SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE

SSC Meeting Overview

July 27, 2023

Via Webinar

VERSION
FINAL
7/27/23

CONTENTS

DOCUMENTS

**Indicates materials not available for briefing book at time of posting. These materials will be added to the recent materials section when available.*

TABLES

SAFMC PUBLIC COMMENT PROCESS

Written comment:

Written comment on SSC agenda topics is provided to the Committee through an online form, similar to all other Council briefing materials. Written comment can be submitted at this link. For this meeting, the deadline for submission of written comment is 9:00 a.m., July 27, 2023.

Verbal comment:

Two opportunities for comment on agenda items will be provided at set times during SSC meetings. The first will be at the beginning of the meeting, and the second near the conclusion. Those wishing to comment should indicate such in the manner requested by the Chair, who will then recognize individuals to provide comment.

An opportunity for comment on specific agenda items will also be provided as each item comes up for discussion. Comments will be taken after all the initial presentations are given and questions from the SSC are answered, but before the SSC starts making recommendations to address the action items. As before, those wishing to comment should indicate such in the manner requested by the Chair, who will then recognize individuals to provide comment. All comments are part of the record of the meeting.

Meeting Format:

This meeting will be held via webinar. Online registration for the meeting can be found at the Council's website: https://safmc.net/events/july-2023-ssc-meeting/

1. INTRODUCTIONS

1.1 Documents

Attachment 1a. SSC July 2023 Agenda
Attachment 1b. Minutes from the April 2023 meeting

1.2 Action

- Introductions and new member appointments.
- Review and approve agenda.
- Approve minutes from April meeting.

2. PUBLIC COMMENT

The public is provided this comment period for any general comments pertaining to any items on the agenda. There will also be time provided for public comment during each specific agenda item as they are discussed. Those wishing to make comment should indicate their desire to do so to the Committee Chair.

3. SEDAR 76: BLACK SEA BASS OPERATIONAL ASSESSMENT

3.1 Documents

Attachment 3a. Black Sea Bass Projections Presentation
Attachment 3b. SEDAR 76 Black Sea Bass Assessment
Attachment 3c. SAFMC ABC Control Rules

3.2 Presentation

Dr. Matthew Vincent, SEFSC

3.3 Overview

The SEDAR 76 Black Sea Bass Operational Assessment was reviewed by the SSC at the April 2023 meeting. The base run estimate of terminal year (2021) spawning stock is below the MSST ($SSB_{2021}/MSST = 0.32$) indicating that the stock is overfished, and the estimated fishing rate is above F_{MSY}. The terminal estimate, which is based on a three-year geometric mean, is above F_{MSY} in the base run ($F_{2019–2021}/F_{MSY} = 2.14$). Thus, this assessment indicates that the stock is overfished and undergoing overfishing. Projections with $F = 0$ indicate that the stock could recover to its target of SSB_{MSY} within ten years if recruitment returns to its long-term average. If recruitment remains low, the stock abundance will remain low and not achieve SSB_{MSY}.

The SSC deemed the assessment consistent with best scientific information available, was suitable for providing management advice, and worked through the ABC Control Rule to determine P* and the recommended $P_{Rebuild}$. Certain model configurations were requested to be revised before recommending catch levels and rebuilding scenarios (see April SSC report).

The SSC is asked to review, discuss, and provide feedback on the approaches to used by the analyst to develop current F, fit to landings and discards, methods to calculate $F_{0.1}$, and MSY proxy.

3.4 Public Comment

3.5 Action

- Review requested changes for projections for SEDAR 76 and provide guidance on:
  - Years to calculate current F
  - Fitting to landings and discards
  - Methods to calculate $F_{0.1}$
  - MSY proxy
  - How to address changing reference points if landings and discards are separated.

