised and nominal)	In line with the ETBF multi-season TACC setting procedure, standardised CPUE for bigeye was not assessed in 2025. The standardised CPUE indices for bigeye tuna **decreased for all sizes classes over the last two years** (Figure 9). The standardised CPUE index in 2023 was above the five-year recent average for adults but below the five-year recent average for Recruits and All size classes.

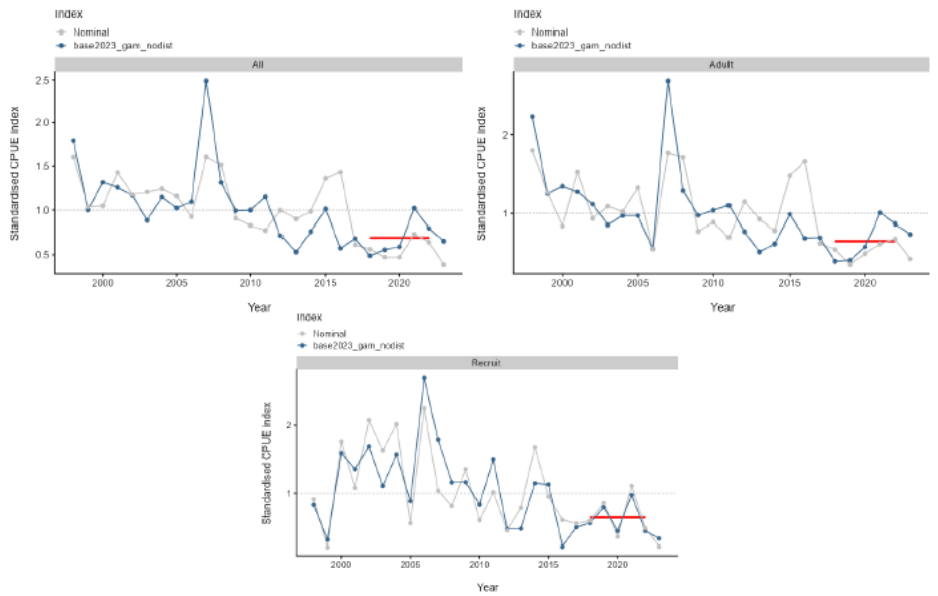
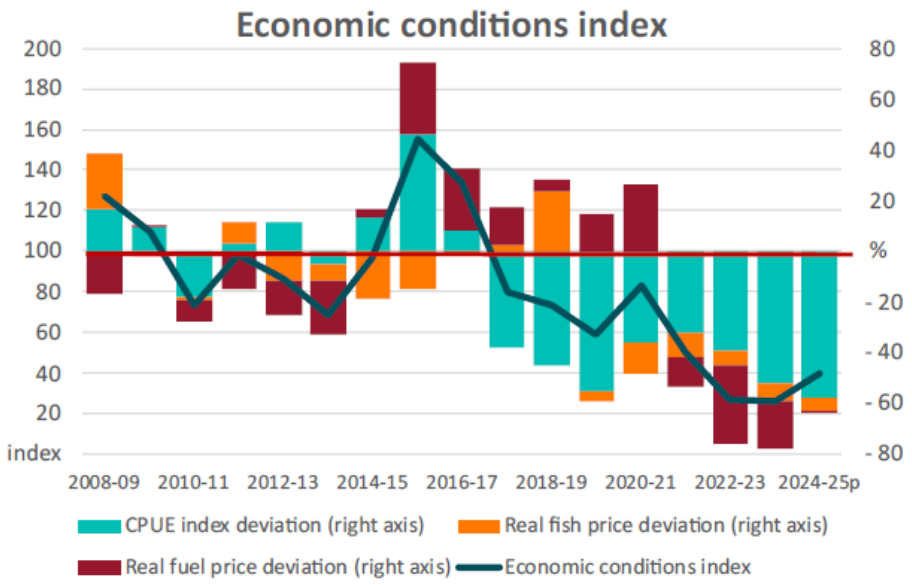


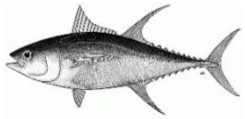
Figure 9: Nominal and standardised CPUE time series for bigeye tuna in the ETBF across size classes and the recent five-year average (2018-2022) (source: Tremblay-Boyer and Williams 2024c)

Economic Conditions Index	The GVP for bigeye tuna in 2024-25 was approximately $3.5 million and 8% of the GVP in the ETBF. This is slightly greater than, but comparable to the GVP in 2023-24. Economic conditions for BET have remained low. This has largely been the result of lower than average productivity (as measured by CPUE) and lower than average landed prices. Export of BET is mostly to Japan and the USA. 
Climate and Ecosystem status	At this stage, there is no bigeye-specific climate information available.
WCPFC management advice	Analysis presented at SC20 confirmed that the CMM 2023-01 objectives for yellowfin and bigeye tuna cannot both be met simultaneously – if precisely achieved for one stock, the other will be above or below that level. SC19 noted that the preliminary estimate of total catch of WCPO bigeye tuna for 2022 was 140,664 mt which was similar to the 2021 level. Longline catch in 2022

	(54,800 mt) was similar to the 2021 catch and lower than the recent ten-year average and understood to be partly due to the impacts of the COVID-19 pandemic. Purse-seine catch in 2022 (62,811 mt) was also similar to the 2021 catch, and lower than the recent ten-year average. • The 2023 WCPO bigeye tuna stock assessment median depletion from the model grid for the recent period (2018-2021; $SB_{recent}/SB_{F=0}$) was 0.35 (10th to 90th percentile interval of 0.30 to 0.40, including estimation and structural uncertainty). For all models in the grid $SB_{recent}/SB_{F=0}$ was above the biomass limit reference point. The recent median fishing mortality (2017-2020; F_{recent}/F_{MSY}) was 0.59 (10th to 90th percentile interval of 0.46 to 0.74, including estimation and structural uncertainty). For all models in the grid, F_{recent}/F_{MSY} was less than one. • SC19 noted that the catch in the last year of the assessment (2021) was less than the median MSY (164,640 mt), which is a 17% increase in the estimated MSY for bigeye tuna from the 2020 stock assessment (140,720 mt). • The objective for bigeye tuna in CMM 2021-01 (the Tropical Tuna Measure) – to maintain the spawning biomass depletion ratio at or above the average $SB/SB_{F=0}$ for 2012-2015 – is being achieved. $SB_{recent}/SB_{F=0}$ (35%) is very close to the average $SB/SB_{F=0}$ for 2012-2015 (34%) calculated across the unweighted grid. • The WCPO bigeye tuna spawning biomass is above the biomass LRP, and F_{recent} is below F_{MSY} for all models in the uncertainty grid. The stock is very likely not experiencing overfishing (100% probability $F_{recent}<F_{MSY}$) and is not in an overfished condition (0% probability $SB_{recent}/SB_{F=0}$<LRP). • The interim objective of bigeye tuna stock under CMM 2021-01 is to maintain the depletion level of the stock at or above the average $SB/SB_{F=0}$ for 2012-2015. The recent depletion level of bigeye tuna is close to this interim objective. SC19 noted that while the projection results based on the 2023 bigeye tuna assessment were not available for SC19 to review, this information will be available for the 4th tropical tuna management workshop and will provide the Commission guidance on future expected levels of fishing mortality and the outcomes relative to the interim or future management objectives.
TTRAG advice	Bigeye tuna are not overfished. The median estimate of spawning biomass (0.35 $SB_{F=0}$) was estimated to be above the level that would be considered overfished (0.2 $SB_{F=0}$). Bigeye tuna are not subject to overfishing. Fishing mortality was estimated to be below the level that would achieve maximum sustainable yield (F_{MSY}=1). The RAG (TTRAG 42, September 2024)recognised a drop in catch rates, but noted that considering overall catch remains small, changing operational dynamics in the fishery (more SBT targeting when past effort would have been directed to BET) and a poor Yen exchange rate, there were no sustainability concerns at this stage. The RAG noted that the recent decrease in catch rates warrants monitoring of the standardised CPUE over the next few years. The RAG confirmed that, in line with section 2.4 of the ETBF multi-season TACC setting procedure, there is no indication that something has changed significantly in the fishery and the fishery data that may warrant alternate TACC advice for bigeye tuna in the ETBF.
TACC advice	No further advice in 2025.

	The bigeye tuna TACC determined for the 2025, 2026 and 2027 ETBF fishing seasons is 1,056 t.

Yellowfin Tuna (YFT)

Yellowfin Tuna (*Thunnus albacares*) Stock status: Not overfished, not subject to overfishing Current TACC: 2,400 t	

Indicator	Comment
Stock Structure	Considered a single stock in the Western and Central Pacific Ocean (WCPO) – connectivity between ETBF and equatorial regions uncertain but may be small.
Stock status	There were no stock status updates for yellowfin tuna in 2025. The most recent stock assessment for yellowfin tuna was conducted and presented at the WCPFC scientific committee meeting in 2023 (Magnusson et al., 2023). Results were more pessimistic than the 2020 stock assessment (Vincent et al., 2020), with the stock estimated to be more depleted (lower depletion level) and higher levels of fishing mortality. In summary: • Yellowfin tuna are **not overfished**. The median estimate of spawning biomass (SB) depletion for the recent period (2018-2021; $SB_{recent}/SB_{F=0}$) was 0.47 with a range (80% CI) of 0.42–0.52. None of the model runs estimated depletion to be below 0.2. • Yellowfin tuna are **not subject to overfishing**. The median estimate of recent (2017-2020) fishing mortality relative to FMSY (F_{recent}/F_{MSY}) was 0.50 with a range (80% CI) of 0.41-0.62. None of the model runs estimated recent fishing mortality to be above F_{MSY}. Last assessment: 2023 Overfished: No Overfishing: No Next assessment: 2026
Catch Catch relative to TACC and WCPFC region	In the ETBF, the 2024 logbook catch of yellowfin tuna (1649 t) was approximately at the five-year and ten-year average catch in the ETBF (Figure 16). However, the reported 2024 CDR catch was 2572 t, indicating a significant increase in 2024 catches and an underestimate in the logbook reported catches. Logbook reported catches of yellowfin tuna in the ETBF have been stable at values around 1500-2000 t after a peak catch in 2003. The 2024 ETBF logbook catch of yellowfin tuna represents **22.5% of the provisional total catch of yellowfin tuna within Region 5** which is the highest proportion reported. The average contribution is 15.4% over the previous five years (2019-2023) (Tremblay-Boyer and Williams, 2025a).

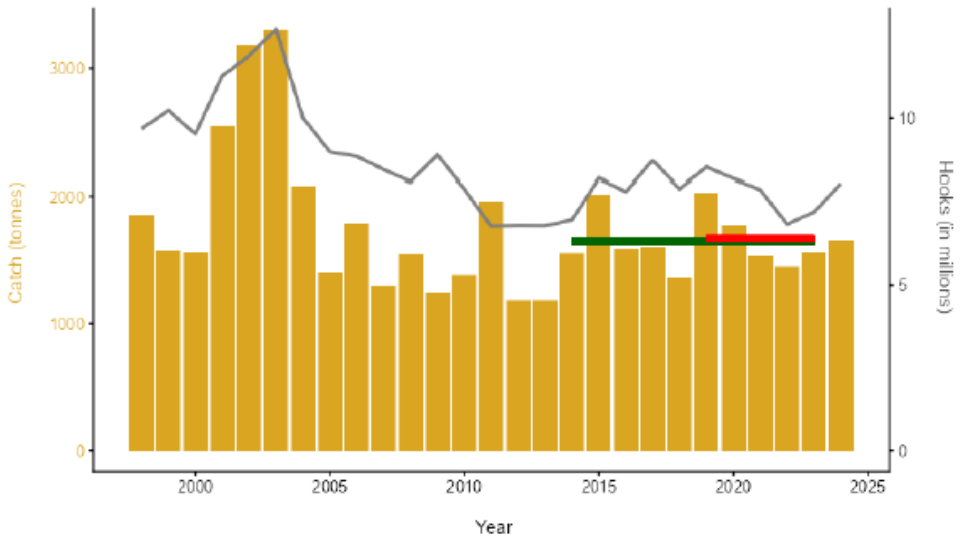


Figure 16: Total yellowfin tuna catch (tonnes) and overall effort (hooks) in the ETBF. The average catch is shown for the periods 2014-23 (green) and 2019-23 (red).

Size

The annual size distribution (Figure 17) shows some variability in the median value across years with no clear trends in recent years and bimodality in 2022 and 2023. The frequency of smaller individuals (recruits) in the size samples has been variable over time, with approximately equal numbers in the 'Small' and 'Prime' size categories (Figure 18).

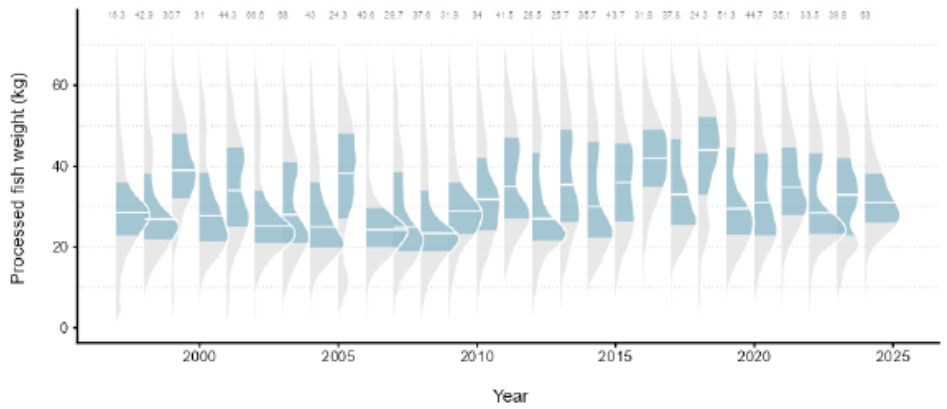


Figure 17: The distribution in processed weights (kg) of yellowfin tuna caught in the ETBF. The horizontal line in each annual distribution represents the median weight and shaded blue area the 50th percentiles. Annual sample sizes (in thousands) are included above each size distribution (source: Williams and Tremblay-Boyer 2025c).

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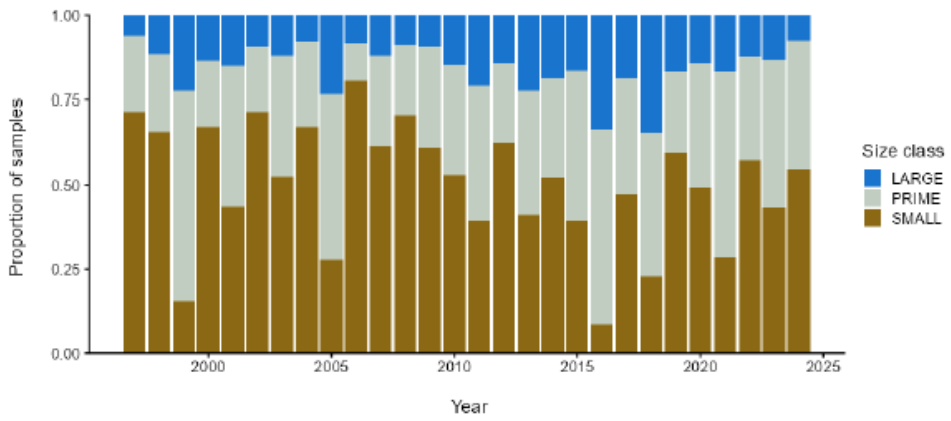

Figure 18: Size distribution of yellowfin tuna caught in the ETBF across small, prime, and large size classes (source: Williams and Tremblay-Boyer 2025c).
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<td>Standardised CPUE</td>
<td>
In line with the ETBF multi-season TACC setting procedure, standardised CPUE for yellowfin was not assessed in 2025.

