2026 Report of the SCRS to the ICCAT Panel 2: Bluefin Tuna and Albacore Tuna

Stock Status, MSE,
Responses, and Research





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

Bluefin Tuna



BFT MSE: 2026 Status/Health Check

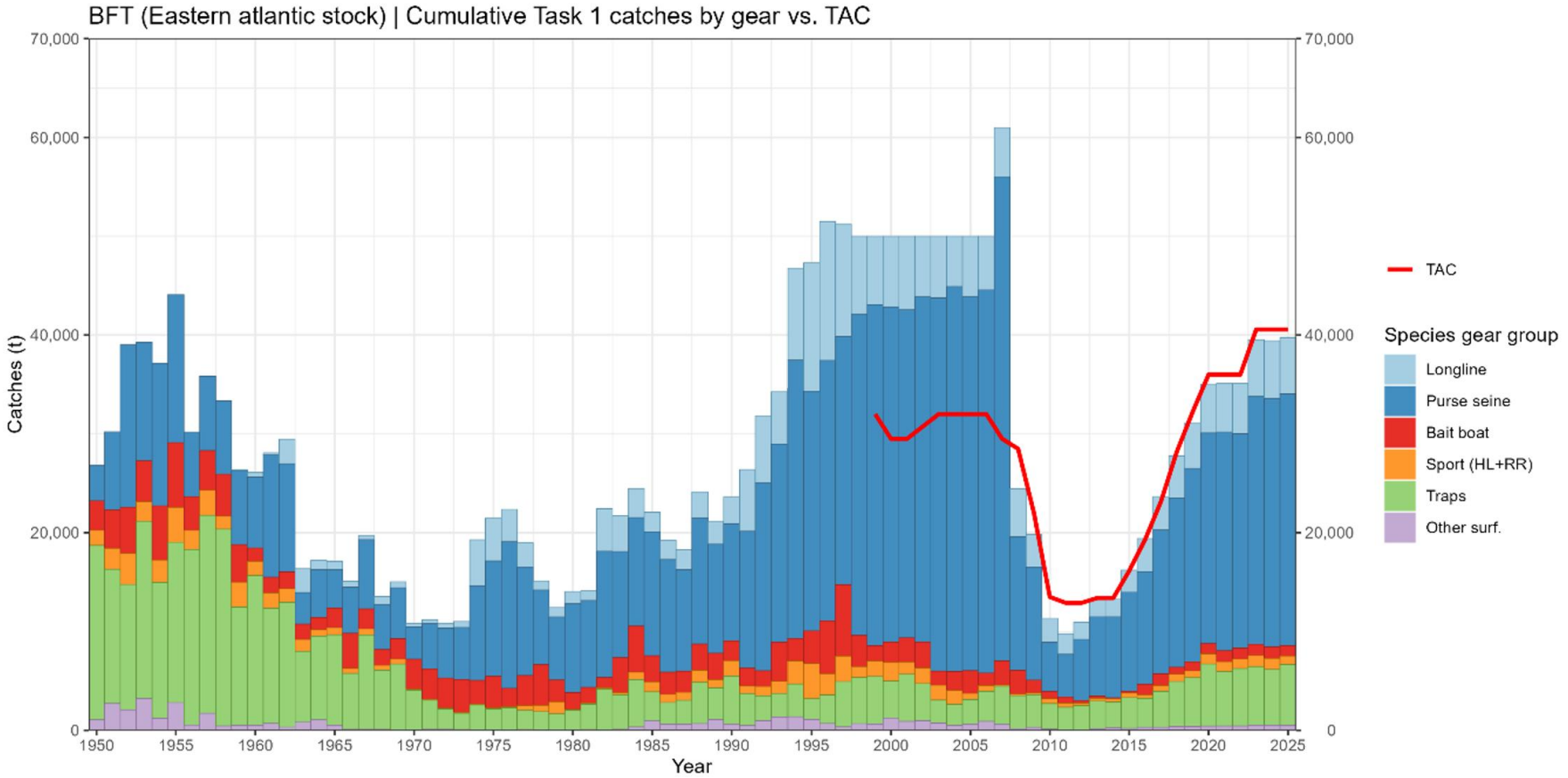
- ***March meeting (online)***
- ***July meeting (Nara Park, Japan)***





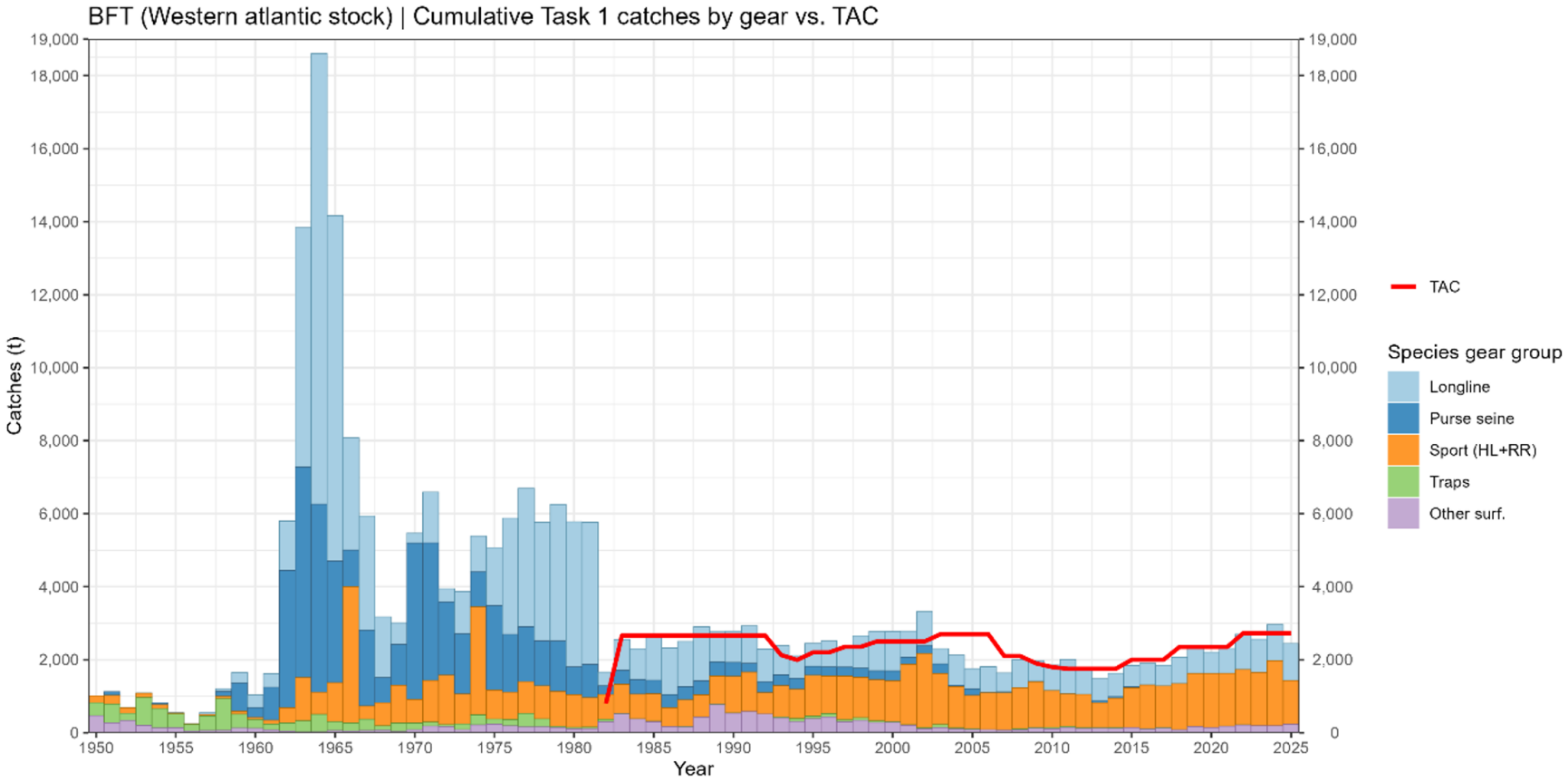
- Stock Synthesis analyses indicated that the status of both BFT-W and BFT-E is good (no overfishing)