Table 1. Black Sea Bass Catch Level Recommendations

Criteria	Deterministic	Probabilistic
Overfished evaluation ($SSB_{2001}/MSST_{)}$	0.32	0.37
Overfishing evaluation ($F_{2019-2021}/F_{MSY}$)	2.14	2.04
MFMT (F_{MSY})	0.41	0.36
SSB_{MSY} (1E10 eggs)	407.15	481.97
MSST (1E10 eggs)	254.47	283.74
MSY (1000 lbs.)	941.37	893.45
Y at 75% F_{MSY} (1000 lbs.)	918.95	871.45
ABC Control Rule Adjustment	17.5%	
P-Star	32.5%	
SSC recommended $P_{Rebuild}$	67.5%	
M	0.375	
Generation Time	~ 6 years	

OFL RECOMMENDATIONS				
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)
2025				
2026				
2027				
2028				
2029				

ABC RECOMMENDATIONS				
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)
2025				
2026				
2027				
2028				
2029				

4. SEDAR 68OA: ATLANTIC SCAMP OPERATIONAL ASSESSMENT

4.1 Documents

Attachment 4a. Scamp/Yellowmouth Additional Forecast Scenarios
Attachment 4b. Scamp/Yellowmouth Nonstationarity in Recruitment

4.2 Presentation

Dr. Kyle Shertzer, SEFSC

4.3 Overview

The SEDAR 68OA: Scamp Operational Assessment was reviewed during the January 2023 SSC meeting where it was determined to be consistent with BSIA, used methods of addressing uncertainty that are consistent with expectations and available information, and is an adequate basis for determining stock status and supporting fishing level recommendations. The estimated spawning stock biomass (SSB) has fluctuated throughout the time series but has been declining since the mid-2000s. The terminal (2021) base-run estimate of spawning stock was near its lowest level of the time series and was well below the minimum stock size threshold (MSST) ($SSB_{2021}/MSST = 0.27$), as was the median estimate ($SSB_{2021}/MSST = 0.29$), indicating that the stock is overfished. The estimated fishing rate has fluctuated around the Maximum Fishing Mortality Threshold (MFMT, represented by $F_{40\%}$) throughout most of the assessment period, but has exceeded it only once since 2010. The terminal estimate, which is based on a three-year geometric mean, is below $F_{40\%}$ in the case of the base run ($F_{2019\text{-}2021}/F_{40\%} = 0.91$) and the median ($F_{2019\text{-}2021}/F_{40\%} = 0.81$). Thus, this assessment indicates that the stock is overfished, but is not experiencing overfishing.

The primary reason for the low stock size in the terminal year of the assessment is not fishing, but rather low recruitment. Recruitment has been lower than average since the mid-2000s, and the lowest values for the entire time series occur since 2010. The SSC determined that the assessment provides a good basis to predict future conditions and support fishing level recommendations; however, the consistently lower recruitment during the recent period (2010-2019), relative to mean recruitment for the full time series, results in substantial uncertainty in predictions of future recruitment and stock biomass.

In April 2023, the SSC recommended setting ABC to $75\%F_{40\%}$ using recent (low) recruitment for projections. They also recommended setting OFL to $F_{40\%}$ using long-term average recruitment; however, this projection was not available in April and was requested from the SEFSC for the July meeting. The SSC should review the additional rebuilding projections and make OFL recommendations in the table below. The SSC is also provided an additional presentation on nonstationarity for Scamp/ and Yellowmouth Grouper due to the difficulty in determining OFL for the stocks.

4.4 Public Comment

4.5 Action

- Review additional requested rebuilding projections and timelines.
- Review presentation regarding nonstationarity, OFL, and rebuilding schedules.
- Make OFL recommendations to complete table below.

