

2025 Report of the SCRS to the ICCAT Panel 4: Part 1. Swordfish and Billfish

Status, Responses,
and Research

29th Regular Meeting of the Commission
17-24 November 2025
Seville, Spain



SWO



WHM



SAI



BUM

Swordfish

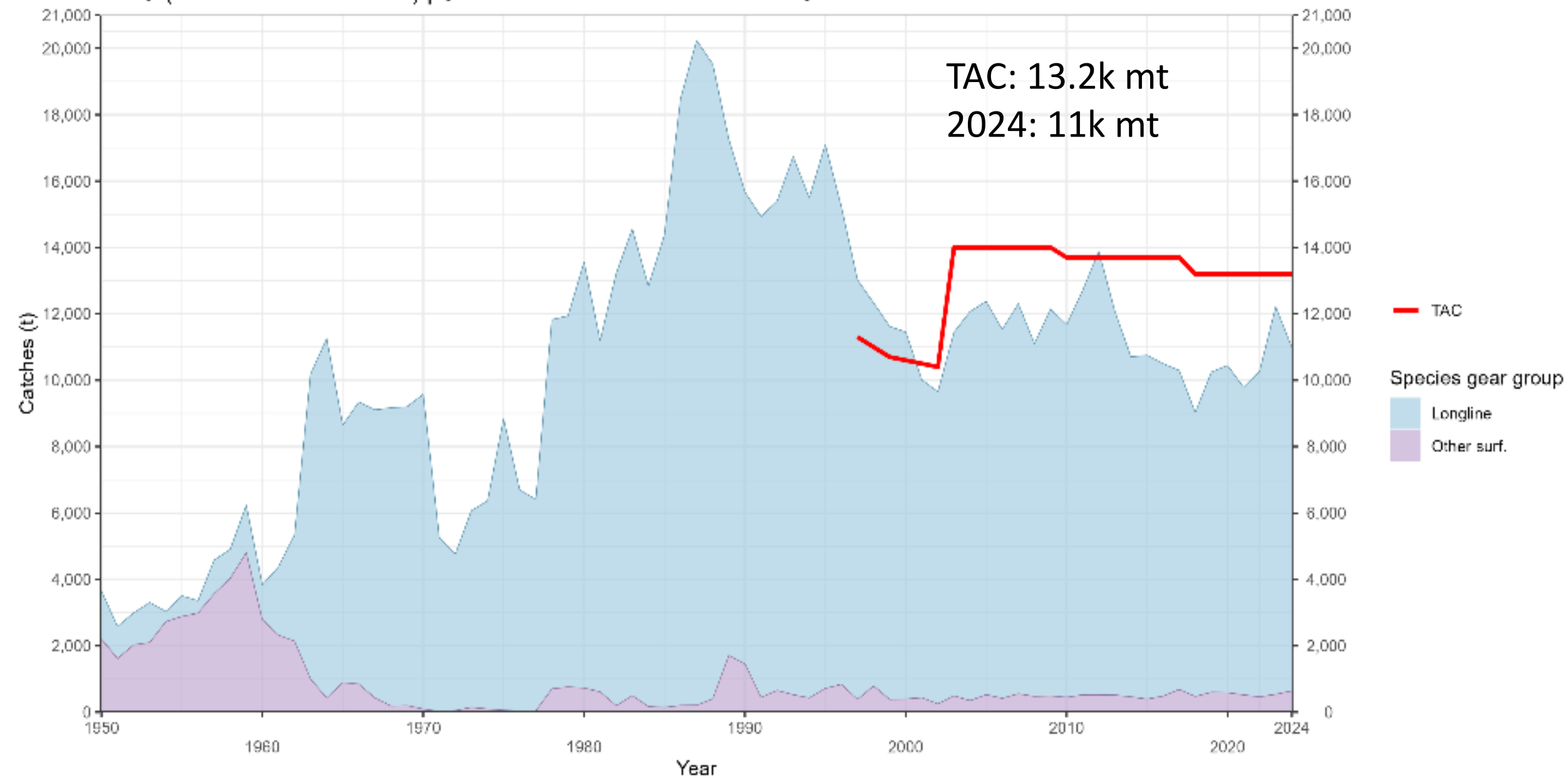




Swordfish overview

1. Stock status
 - Status
 - Catches
2. MSE
 - Robustness testing
 - Exceptional circumstances protocol
3. Responses to the Commission
4. SWO Species Group Work Plan for 2026

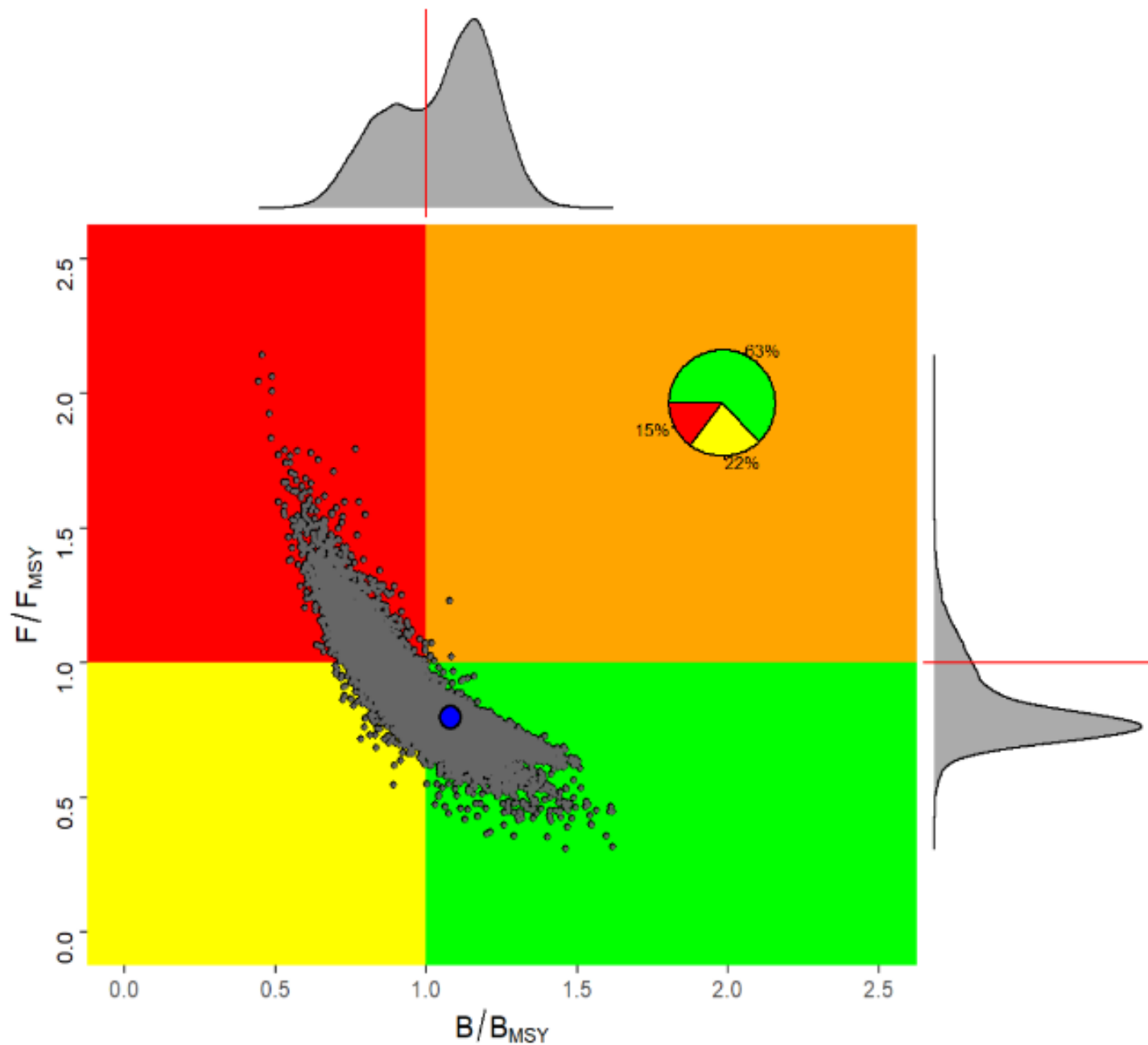
SWO (Northern atlantic stock) | Cumulative Task 1 catches vs. TAC