- Preliminary work for the 2027 MSE review was carried out


BFT (Eastern atlantic stock) | Cumulative Task 1 catches by gear vs. TAC
Catches (t)
70,000
60,000
40,000
20,000
0
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year
TAC
Species gear group
Longline
Purse seine
Bait boat
Sport (HL+RR)
Traps
Other surf.

Eastern Atlantic and Mediterranean Sea bluefin tuna summary table.

Indicator		***Stock Status***
Maximum Sustainable Yield (MSY)	Unknown	2024
TAC (2025)	40,570 t	
Current (2025) Yield	39,757 t[1]	
Relative Fishing Mortality ($F_{2024}/F_{0.1}$)	0.73 (0.31-0.98)[2]	
Stock Status	Overfishing: NO (1.8% probability of overfishing)[3]	
Management measures in effect	Rec. 25-04; Rec. 23-07	
Managed according to a Management Procedure: Recommended TAC for the period 2026-2028 of 48,403 t (Rec. 25-04)		


BFT (Western atlantic stock) | Cumulative Task 1 catches by gear vs. TAC
Catches (t)
Year
19,000
18,000
16,000
14,000
12,000
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
TAC
Species gear group
Longline
Purse seine
Sport (HL+RR)
Traps
Other surf.

Western Atlantic bluefin tuna summary table.

Indicator		***Stock Status***
Maximum Sustainable Yield (MSY)	Unknown	2024
TAC (2025)	2,726 t	
Current (2025) Yield	2,442 t[1]	
Relative Fishing Mortality ($F_{2024}/F_{0.1}$)	0.69 (0.6-0.79)[2]	
Stock Status	Overfishing: NO (<1% probability of overfishing)[3]	
Management measures in effect	Rec. 25-05; Rec. 23-07 TAC for years 2026-2028: 3,081.6 t	

[1] As of 18 September 2026.
[2] Median and 95% confidence interval across the models.
[3] As in prior assessments, reference points to determine biomass status could not be reliably estimated.

Abundance Indices: Committee Concerns & Data Adjustments

Ongoing Index Uncertainties

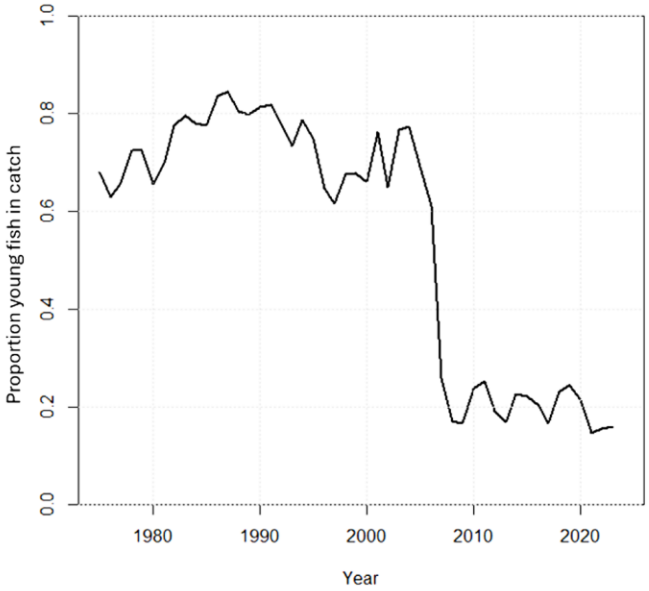
- Environmental Variability: The Committee remains concerned that updated fishery-dependent and independent indices are impacted by unquantified environmental factors.
- Fish Availability: Shifting spatial and temporal availability of bluefin tuna continues to introduce noise into standardized CPUE series.
- Operational Changes: Evolving fishing practices across fleets complicate consistent index standardization over time.

