2026 Report of the SCRS to the ICCAT Panel 4: Part 1. Swordfish and Billfish

Status, Responses, and Research



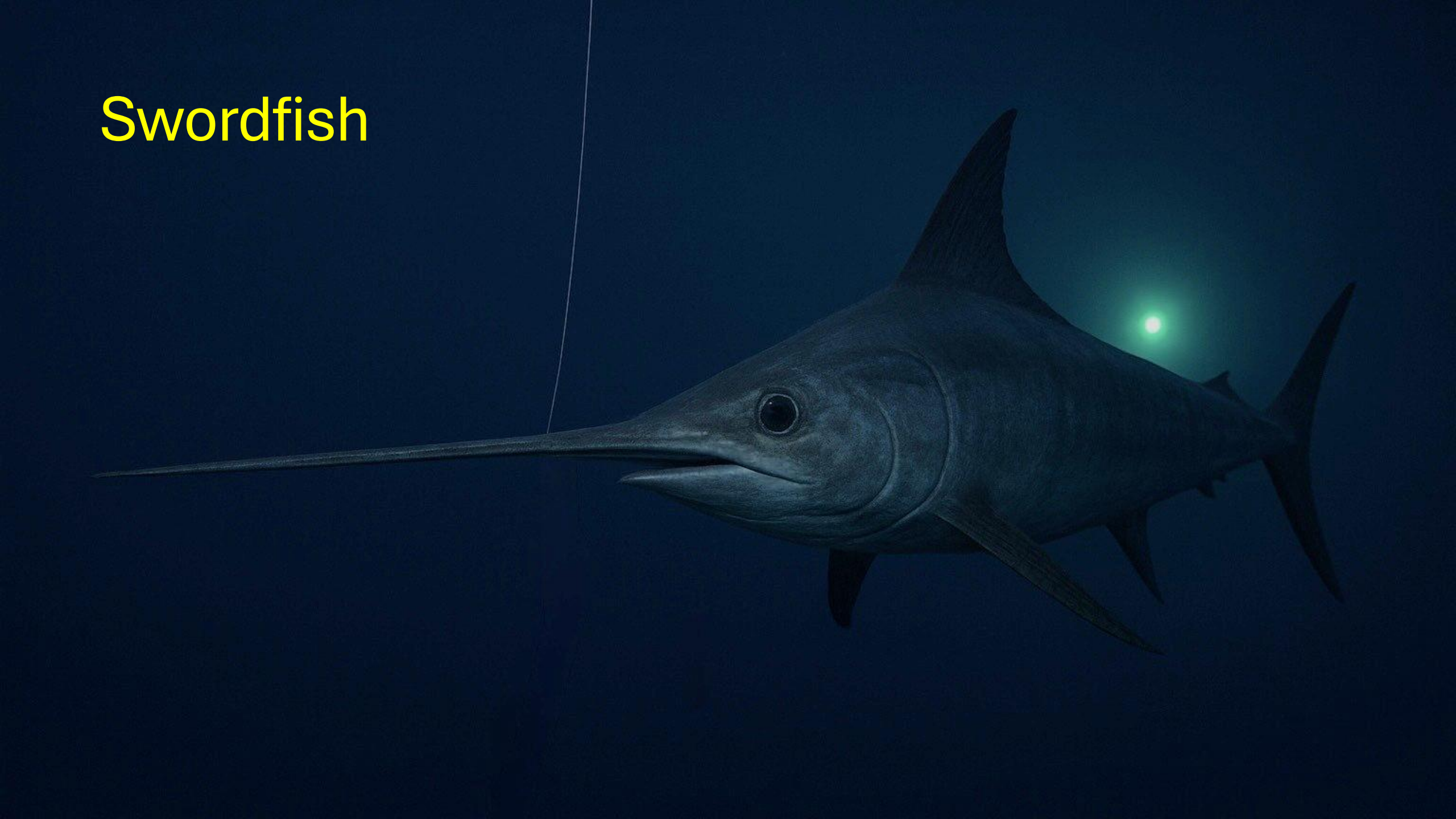






25th Special Meeting of the Commission
16-23 November 2026
Vilamoura, Portugal

Swordfish





Swordfish overview

Stock Status & Advice:

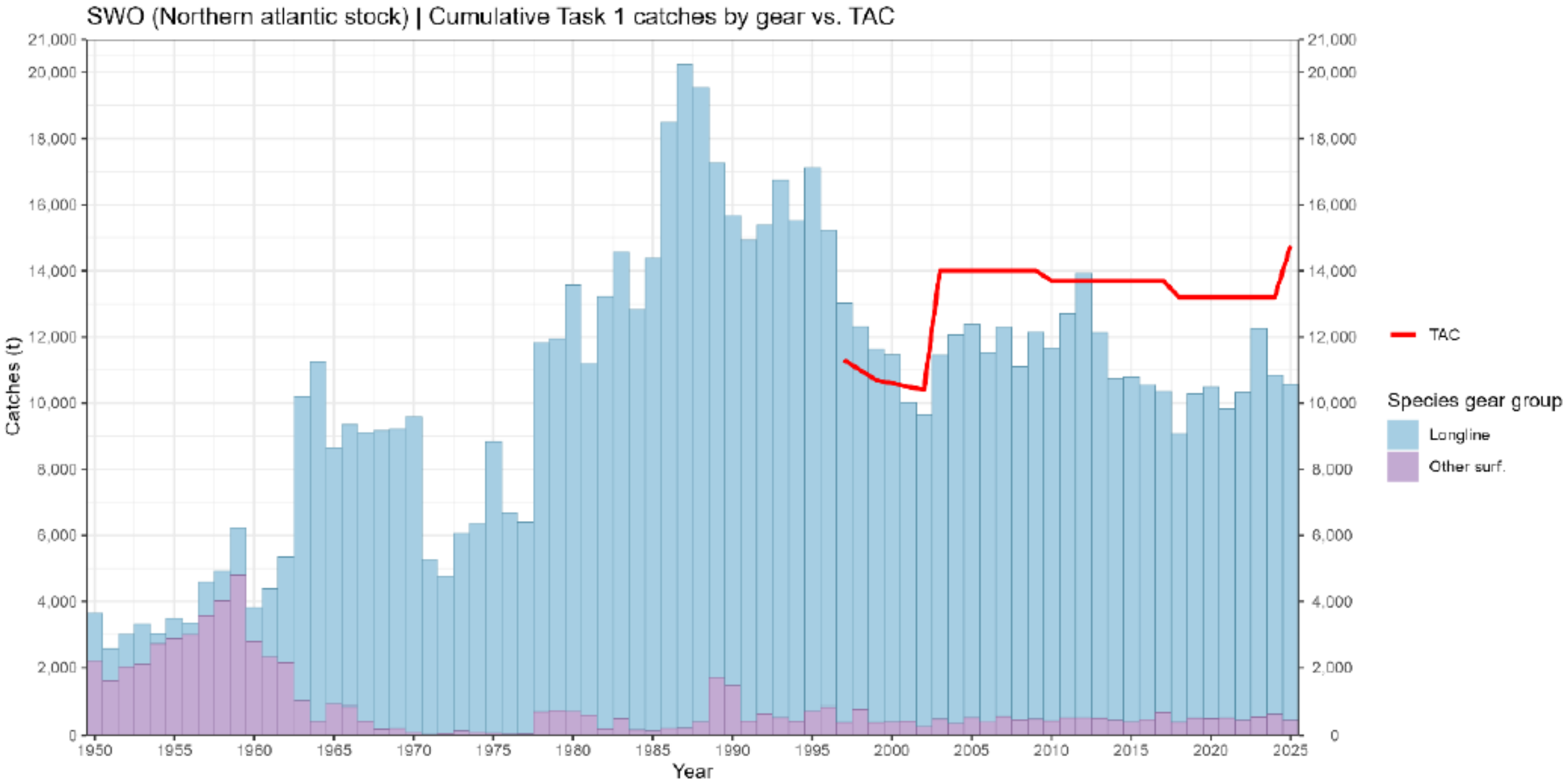
- North Atlantic (SWO-N
- South Atlantic (SWO-S)
- Mediterranean (SWO-M)

MSE & Commission Responses (Item 19):

- N-SWO MSE & EC:
- Minimum Size Limits
- Trapline Gear

SWOYP Research & Work Plan:

- Swordfish Year Programme (SWOYP)
- Budget



Note: Discard reporting remains poor for all stocks

SWO-N summary (Last assessed: 2022)

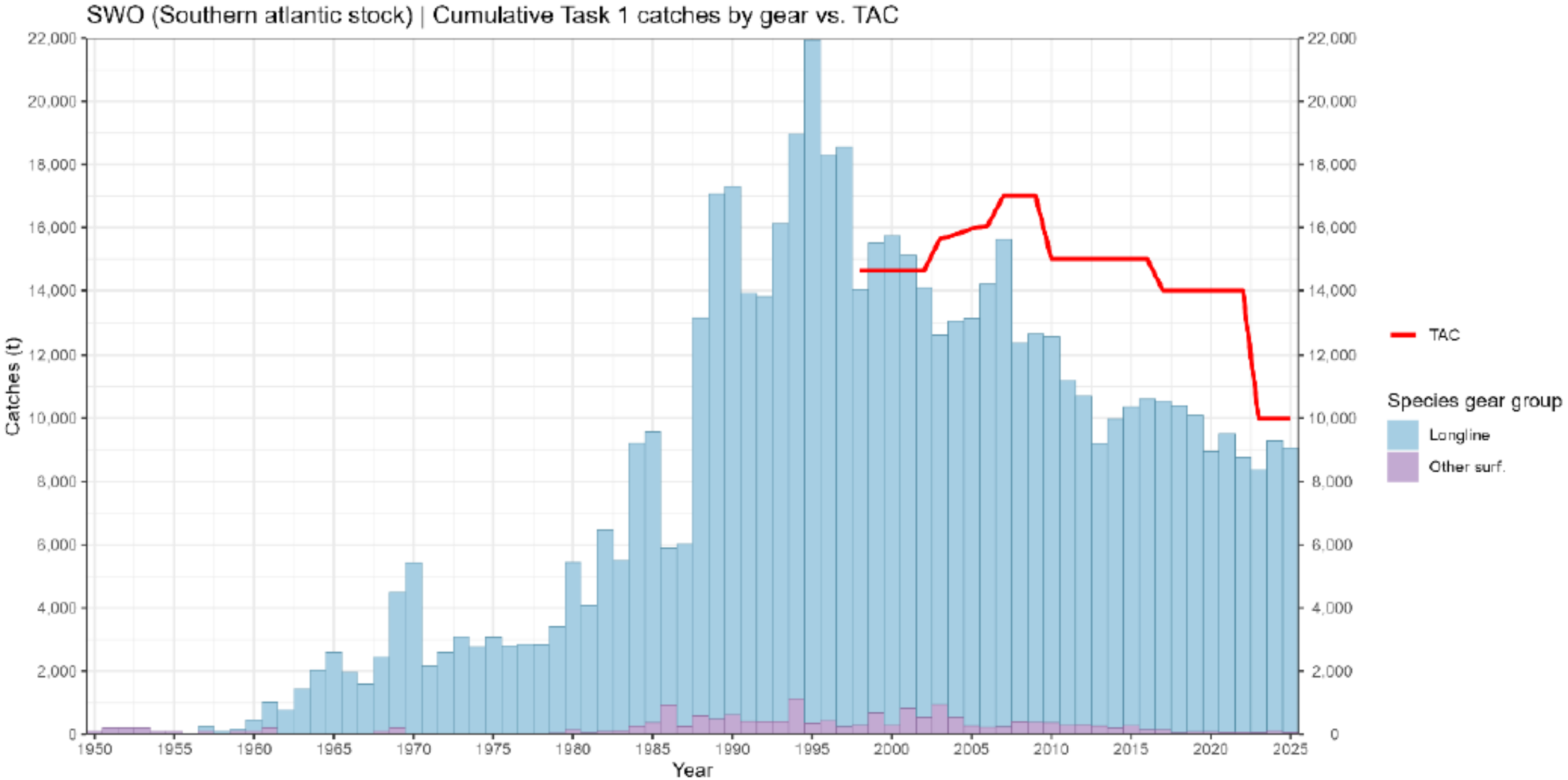
Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)	12,819 t (10,864 t - 15,289 t)[1]	2020
TAC (2025)	14,769 t	
Current (2025) Yield	10,577 t[2]	
Relative Biomass (B_{2020}/B_{MSY})	1.08 (0.71-1.33)[3]	
Relative Fishing Mortality (F_{2020}/F_{MSY})	0.80 (0.64-1.24)[3]	
Stock Status	Overfished: NO (37.1% probability of being overfished)[4] Overfishing: NO (14.7% probability of overfishing)[4]	
Management measure in effect	Rec. 25-10	