Note: Discard reporting remains poor for all stocks

Atlantic - North

Last assessed: 2022
Last year of data: 2020





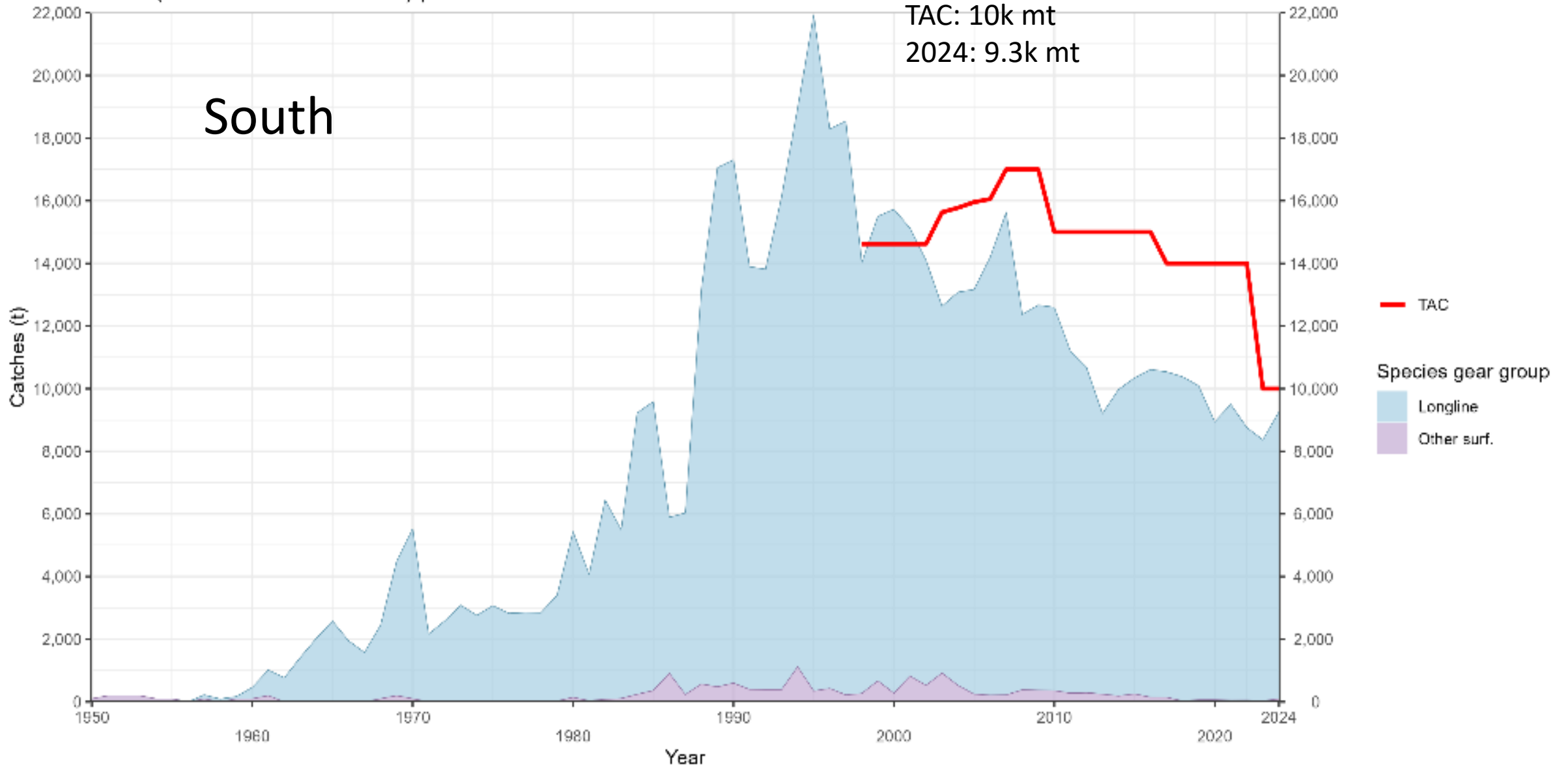
SWO-N summary

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY)	12,819 t (10,864 t - 15,289 t) ¹	2020
TAC (2024)	13,200 t	
Current (2024) Yield	11,001 t ²	
Relative Biomass (B ₂₀₂₀ /B _{MSY})	1.08 (0.71-1.33) ³	
Relative Fishing Mortality (F ₂₀₂₀ /F _{MSY})	0.80 (0.64-1.24) ³	
Stock Status	Overfished: NO (37.1% probability of being overfished) ⁴ Overfishing: NO (14.7% probability of overfishing) ⁴	
Management measure in effect	Rec. 24-10 TAC (2025): 14,769 t	

South Atlantic Swordfish



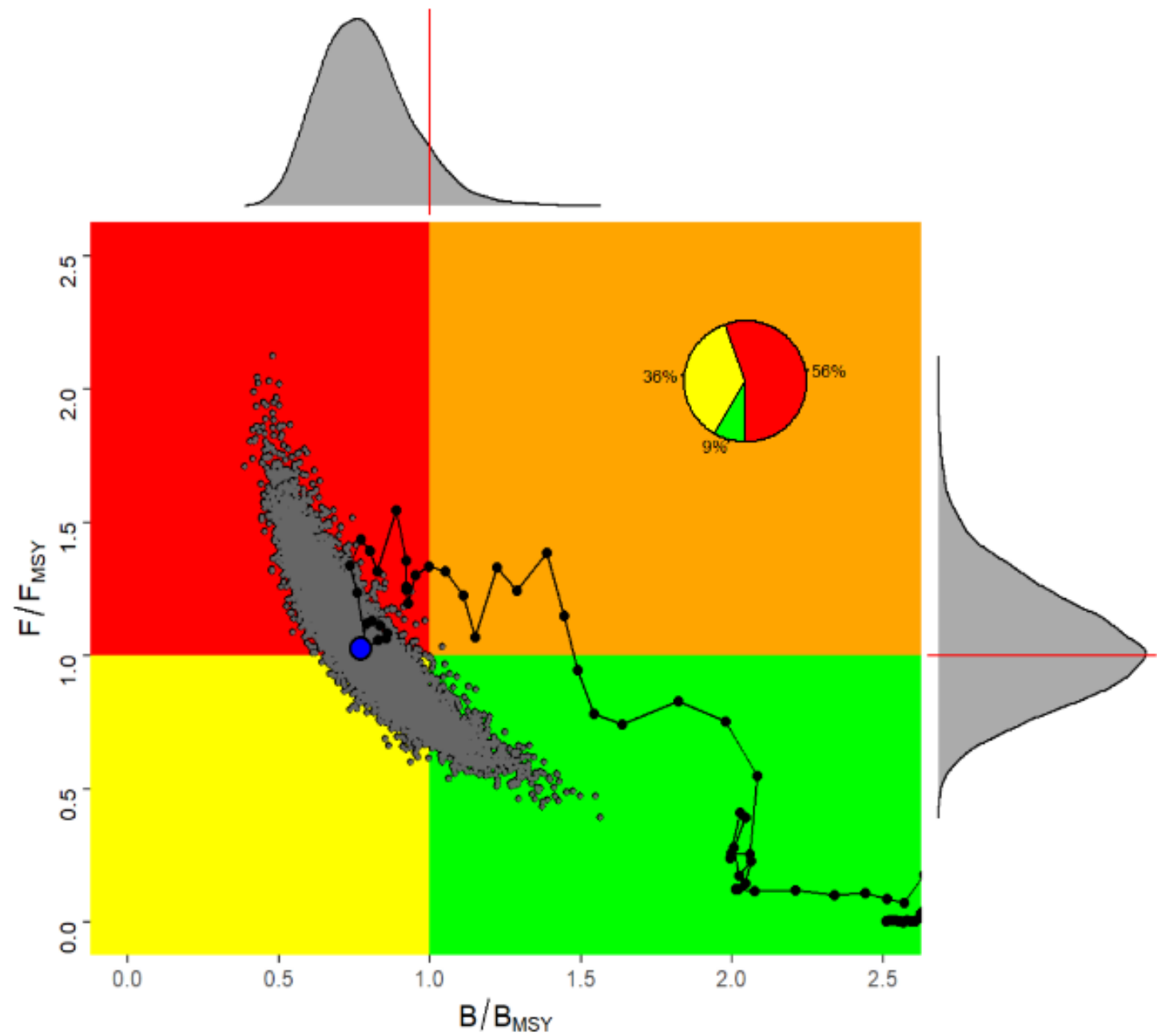
SWO (Southern atlantic stock) | Cumulative Task 1 catches vs. TAC