Specific Series Adjustments in 2026

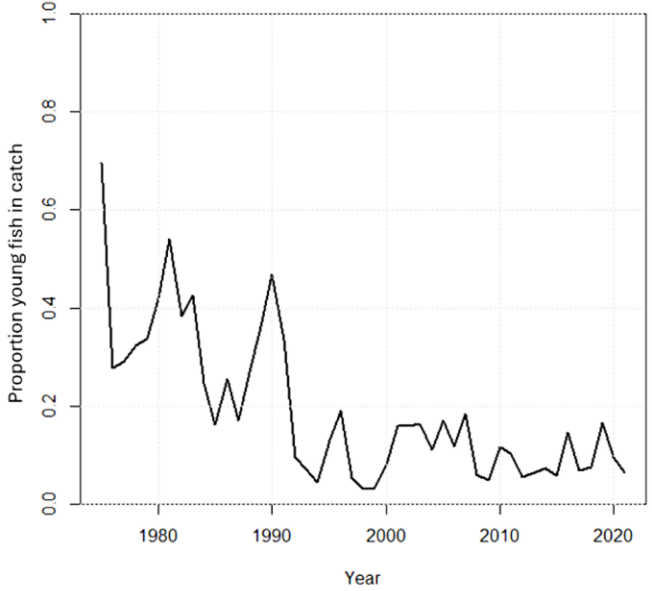
- Moroccan–Portuguese Trap Index (2023–2025): Data points were excluded because substantial changes in fishing operations and temporal catch distribution created unsolvable problems for existing index standardization.
- Spanish Baitboat Series: Split into two series to account for selectivity changes; recent series calculated using French baitboat data due to quota sale.
- Japanese Longline (West): The 1986 low data point was removed in the Stock Synthesis models; NE and West series split at 2009/2010.

Status checks for the BFT-E and BFT-W indicate that management actions including appropriate catch and size limits coupled with changes in fishing practices to focus on larger fish have contributed substantially to current sustainable yields.

East Atlantic and Mediterranean



West Atlantic



Guidance on the Management Procedure (MP) Review Process (Item 18.2, 2026 SCRS Report):

- Regular Multi-Year Reviews: Unlike annual Exceptional Circumstances (EC) checks, MPs undergo regular scheduled reviews (e.g. 6-year cycle for BFT) to incorporate updated stock behavior, new science, and improved performance.
- Re-conditioning Operating Models (OMs): OMs are revised with recent monitoring data to verify whether the MP still meets Commission management objectives (Rec. 23-07).
- Retuning vs. Restructuring: If performance deteriorates meaningfully, the MP should be retuned (adjusting parameter values) rather than undergoing a complete structural overhaul.

Distinction Between MP Reviews and Exceptional Circumstances Checks:

- EC Checks (Annual): Ensure an MP is 'on course' by checking if indices and catches stay within expected ranges.
- Triggering ECs: Does not immediately overturn TAC advice, but may cause the scheduled MP review to be brought forward.


Bluefin Research:
GBYP

Bluefin Tuna (GBYP): Research Priorities & Budget (2027–2029)

2027 Priority Research Areas (ranked)

1. Contract external experts to support BFT MSE review & multi-stock mixing model.
2. Standardize aerial survey index to account for environmental variability.
3. Conduct 2027 GBYP aerial survey in Balearic region (only) & update index.
4. Collect biological samples required for stock assessment (epigenetics, stock ID).
5. Recover genetic samples from PSAT-tagged fish for genetic stock ID & sex.

GBYP Activity Component	2027 (€)	2028 (€)	2029 (€)
Tags & tagging material (eTags)	90,000	80,000	80,000
Rewarding, awareness & satellite	17,500	30,000	30,000
Electronic tagging database	10,000	10,000	10,000
Tagging campaign (East Med)	---	10,000	---
Genetics (epigenetic clock & stock ID)	135,000	150,000	210,000
Stock ID eTags (20k/10k) & BFT-W (15k)	35,000	25,000	25,000
Sample collection, shipping & bank	57,500	60,000	60,000
Aerial surveys & index provision	140,000	140,000	140,000
MSE review & external MSE expert	100,000	80,000	30,000
Science coordination (60% coord + SC)	190,000	190,000	190,000
TOTAL GBYP REQUESTED	**775,000**	**775,000**	**775,000**

Bluefin Tuna: General Recommendations

AI Stereo-Video

• ***Joint Technical Group (AI Measurements):*** Recommends establishing a joint SCRS–PWG technical group to develop technical criteria and specifications (Rec. 25-04, para 173) for evaluating AI-based length measurement systems at first transfer/caging.

Data Compliance

• ***Med Purse Seine Size Data (ST-04*)**: Reiterates obligation for CPCs to report Task 2 size data within established deadlines.

• ***Farm Event Size Data (ST-06):*** Encourages CPCs that have not yet submitted farm size data to work with the Secretariat to ensure timely delivery for stock assessments.

REC. 23-07, PARA 12

BFT Response: Exceptional Circumstances Protocol Evaluation

Evaluation of Rec. 23-07 ECP Criteria (2025 Data)

