SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE



SSC Meeting Report – FINAL May 28, 2025 via Webinar

> VERSION FINAL 6/4/25

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

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 <u>this link</u>. For this meeting, the deadline for submission of written comment is 10:00 a.m., May 28, 2025.

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: <u>https://safmc.net/scientific-and-statistical-committee-meeting/</u>

1. INTRODUCTIONS

1.1 Documents

Attachment 1a. May 2025 SSC Agenda Attachment 1b. April 2025 SSC Meeting Minutes *Attachment 1c. April 2025 Final Report

- 1.2 <u>Action</u>
 - > Introductions
 - Review and approve agenda. Agenda was approved.
 - Approve minutes from April 2025 meeting.
 The minutes were approved with suggested corrections.
 - Approve April 2025 final report. The April, 2025 SSC report was approved by the SSC without additional edits.

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.

Capt. Dewey Hemilwright provided written and verbal comment (see meeting transcript and written submission for details).

3. SEDAR 92: ATLANTIC BLUELINE TILEFISH NORTHERN REGION (DLM) MODEL

3.1 Documents

Attachment 3a. SEDAR 92: Atlantic Blueline Tilefish SAR (northern region) Attachment 3b. Blueline Tilefish Northern Region Presentation Attachment 3c. SADL Survey Presentation Attachment 3d. Proportional Estimation Methodology Presentation Attachment 3e. Joint Sub-Group Final Report Attachment 3f. Joint Sub-Group Presentation

3.2 Presentation

Dr. Nikolai Klibansky, SEFSC; Dr. Kevin Craig, SEFSC; Dr. Paul Nitschke, NEFSC; Dr. Jim Gartland, SA-SSC

3.3 <u>Overview</u>

The SEDAR 92 Operational Assessment updated the previous SEDAR 50 Atlantic Blueline Tilefish stock assessment. The assessment was conducted by the SEFSC within the SEDAR process with a terminal year of 2023. Two Topical Working Groups (TWG) were convened by SEDAR to review and provide recommendations on data to use in SEDAR 92. The Landing Streams TWG focused on landings and discards north of Cape Hatteras and met five times via webinar between April and September 2024. The Life History TWG focused its discussion on age data and met three times via webinar between October and December 2024.

Following SEDAR 50, stock assessment of blueline tilefish in the Atlantic was divided into southern and northern regions, separated at Cape Hatteras, NC. The assessment was split largely because fishing effort north of Cape Hatteras increased substantially after 2005, while the available indices of abundance did not adequately represent that area. More detailed explanation is provided in the Stock Structure section of the SEDAR 50 Assessment Report (SEDAR 2017) and the preceding Stock ID Workshop Report (SEDAR 50 Stock ID Work Group 2016). The southern region extends from Cape Hatteras, NC, south to the Council boundary at Key West, FL. The northern region extends north of Cape Hatteras to the northern extent of the blueline tilefish range (i.e. waters off of Massachusetts).

For the northern region, the analytical team applied a data limited methods (DLM) model using the R package *DLM tool* (Carruthers et al. 2022). A subgroup of SSC members from the Mid-Atlantic and South Atlantic Councils reviewed the northern model DLM assessment in late April and produced a summary report with their recommendations. The committee will also receive a presentation on the SADL survey and proportional estimation methodology, which was utilized to apportion the catch recommendations between the Mid and South Atlantic Council jurisdictions for the northern region.

Note that because the northern model ABC recommendations span the jurisdiction of the Mid and South Atlantic Councils, the South Atlantic SSC will need to determine the apportioned ABC to the sub-area under the South Atlantic Councils jurisdiction (i.e. Cape Hatteras north to NC-VA border), following the ABC recommendation for the entire northern region. The subarea ABC will be added to the ABC recommendations for the southern region (Cape Hatteras south to FL Keys) to provide an ABC recommendation for the entire South Atlantic Council's jurisdiction.