Note: Discard reporting remains poor for all stocks

Atlantic - South

Last assessed: 2022
Last year of data: 2020





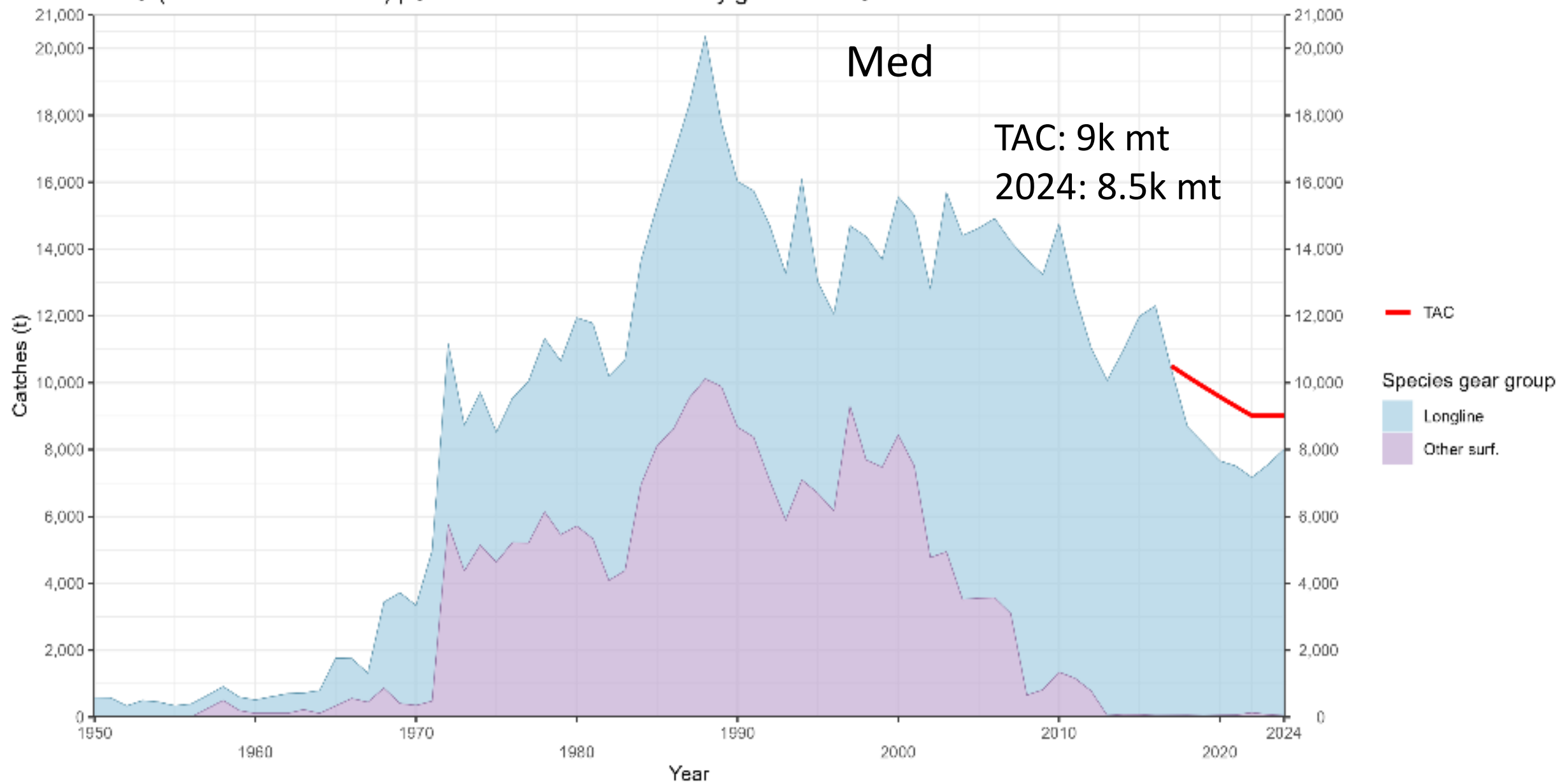
SWO-S summary

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY)	11,481 t (9,793 t-13,265 t) ¹	2020
TAC (2024)	10,000 t	
Current (2024) Yield	9,264 t ²	
Relative Biomass (B_{2020}/B_{MSY})	0.77 (0.53-1.11) ³	
Relative Fishing Mortality (F_{2020}/F_{MSY})	1.03 (0.67-1.51)	
Stock Status	Overfished: YES (91.5% probability of being overfished) ⁴	
	Overfishing: YES (55.6% probability of overfishing) ⁴	
Management measures in effect	Country-specific TACs, Rec. 22-04	



Mediterranean Swordfish

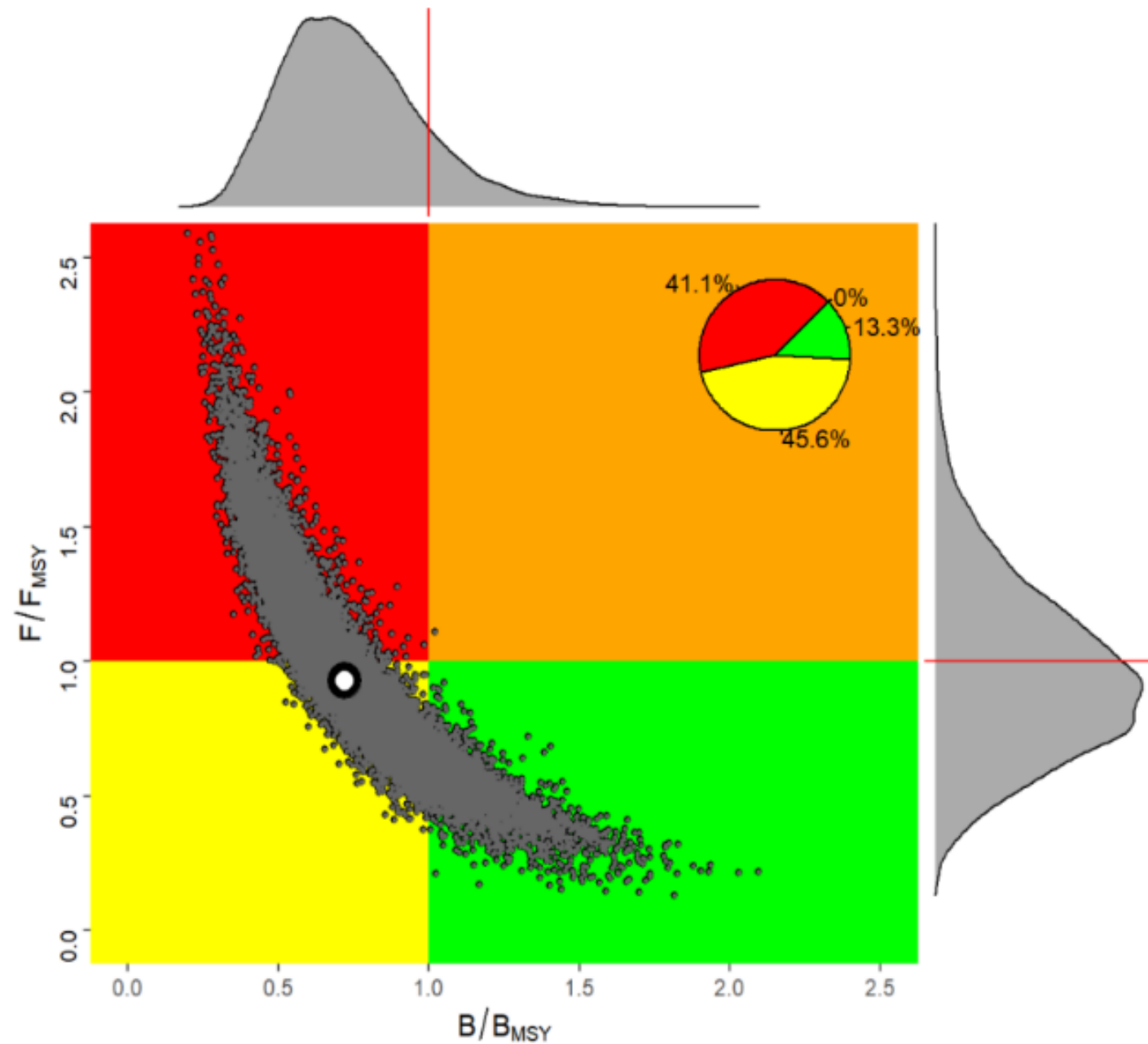
SWO (Mediterranean stock) | Cumulative Task 1 catches by gear vs. TAC



Note: Discard reporting remains poor for all stocks

Mediterranean

Last assessed: 2020
Last year of data: 2018





SWO-MED summary

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY)	13,325 t (10,899 t – 17,346 t) ¹	2018
TAC (2024)	9,015.810 ²	
Current (2024) Yield	8,450 t ³	
Relative Biomass (B ₂₀₁₈ /B _{MSY})	0.72 (0.38 - 1.29) ⁴	
Relative Fishing Mortality (F ₂₀₁₈ /F _{MSY})	0.93 (0.42 - 1.68) ⁴	
Stock Status	Overfished: YES (86.7% probability of being overfished) ⁵ Overfishing: NO (41.1% probability of overfishing) ⁵	
Management measures in effect	Rec. 03-04; Rec. 24-11 TAC (2025) 9,015.810 t	



SWO-N MSE

- ICCAT adopted a management procedure for SWO-N in 2024 (Rec. 24-10)
- During 2025, the SCRS developed the science criteria for use in an Exceptional Circumstances Protocol. Based on those proposed science criteria, there were no ECs in 2025.