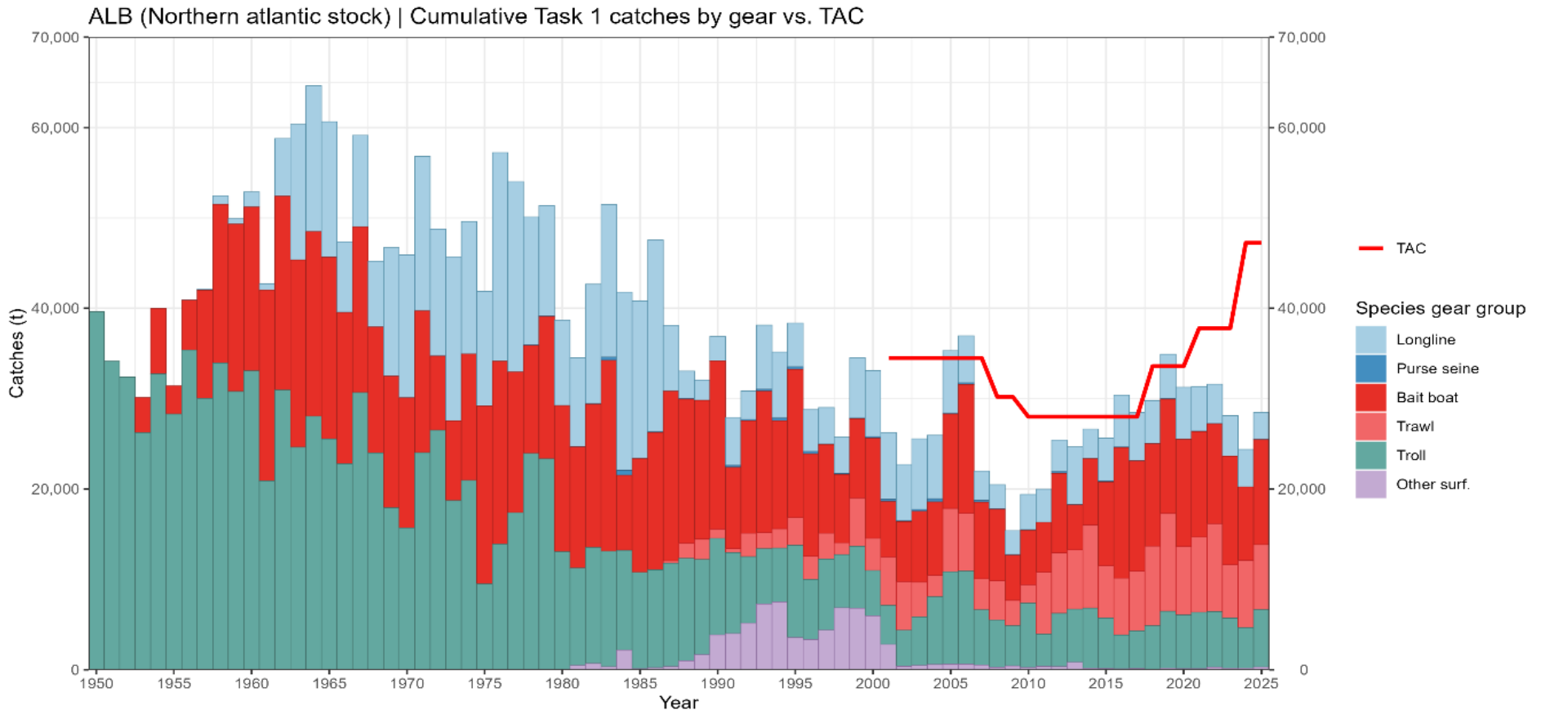
- Stock Dynamics — Combined Indices: Neither East nor West combined indices fell outside the 95% prediction intervals for 2025 (**no EC triggered**).
- Abundance, Life History & Fishery Dynamics: No new information since 2025 indicating Exceptional Circumstances. (**no EC triggered**)
- Data Availability for MP: All indices updated except Moroccan–Portuguese trap (2023–2025 excluded due to temporal catch shifts). Fewer than 3 indices missing in any year and ≤2 missing for 2+ consecutive years. (**no EC triggered)**
- TAC Implementation: 2025 reported catches for East and West areas were both below EC trigger thresholds.

SCRS DETERMINATION:

"In accordance with the Exceptional Circumstances Protocol (ECP) outlined in Rec. 23-07, the Committee did not find that results warranted the triggering of Exceptional Circumstances (EC)."

Albacore

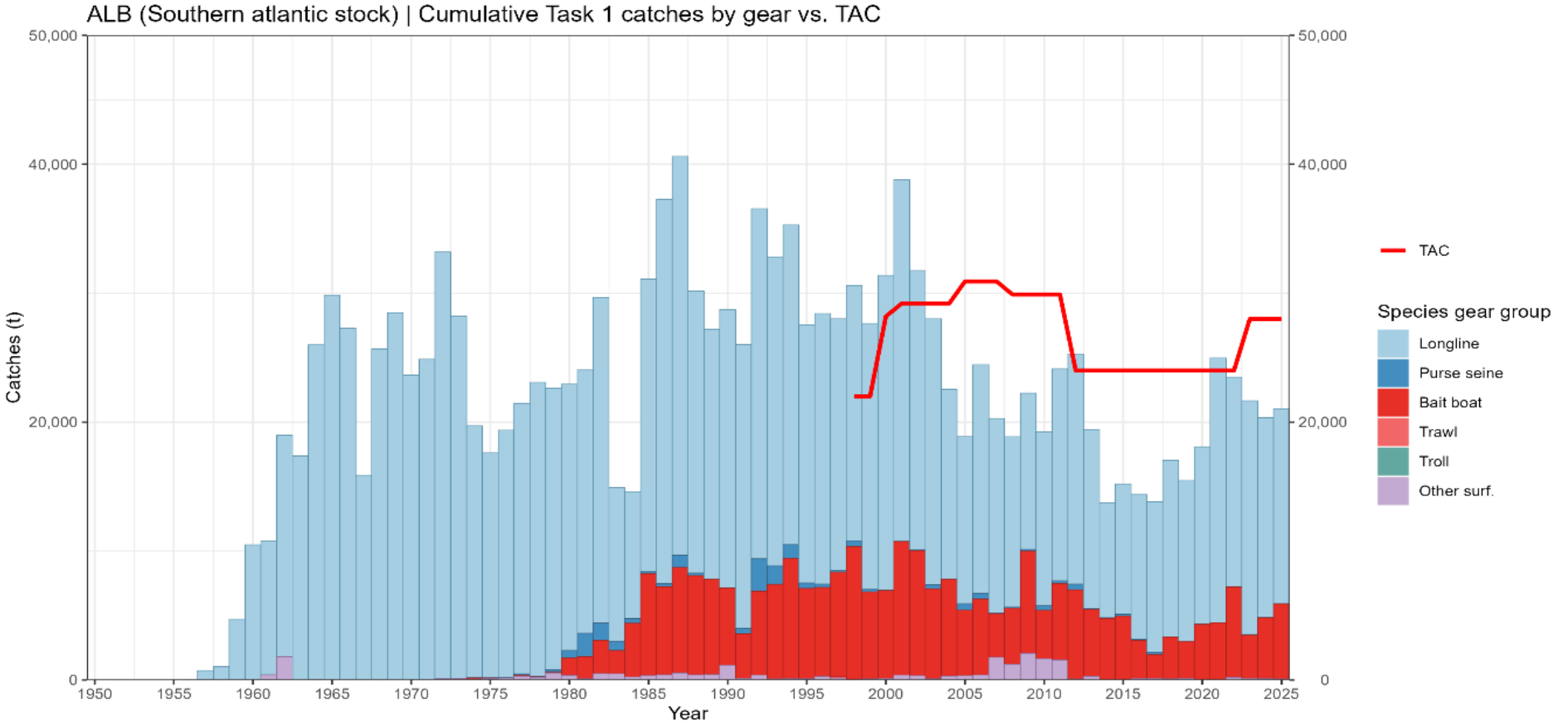



ALB (Northern atlantic stock) | Cumulative Task 1 catches by gear vs. TAC
Catches (t)
70,000
60,000
40,000
20,000
0
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year
TAC
Species gear group
Longline
Purse seine
Bait boat
Trawl
Troll
Other surf.