Managed according to a Management Procedure:
Recommended TAC for the period 2025-2027 of 14,769 t

[1] Median from base case JABBA and Stock Synthesis models; range corresponding to the lowest and highest 95% CIs from the two models.
[2] Provisional as of 16 September 2026 and subject to revision.
[3] Median and 95% quantiles from base case Stock Synthesis and JABBA models.
[4] As estimated from the Kobe plot probability in each quadrant.

South Atlantic Swordfish

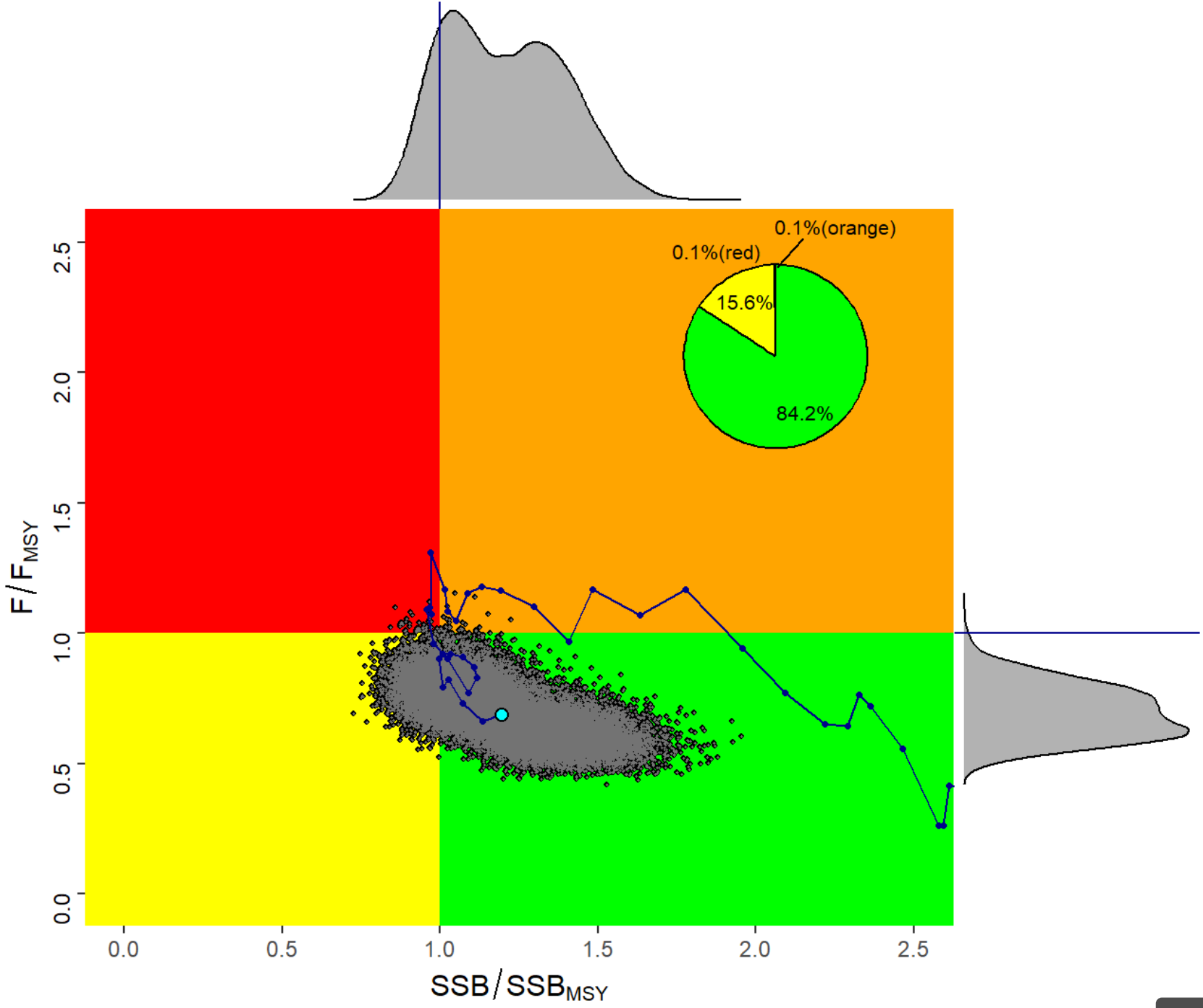




Note: Discard reporting remains poor for all stocks

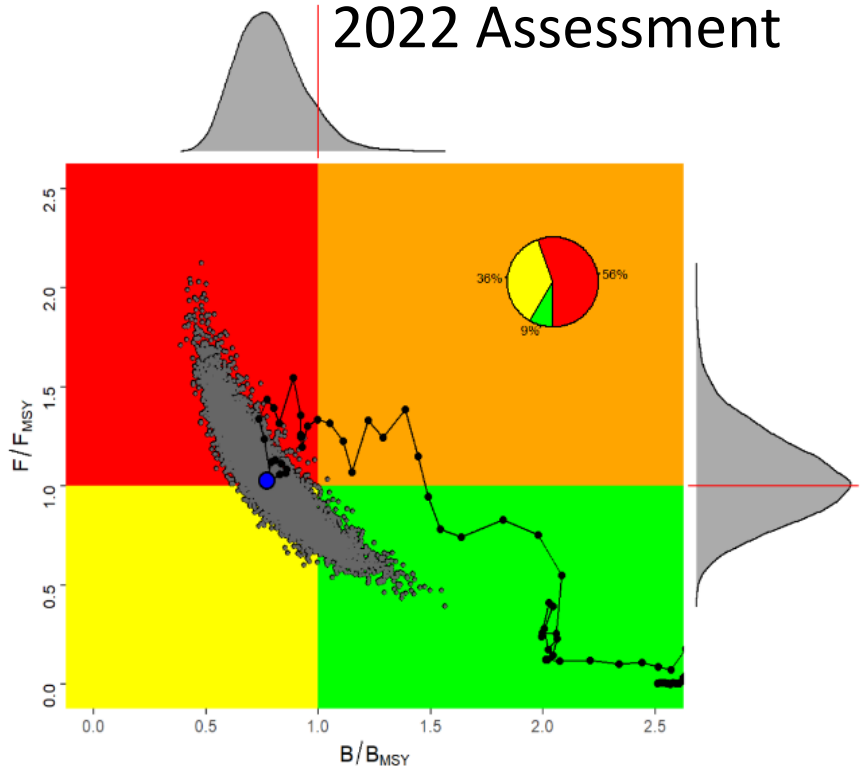
SWO-S

Assessed in 2026
Last year of data: 2024

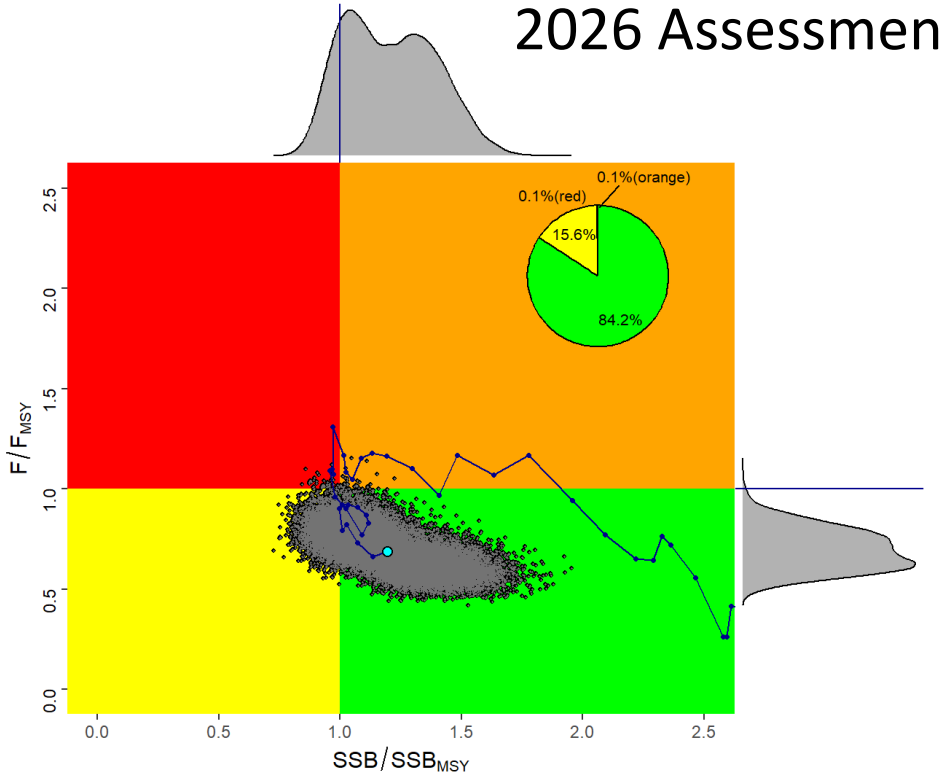


SWO-S

2022 Assessment



2026 Assessment



Major change from the 2022 assessment, driven by:

(1) new data (catches, length and indices)

(2) updated biology from the Swordfish Year Program – faster growth, earlier maturity; and

(3) the shift from a biomass-dynamics (JABBA) to an age-structured (SS3) framework

SWO-S summary (assessed in 2026)

Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)	11,666 t (10,902 t-12,526 t)[1]	2024
TAC (2025)	10,000 t	
Current (2025) Yield	9,065 t[2]	
Relative Biomass (B_{2024}/B_{MSY})	1.19 (0.90–1.57)[3]	
Relative Fishing Mortality (F_{2024}/F_{MSY})	0.69 (0.52–0.90)	
Stock Status	Overfished: NO (15.7% probability of being overfished) [4]	
	Overfishing: NO (0.2% probability of overfishing) [4]	
Management measures in effect	Rec. 22-04	

[1] Median and 95% CIs from base case integrated age-structured model.
[2] Provisional as of 16 September 2026 and subject to revision.
[3] Median and 95% quantiles from base case integrated age-structured model.
[4] As estimated from the Kobe plot probability in each quadrant.