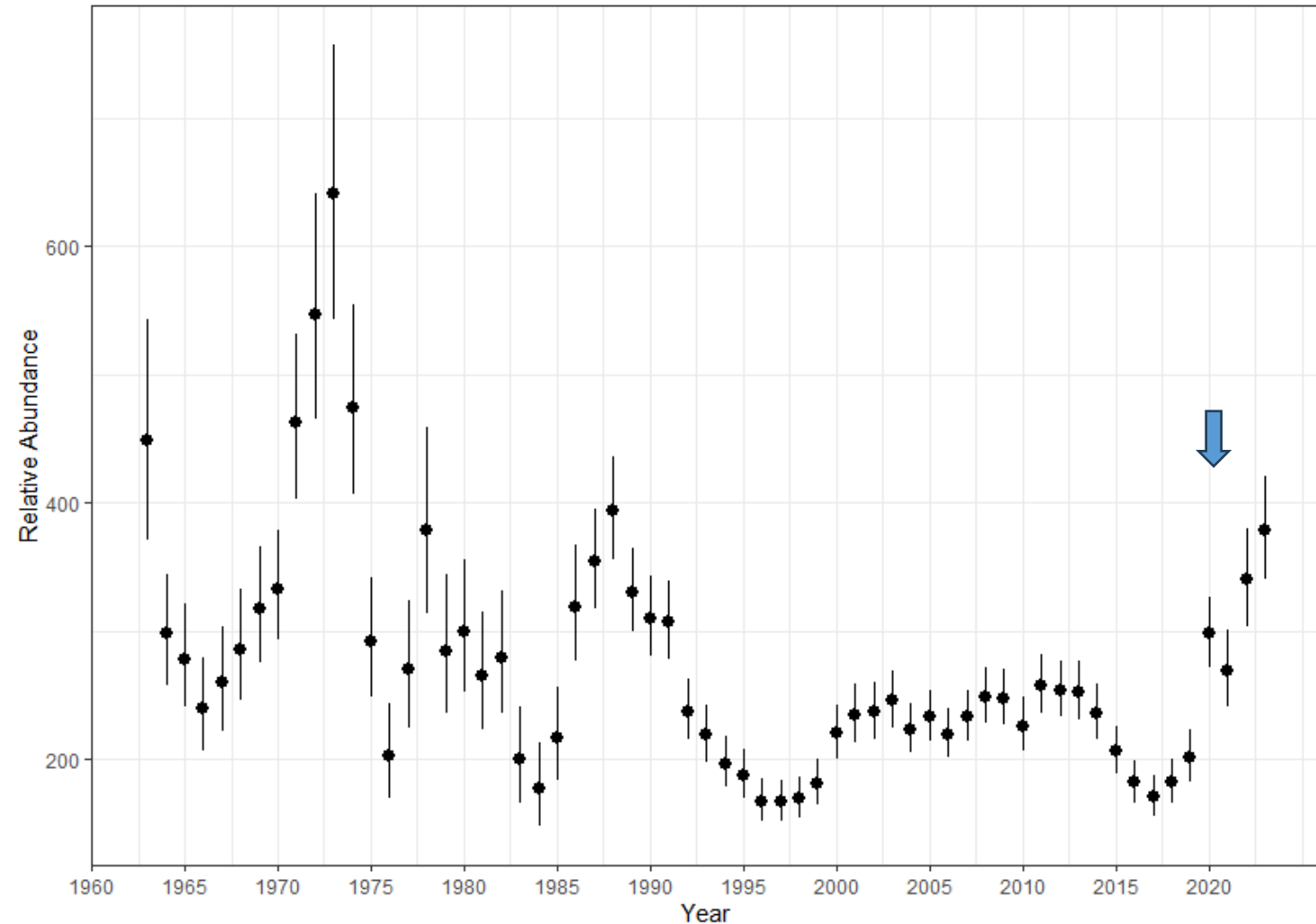
SWO-N MSE (from the ICCAT MSE Roadmap)

Stock	MP adoption (actual or planned)	ECP adoption (actual or planned)	Next year to run MP	Next stock status check	Next MP review	2025 Progress		2026 Workplan		2027 Workplan		2028 Workplan		2029 Workplan	
						SCRS	COMM	SCRS	COMM	SCRS	COMM	SCRS	COMM	SCRS	COMM
Northern Swordfish	2024	2025	2027	2029	2030	Continued robustness testing, per Rec. 24-10. Developed EC criteria for ECP. Checked for ECs.	Adopt ECP at annual meeting.	Continued robustness testing, per Rec. 24-10. Check for ECs.		Check for ECs. Run MP to provide TAC for 2028-2030.	Adopt 2028-2030 TAC based on MP.	Check for ECs.		Conduct status check. Check for ECs.	Review progress on status check.



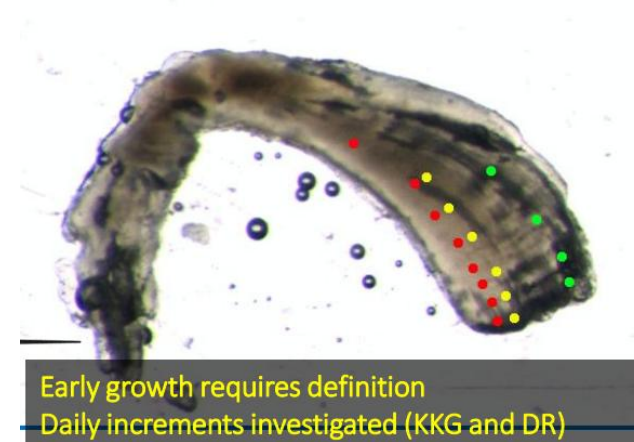
N-SWO MSE

- Combined index of abundance strict update
- Robustness tests:
 - Minimum size limits
 - Climate change
- EC protocol
 - Data availability
 - Assessed for ECs



Swordfish Research

- Supporting assessment inputs:
 - Stock boundaries and mixing
 - Movement and habitat use
 - Ageing and growth
 - Reproduction and spawning areas
 - Gear trials



Responses to the Commission

- Supporting development of an Exceptional Circumstances Protocol
 - Analysis on:
 - Gaps in data for index that informs the MP: loss of multiple important data sources leads to reduced MP performance
 - Overages in TAC: consistent 10% overages lead to stock decline within 2 management cycles
- Evaluated for Exceptional Circumstances based on preliminary criteria
 - No evidence for ECs in 2025
- Minimum size limits: work ongoing



Responses to the Commission

- Catch reporting
 - Trap line gear increasing in use, particularly in the Mediterranean
 - Catchability, selectivity, and bycatch profile differs from typical longline operations
- Discards estimation and reporting
 - Reporting remains poor
 - Estimation protocols received from 5 CPCs
 - Further review required
 - Support from The Working Group on Stock Assessment Methods

Work Plan – next assessments

Stock	Last assessment	Data year	Status	Next assessment
SWO-N	2022	2020		2029*
SWO-S	2022	2020		2026
SWO-MED**	2020	2018		2023 2024 2025 2026