Table 2. Scamp Catch Level Recommendations

Criteria	Deterministic	Probabilistic
Overfished evaluation (SSB/MSST)	0.36	0.38
Overfishing evaluation ($F/F_{MSY\ proxy}$)	0.91	0.81
MFMT ($F_{MSY\ proxy}$)	0.28	0.30
SSB_{MSY} (metric tons)	1503.87	1540.65
MSST (metric tons)	801.60	801.14
MSY (1000 lbs.)	372.28	381.39
Y at 75% F_{MSY} (1000 lbs.)	344.83	353.68
ABC Control Rule Adjustment	20%	
P-Star	30%	
SSC recommended $P_{Rebuild}$	70%	
M	0.155	
Generation Time	~ 10 years	

OFL RECOMMENDATIONS

Year	Total Removals (lbs ww)	Discard (lbs ww)	Total Removals (number)	Discard (number)
2025	*97,000*		*17,000*	
2026	*119,000*		*22,000*	
2027	*171,000*		*32,000*	
2028	*227,000*		*42,000*	
2029	*270,000*		*49,000*	

ABC RECOMMENDATIONS

Year	Total Removals (lbs ww)	Discard (lbs ww)	Total Removals (number)	Discard (number)
2025	71,000		12,000	
2026	76,000		12,000	
2027	79,000		13,000	
2028	82,000		13,000	
2029	84,000		14,000	

**Note: Total Removals = Landings plus dead discards*

5. GREATER AMBERJACK ESTIMATION PROJECT UPDATE

5.1 Documents

Attachment 5a. Presentation of Greater Amberjack Estimation Project
Attachment 5b. Greater Amberjack project narrative

5.2 Presentation

Dr. Sean Powers and Dr. Mark Albins, University of South Alabama, and Dr. John Hoenig, Virginia Institute of Marine Science

5.3 Overview

The overarching goal of the proposed research initiative is to provide an independent estimate of Greater Amberjack abundance in the US Gulf GoM and SA in waters out to 150 m in depth. The independent estimate of abundance derived from the proposed research will be compared with the estimates derived from the stock assessment models used by NOAA Fisheries (Stock Synthesis, Beaufort Assessment Model), allowing validation, calibration, and further refinement of the model. To accomplish this goal, an expansive sampling program focused on providing a rigorous estimate of Age 1+ Greater Amberjack that can be separated into length bins and stratified by region and habitat type. The sampling design will be informed by a comprehensive data synthesis (fisheries-dependent and independent data, previous habitat mapping and traditional fishermen knowledge). Sampling approaches will be refined through intensive calibration studies. Key assumptions of our sampling design and approaches as well as supportive information will be collected through a series of companion studies. These supportive projects include studies that are designed to examine unresolved issues associated with our understanding of movement and connectivity of Greater Amberjack in the southeastern U.S.

5.4 Public Comment

5.5 Action

- Comment and provide feedback on the methods and potential uncertainties for the Greater Amberjack research project.

6. NS1 TECHNICAL GUIDANCE MEMORANDUM

6.1 Documents

Attachment 6a. Presentation on NS1 Technical Guidance

Attachment 6b. NS1 Tech Memo

6.2 Presentation

Dr. Richard Methot, NOAA

6.3 Overview

Dr. Richard Methot, NOAA ST for Stock Assessments, will present on draft Technical Guidance for Estimating Status Determination Reference Points and their Proxies in Accordance with the National Standard 1 Guidelines. The focus of this document is on technical aspects of calculating and evaluating reference points, especially with regard to proxies for MSY quantities, data-limited approaches, and updating reference points as changes occur in prevailing biological and fishery conditions. The document has been distributed to all Councils for their comment and has been presented to the Council Coordination Committee. NMFS requests written feedback from Councils by August 31, 2023.

6.4 Public Comment

6.5 Action

- Discuss and comment on NS1 tech memo.

7. SPANISH MACKEREL CATCH LEVEL RECOMMENDATIONS

7.1 Documents

Attachment 7a. Equilibrium Values from S78 Base Run

7.2 Presentation

Dr. Erik Williams, SEFSC

7.3 Overview

At the April 2023 SSC meeting, the SSC determined the SEDAR 78 stock assessment was sufficient for providing stock status (not overfished, not overfishing), and was also sufficient for providing catch level recommendations using model output but not projections. Significant concerns with natural mortality in the assessment persisted and was considered as justification to deviate from the ABC control rule for setting catch level recommendations. The OFL was set equal to the yield at F_{MSY} from the base model run (8.210 mp), and the ABC was set equal to 75%F_{MSY} from the base model run (8.024 mp).