Standardised CPUE indices for yellowfin tuna in the ETBF are variable for all size classes (Recruit, Adult, and All) (Figure 21). The standardised CPUE in 2023 was above the recent five-year average for All and Recruit size categories and below for adults.

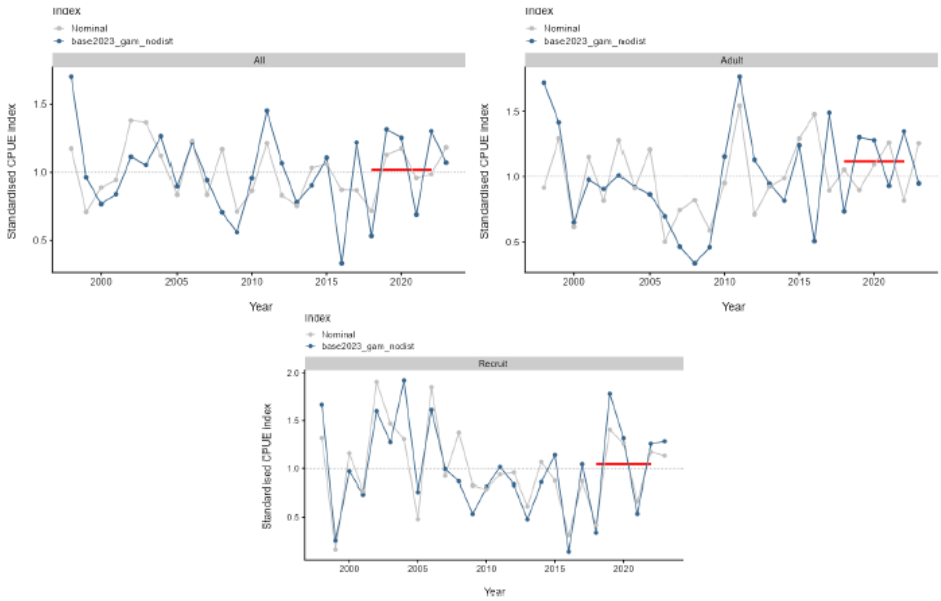

Figure 21: Nominal and standardised CPUE time series for yellowfin tuna in the ETBF across size classes and the recent five-year average (2018-2022) (source: Tremblay-Boyer and Williams 2024c)
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<td>Economic Conditions Index</td>
<td>
The GVP for yellowfin tuna in 2024-25 was approximately $30 million and 67% of the GVP in the ETBF. Yellowfin tuna (YFT) is the most valuable species caught in the ETBF. The GVP and ECI for yellowfin has increased compared to 2023-24, noting larger catches in 2024. The majority of exports going to the USA. The value of yellowfin on the domestic market has declined due to increased catches of SBT, noting that only a small share of YFT goes to the domestic market.
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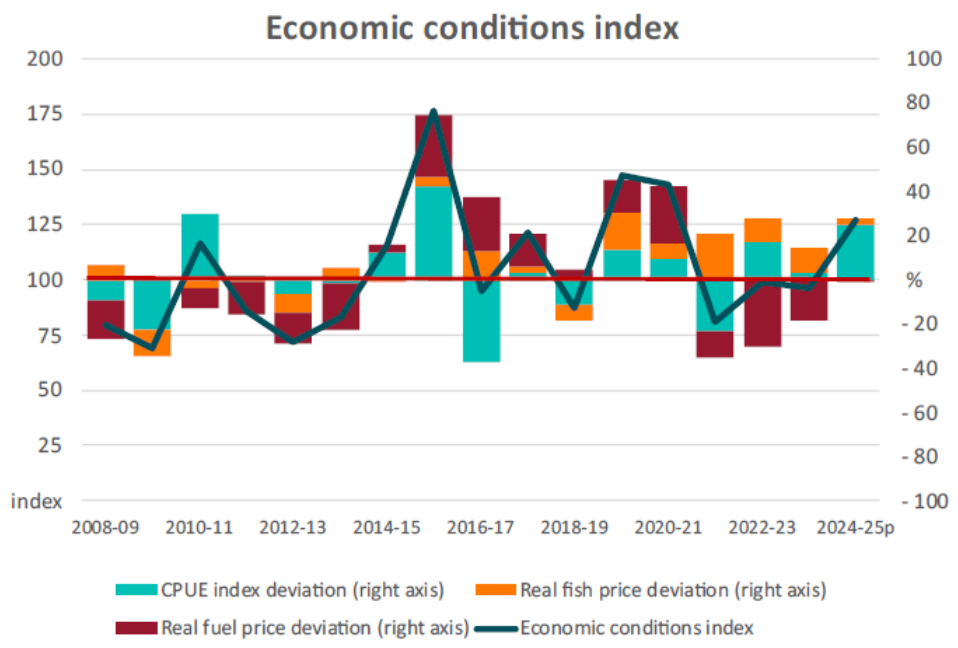
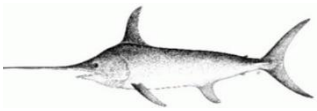
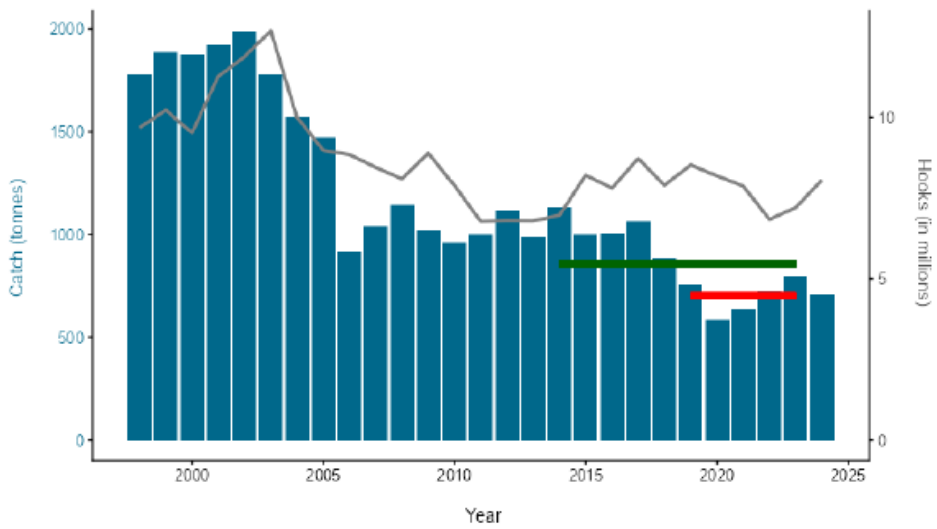
	
Climate and Ecosystem status	At this stage, there is no yellowfin-specific climate information available.
WCPFC management advice	Analysis presented at SC20 confirmed that the CMM 2023-01 objectives for yellowfin and bigeye tuna cannot both be met simultaneously – if precisely achieved for one stock, the other will be above or below that level. Based on the 2023 stock assessment for yellowfin, the miscellaneous fisheries are estimated to account for approximately 37% of the impact on the spawning potential over the period 2016-2018, but recent catch for yellowfin is higher. SC20 recommended that an additional working paper be submitted to WCPFC21, which will include a re-evaluation of the candidate yellowfin and bigeye tuna TRPs using more recent fishing conditions for the domestic fisheries of Indonesia, Philippines, and Vietnam. The 2016-18 average catches are significantly lower than the recent fishing level, likely leading to a more optimistic projected stock status for yellowfin tuna. SC19 noted that the preliminary estimate of total catch of WCPO yellowfin tuna for 2022 was 721,169 mt which was lower than the 2021 level. Longline catch in 2022 (84,232 mt) was higher than the 2021 catch, but lower than the recent 10-year average. Purse-seine catch in 2022 (379,715 mt) was similar to the 2021 catch, and higher than the recent 10-year average. • The 2023 WCPO yellowfin tuna stock assessment median depletion from the model grid for the recent period (2018–2021; $SB_{recent}/SB_{F=0}$) was estimated at 0.47 (10th to 90th percentile interval of 0.42 to 0.52, including estimation and structural uncertainty). For all models in the grid $SB_{recent}/SB_{F=0}$ was above the biomass limit reference point. The recent median fishing mortality (2017–2020; F_{recent}/F_{MSY}) was 0.50 (10th to 90th percentile interval of 0.41 to 0.62, including estimation and structural uncertainty). For all models in the grid, F_{recent}/F_{MSY} was less than one. • SC19 noted that the spawning potential of the stock has become more depleted across all model regions until around 2010, after which it has become more stable, or shown a slight increase.

	• SC19 also noted that average fishing mortality rates for juvenile and adult age-classes have increased throughout the period of the assessment, although more so for juveniles which have experienced considerably higher fishing mortality than adults. In the recent period (2015-2021), a sharp increase in juvenile fishing mortality was estimated, while adult fishing mortality stabilized. • The objective for yellowfin tuna in CMM 2021-01 (the Tropical Tuna Measure) to maintain the spawning biomass depletion ratio at or above the average $SB/SB_{F=0}$ for 2012-2015 is being achieved. $SB_{recent}/SB_{F=0}$ (47%) exceeds the average $SB/SB_{F=0}$ for 2012-2015. • The interim objective for the yellowfin tuna stock under CMM 2022-01 is to maintain the depletion level of the stock at or above the average $SB/SB_{F=0}$ for 2012-2015 and the recent depletion level of yellowfin tuna is close to the interim objective. SC19 noted that while the projection results based on the 2023 yellowfin tuna assessment were not available for SC19 to review, this information will be available when for the 4th tropical tuna management workshop and will provide the Commission guidance on future expected levels of fishing mortality and the outcomes relative to the interim or future management objectives.
TTRAG advice	Yellowfin tuna are not overfished. The median estimate of spawning biomass (0.47 $SB_{F=0}$) was estimated to be above the level that would be considered overfished (0.2 $SB_{F=0}$). Yellowfin tuna are not subject to overfishing. Fishing mortality was estimated to be below the level that would achieve maximum sustainable yield (F_{MSY}=1). The RAG confirmed that, in line with section 2.4 of the ETBF multi-season TACC setting procedure and having regard for the reduced set of indicators reviewed in 2025, there was no indication that something has changed significantly in the fishery and the fishery data that may warrant alternate TACC advice for yellowfin tuna in the ETBF and there was no cause for concern based on the indicators. The RAG discussed a proposal from industry to increase the yellowfin tuna TACC. The RAG discussed increased catch and discards of yellowfin tuna in 2024 as a result of greater availability of yellowfin (a pulse event) and supported the proposed 20% increase to the TACC for yellowfin tuna for the 2026 and 2027 ETBF fishing seasons to improve economic productivity in the fishery. The RAG confirmed there were no sustainability concerns or WCPFC compliance concerns with increasing the yellowfin tuna TACC.
TACC advice	**The RAG supported the proposed 2,880 t TACC for yellowfin tuna for the 2026 and 2027 ETBF fishing seasons.**

Broadbill Swordfish (SWO)

Broadbill Swordfish (*Xiphias gladius*) Stock status: Not overfished, not subject to overfishing Current TACC: 1,047 t 	
Indicator	**Comment**
Stock Structure	The results of genetic studies support a separate south-western Pacific stock of Broadbill Swordfish. At its July 2023 meeting (TTRAG 38) TTRAG agreed, although there is limited data on swordfish movements, the current available data suggests the swordfish stock movements are predominantly north/south rather than east/west within the Australian region. The RAG agreed that this information supports the hypothesis that there is a swordfish sub stock within Australia's exclusive economic zone. The RAG recognised that further research should be undertaken to further reduce the uncertainty of swordfish stock structure.
Stock Status	A new stock assessment for southwest Pacific swordfish was conducted in 2025 using data up to 2023 (Day et al., 2025). The outcomes of the stock assessment are on average more optimistic than the 2021 assessment, and the uncertainty has decreased. In summary: • Broadbill swordfish are **not overfished**. The median estimate of spawning biomass (SB) depletion for the recent period (2020-2023; $SB_{recent}/SB_{F=0}$) was 0.50 with a range (80% CI) of 0.46-0.58. • Broadbill swordfish are **unlikely to be subject to overfishing**. The median estimate of recent (2019-2022) fishing mortality relative to F_{MSY} (F_{recent}/F_{MSY}) was 0.28 with a range (80% CI) of 0.18-0.38. Last assessment: 2025 Overfished: No Overfishing: No Next assessment: 2028
Catch Catch relative to TACC and WCPFC region	In the ETBF, the 2024 logbook catch of broadbill swordfish (699 t) is below the ten-year average catch but at the five-year recent average catch in the ETBF (Figure 8). CDR reported catch of broadbill swordfish in 2024 was 698 t. Catches of broadbill swordfish in the ETBF have been gradually declining over time from a peak in the late 1990s and early 2000s but have started to increase in the past 5 years since the lowest catches were reported in 2020. Catch in 2024 is lower than catch in 2023. The 2024 ETBF logbook catch of broadbill swordfish represents **47.6% of the provisional total catch of broadbill swordfish within Region 1**. The average contribution is 51.9% over the previous five years (2020-2024), with a maximum of 83% in 2007 (Williams and Tremblay-Boyer, 2025a).

	 Figure 8: Total broadbill swordfish catch (tonnes) and overall effort (hooks) in the ETBF. The average catch is shown for the periods 2014-23 (green) and 2019-23 (red).
Size	The annual size distribution (Figure 9) shows a clear mode of smaller individuals and a median much higher than the mode across all years, reflecting a wide span of weights in the catch samples. The proportion of large broadbill swordfish landed has declined over the last nine years, while the proportion of small fish has remained stable since 2020 (Figure 10). The proportion of prime-sized broadbill swordfish has increased over the past few years, likely due to the growth of small fish moving them into the prime size category, resulting in an increase in the overall median size of fish (Figure 10).

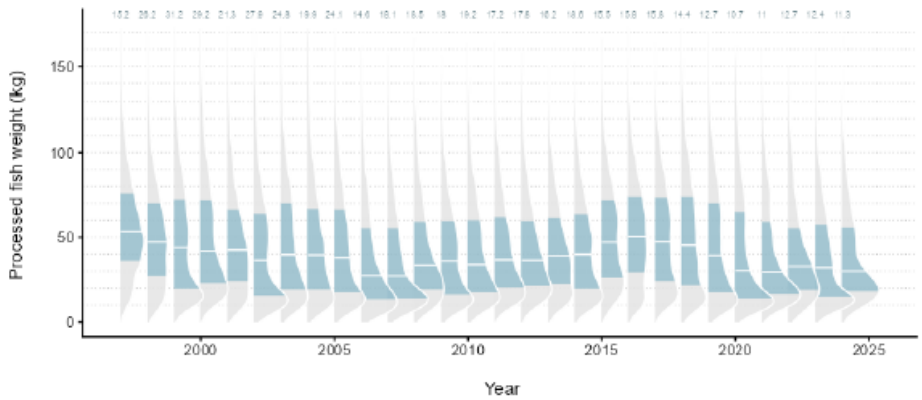


Figure 9: The distribution in processed weights (kg) of broadbill swordfish caught in the ETBF. The horizontal line in each annual distribution represents the median weight and shaded blue area the 50th percentiles. Annual sample sizes (in thousands) are included above each size distribution (source: Williams and Tremblay-Boyer 2025c).

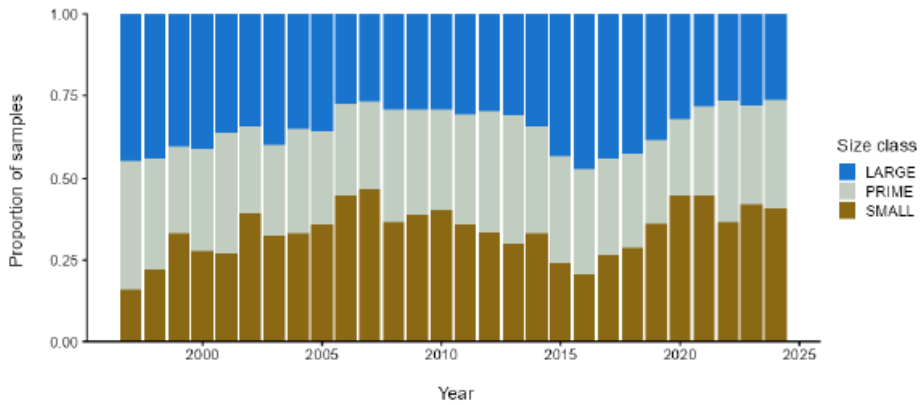


Figure 10: Size distribution of broadbill swordfish caught in the ETBF across small, prime, and large size classes (source: Williams and Tremblay-Boyer 2025c).