SWO-S Management Recommendations

TAC Advice & Green Zone Probabilities (Rec. 22-04)

• Current TAC (10,000 t): Under Rec. 22-04, this catch level will result in a 100% probability of being in the green quadrant of the Kobe plot by 2043 (Table 3).

• Alternative Catch Scenarios: Catch levels up to 12,500 t will result in probabilities higher than 50% of the stock being in the green quadrant in 2043.

Unaccounted Discard Removals & Monitoring Guidance

• Removals Not Fully Accounted: The Committee recognized that the management advice did not fully account for removals associated with:

1. Mortality of unreported dead discards
2. Post-release mortality of live discards

• Close Monitoring Mandate: The Committee emphasized the importance of these uncertainties and recommended that the stock be closely monitored in the upcoming years to confirm its status.

SWO-S Kobe Strategy Matrix

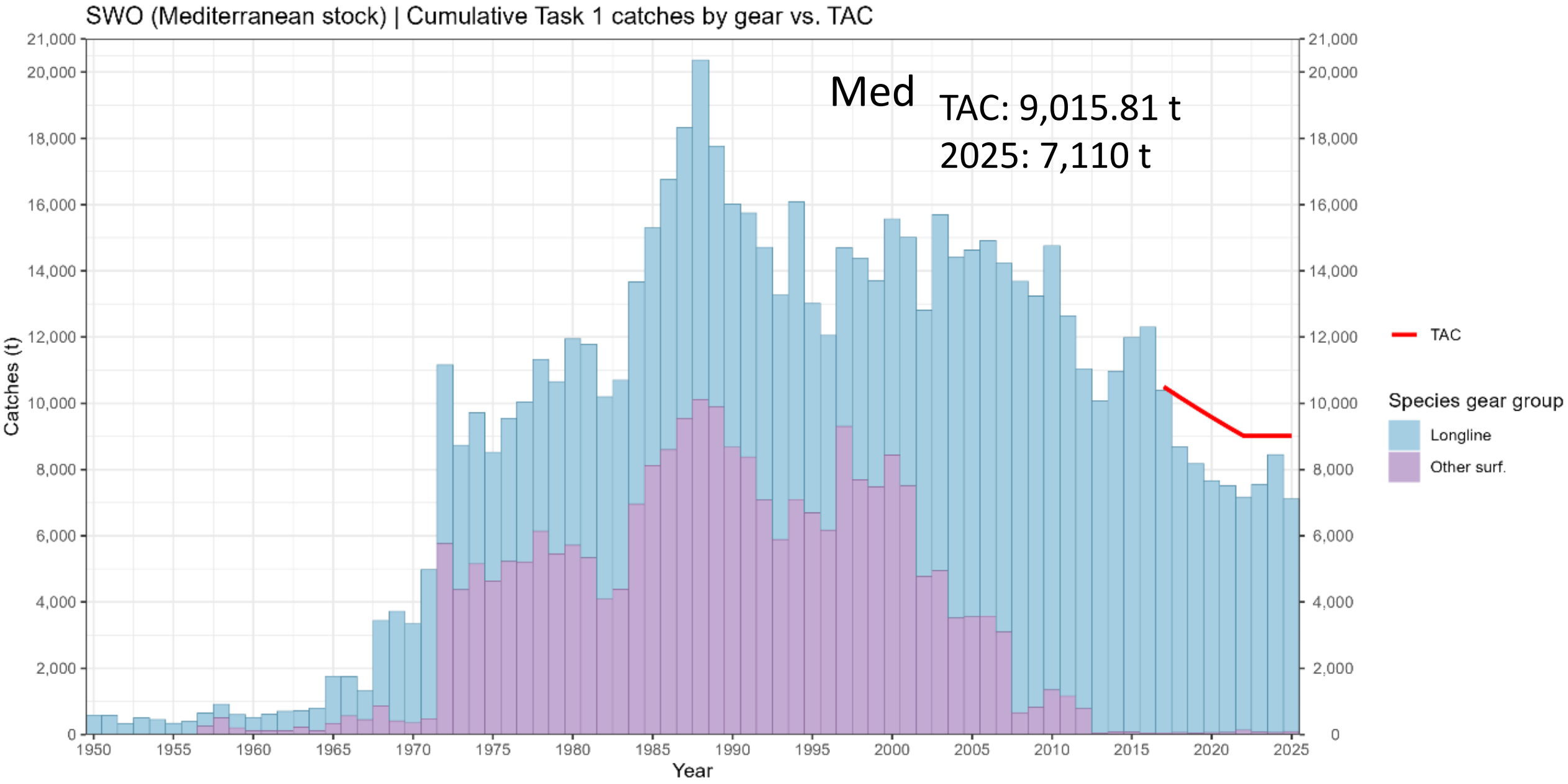
Note: Does not fully account for removals associated with the mortality of unreported dead discards and post-release mortality of live discards.

Probability $F<=F_{MSY}$ and $SSB>=SSB_{MSY}$

TAC (t)	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
8000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
8500	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
9000	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
9500	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
10000	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
10500	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
11000	99%	99%	98%	98%	98%	98%	98%	97%	97%	97%	97%	97%	97%	97%	97%	96%	96%
11250	98%	98%	98%	97%	97%	96%	96%	96%	95%	95%	95%	94%	94%	94%	93%	93%	93%
11500	97%	97%	96%	96%	95%	94%	93%	93%	92%	91%	91%	90%	90%	89%	89%	88%	88%
11750	96%	95%	94%	93%	92%	91%	90%	89%	88%	87%	86%	85%	84%	83%	82%	82%	81%
12000	94%	93%	92%	90%	88%	87%	85%	84%	82%	81%	80%	78%	77%	76%	74%	73%	72%
12250	92%	90%	88%	86%	84%	82%	80%	78%	76%	74%	72%	71%	69%	67%	66%	64%	63%
12500	89%	87%	84%	82%	79%	76%	74%	71%	69%	67%	65%	62%	60%	58%	57%	55%	53%
12750	86%	83%	80%	77%	74%	71%	68%	65%	62%	59%	56%	54%	51%	49%	47%	45%	43%
13000	82%	79%	75%	72%	68%	65%	61%	58%	54%	51%	48%	45%	42%	40%	37%	35%	33%
13500	74%	71%	66%	61%	57%	52%	48%	43%	39%	35%	32%	28%	25%	23%	20%	18%	17%
14000	66%	62%	57%	51%	45%	40%	34%	29%	25%	21%	18%	15%	13%	11%	10%	8%	8%
14500	59%	54%	48%	41%	34%	27%	22%	17%	14%	11%	9%	7%	6%	5%	4%	4%	4%
15000	52%	46%	38%	30%	23%	17%	13%	9%	7%	5%	4%	3%	3%	2%	2%	2%	3%



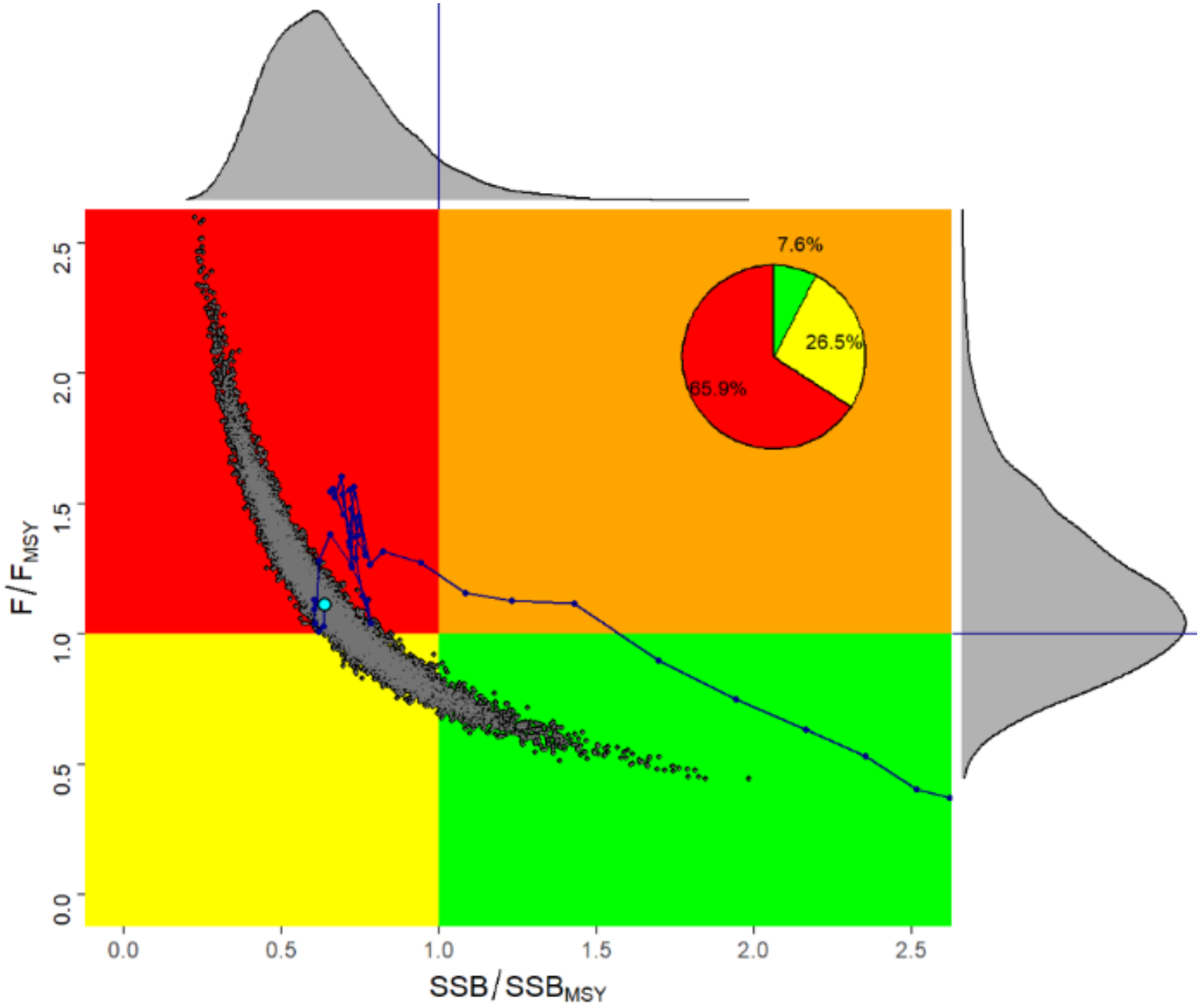
Mediterranean Swordfish



Note: Discard reporting remains poor for all stocks

SWO-M Mediterranean

Assessed in 2026
Last year of data: 2024



SWO-M summary

Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)	12,225 t (11,702 t - 12,748 t)[1]	2024
TAC (2025)	9,015.81[2]	
Current (2025) Yield	7,110 t[3]	
Relative Biomass (SSB_{2024}/SSB_{MSY})	0.64 (0.34 - 1.18)[4]	
Relative Fishing Mortality (F_{2024}/F_{MSY})	1.11 (0.66 - 1.87)[4]	
Stock Status	Overfished: YES (92.4% probability of being overfished)[5] Overfishing: YES (65.9% probability of overfishing)[5]	
Management measures in effect	Rec. 03-04; Rec. 24-11 Catch limit (2026) 9,015.810 t	

[1] 95% confidence intervals from the final SS3 model.
[2] In addition, Egypt and Libya shall have catch limits of 125 t each.
[3] Provisional and subject to revision as of 16 September 2026.
[4] Median and 95% confidence intervals derived from the standard deviations estimated in SS3.
[5] As estimated from the Kobe plot probability in each quadrant.