A request was sent to the SEFSC for additional values (landings by number, discards by weight, and discards by number) from the SEDAR 78 Atlantic Spanish Mackerel stock assessment model that were not included in the original stock assessment report, but were computed as part of the base model run.

7.4 Public Comment

7.5 Action

- Review equilibrium values from the SEDAR 78 base stock assessment model run for Atlantic Spanish Mackerel.

Table 3. South Atlantic Spanish Mackerel Catch Level Recommendations

Criteria		**Deterministic**		**Probabilistic**
Overfished evaluation ($SSB_{2020}/MSST_{)}$		1.40		1.42
Overfishing evaluation ($F_{2018-2020}/F_{MSY}$)		0.77		0.74
MFMT ($F_{MSY\ proxy}$)		0.516		0.523
SSB_{MSY} (metric tons)		6406		6410
MSST (metric tons)		4804		4808
MSY (1000 lbs.)		8210		8351
Y at 75% F_{MSY} (1000 lbs.)		8024		8158
ABC Control Rule Adjustment		10%		
P-Star		40%		
M		0.35		
OFL RECOMMENDATIONS				
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)
2023	8,210,000	*581,000*	*5,413,000*	*1,147,000*
2024	8,210,000	*581,000*	*5,413,000*	*1,147,000*
2025	8,210,000	*581,000*	*5,413,000*	*1,147,000*
2026	8,210,000	*581,000*	*5,413,000*	*1,147,000*
2027+	8,210,000	*581,000*	*5,413,000*	*1,147,000*
ABC RECOMMENDATIONS				
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)
2023	8,024,000	*469,000*	*4,977,000*	*916,000*
2024	8,024,000	*469,000*	*4,977,000*	*916,000*
2025	8,024,000	*469,000*	*4,977,000*	*916,000*
2026	8,024,000	*469,000*	*4,977,000*	*916,000*
2027+	8,024,000	*469,000*	*4,977,000*	*916,000*

8. SEDAR: SCOPES OF WORK FOR 2026 ASSESSMENTS

8.1 Documents

Attachment 8a. Scopes of Work for 2026 Assessments

8.2 Presentation

Drs. Judd Curtis and Chip Collier, SAFMC Staff

8.3 Overview

The SSC is asked to review the draft scopes of work for the Snowy Grouper Operational Assessment, Spanish Mackerel Benchmark, and Dolphinfish MSE, and provide comments and feedback. This document includes the list of research recommendations from the stock assessment review and SSC reviews as well as any major uncertainties uncovered during these processes. The SSC is asked to consider these research recommendations in the formulation of the scopes of work and should discuss and provide requested model modifications appropriate for the upcoming assessments.

8.4 Public Comment

8.5 Action

- Review scopes of work and provide feedback.

9. OTHER BUSINESS

- SSC Workgroup membership and SEDAR appointees.
- Regime shifts workgroup schedule.
- Scamp/Yellowmouth separating landings and discards
- Red Grouper operational assessment spatial considerations

10. PUBLIC COMMENT

The public is provided one final opportunity to comment on SSC recommendations and agenda items. Electronically submitted comments can be viewed here.

11. CONSENSUS STATEMENT AND RECOMMENDATIONS

The Committee is provided with an opportunity to review its report, final consensus statements, and final recommendations.

The Final SSC report will be provided to the Council by noon on Friday, August 18th, 2023 (approximately 3 weeks from the end of the meeting) for inclusion in the briefing book for the September Council meeting.

12. NEXT MEETINGS

12.1 Scientific and Statistical Committee Meetings

- *Half-day webinar: week of Aug 28th or Sept 5th*
- October 24-26, 2023 in Charleston, SC
- April 15-16, 2024 in Charleston, SC (SEP)
- April 16-18, 2024 in Charleston, SC (SSC)

12.2 South Atlantic Fishery Management Council Meetings

- September 11-15, 2023 in Charleston, SC
- December 4-8, 2023 in Beaufort, NC

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