North Atlantic albacore summary.

Indicator		***Stock Status***
Maximum Sustainable Yield (MSY)	41,995 t (38,860-45,130)[1]	2021
TAC (2025)	47,251 t	
Current (2025) Yield	28,471 t[2]	
Relative Spawning Biomass (SSB_{2021}/SSB_{MSY})	2.19 (1.21 - 4.01)[1]	
Relative Fishing Mortality (F_{2021}/F_{MSY})	0.45 (0.29 - 0.71)[1]	
Stock Status	Overfished: NO (0.4% probability of being overfished)[3] Overfishing: NO (<1% probability of overfishing)[3]	
Management measures in effect	Rec. 98-08, Rec. 21-04 and Rec. 23-05	
Recommended TAC for the period 2024-2026, as estimated following the MP adopted in Rec. 21-04	47,251 t	

[1] Reference case model results (mean and 95% confidence intervals based on catch data from 1930-2021).
[2] Provisional and subject to revision as of 18 September 2026.
[3] As estimated from the Kobe plot probability in each quadrant.


ALB (Southern atlantic stock) | Cumulative Task 1 catches by gear vs. TAC
Catches (t)
50,000
40,000
20,000
0
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year
TAC
Species gear group
Longline
Purse seine
Bait boat
Trawl
Troll
Other surf.

2026 ALB-S Stock Assessment

Outlook (2026 Assessment)

- ***Major Framework Update***: Incorporates updated fisheries, size-composition data, standardized indices, new biological data, and transitions to an age-structured SS3 model.
- ***2024 Stock Status***: $SSB_{2024}/SSB_{MSY} = 0.95$ and $F_{2024}/F_{MSY} = 0.90$
- ***Greater uncertainty in status***: 31.4% probability in the green quadrant and 39.5% in the yellow quadrant—reflecting substantially greater status uncertainty than in 2020.
- ***Lower Productivity***: The assessment indicates lower overall stock productivity compared to the 2020 assessment.

Management Recommendations

- ***Current Catch Limit (Rec. 22-06):*** Established a 28,000 t TAC for 2023–2026; reported catches have remained consistently below 28,000 t since 2004.
- ***Stochastic Projections***: Conducted through 2039 using the selected SS3 model and multivariate lognormal (MVLN) approach.
- ***More Pessimistic Projections***: Because the 2026 model indicates lower stock productivity and a slower spawning-biomass response to reductions in fishing mortality, projection results are more pessimistic than in prior assessments.

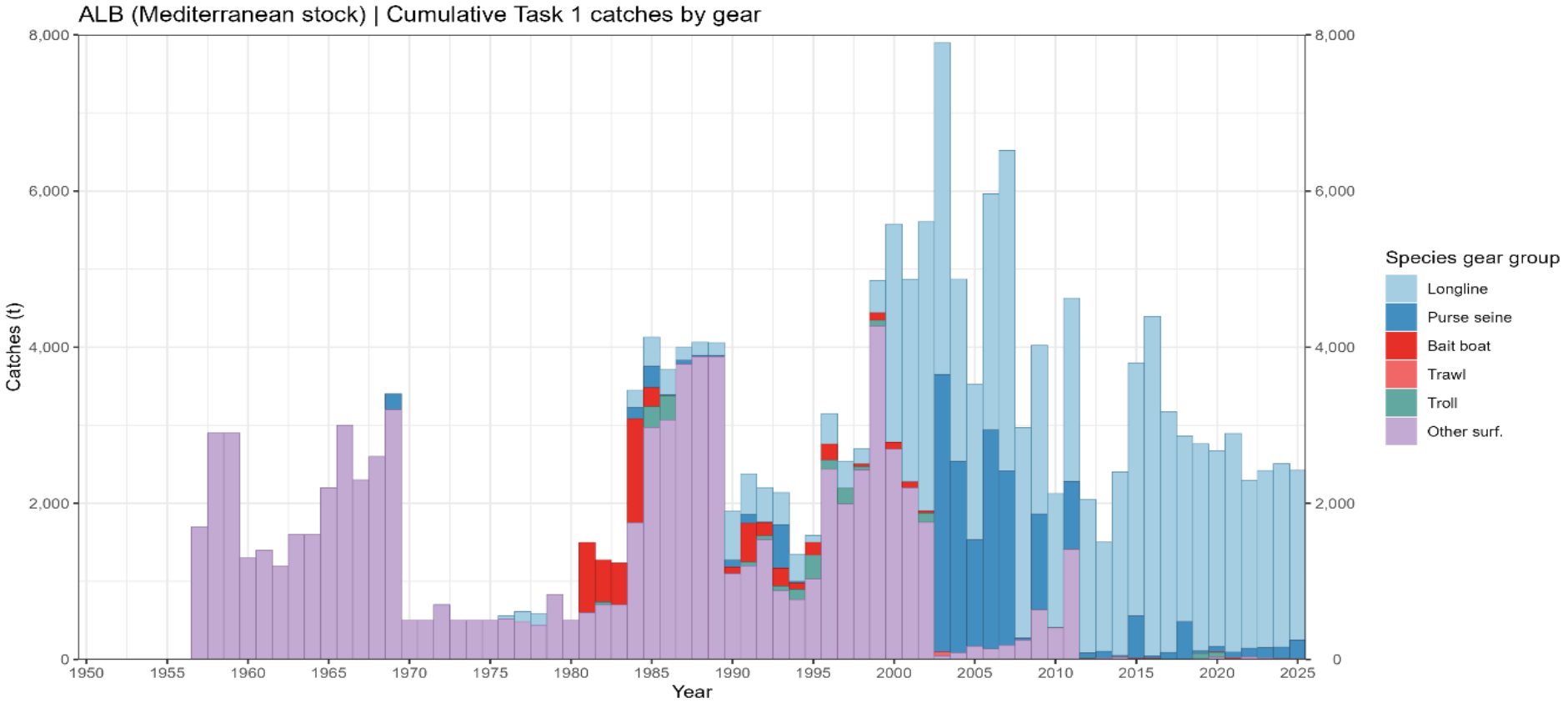
South Atlantic albacore summary table.