Standardised CPUE	For all size groups, the standardised CPUE index appears to vary cyclically with a low period from 2016. There is a slight increase in the standardised CPUE indices from 2020 to 2023 for all size groups, with the index greater than the recent five-year average in 2024 for all size classes except recruits (Figure 11).

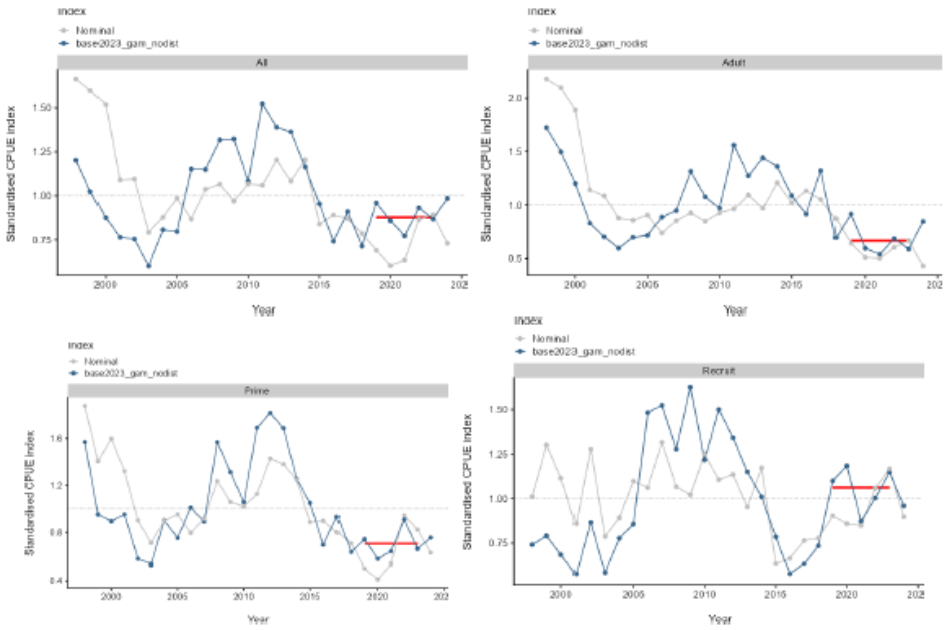
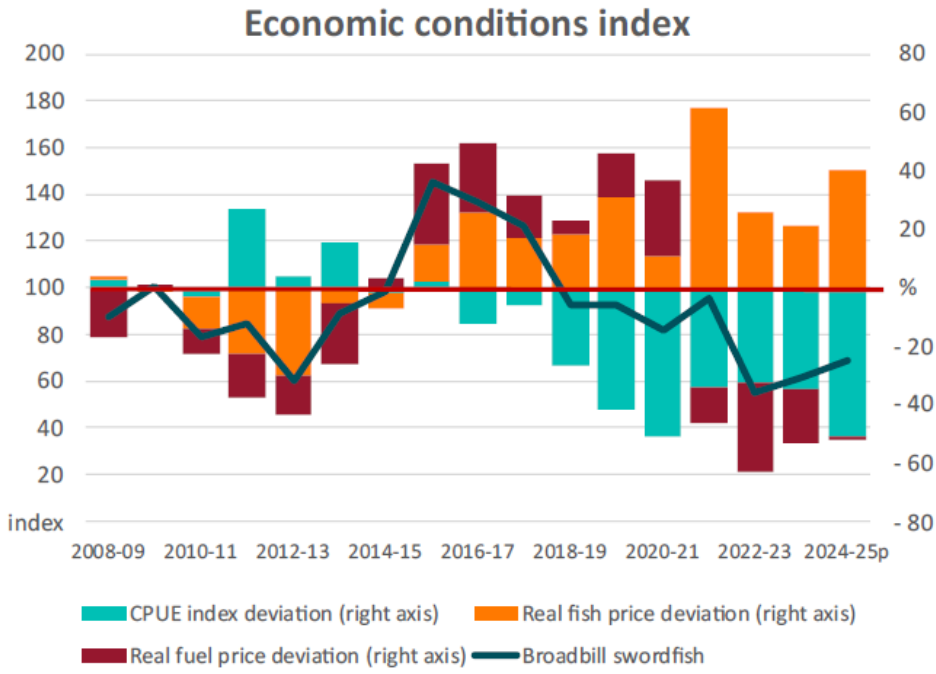


Figure 11: Nominal and standardised CPUE time series for broadbill swordfish in the ETBF across size classes and the recent five-year average (2019-2023) (source: Williams and Tremblay-Boyer 2025b)

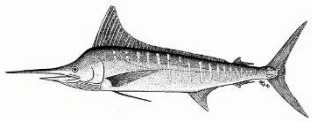
Economic Conditions Index	The GVP for swordfish in 2024-25 was approximately $7.5 million and 17% of the GVP in the ETBF. The ECI and GVP for swordfish has remained relatively stable over the past three years. 
Climate and Ecosystem status	At this stage, there is no swordfish-specific climate information available.
WCPFC management advice	SC21 accepted the 2025 assessment for management advice, and expressed overall confidence in the assessment, noting the model still shows some lack of fit to the CPUE index, and diagnostics still suggest some model mis-specification. The need for increased collection of conditional age-at-length data, improving

	limitations of the size composition data, a better understanding of potential boundary effects on the assessment, further work on CPUE indices, and further refining the stock assessment model structure were noted. • There are no agreed reference points for Southwest Pacific swordfish. Stock status is therefore assessed in relation to the default WCPFC SB/SB_{MSY} and F/F_{MSY} reference points, with information also provided for the depletion relative to the $20\%SB_{F=0}$ LRP that is applied to key tunas. The 2025 stock assessment indicates that the stock status is positive with respect to the MSY-based reference points, and although the stock biomass trend and depletion decline, the last few years of the model indicate some stability in female spawning biomass. • Median recent fishing mortality was below F_{MSY} (F_{recent}/F_{MSY} is 0.28 with 80% quantile range from 0.18 – 0.38, and the probability of $F_{recent}/F_{MSY} > 1$ is <1%). Median recent female spawning biomass was well above SB_{MSY} (SB_{recent}/SB_{MSY} biomass reference point is 2.33 with 80% quantile range 1.88 – 3.34, and the probability of $SB_{recent}/SB_{MSY} < 1$ is <1%). Median recent spawning biomass was also well above the $20\%SB_{F=0}$ LRP applied to tunas ($SB_{recent}/SB_{F=0}$ = 0.50 with 80% quantile range 0.46-0.58, without estimation uncertainty). Depletion with respect to unfished female biomass ($SB_{recent}/SB_{F=0}$) is 0.50 with an 80% quantile range of 0.46 – 0.58, without estimation uncertainty. • Based upon the stock assessment results, the stock is exceptionally unlikely to be experiencing overfishing (<1% probability) and to be overfished (<1% probability) relative to MSY-based reference points. SC21 advised that it is exceptionally unlikely that Southwest Pacific swordfish is overfished and subject to overfishing. SC21 noted that the estimated spawning biomass relative to unfished levels has continued to decline over the last decade, despite a brief recovery in 2015. This declining trend highlights the ongoing need for management. To this end, SC21 noted the Commission's intention to develop a management strategy evaluation framework for Southwest Pacific swordfish and to design and evaluate a candidate management procedure. SC21 agreed to use this year's stock assessment model as a starting point for developing an operating model reference set to evaluate the candidate management procedures, noting that better addressing the issue of model mis-specification is necessary to improve the reliability of the operating model reference set. SC21 noted that due to challenges and associated time constraints in fitting the stock assessment model, no projections were provided to the SC, and recommended that projections be included in future assessment reports.
Outcomes from SWO modified harvest strategy	Application of the modified harvest strategy was extended (adopted by the AFMA Commission in September 2024) and will be applied to calculate a TACC recommendation for the 2025, 2026 and 2027 fishing seasons. The purpose of the modification is to explicitly account for recent low catch levels compared to the TACC and, in doing so, avoid unnecessary TACC reductions. RBCC Calculation: The mean sub-adult standardised CPUE for the years 2021–2024 was 0.69. This is below the lower buffer of 0.8 in the HCR which means a decrease in the RBCC will be the result. For reference, the "tuned" target CPUE - the longer-term target CPUE the Harvest Strategy will try to work to attain is almost two times higher than the current average value. The actual value of the RBCC multiplier is 0.9 - the

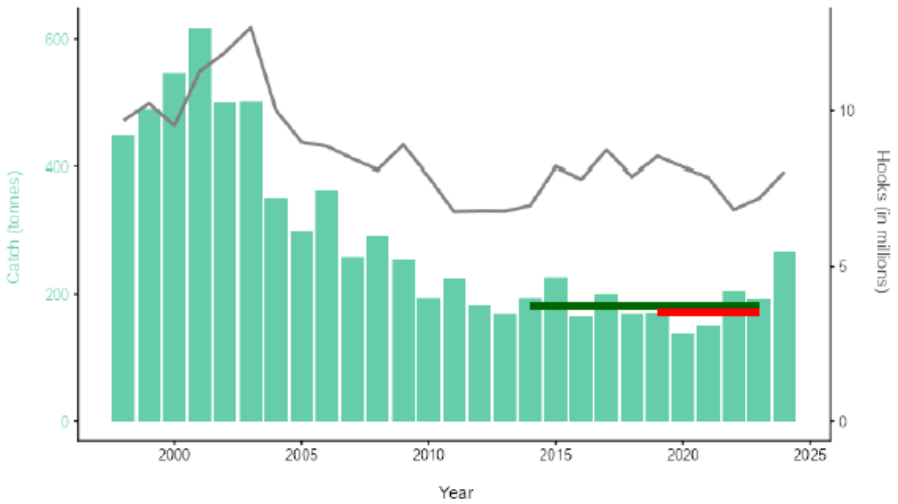
	maximum 10% permitted. If not for the maximum change constraint the reduction would have been a factor of 0.81. However, because current catches are further below the initial RBCC than it is below the current TAC, the recommended RBCC is 1,047 tonnes (**no change**).
TTRAG advice	Broadbill swordfish are not overfished. The median estimate of spawning biomass (0.39 $SB_{F=0}$) was estimated to be above the level that would be considered overfished (0.2 $SB_{F=0}$). Broadbill swordfish are not subject to overfishing. Fishing mortality was estimated to be below the level that would achieve maximum sustainable yield (F_{MSY}=1). The RAG advice for broadbill swordfish is based on the application of the modified harvest strategy. The RAG noted no further exceptional circumstances and confirmed the TACC recommendation of 1,047 t for the 2026 ETBF fishing season.
TACC advice	**The RAG recommended a 1,047 t TACC for broadbill swordfish for the 2026 ETBF fishing season.**

Striped Marlin (STM/MLS)

Striped Marlin
(*Kajikia audax*)
Stock status: Likely overfished, likely subject to overfishing
Current TACC: 351 t



Indicator	Comment
Stock Structure	The results of genetic studies support a separate south-western Pacific stock of striped marlin. The RAG therefore consider that striped marlin is a single stock within the south-west Pacific.
Stock status	An updated stock assessment for striped marlin was conducted in 2025 using two alternative assessment approaches, after the previous assessment was not accepted by the WCPFC Scientific Committee in 2024. One assessment was conducted using Stock Synthesis 3 (SS3) (Castillo- Jordan et al., 2025) while the second applied a Bayesian surplus production model (BSPM) (Ducharme-Barth et al., 2025). Only the BSPM results are presented here, as they were used for management advice. The BSPM differed from the SS3 assessment in that it summarised stock status in terms of depletion (D) relative to total depletion at which maximum sustainable yield (MSY) is produced (D/D_{MSY}) and also total depletion relative to a limit reference point of 20% depletion from the unfished state ($D/D_{0.2F=0}$) as agreed for tuna species. For comparison, D_{MSY} was estimated by the BSPM to be 0.48 (95% CI: 0.26 - 0.70), which is substantially higher than 0.2. While the results from the BSPM were more optimistic than previous assessments, significant uncertainty remains. In summary: • Striped marlin are **overfished when assessed against the D/D_{MSY} reference point but not overfished when assessed against the limit reference point of $D/D_{0.2F=0}$.** The median estimate of depletion (D) for the recent period (2019-2022; $SB_{recent}/SB_{F=0}$) was 0.37 with a range (95% CI) of 0.15-0.94. There is a 9.2% probability that depletion is below 0.2.

	• Striped marlin are **not subject to overfishing**. Estimates of fishing mortality were highly uncertain, with the median estimate of recent (2018-2021) fishing mortality relative to F_{MSY} (F_{recent}/F_{MSY}) of 0.77 with a range (95% CI) of 0.05-1.51. There is a 44% probability that fishing mortality is above F_{MSY}. The RAG noted that in the 2025 stock assessment, depletion estimates are based on numbers of fish rather than biomass which makes it difficult to compare directly to both previous estimates and default limit reference points (eg, 20% of unfished biomass). Last assessment: 2025 Overfished: Likely Overfishing: No Next assessment: 2028
Catch Catch relative to TACC and WCPFC region	In the ETBF, the 2024 logbook catch of striped marlin (266 t) is above both the five-year and ten-year average catch in the ETBF (Figure 12) and the highest reported since 2008. CDR reported catches of striped marlin in 2024 was 365 t. Catches of striped marlin in the ETBF declined gradually over time since a peak in 2001, but have remained relatively stable since 2010 until the peak in 2024. Discarding in 2024 was significantly greater compared to previous years. The 2024 reported discards were 82 t compared to 9 t in 2023. The 2024 ETBF logbook catch of striped marlin represents **62.3% of the provisional total catch of striped marlin within Region 1**. The average contribution is 57.6% over the previous five years (2020-2024), with a maximum of 72% in 2006 (Tremblay-Boyer and Williams, 2025a).  Figure 12: Total striped marlin catch (tonnes) and overall effort (hooks) in the ETBF. The average catch is shown for the periods 2014-23 (green) and 2019-23 (red).
Size	The annual size distribution shows a single mode between about 50 and 70 kg throughout the time series with a decline in median size over time (Figure 13) and relatively stable proportions of each size category (Figure 14).

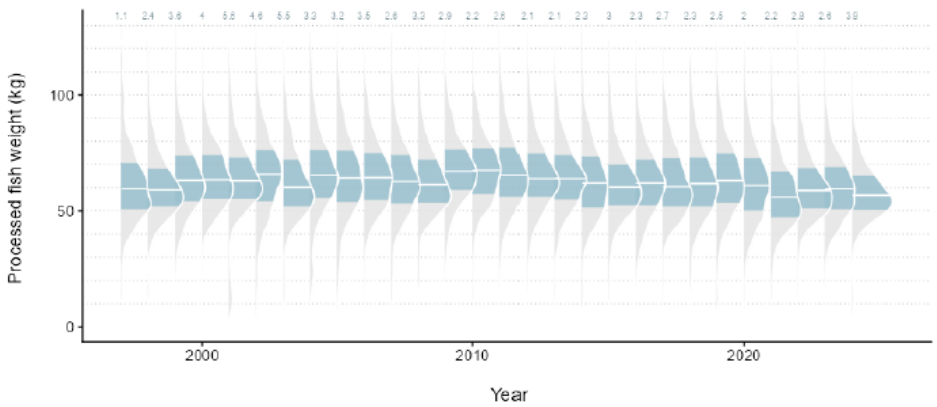


Figure 13: The distribution in processed weights (kg) of striped marlin caught in the ETBF. The horizontal line in each annual distribution represents the median weight and shaded blue area the 50th percentiles. Annual sample sizes (in thousands) are included above each size distribution (source: Williams and Tremblay-Boyer 2025c).