*Rec. 24-10 MSE implementation schedule

**Trapline gear requires additional planning for data inputs

Billfish





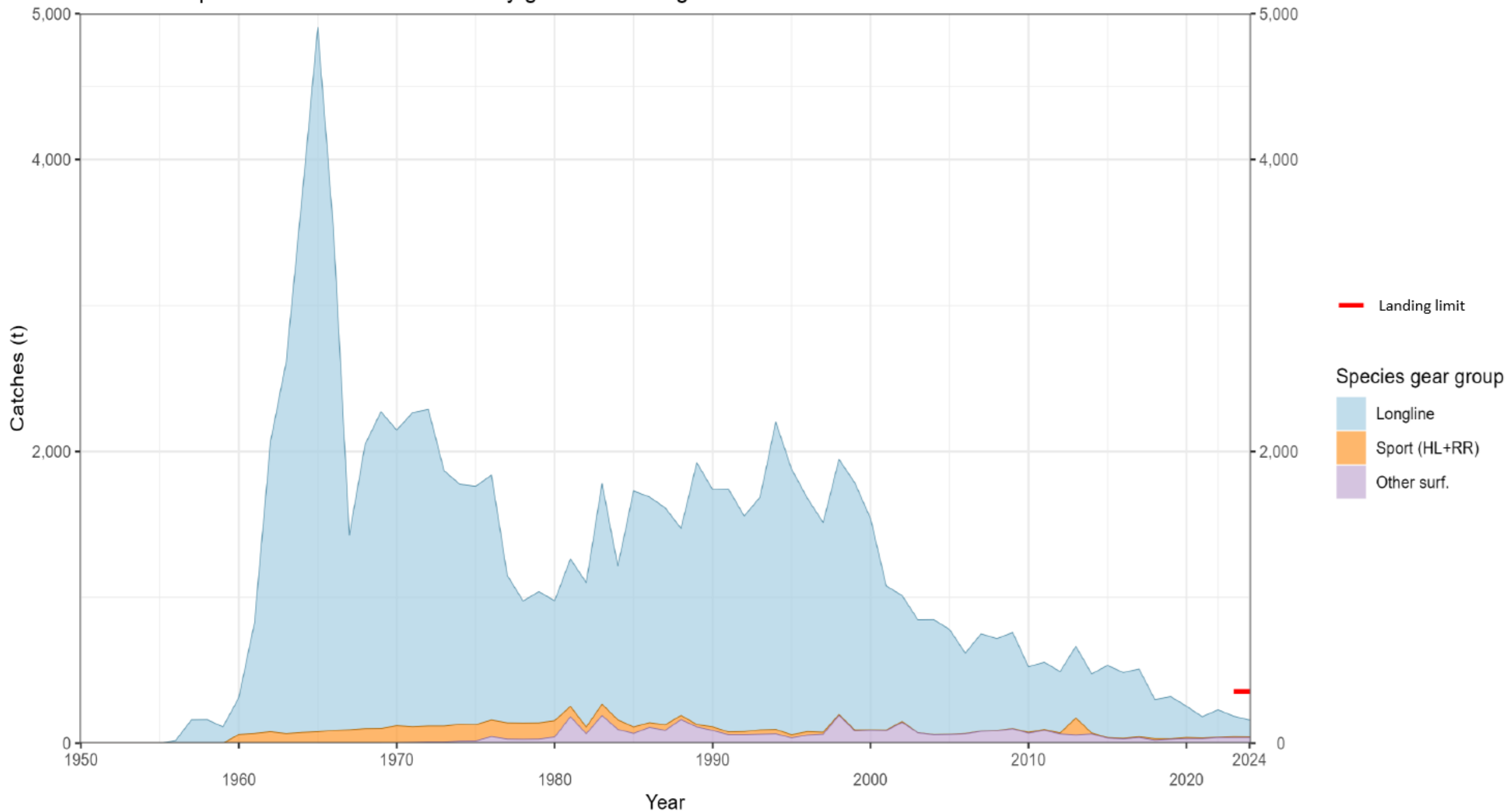
Billfish overview

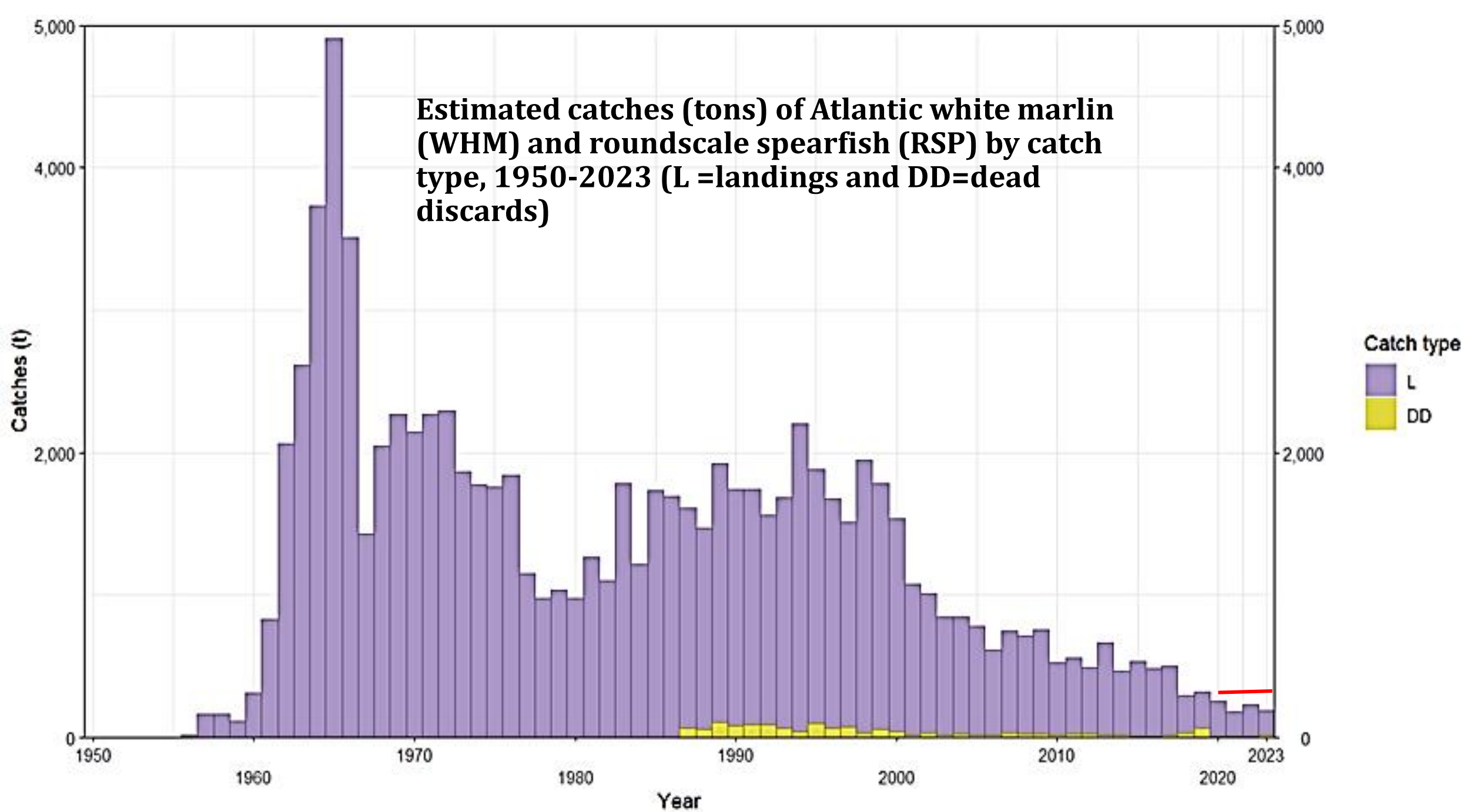
- **WHM-Stock Assessment 2025**
- **Effect of current regulations**
- **Management recommendations**
- **Status of SAI and BUM**
- **BIL Workplan for 2026**
- **Recommendations BIL WG**
- **Other general recommendations BIL WG**