SWO-M Management Recommendations

Status & Rebuilding

• Biomass Depletion: 2024 SSB is ~35% lower than corresponding to MSY; fishing mortality exceeds FMSY.

• Commission Objective: Requires rebuilding to BMSY with ≥60% probability.

• Current TAC (~9,000 t): Yields 52% probability of rebuilding by 2031, reaching 60% by 2032 (Table 3).

Catches & Projections

• No Observed Recovery: Recent catches (2020–2025 mean = 7,575 t) have not improved SSB/SSBMSY.

• Model Projections: Projections indicate a 7,500 t TAC would recover stock rapidly by 2030.

• Catch Underestimation: Recent catches likely underestimated due to discards.

• Declining Productivity: Past 15 years show lower recruitment, meaning projections may be optimistic (interpret with caution).

Discards & Size Limits

• Increased Dead Discards: Since the minimum size increase (Rec. 16-05), discards of undersized fish have risen and are largely dead.

• Under-Reporting: Discards are not reported for all fleets; total dead discards remain unknown.

• Assessment Bias: Under-reporting undermines total catch estimates and biases stock status and rebuilding projections.

SWO-M Kobe Strategy Matrix

Note: Does not fully account for removals associated with the mortality of unreported dead discards and post-release mortality of live discards.

Probability $F<=F_{MSY}$ and $SSB>=SSB_{MSY}$

TAC (t)	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
0	42%	77%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
6000	28%	44%	62%	77%	89%	96%	99%	100%	100%	100%	100%	100%	100%
6500	27%	41%	58%	72%	84%	93%	97%	99%	100%	100%	100%	100%	100%
7000	26%	39%	53%	67%	79%	88%	94%	97%	99%	100%	100%	100%	100%
7500	25%	36%	49%	62%	72%	82%	90%	95%	97%	99%	100%	100%	100%
8000	24%	34%	44%	56%	66%	75%	83%	89%	94%	97%	98%	99%	100%
8500	23%	32%	40%	50%	59%	67%	75%	82%	87%	92%	95%	97%	98%
9000	22%	29%	37%	44%	52%	60%	66%	73%	78%	83%	88%	92%	94%
9500	22%	27%	33%	39%	45%	51%	57%	63%	68%	72%	77%	81%	85%
10000	21%	25%	30%	34%	38%	43%	47%	51%	55%	60%	64%	68%	71%
10250	20%	24%	28%	32%	36%	39%	42%	46%	49%	53%	56%	60%	63%
10500	20%	23%	27%	30%	33%	35%	38%	40%	43%	46%	48%	51%	53%
10750	20%	22%	25%	28%	30%	32%	34%	36%	37%	39%	41%	43%	45%
11000	19%	21%	24%	25%	27%	28%	30%	31%	32%	33%	34%	34%	37%
11250	19%	20%	22%	23%	24%	25%	26%	27%	27%	28%	28%	29%	29%
11500	18%	19%	20%	21%	21%	22%	22%	23%	23%	23%	24%	24%	24%
11750	17%	18%	18%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%
12000	16%	16%	17%	17%	17%	17%	17%	17%	17%	16%	16%	16%	16%

Swordfish Responses (SWO-07 through SWO-12)

Responses included:

- SWO-07 (Item 19.16): Mediterranean swordfish stock recovery assessment under Rec. 24-11.
- SWO-08 (Item 19.17): Review of ST-13 reporting template for traplines under Rec. 25-09.
- SWO-09 (Item 19.18): Trapline data collection objectives and advice timeline.
- SWO-10 (Item 19.19): North Atlantic swordfish MSE Exceptional Circumstances (EC) evaluation.
- SWO-11 (Item 19.20): Review of CPC discard and live-release estimation methodologies.
- SWO-12 (Item 19.21): MSE robustness testing on minimum size limits and climate change.

SWO-07: Mediterranean Stock Recovery

ITEM 19.16 | REC. 24-11, PARA 2

SCRS RESPONSE TO THE COMMISSION (VERBATIM):

"Mediterranean swordfish stock recovery was not directly assessed. However, estimates of spawning stock biomass from the 2026 assessment indicate no increase since implementation of the recovery plan in 2017 (Rec. 16-05)."

Key Takeaway for Panel 4: Current spawning biomass remains depleted with no evidence of rebuilding under the current measures.

Trapline gear

- Growing use in several SWO fisheries
- Gear studies in ATL and MED
- Differences in:
  - Catch rates
  - Selectivity
  - Species composition/bycatch profile
- Full response to Commission by 2028





SWO-08 & SWO-09: Trapline Reporting & Objectives

ITEMS 19.17 & 19.18 | REC. 25-09

SWO-08: Reporting Template (Item 19.17)

- General agreement with Annex 2 data requirements.
- Recommends form ST-13 be reformulated to collect general meta-data rather than detailed raw set-level data.
- Detailed set-level raw data raises confidentiality issues for some CPCs.
- Detailed analyses should be conducted directly by CPCs, not necessarily by the SWO-SG.
- Committee will synthesize all contributions to provide final advice under paragraph 7 of Rec. 25-09.
- Proposal for revised ST-13 provided to Secretariat.

SWO-09: Advice Timeline (Item 19.18 - Verbatim)

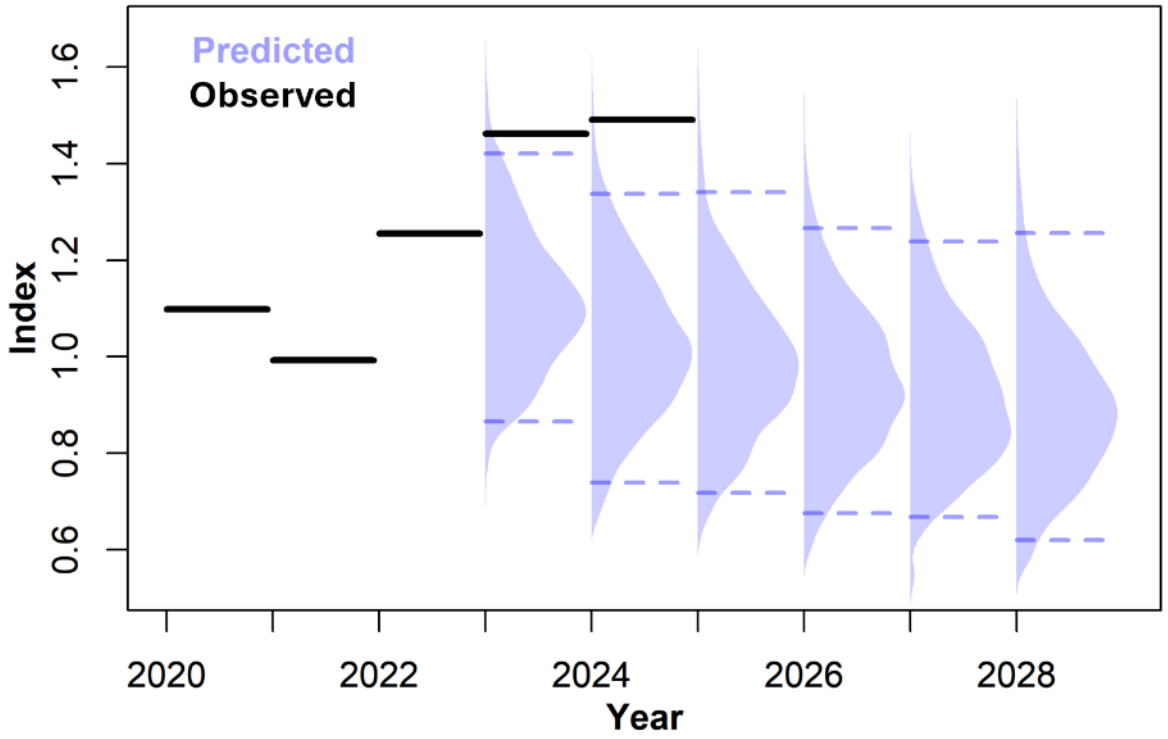
"The Committee is in general agreement with the objectives and provisions of the measures in Recommendation by ICCAT on the experimental use of traplines (Rec. 25-09). The SWO Species Group notes that to date, multiple CPCs have presented their pilot projects on the use of traplines from their fleets, including the presentation of preliminary results.

At this point, the Committee believes that it will be possible to maintain the current timeline specified in Rec. 25-09, to provide advice on the use of traplines by 2028."

N-SWO MSE—EC evaluation

Criterion	EC determination
TAC implementation	No EC
Data availability	No EC
Abundance, life history, fishery dynamics	No EC*
Indices	EC

*vigilance needed with regard to traplines



SWO-10: N-SWO MSE Exceptional Circumstances

ITEM 19.19 | REC. 25-10, PARA 5

Annual Evaluation of 4 ECP Indicators (Rec. 25-10)

- Indices (Combined Index): EC? YES
  Result: 2023 & 2024 values exceed the upper bound of 95% prediction interval (index remains high, likely because catches are below TAC).
- Abundance, Life History & Fishery Dynamics: EC? NO
  No evidence of EC. Emerging traplines will require further robustness analysis.
- Data Availability for MP: EC? NO
  All data required to update the combined index were available.
- Implementation of TAC: EC? NO
  2025 reported catch (10,577 t) did not exceed TAC (14,769 t).

SCRS CONCLUSION (VERBATIM):

"The Committee determined that this EC does not preclude continuation of the TAC for 2027 set using the MP, nor is its implementation risky or inappropriate for the remainder of the current management cycle. The Committee has developed a work plan to further evaluate this EC and provide advice on future implementation of the MP."

SWO-11: Methodologies to Estimate Discards

ITEM 19.20 | REC. 25-10, PARA 19

SCRS RESPONSE TO THE COMMISSION (VERBATIM):

"The Committee has been provided with proposed methods for swordfish discard estimation for some longline fleets. In 2027, the Committee will begin evaluating the methods submitted to date using the evaluation procedure and associated checklist in Annex 1 of the Report of the Subcommittee of Statistics."