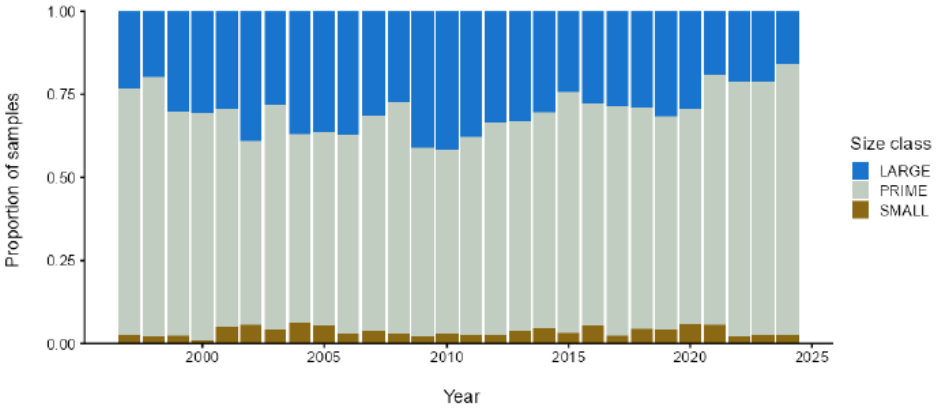


Figure 14: Size distribution of striped marlin caught in the ETBF across small, prime, and large size classes. (source: Williams and Tremblay-Boyer 2025c).

Standardised CPUE	The standardised CPUE index for striped marlin has been relatively stable over the last two decades but a large increase in the last three years (Figure 15). Standardised CPUE in 2024 is well above the five-year recent average and the highest for the entire time series.

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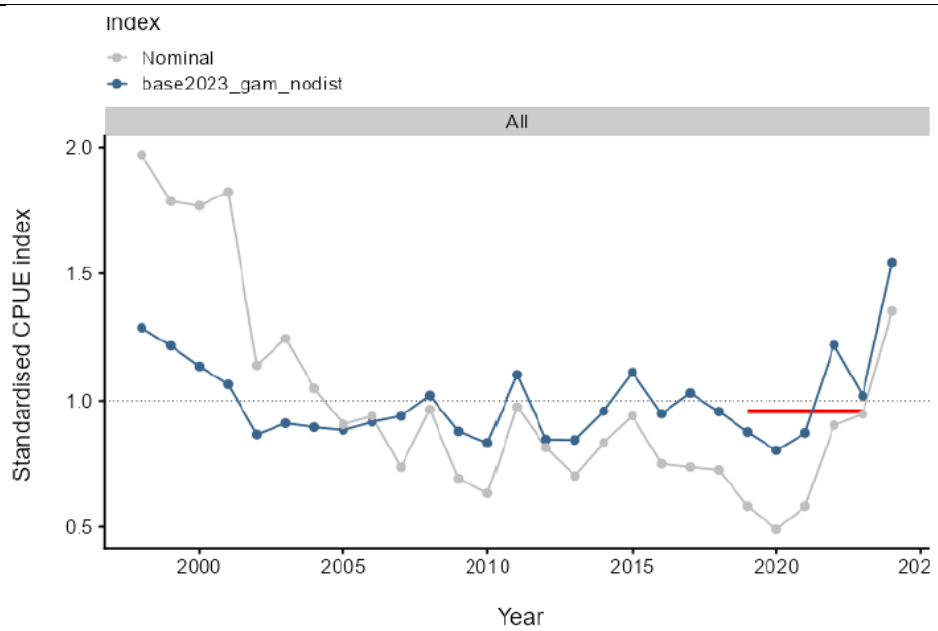

Figure 15: Nominal and standardised CPUE time series for striped marlin in the ETBF and the recent five-year average (2019-2023) (source: Williams and Tremblay-Boyer 2025b).
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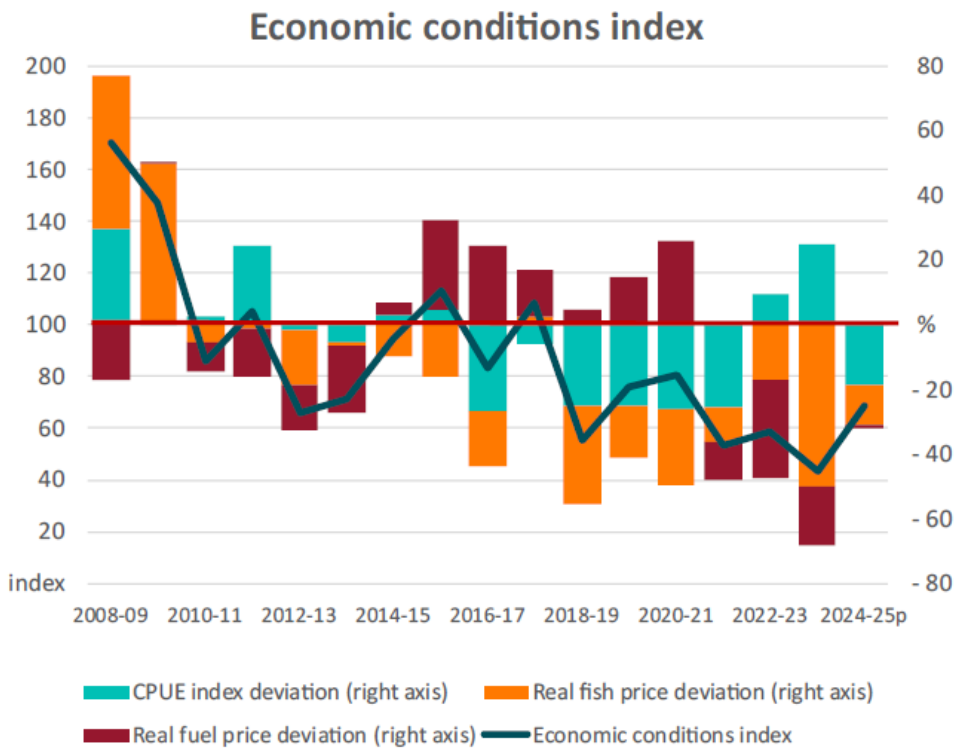
<td>Economic Conditions Index</td>
<td>
The GVP for striped marlin in 2024-25 was approximately $1.6 million and 4% of the GVP in the ETBF. The ECI and GVP is greater than in 2023-24, but comparable to the GVP in 2022-23. Economic conditions for striped marlin remain low compared to a peak in 2008-09.


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<tr>
<td>Climate and Ecosystem status</td>
<td>At this stage, there is no striped marlin-specific climate information available.</td>
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WCPFC management advice	Management advice from the WCPFC Scientific Committee 2025 (SC21) • SC21 recommended that stock status and management advice be based upon the Bayesian surplus production model (BSPM) results as the most parsimonious and robust assessment presented for the SW Pacific MLS stock. • Median recent fishing mortality was below FMSY (F_{recent}/F_{MSY} = 0.77 with a 95% range of 0.05-1.51 and a 22.9% probability of F_{recent} exceeding F_{MSY}. Figure MLS-06) indicating the stock was unlikely to be subject to overfishing. • Median recent stock abundance was below D_{MSY} (D_{recent}/D_{MSY} = 0.77 with a 95% range of 0.33-2.3 and a 74% probability that the stock abundance was below D_{MSY}. Figure MLS-06) indicating the stock was likely to be overfished. The depletion value at which MSY occurs is 0.48 (the 95% credible interval is 0.26-0.7). • The stock is very unlikely to be below 20% of the unfished state (Figure MLS-05). The probability of the stock being below $D_{0.2,F=0}$ is 9.2% for the recent period, with a median ratio of 1.84 (95% CI: 0.73 – 4.7295). Noting that this depletion is relative to the 20% total depletion from the equilibrium unfished population level and is not equivalent to the conventional $SB/SB_{20\%,F=0}$. • SC21 noted that under projections using recent average catch, the stock had a 55% probability of recovering to greater than MSY levels by 2026 (Table MLS-04), and recommended not increasing catch above recent average levels.
TTRAG advice	Striped marlin are overfished when assessed against the D/D_{MSY} reference point but not overfished when assessed against the limit reference point of $D/D_{0.2F=0}$. The median estimate of depletion (D) for the recent period (2019-2022; $SB_{recent}/SB_{F=0}$) was 0.37 with a range (95% CI) of 0.15-0.94. There is a 9.2% probability that depletion is below 0.2. Striped marlin are not subject to overfishing. Estimates of fishing mortality were highly uncertain, with the median estimate of recent (2018-2021) fishing mortality relative to F_{MSY} (F_{recent}/F_{MSY}) of 0.77 with a range (95% CI) of 0.05-1.51. There is a 44% probability that fishing mortality is above F_{MSY}. While the commercial catch of striped marlin is low, Australia does take a high proportion of STM in the SW Pacific Region 1 (61.3% in 2024). The RAGs advice is based on a constant catch harvest strategy approach. Having regard for the SC21 advice that catches of striped marlin should not increase above recent average levels, the RAG confirmed that there was no additional advice and no indications that a TACC of 351 t would not be appropriate for the 2026 fishing season. Industry suggested that striped marlin becomes limiting where quota is used earlier in the season due to shifts in targeting practices, and therefore not available for later in the season. However, such targeting has not been observed so far in 2025 and potentially indicates that 2024 was an anomalous year.
TACC advice	**The RAG recommended a 351 t TACC for striped marlin for the 2026 ETBF fishing season.**

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Attachment A

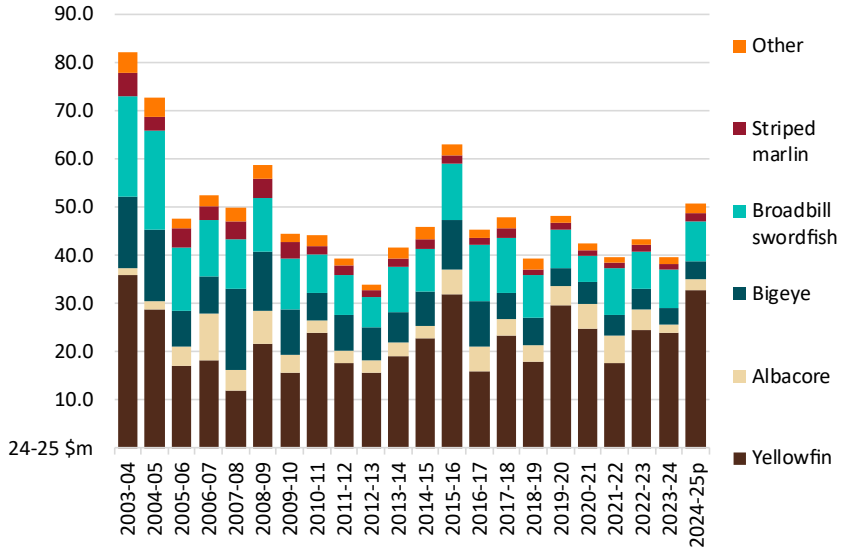
Australian Government
Department of Agriculture, Fisheries and Forestry
ABARES

Economic conditions in the Eastern Tuna and Billfish Fishery

Meeting paper for Tropical Tuna Resource Assessment Group meeting, held 16th September 2025

Economic conditions in the Eastern Tuna and Billfish Fishery
Annual indicators

Gross value of production



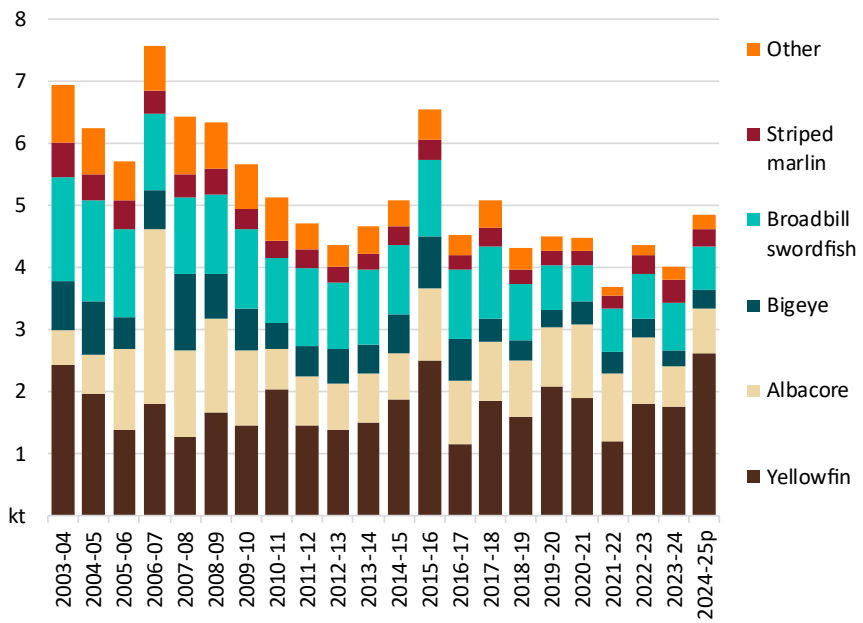
Source: ABARES.
Note: p preliminary
GVP for 2024-25 is preliminary. Final GVPs will be available for the 2023-24 financial year later in 2024.

In 2024–25 GVP is estimated to have increased by 28%, with most of this increase driven by higher catch volumes of yellowfin tuna.
Gross value of production (GVP) in the ETBF decreased between 2003–04 and 2012–13 from $82.24 million to $34.07 million in real terms (2024–25 dollars), reflecting lower landed catch and falling average prices.

Between 2012–13 and 2015–16, GVP increased to an 11-year high of $63.1 million in 2015–16 in real terms (2024–25 dollars). This increase resulted from higher landed catch and rising prices of key targeted species (particularly yellowfin tuna).

The decrease in GVP between 2015–16 and 2023–24 largely resulted from lower bigeye tuna, Broadbill swordfish and Yellowfin tuna production value.

Catch



Source: AFMA.
Note: p preliminary
Catch for 2023-24 is preliminary. Final catch will be available for the 2024-25 financial year later in 2024. Catch data is from AFMA.

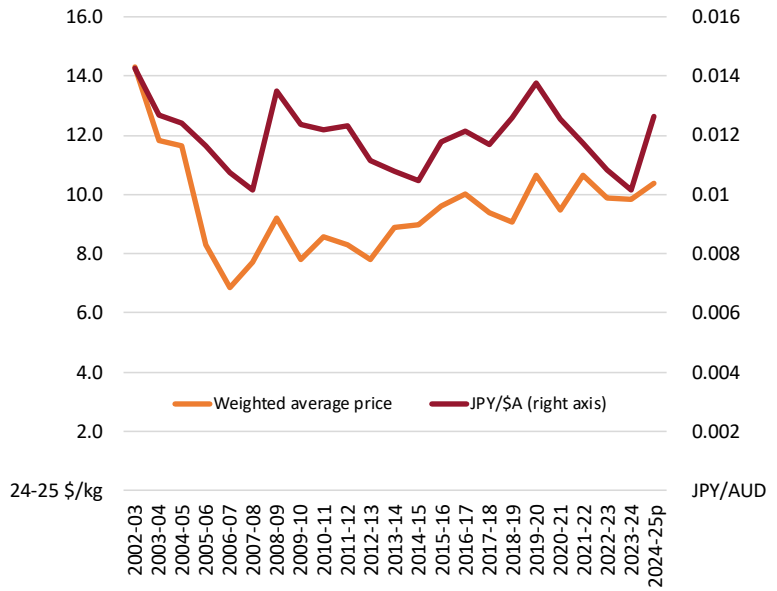
In 2024-25 catch increased following because of higher landed volumes of yellowfin tuna.