The SSC is tasked with recommending whether the assessment adequately met the terms of reference (*or latest requests from the SSC*), are consistent with the Best Scientific Information Available (BSIA), and useful for providing management advice and developing fishing level recommendations for the Council. The SSC should identify and discuss the scientific uncertainties within the assessment and describe the consequences of these uncertainties in regard to setting catch level recommendations.

3.4 Public Comment

- *Capt. Dewey Hemilright provided written and verbal public comment (see webinar transcript for details).*

3.5 Action

Review assessment

- Does the assessment address the ToRs or other requests to the SSCs satisfaction?
 - Yes, overall ToRs were addressed adequately and ToRs assigned to the sub-group were also adequately addressed to the extent possible. (see subgroup report, attachment 3e)
- Does the assessment reliably capture past trends in the fishery and population?
 - Yes, in terms of the fishery, given inherent uncertainty from data limitations (see subgroup report). Catch based DLM models do not reliably capture estimates of the population trends.
- Does the assessment provide a reliable, quantitative estimate of current stock status?
 - The DLM tool does not provide quantitative estimates of biomass, F, or stock status; therefore, an OFL estimate is unknown.
- Does the assessment provide reliable predictions of future conditions to support fishing level recommendations?
 - The DLM tool does not provide projections of future conditions. The management procedures used in SEDAR 92 (and 50) used a historical catch time series for estimating a TAC distribution. Additionally, the DLM tool does not provide a direct mechanism to incorporate annual CVs for the average catch time series. A bootstrapping approach provides estimates of variability over the catch time series but does not include uncertainty for annual catch estimates.
 - Other sources indicate that the fishery is still emerging in the Mid-Atlantic region and there are indications of an otherwise healthy population in the South Atlantic region (evidence of large fish and size range of fish harvested, commercial ACLs and trip limits taken, etc.). Additional buffer is not recommended because there are no signs that the fishery is depleting the size composition and the fisheries have been able to harvest up to their catch limits.

> Identify, summarize, and discuss assessment uncertainties.

- Review, summarize, and discuss the factors of this assessment that affect the reliability of estimates of stock status and fishing level recommendations.
 - The presented DLM analyses do not provide quantitative estimates of biomass, F, or stock status (see Joint Subgroup report for details on assessment uncertainties).

- The SSC determined the average catch-based management procedures (average catch over the entire time series: AVC, average catch over the most recent 5 years: CC1, 70% of the average catch over the last 5 years: CC4) were preferred to the mean length (ML) based methods, as the ML-based methods were determined to not be viable. The life history-based approaches (ML-based) produced highly uncertain estimates that the SSC was uncomfortable with given the TAC estimates were higher than nearly all years of observed landings.
 - *Further concerns with the ML-based MPs include:*
 - *High frequency of negative F values in the ML-based* methods estimates because Z estimates are lower than M estimates for many years, resulting in negative Fvalues. SEDAR 50 and 92 use the Beverton-Holt equilibrium mean length equation,

 $Z = K (L\infty - Lbar) / (Lbar - Lc)$ where *Lc* is the modal fish length of all catches and *Lbar is the mean length of fish larger than Lc.) With* this equation, if Lc is small and/or Lbar is large, then Z will be small. If Z becomes smaller than M, then F becomes negative, because F = Z - M (see assessment report for further explanation).

- Length composition frequencies from the data inputs *(longline length comps) may not be representative of* the population/fishery. If they were thoroughly represented, F would be very close to zero, which is unlikely.
- The ML-based methods assume the population is at equilibrium, which is also unlikely.
- *As a sensitivity run, the analyst noted that if Lc and* Lbar from the 2015 run (i.e., lengths from 2011 to 2015) are used, then SEDAR 92 ML-based results would be similar to average catch results (AVC, CC1, *CC4*). *This overlap provides some confidence in the* output of the average catch-based methods.
- *Steepness value, h=0.836 from B-H relationship is high* for a deep demersal, long-lived species such as Blueline Tilefish.
- Length compositions are based on a limited number of trips (i.e. small sample size), in a localized region; therefore, they are not representative of the entire region. The data limited methods are sensitive to length composition data.