SWO-12: MSE Robustness & Minimum Size Limits

ITEM 19.21 | REC. 25-10, PARA 6

Analysis 1: Trade-offs (SCRS/2026/172)

- High haul-back and post-release mortality means MSL does not protect small fish from fishing mortality.
- Removing MSL (full retention) yields higher landed catch without significantly impacting spawning population.
- MSL only effective if size raised to maturity (~166 cm) AND gear avoids capture.

Analysis 2: MP Robustness (SCRS/2026/243)

- Removing MSL resulted in lower fishing mortality for the same TAC.
- Produces ~5% higher landings (in weight) as previously discarded fish contribute to landings.
- Safety, Status, and Yield metrics were equal or improved. MP is robust to MSL removal.

SCRS SUMMARY (VERBATIM):

"• These studies indicate that minimum size limits for swordfish do not effectively protect small fish.
• An increase in the minimum size limits is unlikely to protect small fish without implementation of changes to the gears used in this fishery.
• The MP is robust to the removal of minimum size limits should the Commission wish to do so."





Research:
Swordfish Year Program





SWOYP – Phase 8 objectives

Sampling

- Spines and otoliths, muscles and gonads to support work on ageing and growth, reproduction and genetic stock structure

Age and growth

- Growth modeling and age validation

Reproduction and maturity

- Size at first maturity; spawning location and timing

Genetics

- Stock differentiation, boundaries and mixing among stocks

Tagging

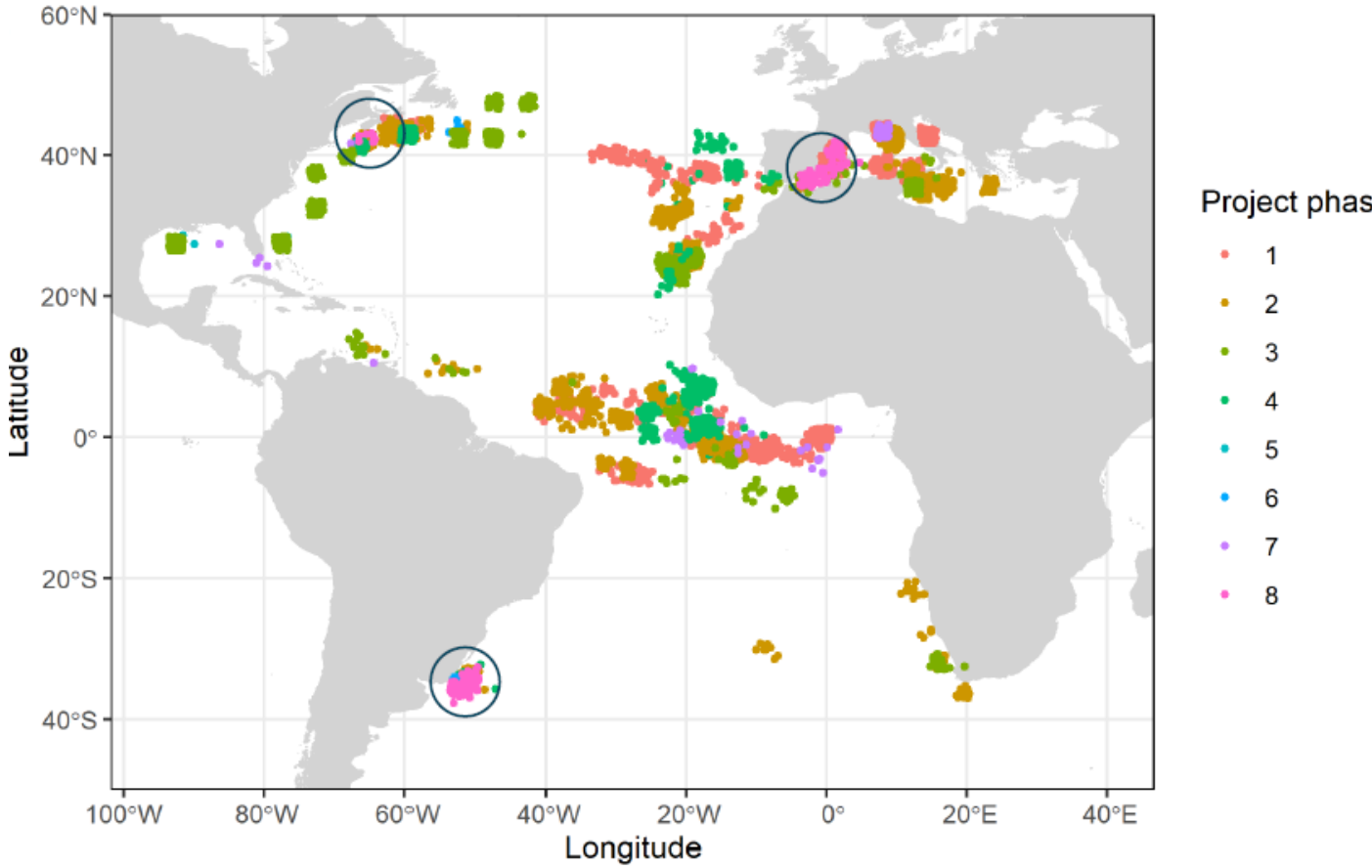
- Movement, mixing and habitat use





Sampling

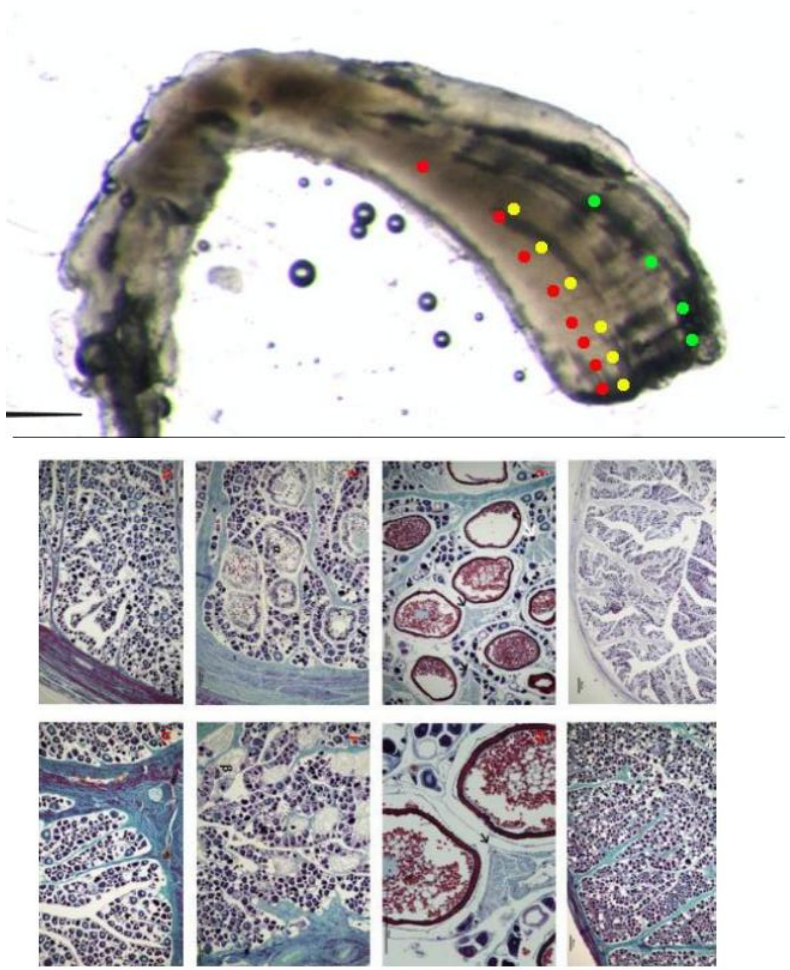
- 5000+ fish sampled among all three stocks
- Sampling gaps remain



Total fish sampled	Fin spines	Otoliths	Tissue	Gonads
5065	3631	1281	4071	972

SWOYP - highlights

- Ageing and growth
  - Development of new growth models for South and Med stocks
  - S-ATL: otolith curve used in 2026 assessment
  - Med: new spine & otolith curve developed
- Reproduction
  - New maturity estimates used in South and Med assessments
  - New maturity ogives developed

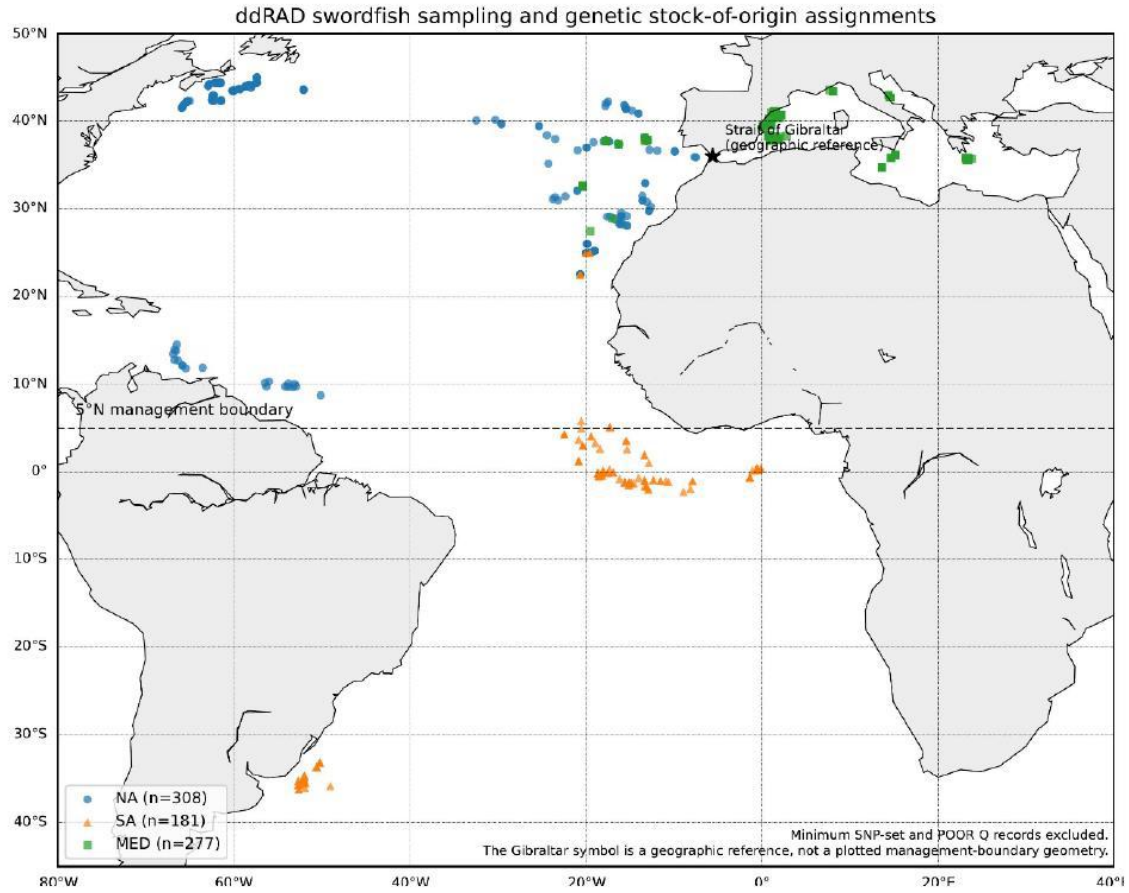


SWOYP - highlights

- Genetic analysis
  - Stock differentiation
  - Evidence of mixing for all 3 stocks in NE Atlantic