Catch in the ETBF has trended downwards between 2003–04 and 2023–24, with peaks during those years in 2003–04, 2006–07 and 2015–16.

Since 2003–04 the number of active vessels (and fishing effort to a lesser extent) decreased significantly, following a decline in economic conditions in the fishery and the removal of vessels through the Securing Our Fishing Future structural adjustment package (Patterson et al 2020).

Between 2012–13 and 2015–16 landed catch increased by 50% to 6,572 tonnes and has remained well below this level since 2015–16.

Weighted average price of landed catch tracks the JPY/AUD exchange rate

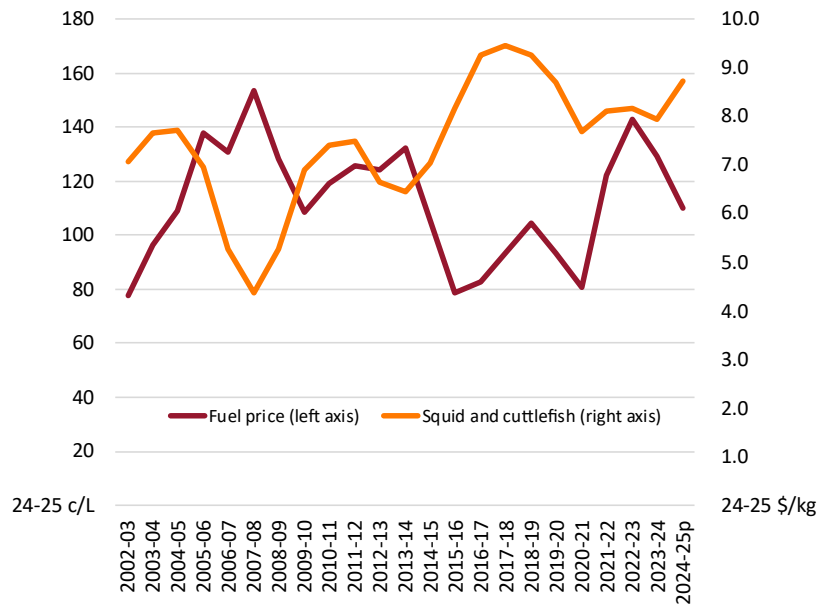


Source: ABARES, RBA.

The weighted average price of fish caught in the ETBF fell significantly in the early 2000s, largely a result of the appreciation of the Australian dollar against the Japanese Yen. Japan was Australia's major export market for yellowfin tuna, and bigeye tuna during this period.

The weighted average price of fish caught in the ETBF trended upwards from 2006–07. There is a strong correlation of the Australian dollar against the Japanese Yen and the weighted average price movement.

Input prices – fuel and squid by financial year average



Note: Fuel price is diesel (ex. GST and excise).
Source: ABARES.

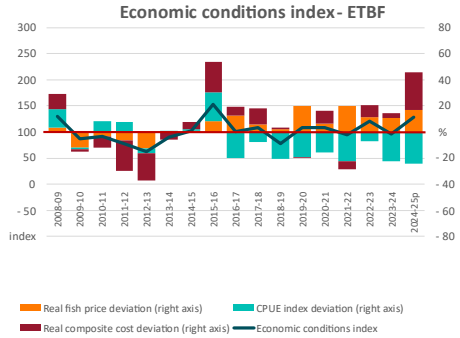
The price of fuel and squid in real terms (2024–25 dollars) have varied significantly between 2002–03 and 2024–25.

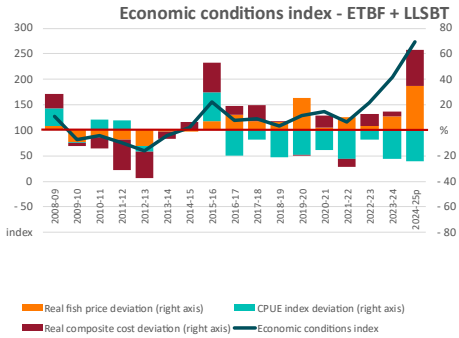
The average real price of fuel peaked in 2007–08, 2013–14 and 2022-23. Real fuel prices have trended upwards since 2015–16 and were at historically high levels through 2022–23 but declined to 2024–25.

The average real price of squid imports (a proxy for bait price) peaked in 2017–18 at more than double the average price in 2007–08. According to the FAO (2019), squid prices have on tight world supplies which are not expected to ease in the short term. Squid prices declined in 2020-21, but have remained high since then in real terms compared to the early 2000s period.

Economic conditions in the Eastern Tuna and Billfish Fishery
Annual indicators

Economic conditions index (weighted)



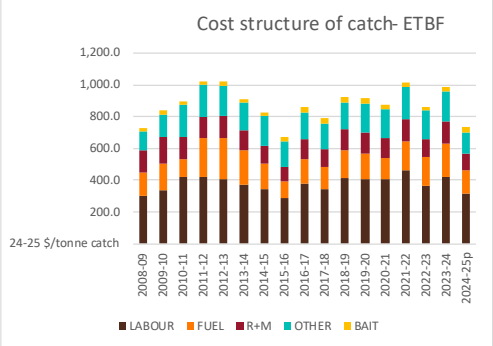


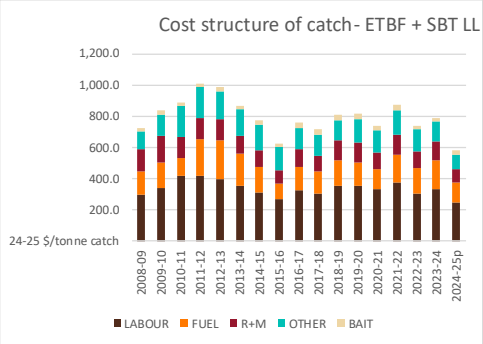
Notes: CPUE is catch-per-unit effort 2008–09 to 2018–19 average = 100 for all indices. Economic conditions index reflects three component indices. Deviation (right axis) represents percentage difference of each component index from long-term average. ECI and deviations in real fish price and real fuel price are calculated using weighted GVP of yellowfin tuna, bigeye tuna, albacore, swordfish and striped marlin.
Source: ABARES adapted from FFA 2018.

The ECI reflects that the ETBF is a multi-species fishery. Nominal GVP weights of the 5 key commercial species in the ETBF were used to calculate ECI and deviations in its component indices from the long-term (2008–09 to 2018–19 average = 100) average.

Using the weighted ECI approach, in 2024–25 the ECI increased to be above average levels compared to the decadal average pre the onset of the Covid-19 Pandemic. This outcome is attributed to lower input costs and higher fish prices. Declining catch per unit effort moderating the increase in the ECI during the year. The availability of long line SBT to operators in the fishery on the Australian east coast provides a boost to the ECI with the indicator tracking at well above average with the inclusion of SBT.

Cost structure of fishery

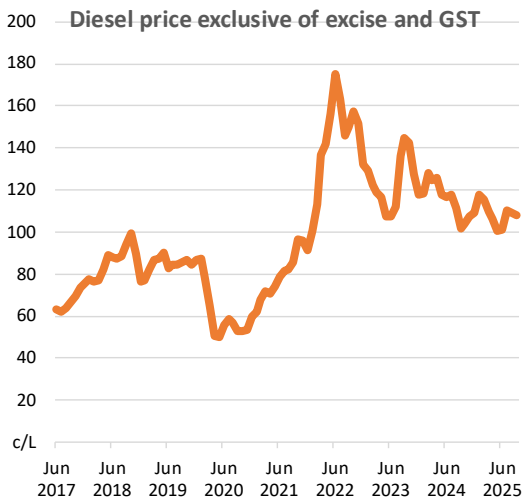


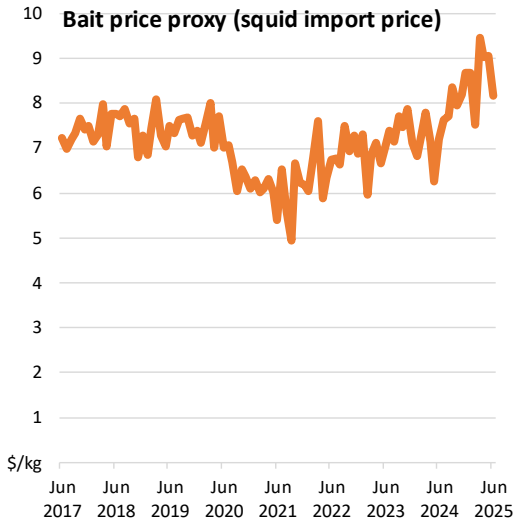


During 2024–25 costs per tonne of catch declined for the ETBF fishery. The effect on this indicator of including longline SBT caught is to reduce cost per catch as fixed costs are recouped across a larger volume of catch.

Economic conditions in the Eastern Tuna and Billfish Fishery Monthly indicators

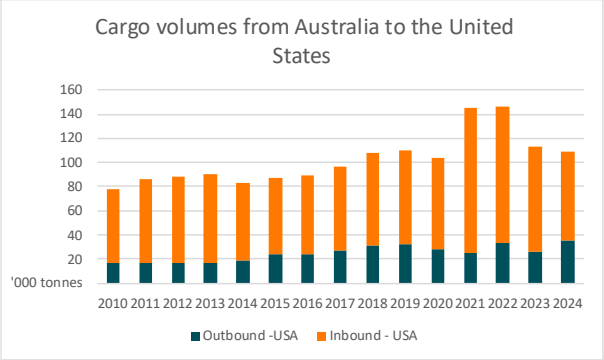
Input prices, monthly June 2017 to August 2024

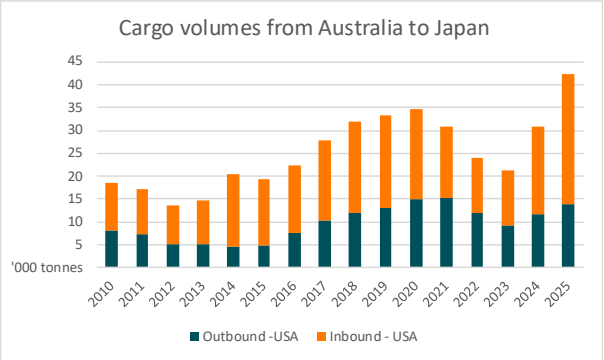




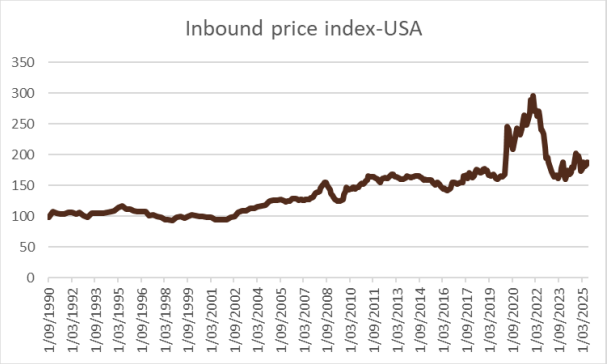
Sources: Australian Institute of Petroleum, Australian Bureau of Statistics.
Notes: Fuel is monthly average from June 2017 to September 2024; Bait is the sum of monthly imports of AHECC 0307410018 - Cuttle fish and squid, live, fresh or chilled and AHECC 0307430019 - Frozen cuttle fish (Sepia officinalis, Rossia macrosoma, Sepiola spp.) and squid (Ommastrephes spp., Loligo spp., Nototodarus spp., Sepioteuthis spp.), June 2017 to June 2024

Air freight indicators – selected routes and years



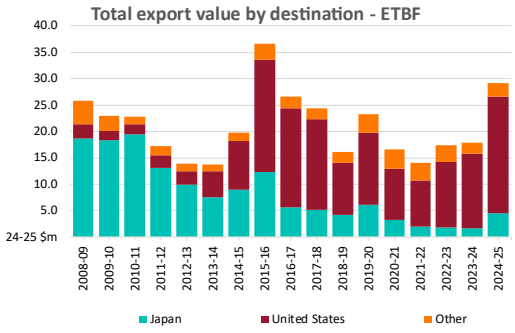


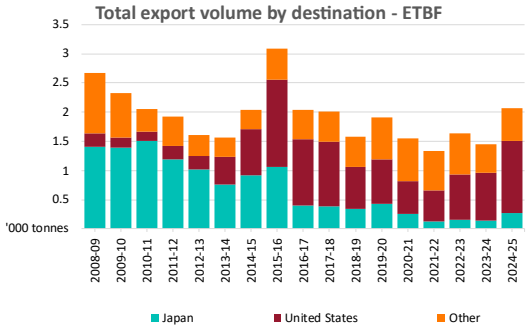
Source: [Freight Statistics | Bureau of Infrastructure and Transport Research Economics]

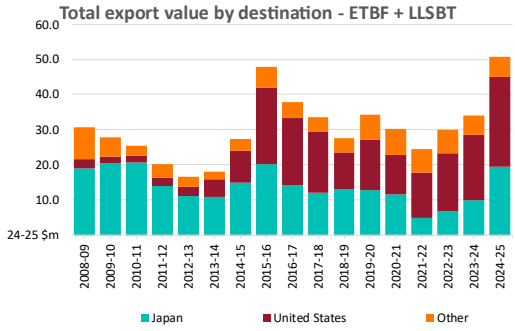


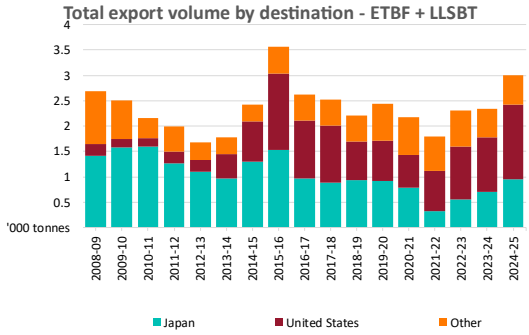
Source: [Inbound Price Index (International Services): Air Freight (IC131) | FRED | St. Louis Fed]

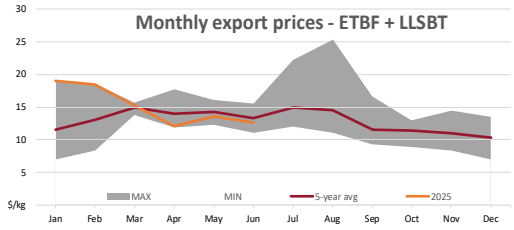
Export markets

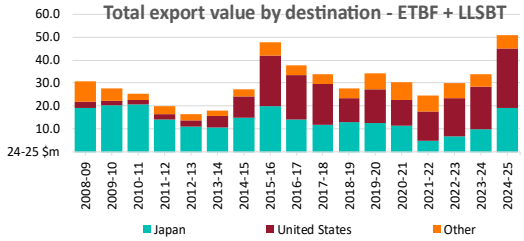






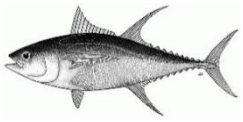


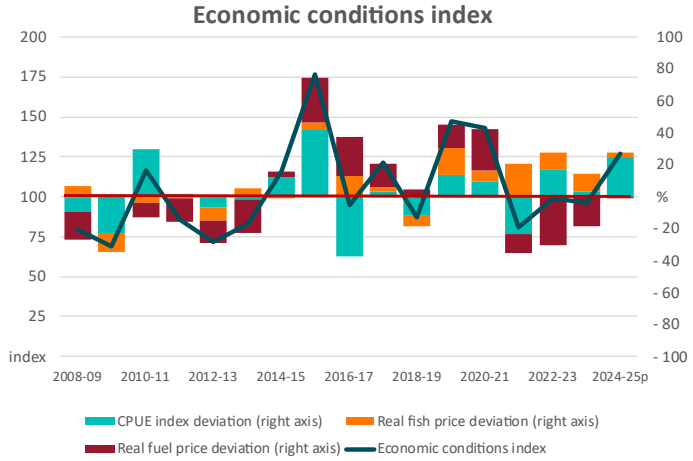


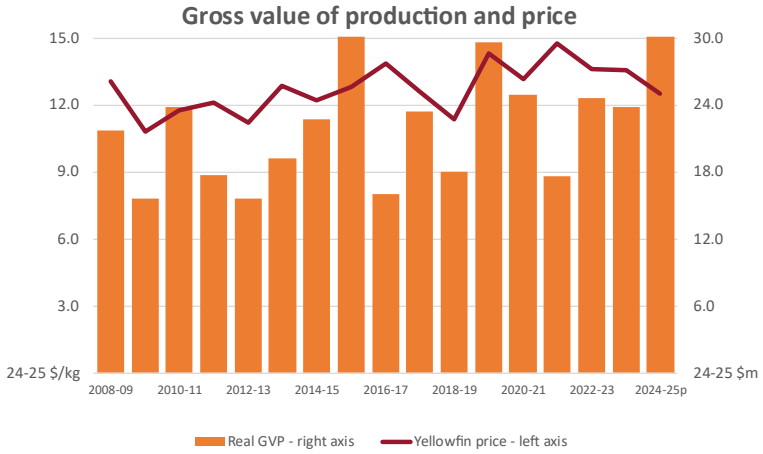


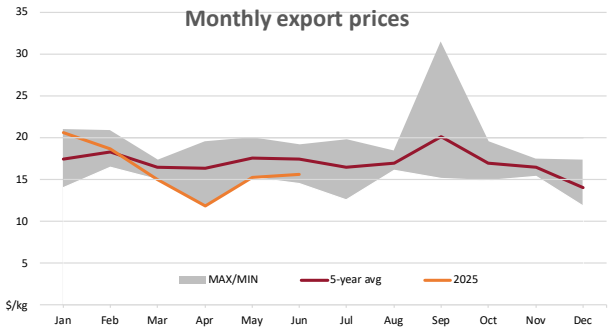
Source: RBA, ABS.