Indicator		***Stock Status***
Maximum Sustainable Yield (MSY)	24,333 t (23,190 - 25,476)[1]	2024
TAC (2025)	28,000 t	
Current (2025) Yield	21,034 t[2]	
Relative Spawning Biomass (SSB_{2024}/SSB_{MSY})	0.95 (0.57 - 1.62)[1]	
Relative Fishing Mortality (F_{2024}/F_{MSY})	0.90 (0.62 - 1.31)[1]	
Stock Status	Overfished: YES (56.8% probability of being overfished)[3]	
	Overfishing: NO (29.1% probability of overfishing)[3]	
Management measure in effect	Rec. 22-06	
	TAC (2026) 28,000 t	

[1] Median and 95% confidence interval (CI) of the reference/base case model.
[2] Provisional and subject to revision as of 18 September 2026.
[3] As estimated from the Kobe plot probability in each quadrant.

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

TAC (t)	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
16000	58%	71%	80%	86%	89%	92%	95%	97%	98%	99%	99%	100%	100%
18000	54%	64%	71%	77%	80%	84%	87%	90%	92%	94%	96%	97%	97%
20000	49%	57%	62%	66%	69%	71%	74%	77%	80%	83%	85%	87%	88%
20500	48%	54%	59%	63%	66%	68%	71%	73%	76%	78%	80%	83%	84%
21000	46%	52%	57%	60%	62%	64%	67%	69%	72%	74%	76%	78%	79%
21500	45%	50%	54%	57%	59%	61%	63%	65%	67%	69%	71%	73%	74%
22000	43%	47%	51%	53%	55%	57%	59%	61%	63%	64%	66%	67%	69%
22500	41%	45%	48%	50%	52%	53%	55%	56%	58%	59%	61%	62%	63%
23000	39%	42%	45%	46%	48%	49%	50%	52%	53%	54%	55%	56%	57%
23500	37%	40%	42%	43%	44%	45%	46%	47%	48%	49%	51%	51%	52%
24000	35%	37%	39%	40%	41%	42%	42%	43%	44%	45%	46%	46%	47%
24500	33%	34%	36%	37%	37%	38%	39%	39%	40%	41%	42%	43%	44%
25000	31%	32%	33%	33%	34%	35%	35%	36%	37%	38%	39%	38%	36%
25500	29%	30%	30%	30%	31%	31%	32%	33%	34%	35%	33%	31%	30%
26000	27%	28%	28%	28%	28%	29%	29%	30%	31%	29%	27%	26%	25%
27000	23%	23%	23%	23%	23%	23%	24%	25%	23%	21%	20%	19%	18%
28000	19%	19%	19%	19%	19%	19%	20%	19%	18%	15%	18%	15%	14%


ALB (Mediterranean stock) | Cumulative Task 1 catches by gear
Catches (t)
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
Year
Species gear group
Longline
Purse seine
Bait boat
Trawl
Troll
Other surf.

Mediterranean albacore summary table.

Indicator		*Stock Status*
Maximum Sustainable Yield (MSY)	Scenario 1: 3,564 t (2,584 t - 4,663 t) Scenario 2: 4,174 t (2,831 t - 7,936 t)[1]	2022
TAC (2025)	2,500 t	
Current (2025) Yield	2,423 t[2]	
Relative Biomass (B_{2022}/B_{MSY})	Scenario 1: 0.58 (0.31-1.10) Scenario 2: 1.44 (0.59-2.64)[1]	
Relative Fishing Mortality (F_{2022}/F_{MSY})	Scenario 1: 1.22 (0.66-2.10)[1] Scenario 2: 0.42 (0.13-1.17)[1]	
Stock Status	Overfished: Scenario 1 – YES; Scenario 2 - NO Overfishing: Scenario 1 – YES; Scenario 2 - NO	
Management measures in effect	Rec. 22-05; Rec. 24-08: TAC for years 2025-2026: 2,500 t.	

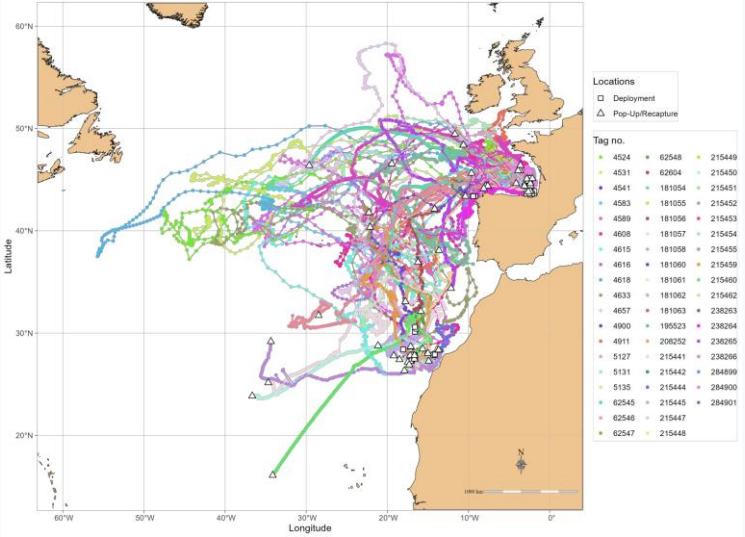
[1] Median and 95% credibility intervals for the Bayesian surplus production model under the two alternative scenarios considered.
[2] Provisional and subject to revision as of 18 September 2026.