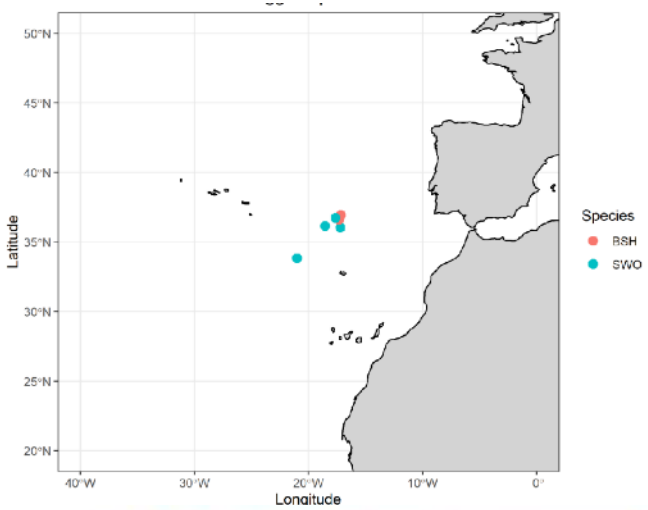
- Epigenetic ageing
  - Age-associated methylation sites identified
  - Epigenetic models showed good predictive performance

of the analyzed samples and their genetic assignments is shown in Figure 1.

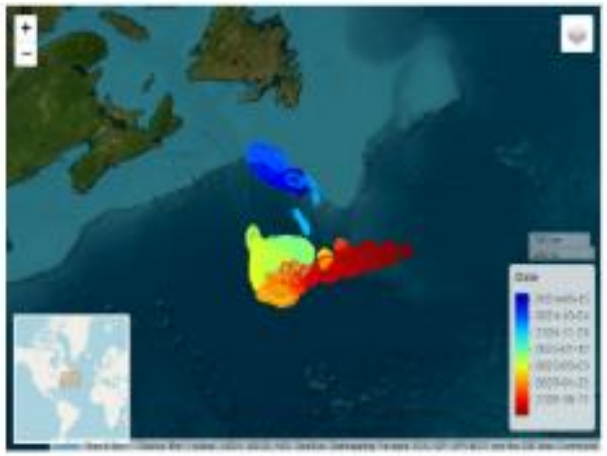


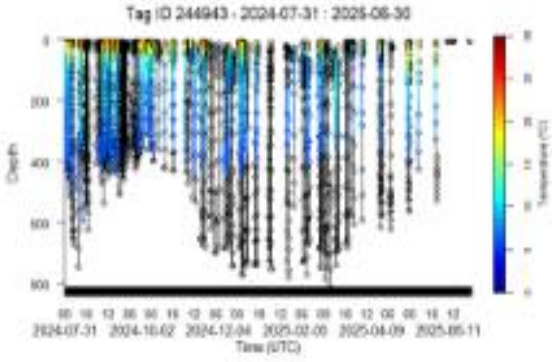
SWOYP - highlights

- Tagging
  - 2 campaigns in Atlantic
- Northeast
  - Mixing area
- Northwest
  - Shift in distribution
  - Habitat use









Swordfish Year Programme (SWOYP): Research, Biology & MSE Budget

Priority Activities (Highest to Lowest)

- **Biology:** Produce baseline growth curves, maturity ogives, and stock boundaries by 2027; transition to regular monitoring from 2028.
- **MSE for SWO-N:** Support Climate Change scenarios (Rec. 25-10), EC evaluation, and PA4 request on trapline gear impacts (€30,000 in 2027).
- **Satellite Tagging:** Dedicated 2027 campaign in NE Atlantic stock mixing area (€55,000); South Atlantic and Mediterranean thereafter.
- **CKMR / Gene Tagging Feasibility:** 2028 study evaluating absolute stock abundance estimation (€15,000).
- **Ageing Workshop:** Technical reader calibration in 2027 (€12,000).

SWOYP Budget Breakdown

Activity Component	2027 (€)	2028 (€)	2029 (€)
Tags, Tagging Material & Satellite	€49,560	€120,000	€120,000
Tagging Campaign (NE Atlantic)	€55,000	---	---
Reproduction, Age & Genetics	€96,700	€71,700	€71,700
Sample Collection & Consumables	€7,000	€6,000	€6,000
Modelling: CKMR Feasibility	---	€15,000	---
Modelling: SWO-N MSE Support	€30,000	€5,000	€15,000
Ageing Calibration Workshop	€12,000	---	---
Science Coordination Share	€13,981	€11,778	€13,462
TOTAL SWOYP Requested	**€264,241**	**€229,478**	**€226,162**

Swordfish Species Group: Trapline Monitoring & Discard Protocols

Actions to Address Expanding Use of Trapline Gear

Recognizing the expanding use of trapline gear in swordfish longline fisheries, the Committee recommended:

- **Logbook Measures:** CPCs implement measures requiring trapline gear to be recorded specifically in logbooks and fishery databases.
- **Fishery Characterization:** CPCs and SCRS conduct work to determine initial year of entry, historical catches, areas (Atlantic/Med), active fleets/vessels, and whether used alone or with longlines.
- **Gear-Specific CPUE:** Conduct CPUE analyses specific to traplines for both target and non-target species.

Discard Estimation Protocols Checklist

The Committee reiterated the importance of understanding the data and methodology used by CPCs to estimate live and dead discards. Reminded CPCs that have not submitted documentation to consult the review procedure and checklist in **Annex 1 of the Second Intersessional Meeting of the Subcommittee on Statistics** (Col. Vol. Sci. Pap. ICCAT, 83(9)).

Billfish



Billfish overview

Stock Status & Management:

- White Marlin / RSP (WHM)
- Blue Marlin (BUM)
- Sailfish (SFA)

Fishery Statistics & Responses (Item 19):

- Data Quality & Completeness
- Discard Methodologies
- Terminal Gear

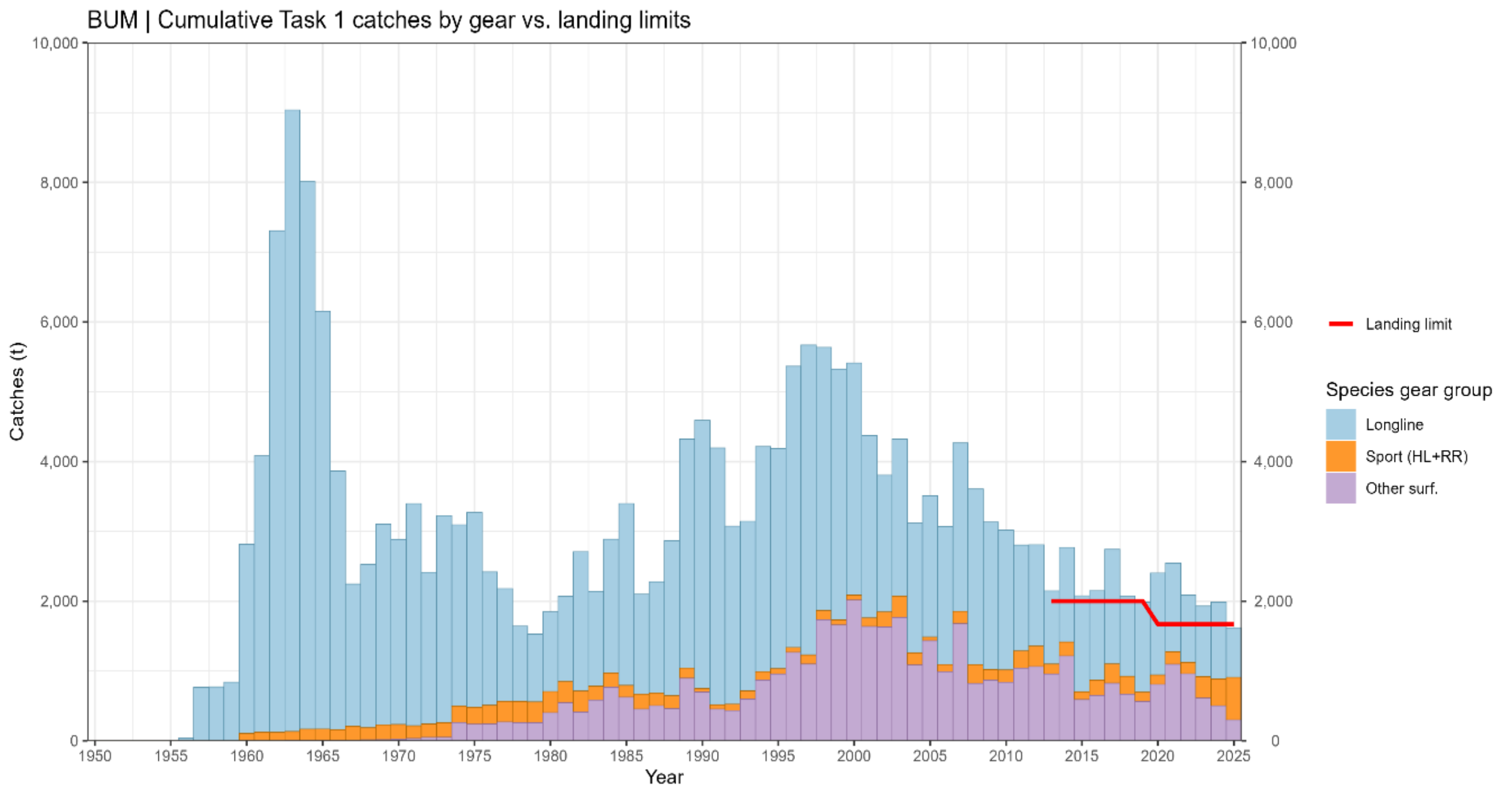
EPBR Research & Recommendations:

- Enhanced Program for Billfish Research (EPBR)
- Budget



Blue Marlin



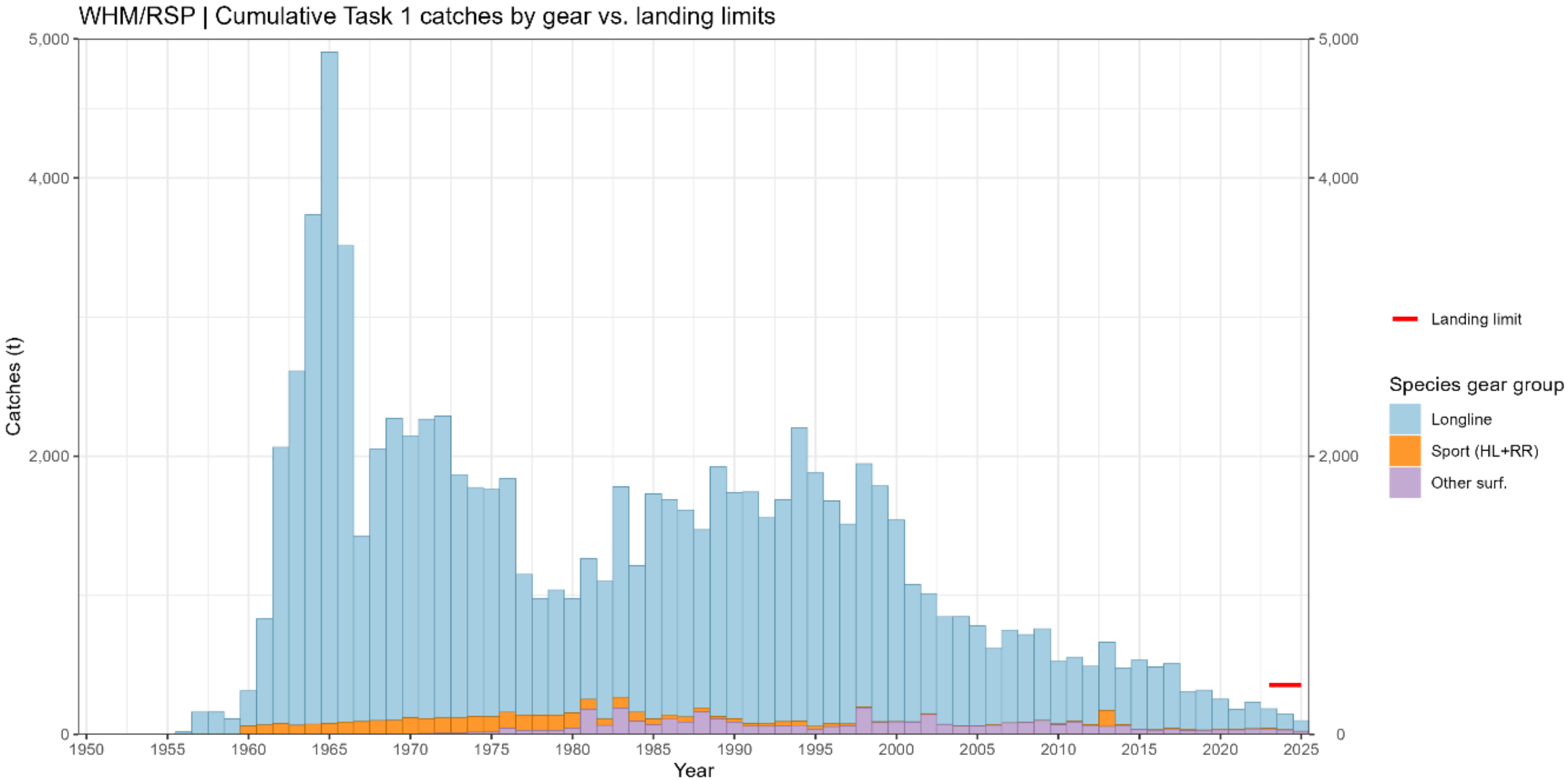

BUM | Cumulative Task 1 catches by gear vs. landing limits
Catches (t)
Year
10,000
8,000
6,000
4,000
2,000
0
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Landing limit
Species gear group
Longline
Sport (HL+RR)
Other surf.

Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)[1]	3,331 t (2,323 t - 4,659 t)[3]	2022
Landing limit 2025	1,670 t	
Current (2025) Yield[2]	1,618 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 18 September 2026.
[3] Point estimate, 95% bias corrected confidence intervals are shown.
[4] As estimated from the Kobe plot probability in each quadrant.



White Marlin

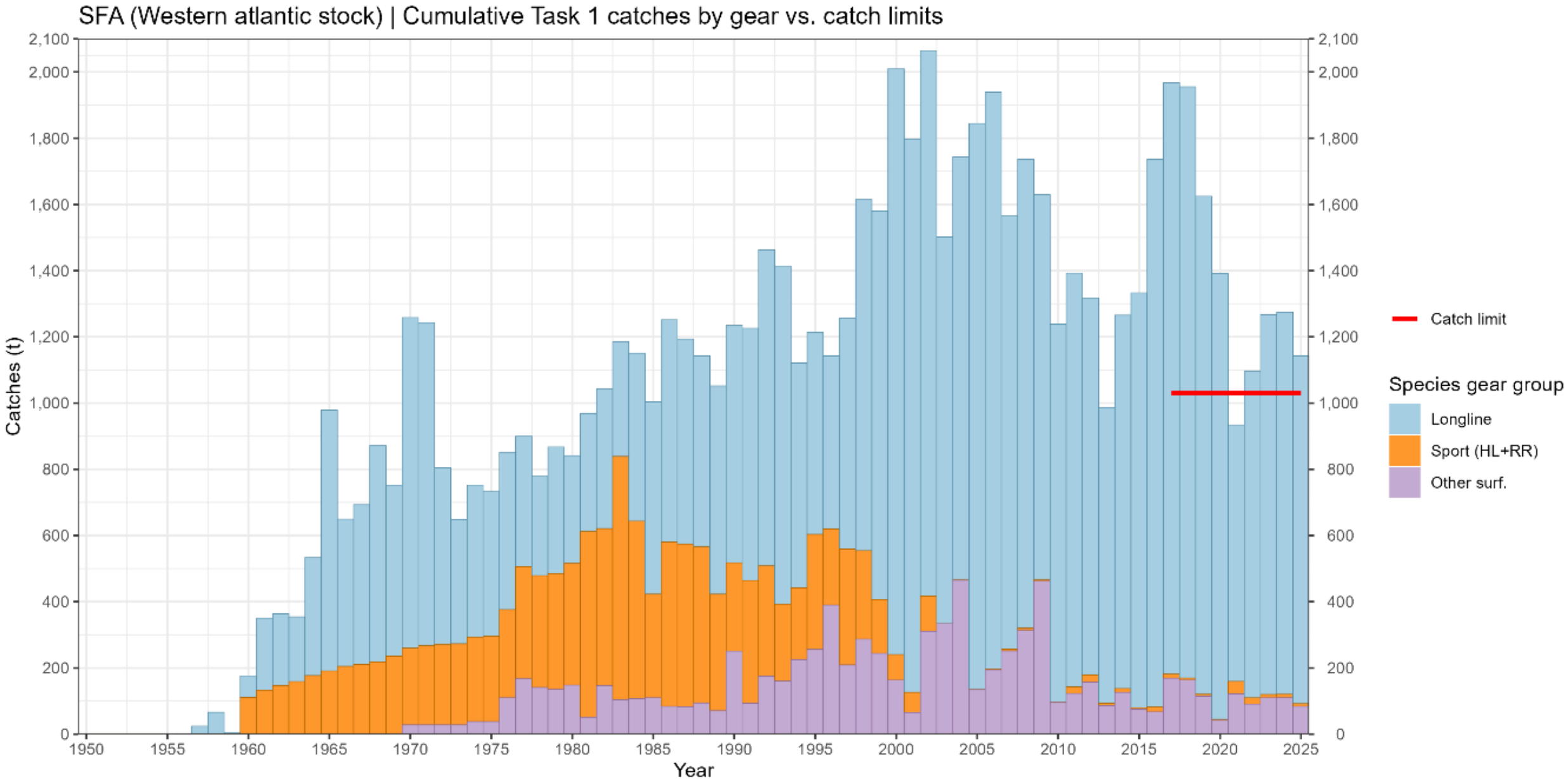

WHM/RSP | Cumulative Task 1 catches by gear vs. landing limits
Catches (t)
5,000
4,000
2,000
0
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year
Landing limit
Species gear group
Longline
Sport (HL+RR)
Other surf.

Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)[1]	1,497 t (1,160 t - 1,937 t)[3]	2023
Landing limit 2025	355 t	
Current (2025) Yield[2]	99 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	

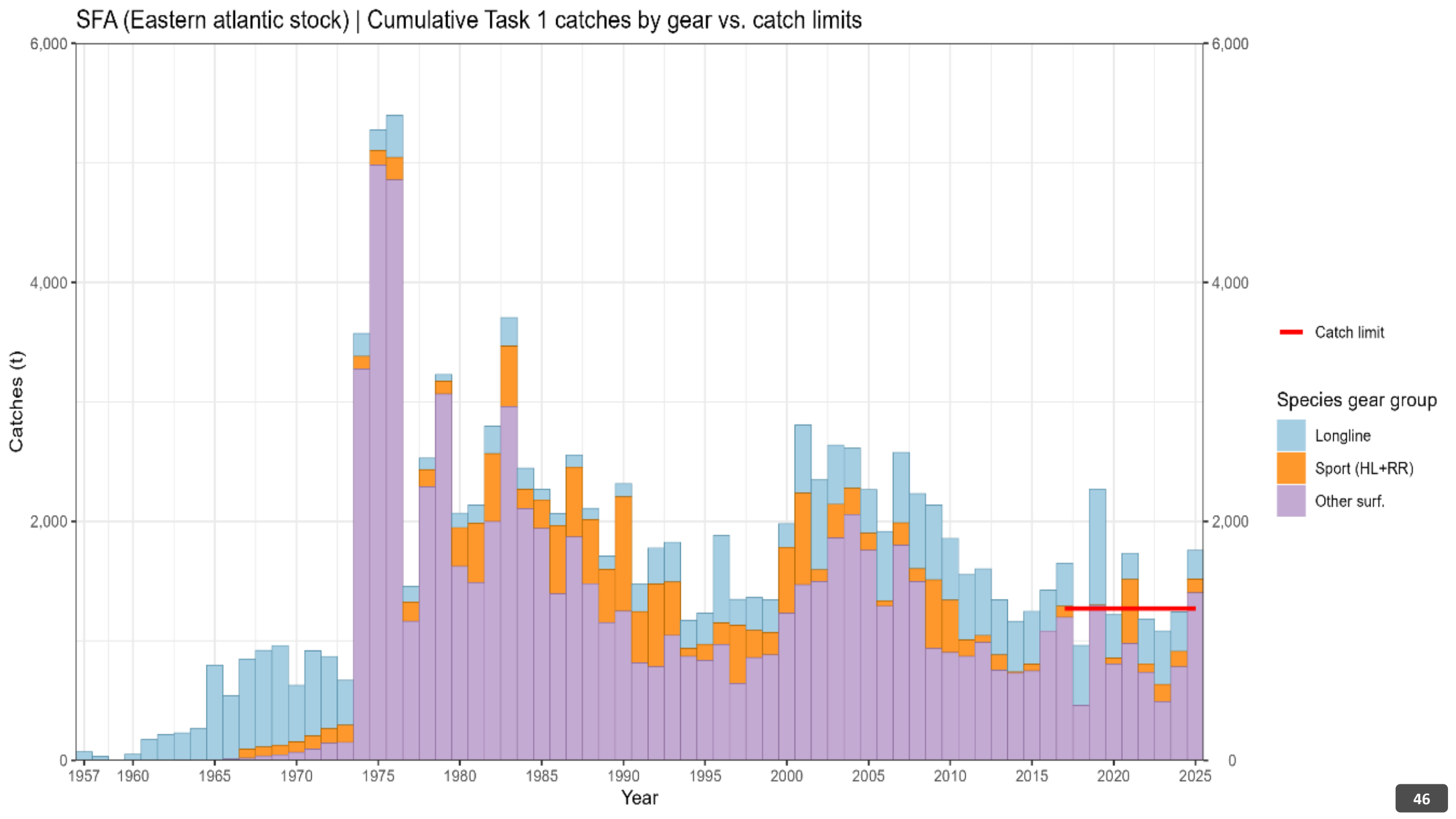
[1] Base case model results based on catch data from 1956-2023.
[2] Provisional and subject to revision as of 18 September 2026.
[3] Point estimate, 95% credibility intervals are shown.
[4] As estimated from the Kobe plot probability in each quadrant.