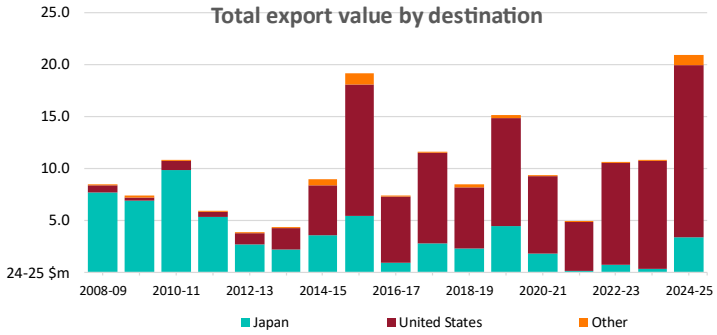
Economic conditions in the Eastern Tuna and Billfish Fishery
Yellowfin tuna

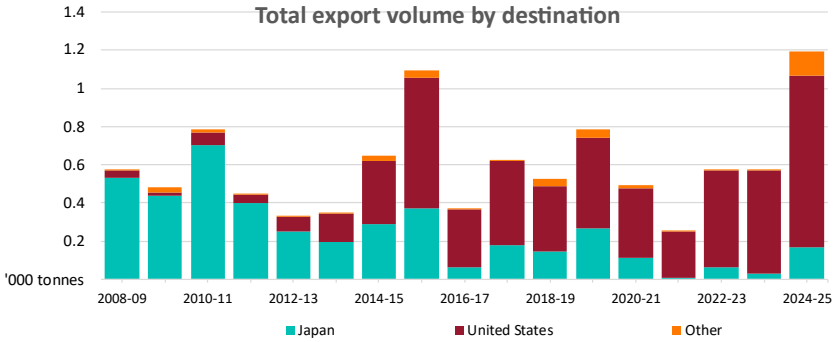






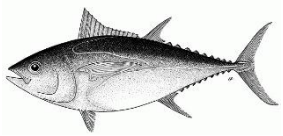


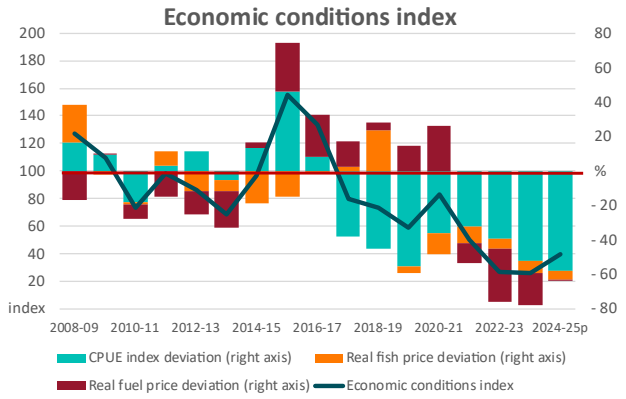


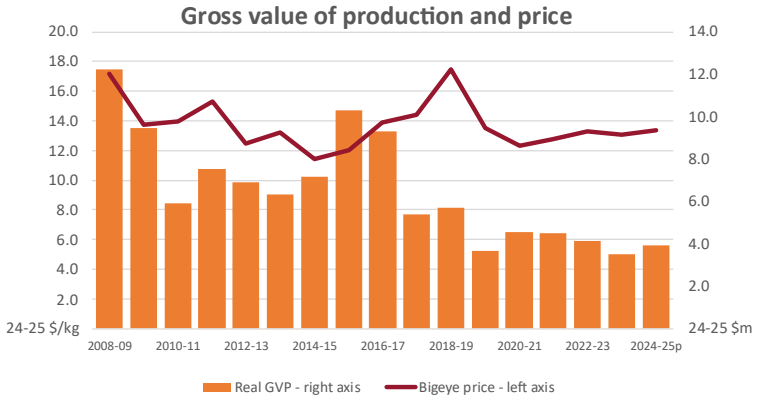


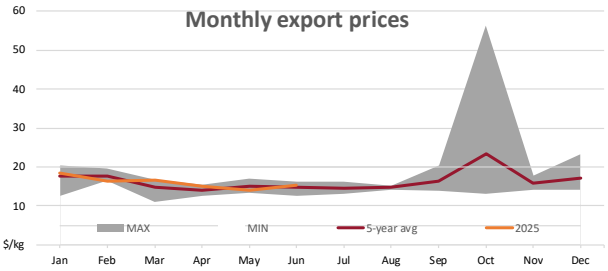
Notes: Economic conditions index (and component indices) 2008–09 to 2018–19 average = 100. Deviation represents percentage difference of each component index from long-term average. Monthly export prices based on fresh or chilled yellowfin tuna exports. Total export value by destination based on all yellowfin tuna exports from Australia. 99% of yellowfin tuna exports are as 'fresh or chilled'.
Sources: ABARES, ABS, FFA.

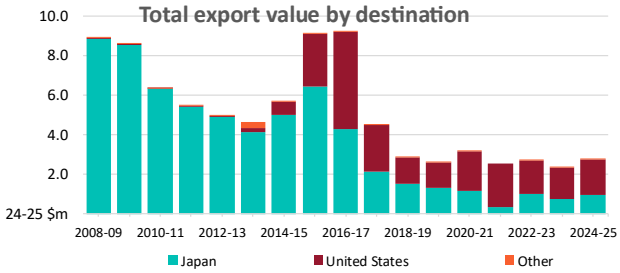
Economic conditions in the Eastern Tuna and Billfish Fishery
Bigeye tuna

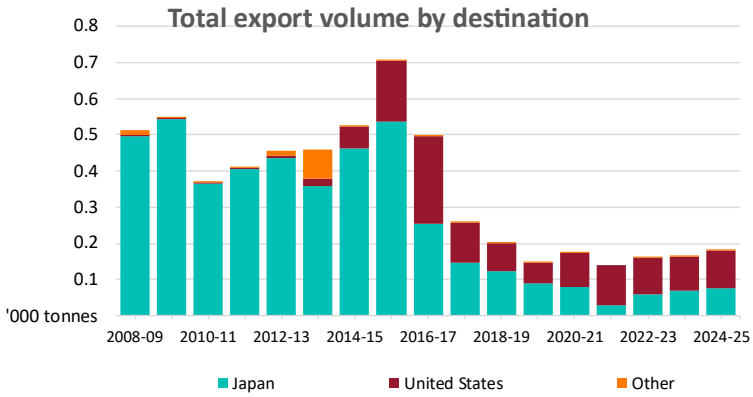






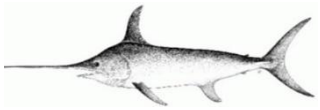


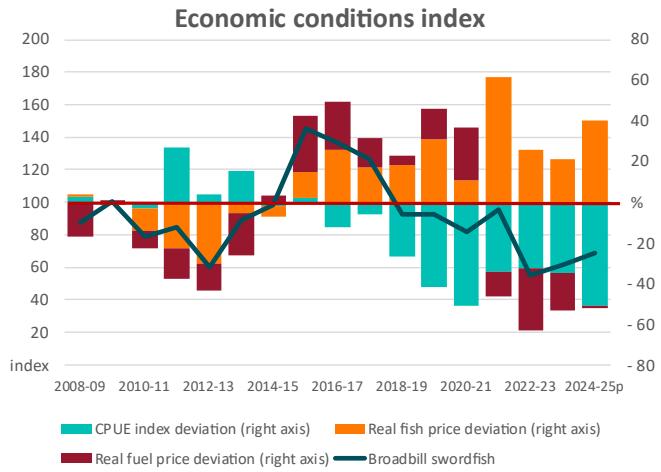


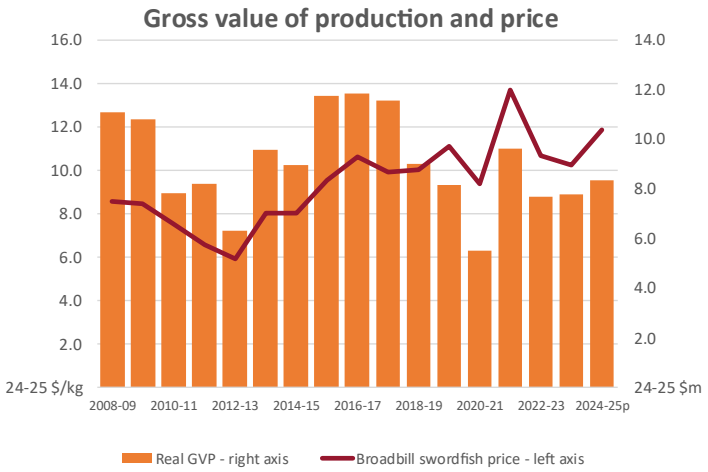


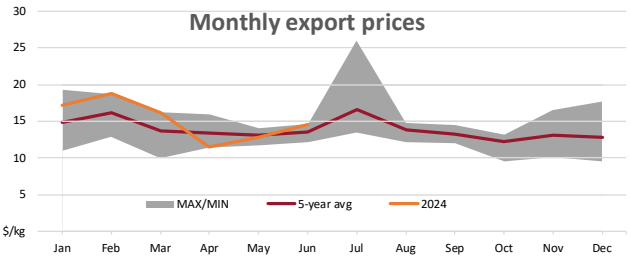
Notes: Economic conditions index (and component indices) 2008–09 to 2018–19 average = 100. Deviation represents percentage difference of each component index from long-term average. Monthly export prices based on fresh or chilled bigeye tuna exports. Total export value by destination based on all bigeye tuna exports from Australia. 99.9% of bigeye tuna exports are as 'fresh or chilled'.
Sources: ABARES, ABS, FFA.

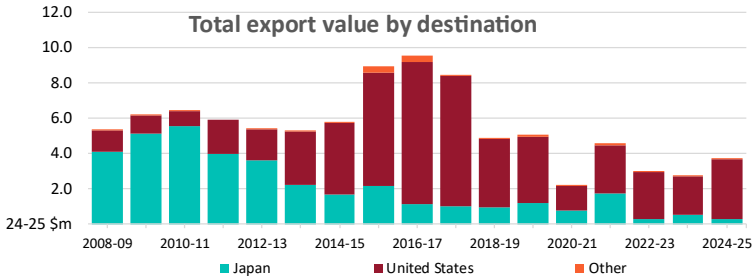
Economic conditions in the Eastern Tuna and Billfish Fishery Swordfish

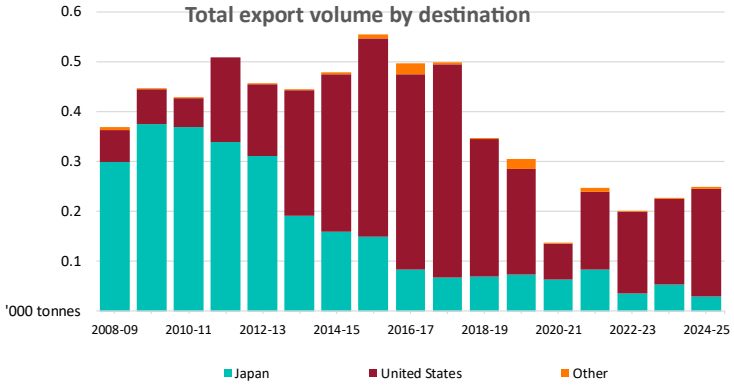






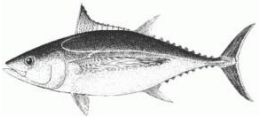


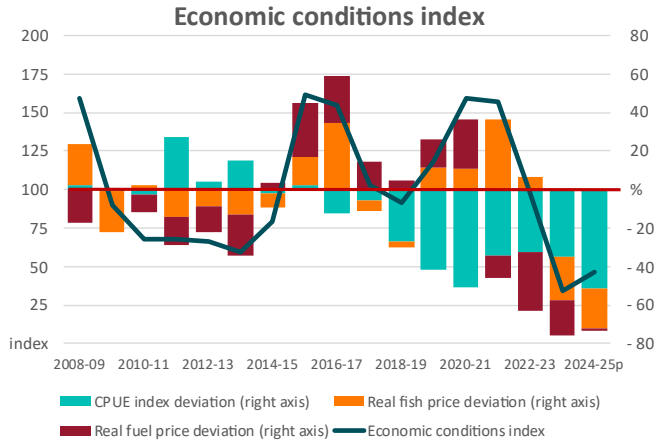


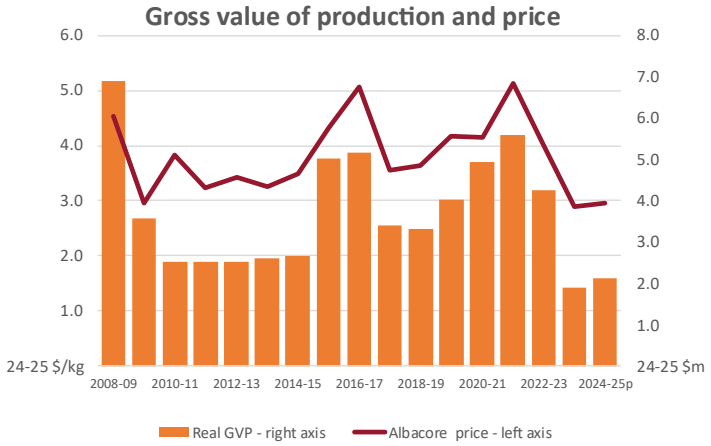


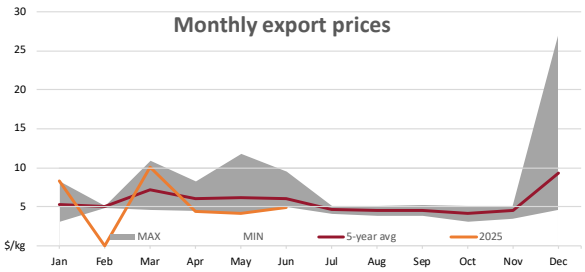
Notes: Economic conditions index (and component indices) 2008–09 to 2018–19 average = 100. Deviation represents percentage difference of each component index from long-term average. Monthly export prices based on fresh or chilled swordfish exports. Total export value by destination based on all swordfish exports from Australia. 99% of swordfish exports are as 'fresh or chilled'.
Sources: ABARES, ABS, FFA.