White Marlin



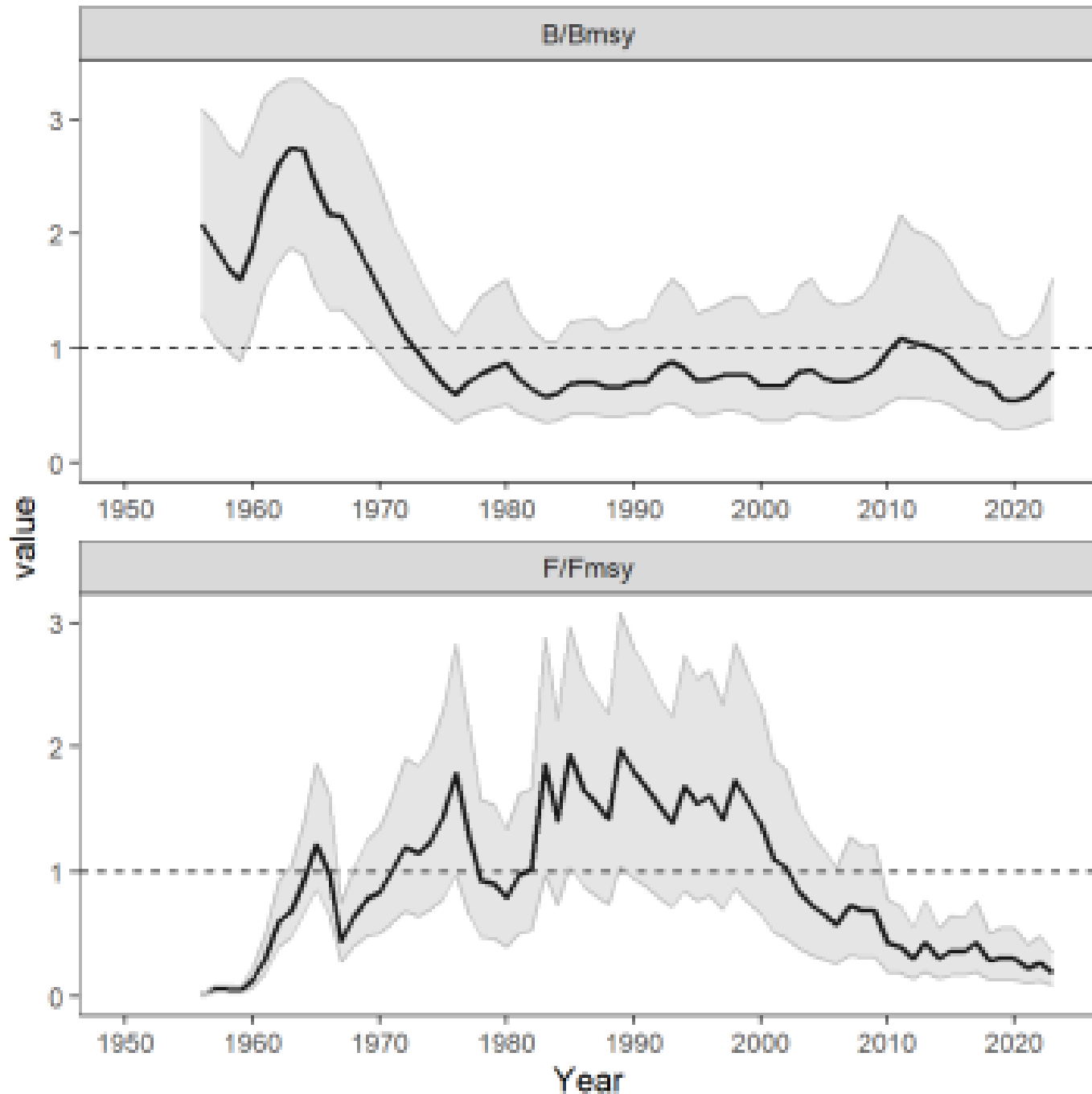
WHM/RSP | Cumulative Task 1 catches by gear vs. landing limits





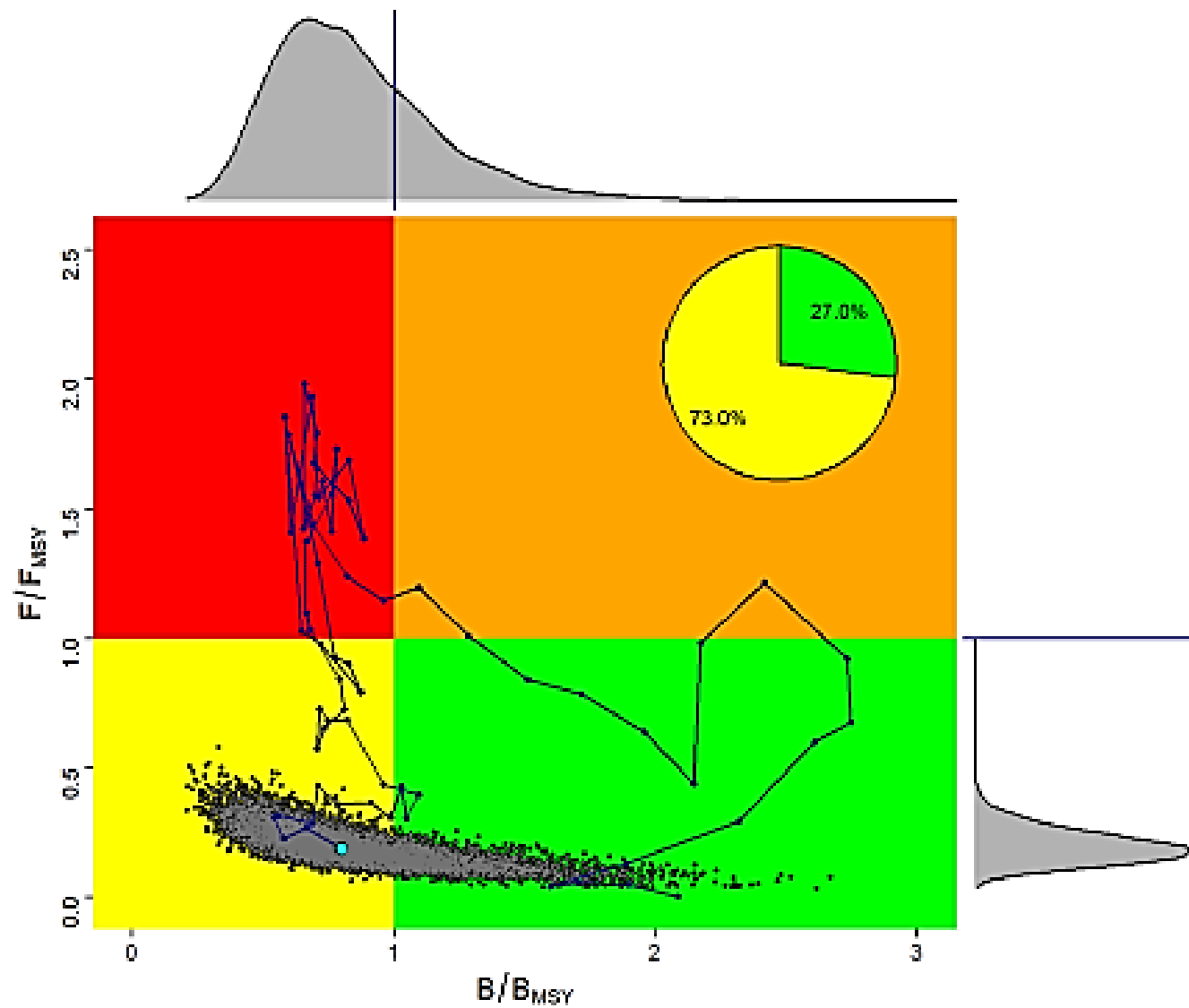
White Marlin

2025 Stock Assessment Results



Trajectories of biomass relative to B_{MSY} (B/B_{MSY} , upper plot) and fishing mortality relative to F_{MSY} (F/F_{MSY} , lower plot) for the Atlantic white marlin.

The shaded area indicates the 95% CRI bounds.



Kobe plots for the result of the JABBA model (JABBA Group 0_no_CTP_LL2) for the Atlantic white marlin.

Table 1. White marlin/roundscale spearfish summary table.

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY) ¹	1,497 t (1,160 t - 1,937 t) ³	2023
Landing limit 2024	355 t	
Yield 2024 ²	158 t	
Relative Biomass (B ₂₀₂₃ /B _{MSY})	0.80 (0.394 – 1.611) ³	
Relative Fishing Mortality (F ₂₀₂₃ /F _{MSY})	0.191 (0.089 – 0.348) ³	
Stock Status	Overfished: YES (73% probability of being overfished) ⁴	
	Overfishing: NO (<1% probability of overfishing) ⁴	
Management measures in effect	Rec. 18-04 and Rec. 19-05 Landing limit 2025 of 355 t	

¹ Base case model results based on catch data from 1956-2023.
² Provisional and subject to revision as of 23 September 2025.
³ Point estimate, 95% credibility intervals are shown.
⁴ As estimated from the Kobe plot probability in each quadrant.



No Stock projections were done

- Due to persistent uncertainty, significant processing errors, discrepancies between abundance indices, and the difficulty in reconciling recent data, the Group decided not to make future stock projections or generate Kobe matrices for future catch level scenarios.
- It is suggested that the results should be viewed with caution.