- The K parameter in the growth curve was higher than in S50, but note that in S92 K was based on the Blueline Tilefish growth curve, not on a meta-analysis.
- Describe the risks and consequences of the assessment uncertainties with regard to status and fishing level recommendations.
 - Given limitations in the available data and capabilities of the DLM model, the outcome of the assessment and recommendations are highly uncertain.
 - Critical to include the SADL survey index in the next assessment based on the uncertainties in the catch level recommendations from S92 (see subgroup report)
 - The proportional estimation method uses only 2 years of SADL data. Although this is an improvement over the use of only one year of data from a pilot study that was used for S50, it also resulted in a large change in the proportional estimation (70% Mid-Atlantic to 30% South Atlantic) from previous apportionment (56/44). Changing regional proportion could have a negative result of increasing discards for one region.
- List (in order of the greatest contribution to risk and overall assessment uncertainty), and comment on the effects of those assessment factors that most contribute to risk and impact status determinations and future yield predictions.
 - Due to data limitations (lack of CPUE information, unreliable size or age compositions, lack of fishery-independent index, and high uncertainty in recreational catch estimates), and use of DLM approach, no estimate of stock status or OFL.
 - Uncertainty in annual recreational catch estimates (e.g., MRIP) and variances.
 - Growth curves show high variability in size-at-age.

> Provide fishing level recommendations.

- Is the assessment consistent with BSIA guidance and principles, and acceptable for use in management?
 - Yes, given the available data, the use of the DLM approach is consistent with BSIA, and acceptable for use in management.
- Apply the South Atlantic ABC Control Rule, if possible, and complete the fishing level recommendations table.
 - The SSC recommends an ABC based on the 50% quantile of the recent 5-yr average catch series management procedure (CC1 method) as an estimate for the ABC (Cape Hatteras north), which is 646,000 pounds (293 mt) whole weight.

Given the uncertainties accounted for in the CC1 method, no additional buffer was recommended for scientific uncertainty.

- Comment on any difficulties encountered in applying the Control Rule, including any required information that is not available.
 - The SSC encountered some difficulties in applying the ABC-CR given the assessment method and no OFL is specified. The Subgroup recommended applying an ad-hoc method (in line with the SA-ABC-CR, Category 4) to recommend a direct ABC.
 - Procedure for setting ABCs in ABC-CR Categories 2-4 are not fully developed and there is an urgent need for a standardized approach to avoid inconsistent ad-hoc decisions.

> Provide advice on monitoring the stock until the next assessment.

- What indicators or metrics should be included in the SAFE Report to monitor and evaluate the stock until the next assessment?
 - Current data that will be included:
 - Total Landings relative to ABC from the previous assessment until values from SEDAR 92 are adopted.
 - Recreational (MRIP-FES values) and Commercial Landings
 - Recreational and commercial landings relative to their respective ACL developed from SEDAR 92 ABC.
 - Trends in abundance included in SEDAR 92
 - Economic trends
 - Recreational MRIP Directed Trips
 - Commercial Ex-Vessel Value
 - Regional trends in commercial trips between the Mid-Atlantic and 'sliver' areas.
 - Social trends
 - Observations of Closures
 - Comments from Fishery Performance Report
 - Recent management actions
 - Other?
 - Monitor new SADL survey data for trends in abundance and the proportion of survey catch in the areas NC/VA border north and NV/VA border to Cape Hatteras (socalled "sliver".

Provide research recommendations and guidance on the next assessment.

• Review the included research recommendations and indicate those most likely to reduce risk and uncertainty in the next assessment.