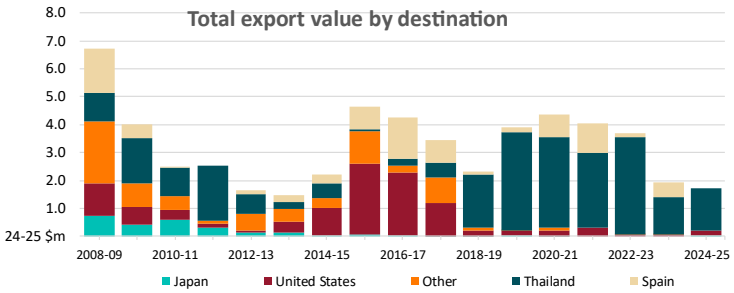
Economic conditions in the Eastern Tuna and Billfish Fishery Albacore

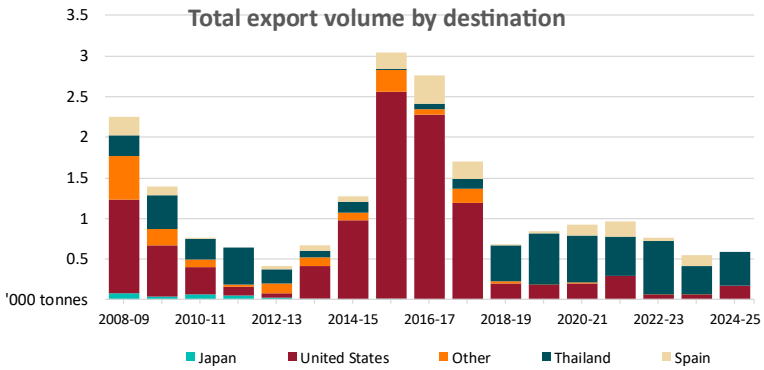






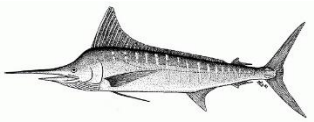


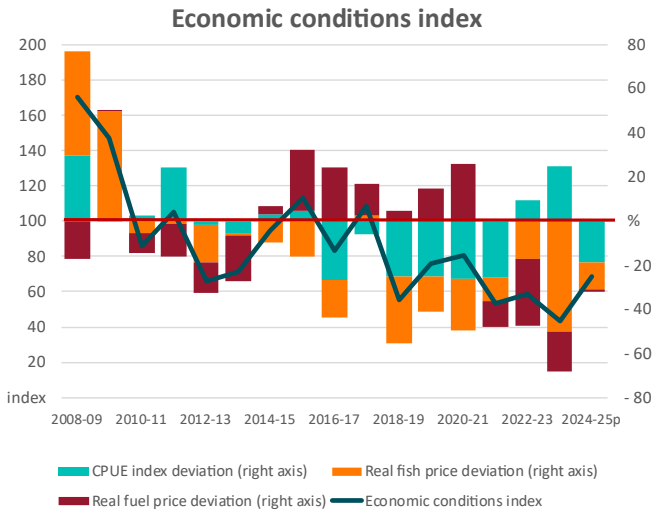


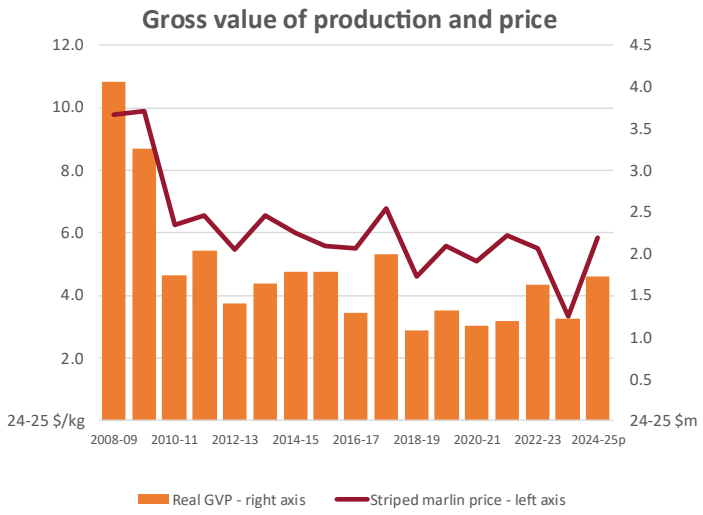


Notes: Economic conditions index (and component indices) 2008–09 to 2018–19 average = 100. Deviation represents percentage difference of each component index from long-term average. Monthly export prices based on all albacore exports. Total export value by destination based on all albacore exports from Australia. Albacore export product form varies and between 2016–17 and 2020–21 on average 78% was exported frozen and 22% was exported as 'fresh or chilled'. In 2020–21 only 5% was exported as 'fresh or chilled'.
Sources: ABARES, ABS, FFA.

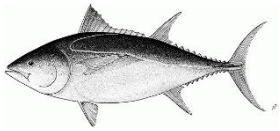
Economic conditions in the Eastern Tuna and Billfish Fishery
Striped Marlin

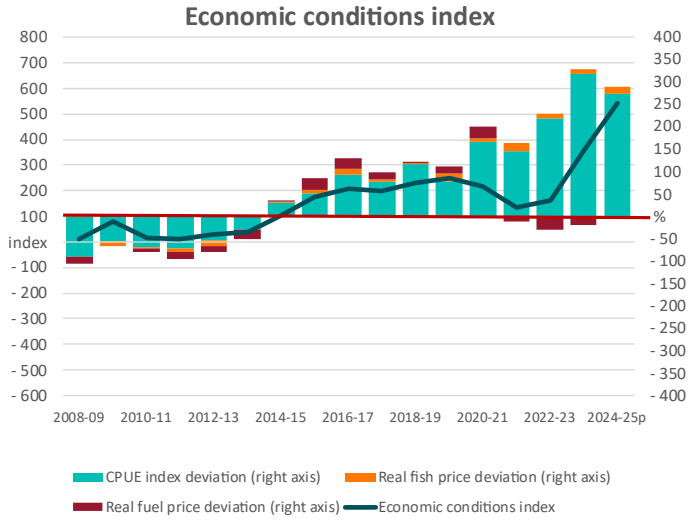


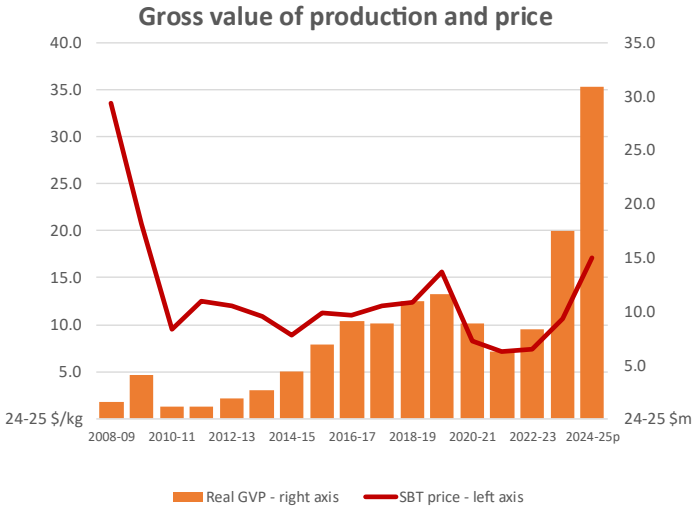


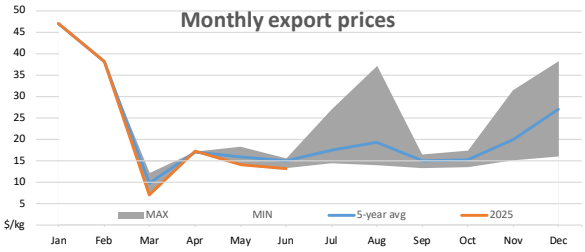


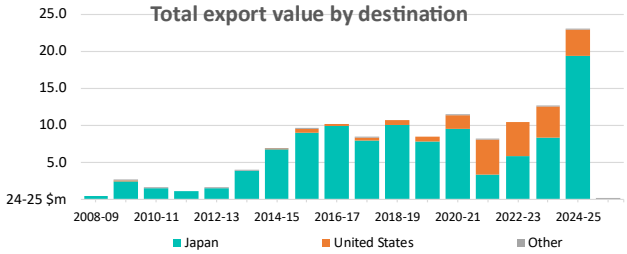
Southern bluefin tuna (excluding SA farm input)

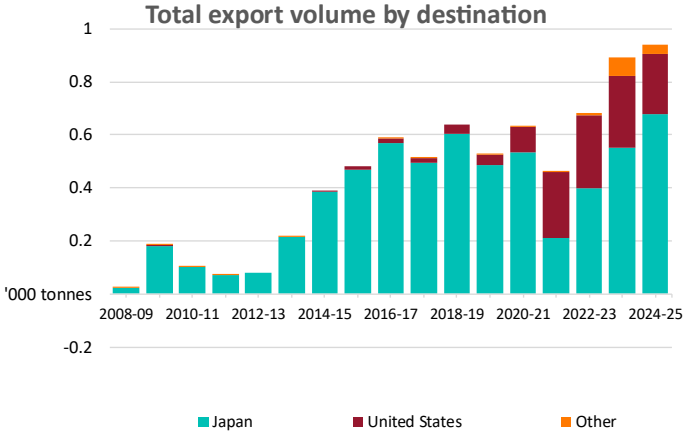








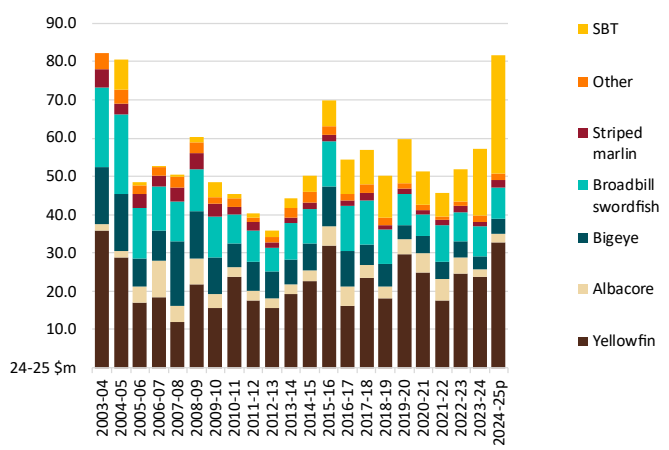


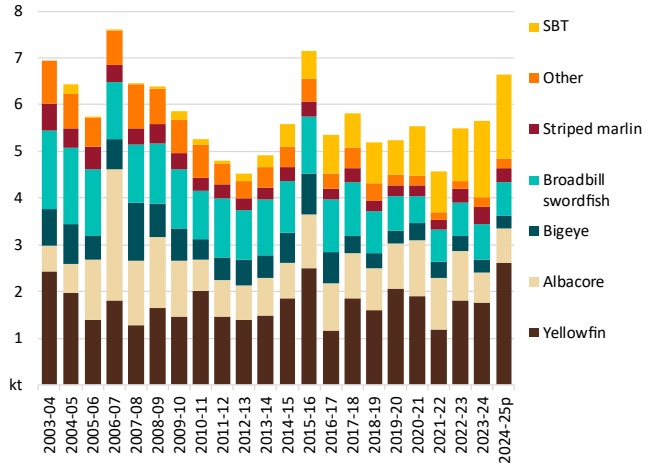


Notes: Economic conditions index (and component indices) 2008–09 to 2018–19 average = 100. Deviation represents percentage difference of each component index from long-term average. Export data not available for striped marlin. Gross value of production data for southern bluefin tuna are for fish landed outside South Australia.
Sources: ABARES, ABS, FFA.

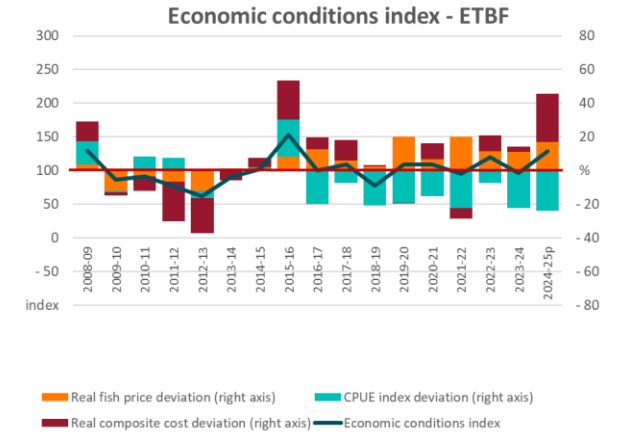
Economic conditions in the Eastern Tuna and Billfish Fishery

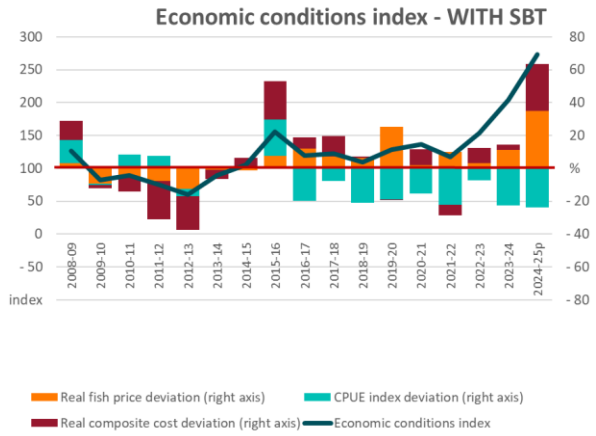
GVP and catch of combined ETBF and SBT long line (excluding SA farm input)

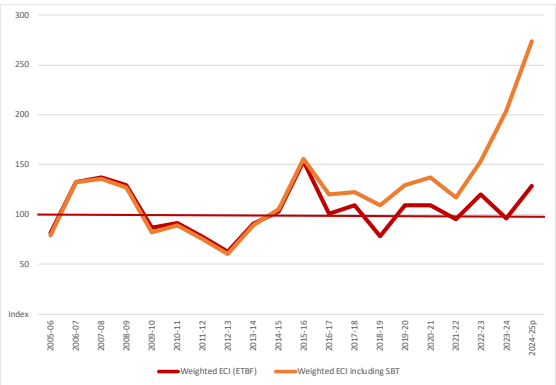




Impact on ECI of Southern bluefin tuna (excluding SA farm input)







Notes: Economic conditions index (and component indices) 2008–09 to 2018–19 average = 1 00. Deviation represents percentage difference of each component index from long-term average. Export data not available for striped marlin. Gross value of production data for southern bluefin tuna are for fish landed outside South Australia.
Sources: ABARES, ABS, FFA.