Albacore Research: ALBYP



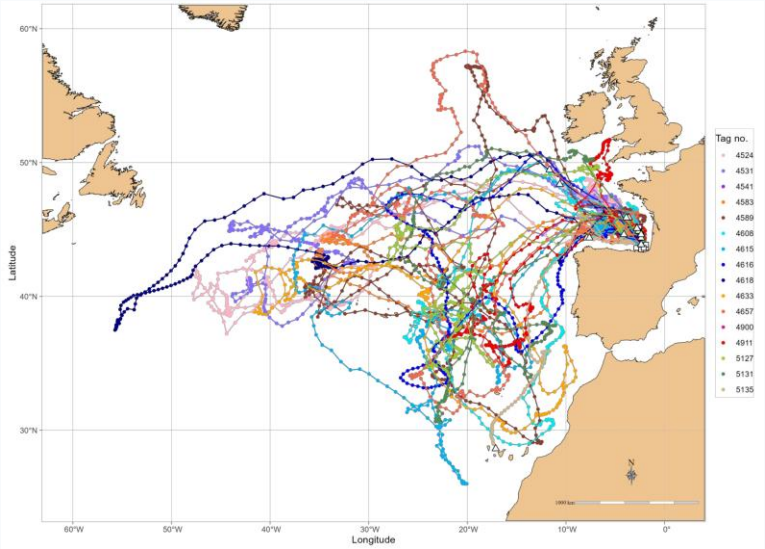
Electronic Tagging (2019–2026)

Pop-Up Satellite Tags (PSATs) & Combined Tracks



- Global First: Completed a full 360-day PSAT cycle on albacore using double-anchor technology.
- 43 satellite datasets received from Canary Islands & Bay of Biscay releases, revealing deep seasonal migrations.

Internal Archival Tags (IATs) — Multi-Year Tracks



- 17.9% Recapture Rate (5× higher than past studies!) — 43 tags recovered with 197 still at liberty.
- Record 776-Day Track: 18 fish tracked over a full annual cycle across the central & NW Atlantic.

Life-History

North Atlantic: Earlier Maturity & Sex-Specific Growth

- Basin-Wide Sampling: Over 700 fish sampled across Venezuelan, Chinese Taipei & Spanish fleets to close critical size gaps.
- Mature Earlier Than Thought: 50% maturity reached at ~75 cm (~3.9 years)—smaller and younger than historical baselines.
- Why Males Grow Larger: Females invest heavy energy into egg production (leveling near 100 cm), while males reach 114 cm.

Table 9. Observations (N) and size values at first maturity (L_{50}) and size where the 90% of individuals are mature (L_{90}) with confidence intervals (L_{50} lower – L_{50} upper; L_{90} lower – L_{90} upper), and size values with 90% confidence intervals, for total individuals, females and males.

Sex	*N*	*L_{50} lower*	*L_{50}*	*L_{50} upper*	*L_{90} lower*	*L_{90}*	*L_{90} upper*
Female	417	69.8	72.8	75.1	81.8	85.3	88.2
Male	212	75.6	78.2	80.7	84.7	88.4	91.4
Total	629	73.2	75.1	76.8	84.3	86.8	89.0

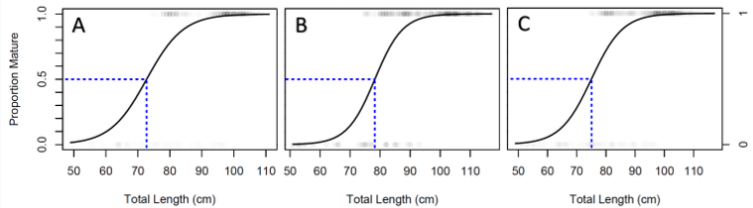
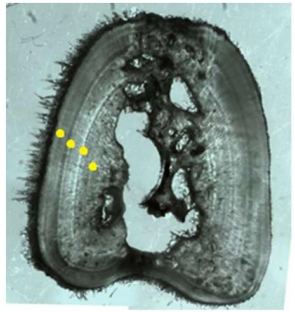


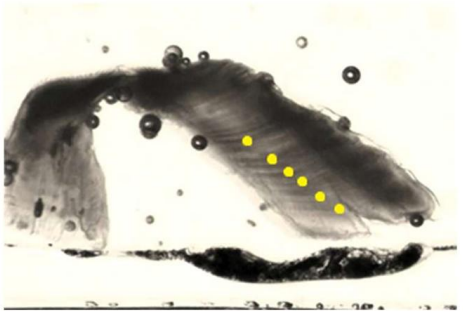
Figure 8.- Logistic fit for the proportion of mature ALB for (A) total, (B) females and (C) males.

Advice Impact: Informs Spawning Stock Biomass (SSB) estimates for ALB-N.

South Atlantic: Age and Growth, Reproduction

- Spawning Cycle and Maturity
- Spines vs Otolith as structures for determining age
- Investigating Regional Growth





Advice Impact: Influential in the 2026 ALB-S stock assessment.

ICCAT Panel 2 | ALBYP Research Highlights | Sources: SCRS/2026/203 (Macías et al.) & SCRS/2026/247 (Travassos et al.)

Albacore (ALBYP): Research Priorities, Budget

Priorities:

1. MSE development (North & South Atlantic)
2. Finalize reproductive & ageing studies (South)
3. Joint NE Atlantic juvenile index (2028)
4. E-tagging (North, then South Atlantic)

ALB-M General Recommendations:

- Consolidate Mediterranean Albacore Research Network.
- Improve fishery statistics via data recovery, integrated growth analysis, joint LL CPUE, and r & K priors.

ALBYP Activity Component	2027 (€)	2028 (€)	2029 (€)
Tags (ALB-S PSAT & ALB-N archival)	13,680	7,680	7,680
Rewards, satellite & geolocation	9,496	6,936	6,936
Tagging campaigns (ALB-N & ALB-S)	23,000	9,000	9,000
Biology: Reproduction (ALB-S)	12,500	---	---
Joint NE Atlantic juvenile index	---	25,000	---
Modelling: ALB-N MSE	35,000	35,000	35,000
Modelling: ALB-S MSE (ext. funded 26-27)	---	35,000	35,000
Science coordination share	5,233	6,418	5,925
TOTAL ALBYP REQUESTED	**98,909**	**125,034**	**99,541**

ALB-N Exceptional Circumstances Check

North Atlantic Albacore ECP Indicators

- ***Catch vs. TAC:*** Since MP adoption, catches have remained below the TAC in all years except 2019 (exceeded by 3.5%).
- ***Standardized CPUE Series***: All fall within the 2.5–97.5 percentile simulation envelope, except the 2018 Spanish baitboat value (slightly above MSE range).
- ***MP Re-run Estimates:*** Relative stock biomass (B/B_{MSY}) and fishing mortality (F/F_{MSY}) from the 2026 MP re-run fall squarely within the 95% confidence intervals estimated during MSE testing.

SCRS CONCLUSION:

"In summary, the Committee concluded that no exceptional circumstance(s) were identified that preclude the application of the adopted MP to set the TAC for the period 2027-2029."