Effect of current regulations

- The Commission further strengthened the plan to rebuild white marlin beginning in 2020 ([Rec. 19-05](#))
- The Commission established an annual landing limit of 355 t beginning in 2020 ([Rec. 19-05](#)).
- Landings in 2020, 2021, 2022 and 2023 did not exceed the limit established in the [Rec. 19-05](#).
- *The Committee noted that despite the recent reported catches have been below the 355 t landing limits established in [Rec. 19-05](#) para 2, the stock has shown limited signs of recovery.*



Management recommendations

- The Committee noted that although recent reported catches remain below the **355 t annual limit set in [Rec. 19-05](#)**, the stock shows limited recovery.
- Concerns were raised about **unreported catches and discards**, which create **uncertainty in catch estimates**.
- Improved data reporting and abundance indices are essential to support reliable stock assessments and management advice.
- The Committee recommended maintaining the 355 t landing limit. At the end of 2023, biomass remained below B_{MSY} ($B/B_{MSY} = 0.80$) and fishing mortality was below F_{MSY} ($F/F_{MSY} = 0.191$).

Sailfish



SAI (Western atlantic stock) | Cumulative Task 1 catches by gear vs. landing limits

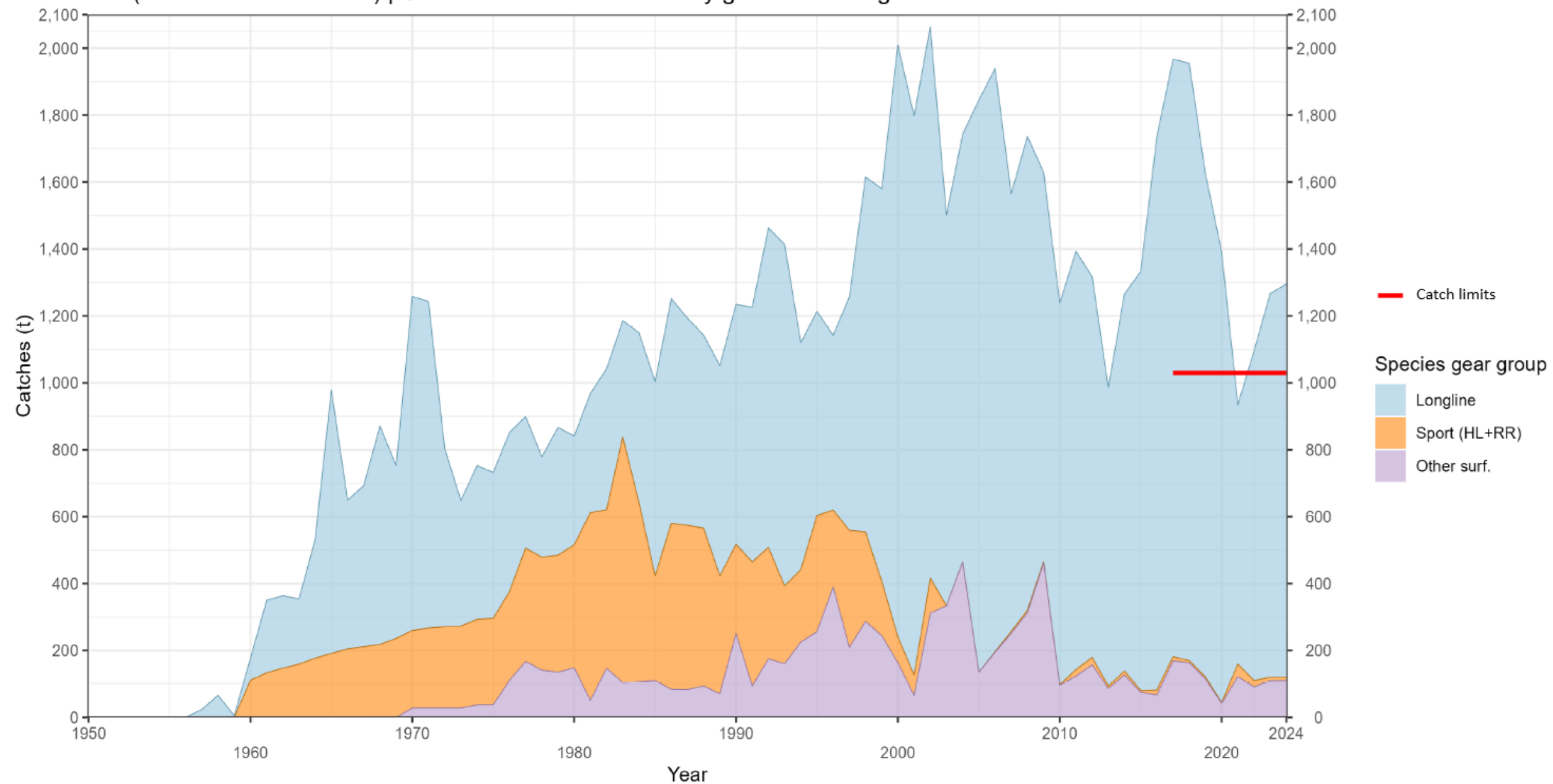


Table 1a. West Atlantic sailfish summary table.

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY) ¹	1,612 t (1,357 t - 1,968 t) ³	2021
TAC (2024)		
Current (2024) Yield ²	1,295 t	
Relative Biomass (B ₂₀₂₁ /B _{MSY}) if applicable	0.96 (0.59-1.45)	
Relative Fishing Mortality (F ₂₀₂₁ /F _{MSY}) ¹	0.59 (0.36-0.95)	
Stock Status	Overfished: YES (59% probability of being overfished) ⁴ Overfishing: NO (2% probability of overfishing) ⁴	
Management measures in effect	Rec. 16-11: Limit catches to the level of 67% of MSY (1,030 t)	

SAI (Eastern atlantic stock) | Cumulative Task 1 catches by gear vs. landing limits

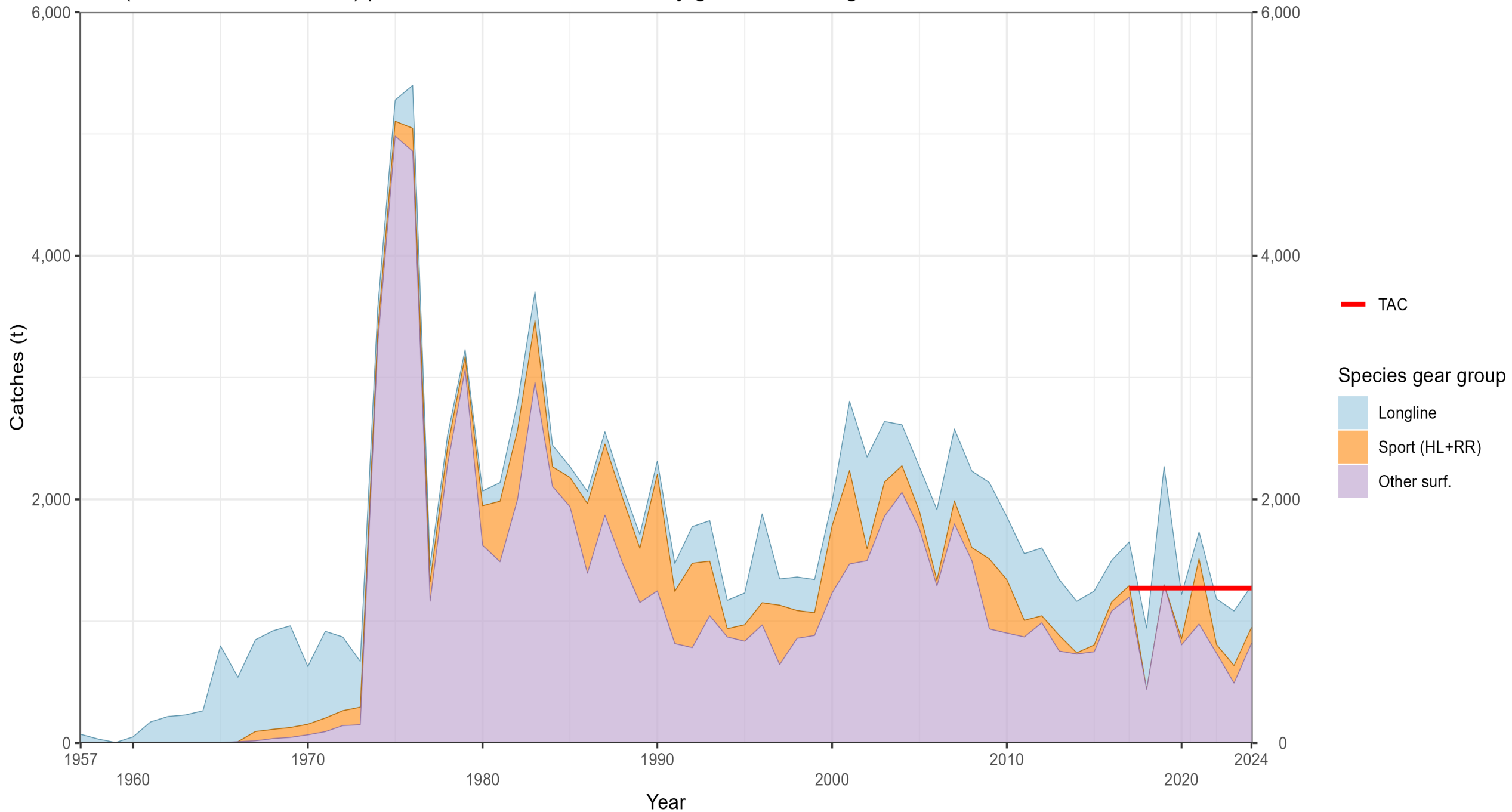


Table 1b. East Atlantic sailfish summary table.