Sailfish




SFA (Western atlantic stock) | Cumulative Task 1 catches by gear vs. catch limits
Catches (t)
Year
0
200
400
600
800
1,000
1,200
1,400
1,600
1,800
2,000
2,100
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Catch limit
Species gear group
Longline
Sport (HL+RR)
Other surf.

Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)[1]	1,612 t (1,357 t - 1,968 t)[3]	2021
TAC (2025)	1,080 t[4]	
Current (2025) Yield[2]	1,143 t	
Relative Biomass (B_{2021}/B_{MSY})	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)[5] Overfishing: NO (2% probability of overfishing)[5]	
Management measures in effect	Rec. 16-11: Limit catches to the level of 67% of MSY	


SFA (Eastern atlantic stock) | Cumulative Task 1 catches by gear vs. catch limits
Catches (t)
6,000
4,000
2,000
0
1957
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year
Catch limit
Species gear group
Longline
Sport (HL+RR)
Other surf.

Billfish Responses (BIL-07 through BIL-10)

- BIL-07 (Item 19.11): Revision of discard estimation methodologies and capacity building under Rec. 19-05, para 16.
- BIL-08 (Item 19.12): Evaluation of Task 1 & 2 data completeness and unreported catch feasibility (Rec. 19-05, para 17).
- BIL-09 (Item 19.13): Data collection initiatives under the Enhanced Program for Billfish Research (EPBR).
- BIL-10 (Item 19.14): Potential technical changes to terminal gear (hook shape/size) and fishing practices.

BIL-07: Discard Methods & Capacity Building

Discard Estimation & Reporting Dynamics

• Standardized Checklist: WGSAM proposed a diagnostic framework (SCRS/2026/197); Species Groups decide acceptance. CPCs must submit methods.
• Artisanal Fleets: Seldom discard billfish; fish are retained for local consumption (landings ≈ total catch).
• Sport Fleets: Release most billfish, but reporting is inconsistent across fleets and tournaments.

Capacity Building & Collaborative Tools

• Caribbean Project: Ongoing collaboration reviewing governance, historical data, and sampling design for small-scale and sport fisheries.
• BYET Tool: SCRS supports continued development of Bycatch Estimation Tool (BYET) to estimate bycatch at Task 1 statistical level.
• Workshops: Dedicated training in Dec 2026 and 2027.

BIL-08 & BIL-09: Data Completeness & EPBR

BIL-08: Data Completeness (Verbatim)

"The Committee received a presentation on the online SCRS data catalogue dashboard BLUE / RED and refers individual CPCs to consult the dashboard and prioritize data improvements in anticipation of future billfish assessments."

BIL-09: EPBR Data Collection (Verbatim)

"The Committee continued working under the EPBR programme with the objectives of maintaining and strengthening this research line with a view to improving the quality of the data and supporting the provision of scientific advice for billfishes. For further information please see items 13.4 (EPBR summary) and 17.1.5 (2027 workplan) in this Report."

Billfish data issues include: missing task 1 and 2, species "BIL", unknown gear, substantial carryovers

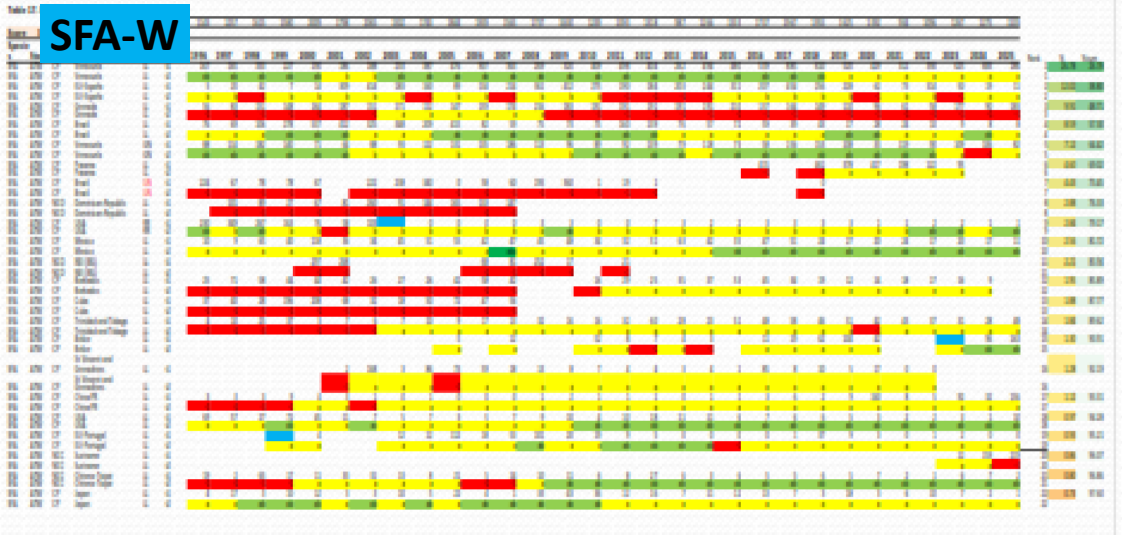
BUM



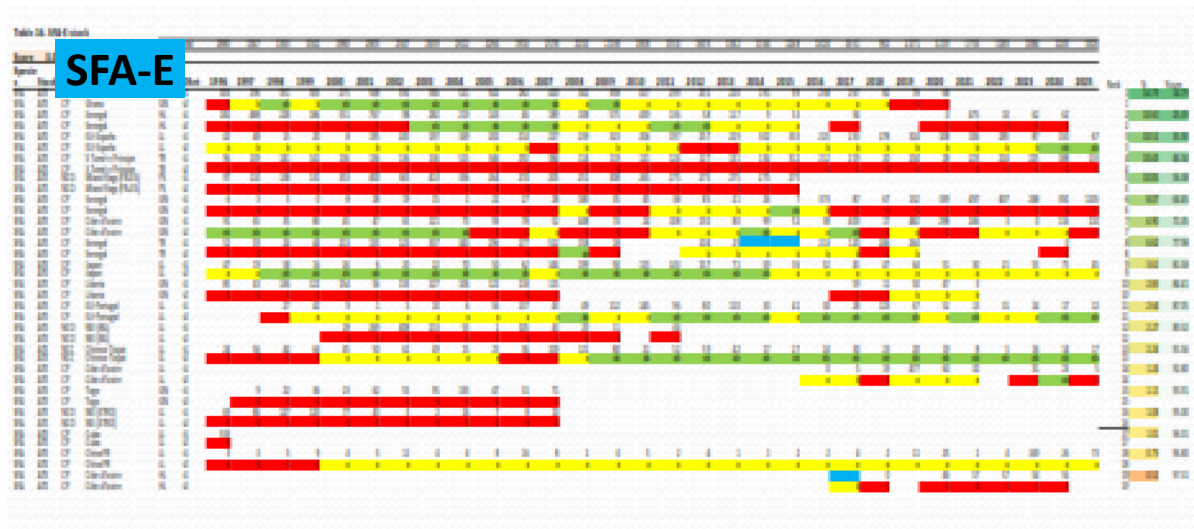
WHM



SFA-W



SFA-E



BIL-10: Terminal Gear & Fishing Practices

SCRS RESPONSE TO THE COMMISSION (VERBATIM):

"In 2026 no additional information on this matter was presented to the Committee. Therefore, the response provided in item 19.9 of the Report for Biennial Period 2024-2025, Part II (2025), Vol. 2 continues to contain the most up-to-update information."

Enhanced Programme for Billfish Research (EPBR): Funding (2027–2029)

Priority Research Areas (2027–2029)

The Committee recommends continued funding of the EPBR focusing on three priority species in the eastern Atlantic (BUM, WHM, SFA) under Rec. 19-05:

- **Ageing & Growth Models:** Process samples and complete bomb-radiocarbon age validation and growth models by 2029 (WHM: 2026–2028; SFA: 2028–2030).
- **Electronic Tagging:** MiniPAT deployments in temperate NE Atlantic (southern Portugal) and opportunistic tagging across Eastern Atlantic.
- **Roundscale Spearfish (RSP):** Improve basic biology to test assumption that RSP does not differ from WHM.

EPBR Budget Breakdown

Activity Component	2027 (€)	2028 (€)	2029 (€)
MiniPAT Tags Acquisition	€22,200	€22,200	€22,200
Rewarding, Awareness & Satellite	€2,700	€2,700	€2,700
Tagging Campaign (NE Atlantic)	€10,000	€10,000	€10,000
Age & Growth (€17k) & Validation (€25k)	€42,000	€42,000	€37,500
Sample Collection and Shipping	€7,000	€7,000	€7,000
Science Coordination Share	€4,687	€4,539	€5,025
TOTAL EPBR Requested	**€88,587**	**€88,439**	**€84,425**

General Recommendations

Natural Mortality (M) Estimation

The Committee recommends improving estimates of natural mortality (*M*) and considering developing an age-specific natural mortality vector (*M*-at-age) for all billfish species to enhance model realism.

Comprehensive Review of Abundance Indices (BUM, WHM, SFA)

The Committee recommends a thorough review of blue marlin, white marlin, and sailfish indices:

- Clear definition of catch used (landed only vs. landed plus discards) and fishing effort definitions.
- Standardization of data sources (logbooks, observer programmes, tournaments).
- Verification whether catches include strictly identified white marlin versus roundscale spearfish.
- Evaluating factors affecting catchability in both target and bycatch fisheries.
- **Multi-fleet LL CPUE:** Exploring estimation of combined longline CPUEs to resolve conflicting trends faced during assessments.

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

Swordfish Coordinator: Kyle Gillespie (Canada)
North Atlantic Swordfish Rapporteur:
Kyle Gillespie (Canada)
South Atlantic Swordfish Rapporteur:
Luis Gustavo Cardoso (Brazil)
Mediterranean Swordfish Rapporteur:
George Tserpes (European Union)

Billfish Rapporteur: Karina Ramírez López (México)

Images of fish in natural settings within this presentation were created using AI by Craig Brown for the use of ICCAT.