References

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Patterson, H, Larcombe, J, Woodhams, J and Curtotti, R 2020, 'Eastern Tuna and Billfish Fishery', in *Fishery status reports 2020,* Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

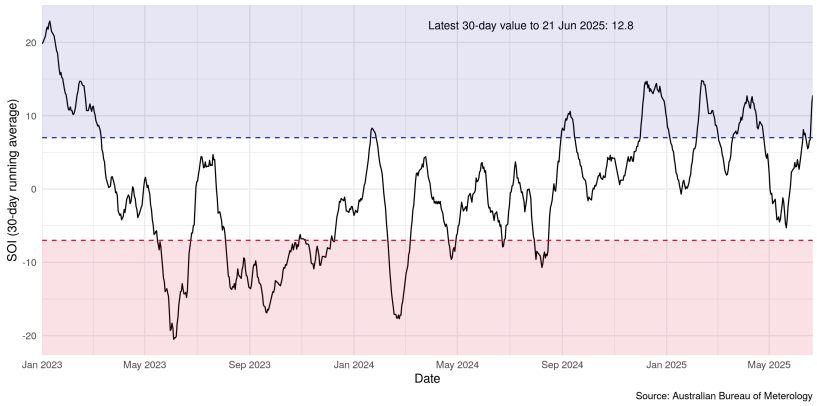
Eastern and Tuna Billfish Fishery

Attachment B

July 21, 2025

Historical Period

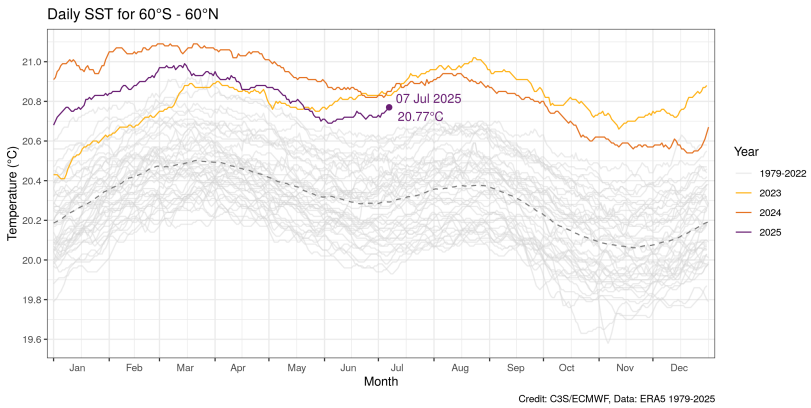
Climate Drivers: Southern Oscillation Index (SOI)



SOI reflects atmospheric conditions of ENSO by comparing air pressure between Tahiti and Darwin; sustained values below −7 indicate El Niño, while values above +7 indicate La Niña. ENSO is currently neutral and has been neutral since April 2024 (*BOM*)[1].

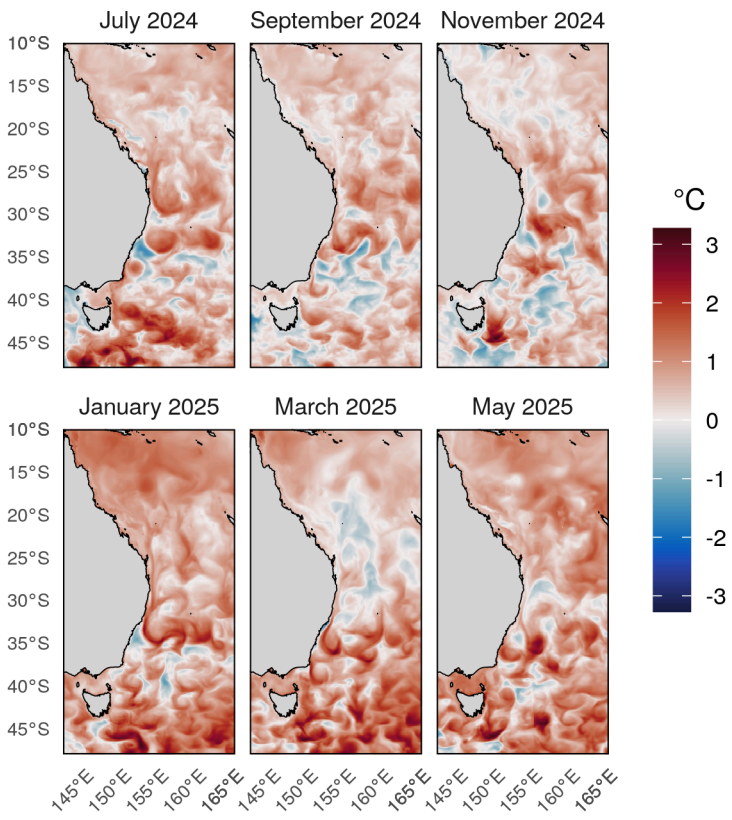
ENSO influences catch rates of YFT, BET, ALB, & STM in the Western Central Pacific[2]. Catches are typically higher during El Niño.

Climate Drivers: Sea Surface Temperature (SST)



Global Sea Surface Temperatures (SST) have remained at record highs in 2025 (*Copernicus*)[3].

Regional Dynamics: SST Anomaly

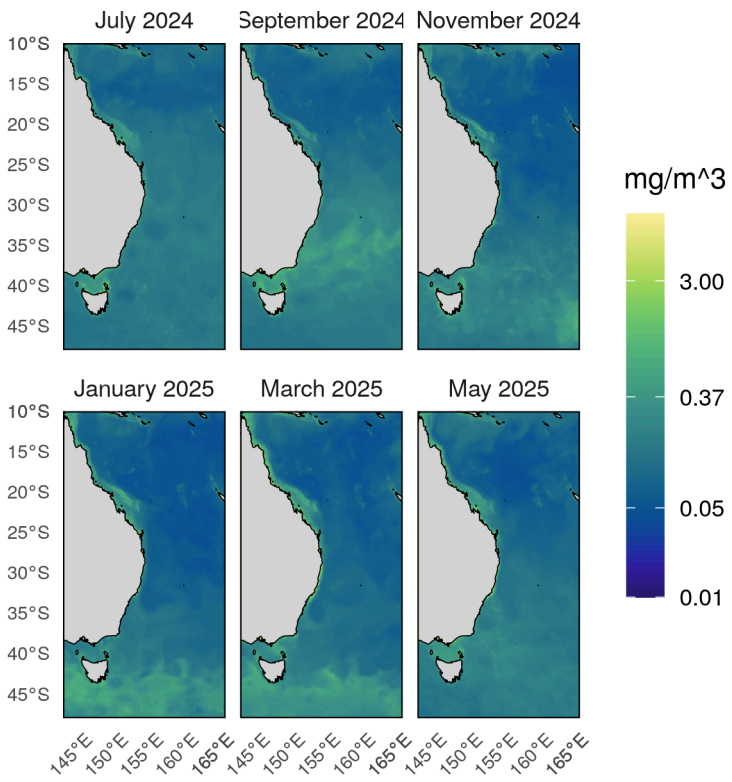


Source: CMEMS

Bi-monthly maps of SST anomalies show the east coast of Australia has largely been anomalously warm for the last year[4]. Some average and cooler-than-average waters were seen off the central-east coast during March 2025. Anomalies are relative to 1993-2016. Patches of anomalously cool water south of Sydney reflect the dynamic eddy field that is characteristic of this region. In this region, eddy activity has intensified and extended further south over time[5].

Moderate marine heatwaves (MHW), regions of anomalously warm water, occurred across most of the region from Nov-Jan, with MHWs continuing in the southern part of the region until May (*MHWtracker*)[6]. The impacts to the ETBF are unknown.

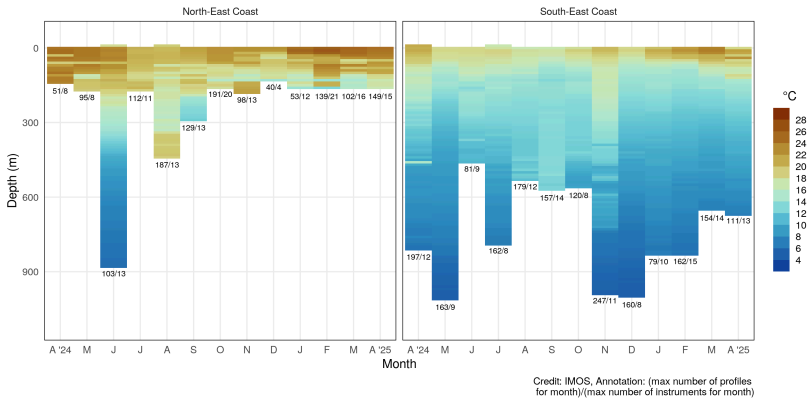
Regional Dynamics: Chlorophyll-a



Source: CMEMS

Bi-monthly maps of surface chlorophyll-a (log scale; mg/m3)[4]. Surface chl-a is a proxy for ecosystem productivity. Elevated surface chl-a persists in southern regions and off QLD shelf-waters throughout the year. Peaks in surface chl-a are notable during spring and summer months.

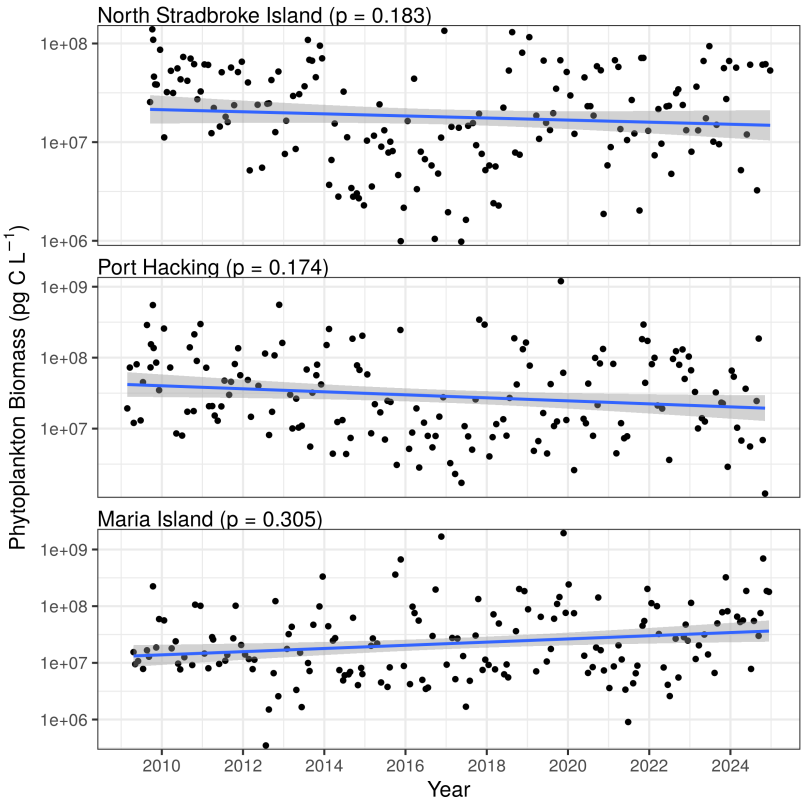
Regional Dynamics: FishSOOP Temperature-Depth Profiles



Average temperature at depth bins for each month over the past year, as sampled by instruments deployed on fishing vessels. North-east coast is from Fraser Island to Sydney, and South-east coast is from Sydney to southern Tasmania and includes all vessels using stationary and mobile gears.

Warmer water near the surface and cooler water at depth is most notable during summer, and breaks down over winter - a process known as seasonal stratification. It is most notable in the south where there are deeper observations below the mixed layer.

Ecosystem: Phytoplankton Biomass



Ecosystem productivity, as measured by phytoplankton biomass at IMOS National Reference Stations, show long-term increases off Tasmania and small declines off North Stradbroke Island and Port Hacking (Sydney)[7] (*IMOS BOO*).

Observations

2025 observations

- End of 2024 had very high YFT commercial catch. Industry noted that YFT catches are often high after El Niño.
- Recreational sector targeting striped marlin in North-east Tasmania for the first time.
- Recreational sector noted an increase in catch of small blue marlin further south. This is rare as these sizes usually remain in the tropics.
- Recreational sector noted no notable black marlin recruitment events. This has happened in the past.

2024 observations

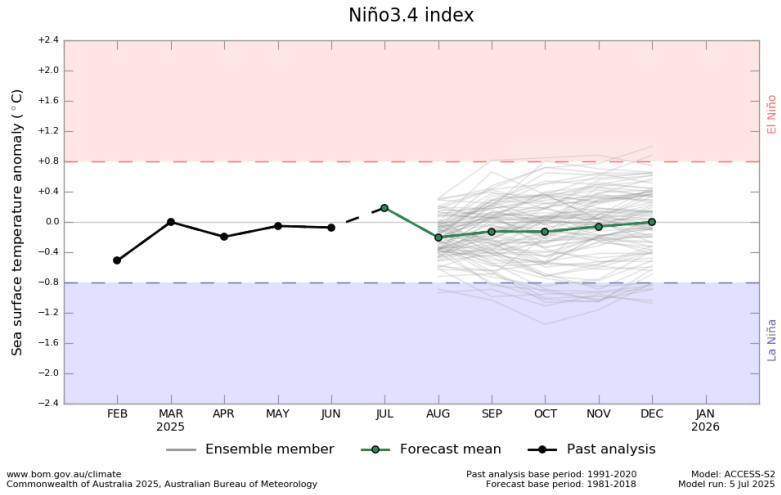
- Juvenile black marlin recruitment event observed in recreational sector.
- Albacore tuna appeared later.
- Yellowfin tuna arrived with pulse of warmer water in June, which coincided with southern bluefin season.
- Strong southern bluefin tuna season.Lots of spearfish caught off Sydney in winter.

2023 observations

- Catches higher during El Niño.
- Recreational fishing sector noted a recruitment event is occurring due to juvenile species being caught.
- Bigeye is usually fished at different depths especially before El Niño.
- High sea temperatures during La Niña thought to be good conditions for spawning.

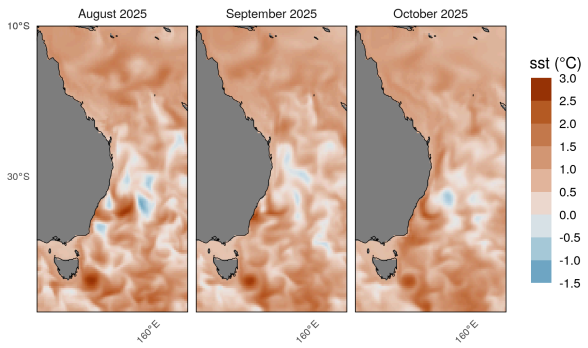
Future Outlook

Climate Drivers: Nino3.4



ENSO is currently neutral and forecast to remain neutral until December. (*BOM ENSO*)[8].

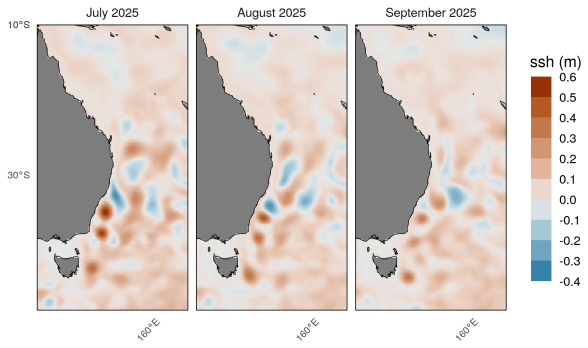
Regional Dynamics: SST Anomaly



Model: ACCESS-S (sourced from the Bureau of Metereology)

Forecasts of SST anomalies for the next three months indicate anomalously warm conditions across most of the region (*BOM OceanT*)[9]. Some patches of cooler than average water is forecast off NSW. Forecasts are updated regularly.

Regional Dynamics: SSH Anomaly



Model: ACCESS-S (sourced from the Bureau of Metereology)

Forecasts of SSH anomalies for the next three months can indicate eddies. Exact location of eddies is uncertain and forecasts are updated regularly[10].

Mesoscale ocean features, like eddies, are important foraging hotspots for tunas. Regions with more eddy activity can have higher YFT catch.

Sources:

(1) http://www.bom.gov.au/climate/enso/#tabs=Pacific-Ocean&pacific=SOI.

(2) Hartog et al., 2023: FRDC Project No 2017/004.

(3) https://pulse.climate.copernicus.eu/.

(4) Copernicus Marine Service.

(5) https://www.nature.com/articles/s41558-021-01006-9.

(6) https://www.marineheatwaves.org/tracker.html.

(7) https://shiny.csiro.au/BioOceanObserver/.

(8) http://www.bom.gov.au/climate/ocean/outlooks/?index=nino34.

(9) http://www.bom.gov.au/oceanography/oceantemp/sst-outlook-map.shtml.

(10) https://access-s.clide.cloud/