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY) ¹	2,337 t (2,003 t - 2,833 t) ³	2021
TAC (2024)		
Current (2024) Yield ²	1,290 t	
Relative Biomass (B ₂₀₂₁ /B _{MSY}) if applicable	1.83 (1.14-2.88) ³	
Relative Fishing Mortality (F ₂₀₂₁ /F _{MSY})	0.36 (0.21-0.59) ³	
Stock Status	Overfished: NO (<1% probability of being overfished) ⁴	
Management measure in effect	Overfishing: NO (<1% probability of overfishing) ⁴ Rec. 16-11: Limit catches to the level of 67% of MSY (1,271 t)	

¹ Base case/combined model: model results based on catch.
² Provisional and subject to revision as of 23 September 2025.
³ Point estimate, 95% credibility intervals are shown.
⁴ As estimated from the Kobe plot probability in each quadrant.

Blue Marlin



BUM | Cumulative Task 1 catches by gear vs. landing limits

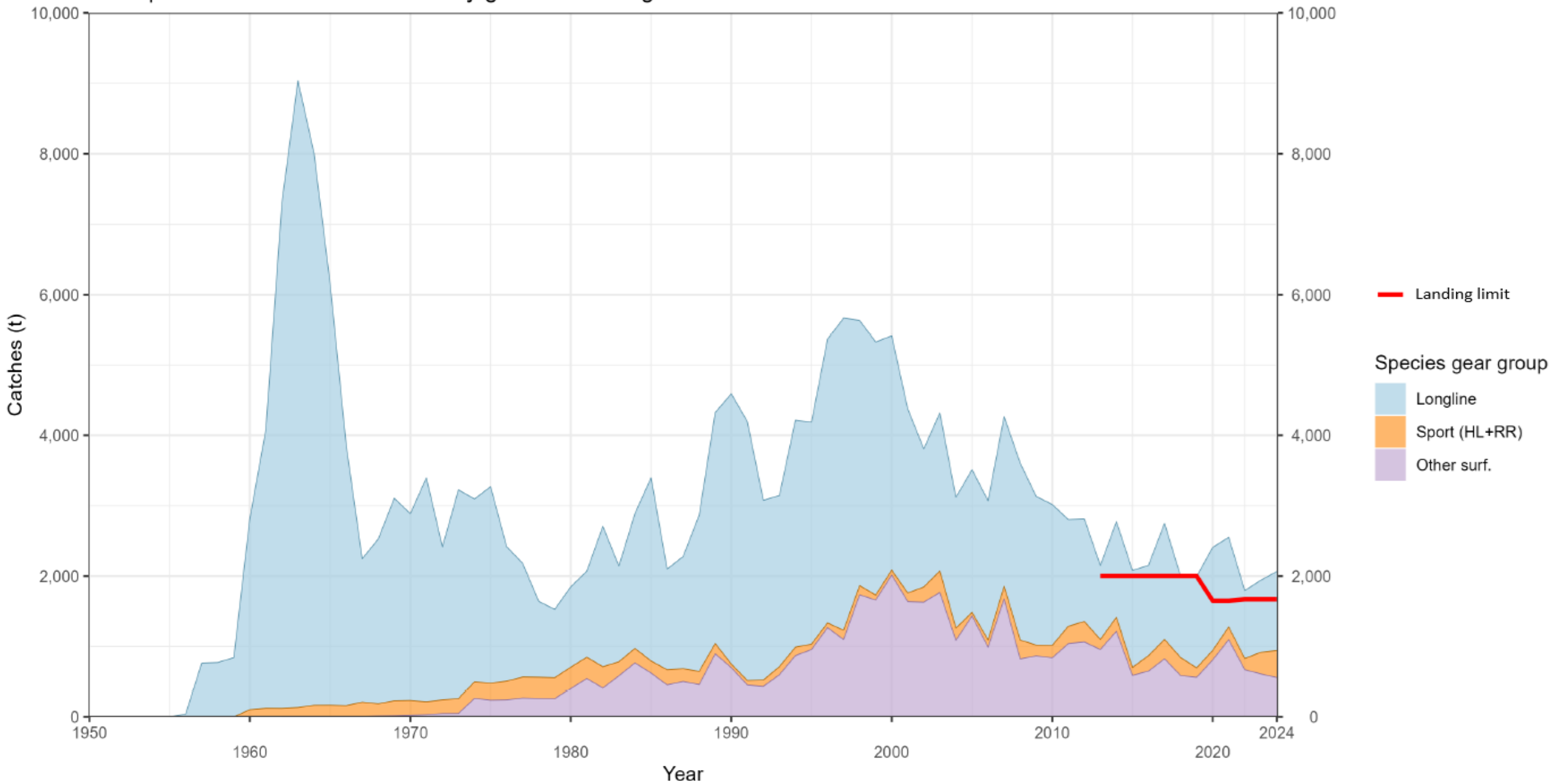


Table 1. Blue marlin summary table.

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY) ¹	3,331 t (2,323 t - 4,659 t) ³	2022
Landing limit 2024	1,670 t	
Current (2024) Yield ²	2,066 t	
Relative Biomass (B ₂₀₂₂ /B _{MSY}) if applicable	0.67 (0.30-1.35) ³	
Relative Fishing Mortality (F ₂₀₂₂ /F _{MSY}) ¹	0.91 (0.40-1.64) ³	
Stock Status	Overfished: YES (84% probability of being overfished) ⁴	
	Overfishing: NO (39% probability of overfishing) ⁴	
Management measure in effect	Rec. 19-05, Landing limit 2025 of 1,670 t	

¹ Base case/combined model: model results based on catch data from year-year.

² Provisional and subject to revision as of 23 September 2025.

³ Point estimate, 95% bias corrected confidence intervals are shown.

⁴ As estimated from the Kobe plot probability in each quadrant.

Billfish Research in 2026

Life history parameters

- Continue the EPBR activities including:
 - Age and growth studies on billfish (BUM, WHM and SAI) in the eastern Atlantic (West Africa) to:
 - Continue sampling on the priority sizes, and sample processing of both spines and otoliths
 - Continue age estimation and growth modelling
 - Conclude age validation for blue marlin through bomb radiocarbon, while starting the work for WHM.
 - Continue building a reference set for both spines and otoliths, with a repository of digital images of the structures.
 - Continue the research and biological sampling of BUM from the Gulf of Mexico Mexican longline and recreational fisheries.

Billfish Research in 2026

Tagging

- To continue the satellite tagging of blue and white marlin on the South Portugal coast in the recreational fishery, and
- conduct opportunistic electronic and conventional tagging in other areas of the Eastern Atlantic.



During the period 2026-2029, research will be focused on the following areas, by order of priority:

- Continue the ageing and growth studies of the three priority billfish (BUM, WHM and SAI). This recommendation address item [Rec. 19-05 para 19](#).
- Continue the e-tagging of the three priority billfishes (BUM, WHM and SAI). Priority area is the temperate NE Atlantic, while opportunistic tagging in be carried out in other areas of the Eastern Atlantic.
- The Committee recommended that research aimed at improving the basic biological data and population dynamics information for RSP to be discussed throughout 2026 and 2027, for possible inclusion in future EPBR activities. This recommendation addresses [Rec. 19-05](#).

**I would like to thank the SCRS
Swordfish and Billfish Officers
officers for their contributions
throughout the year and for
this presentation.**



Images of fish in natural settings within this presentation were created by Craig Brown for the use of ICCAT, using AI (Gemini, Copilot, ChatGPT)