ITEM 19.10 | REC. 24-08, PARA 11 | DOC. ALB-10

Mediterranean Albacore: Stock Assessment & Measures

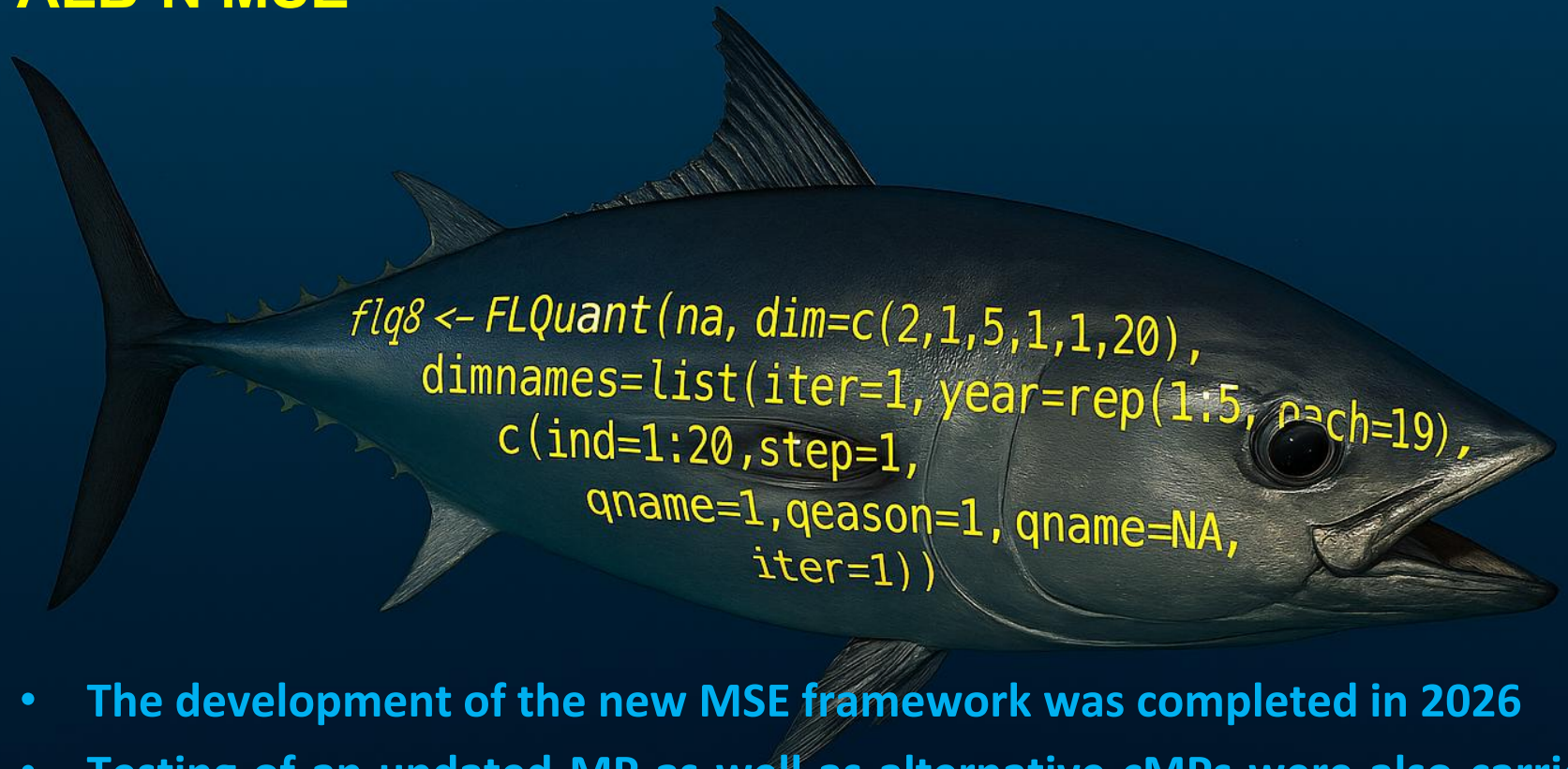
Stock Assessment Deferred Until ≥ 2028

- ***Persistent Data Limitations***: Despite recent progress on catch data and larval index treatment, major uncertainties in historical catches and life-history traits still preclude a robust new stock assessment.
- ***Scheduling***: The Committee advised that the next full assessment not be scheduled before 2028, and only after these major uncertainties are resolved.

Rebuilding Plan Technical Measures

- Fishing Gear Characteristics: Changes to gear would provide little benefit because most catches are already above the size at first maturity.
- Closure Periods: Fall–winter closures adopted in 2022 may help reduce fishing effort, though their exact effect cannot yet be quantified.
- Minimum Size Limit: Would provide limited or no benefit given current catch composition and would result in potentially high discard mortality.

ALB-N MSE



- The development of the new MSE framework was completed in 2026
- Testing of an updated MP as well as alternative cMPs were also carried out in 2026 and results were presented at the Second Intersessional meeting of Panel 2.

ALB-N New MSE Framework

2027–2029 TAC Advice & Updated-MP

- Adopted MP Result: Re-running the adopted MP (Rec. 21-04) produced a TAC of 50,000 t for 2027–2029.
- New MSE Framework: Built on the 2023 benchmark assessment (SPiCT surplus production model & updated CPUE indices).
- Climate Robustness: Under simulated 20% climate-driven recruitment declines, the updated-MP automatically reduced TAC to preserve stock safety and green status.

Evaluation of 7 Candidate MPs (CMPs)

- ***All 7 CMPs Meet Objectives:*** Every evaluated CMP (4 model-based, 3 empirical) satisfies stock status and safety targets (PGK = 0.84–1.00; PBlim = 1.00).
- ***2027–2029 TAC Options Across CMPs:***
  - Model-based variants (F0.8 or F1.0): 50,000 t
  - Empirical CPUE ratio variants: 46,306 t
  - Pseudo-constant catch (15%_PCCatch): 42,000 t
- ***Technical Annex Update:*** Recommends updating Appendix A of Annex 1 (Rec. 21-04) to reflect SPiCT software and benchmark CPUE series if updated-MP is selected.

Technical updates to the text have been provided.

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