- Inclusion of fishery-independent index of abundance from the SADL survey.
- Age and size composition of landings and discards.
- Provide any additional research recommendations the SSC believes will improve future stock assessments.
 - Investigate if age data can reliably be used in the next assessment.
 - Re-evaluate the apportionment method based on additional years of SADL survey data. Note that this can be done before the next assessment or on an annual basis.
 - Consider adjusting the SADL proportional sampling allocation to maximize precision for estimating the Lc and Lbar values that are necessary to implement the mean length DLM methods.
 - Although Lc and Lbar are typically based on length compositions derived from the fishery, the SADL survey can possibly also serve as a source of these length data given similarities in longline gear characteristics.
- Provide guidance on the next assessment, addressing its timing and type.
 - Next assessment should be conducted as soon as SADL survey data can reliably be incorporated for a fishery-independent index of abundance (5-yrs worth of data for both regions) and should be considered for 2028.
 - The Mid-Atlantic SSC has recommended setting an ABC for one year and considering additional sources of data before setting future year catch levels. The SSC recommends coordinating any changes in the apportionment methodology with the Mid-Atlantic as new data becomes available (potentially utilizing a joint sub-group approach).

SSC RECOMMENDATIONS:

The SSC recommends an ABC based on the 50% quantile of the recent 5-yr average catch series management procedure (CC1) as an estimate for the ABC (Cape Hatteras north through Mid-Atlantic), which is 646,000 lbs (293 mt) whole weight. Given the uncertainties accounted for in the CC1 method, no additional ABC buffer was recommended for scientific uncertainty.

The SSC further recommends that the ABC north and south of the VA/NC border be proportioned based on the combined 2023 and 2024 SADL survey CPUEs scaled by sampling area (stratum). This resulted in an apportionment of 30% for the area from Cape Hatteras to the NC/VA border and 70% for the area north of the NC/VA border. This would result in an ABC from Cape Hatteras to the NC/VA border of 193,800 lbs whole weight until subsequent ABC recommendations are made.

Table 1. SSC's Atlantic Blueline Tilefish (Northern Model) Catch Level Recommendations (North of Cape Hatteras to NC-VA border)

ABC-CR Criteria	Value			
Stock Risk Rating	High			
Relative Stock Biomass L	evel	n/a		
Category		4		
P-Star		n/a		
OFL RECOMMENDATIONS				
Year Yield (lbs ww)				
2026		0w n		
2027				
2028				
ABC RECOMMENDATIONS				
Year Yield (lbs ww)		ww)		
2026 193,800 lbs ww		bs ww		
2027				
2028				

*Note: assumes 70/30 proportional split between Mid/SA.

4. SEDAR 92: ATLANTIC BLUELINE TILEFISH SOUTHERN REGION (DLM) MODEL

4.1 Documents

*Attachment 4a. Blueline Tilefish (Southern Region) DLM SAR *Attachment 4b. Blueline Tilefish Southern Region Presentation Attachment 4c. South Atlantic ABC-CR Tables

4.2 <u>Presentation</u>

Dr. Nikolai Klibansky, SEFSC

4.3 <u>Overview</u>

The SEDAR 92 Operational Assessment updated the previous SEDAR 50 Atlantic Blueline Tilefish stock assessment. The assessment was conducted by the SEFSC within the SEDAR process with a terminal year of 2023. Two Topical Working Groups (TWG) were convened by SEDAR to review and provide recommendations on data to use in SEDAR 92. The Landing Streams TWG focused on landings and discards north of Cape Hatteras and met five times via webinar between April and September 2024. The Life History TWG focused its discussion on age data and met three times via webinar between October and December 2024.

Following SEDAR 50, stock assessment of blueline tilefish in the Atlantic was divided into southern and northern regions, separated at Cape Hatteras, NC. The assessment was split largely because fishing effort north of Cape Hatteras increased substantially after 2005, while the available indices of abundance did not adequately represent that area. More detailed explanation is provided in the Stock Structure section of the SEDAR 50 Assessment Report (SEDAR 2017) and the preceding Stock ID Workshop Report (SEDAR 50 Stock ID Work Group 2016). The southern region extends from Cape Hatteras, NC, south to the Council boundary at Key West, FL. The northern region extends north of Cape Hatteras to the northern extent of the blueline tilefish range (i.e. waters off of Massachusetts).

For the southern region, the analytical team applied an age-aggregated logistic surplus production model using ASPIC software to estimate stock status of blueline tilefish south of Cape Hatteras. During the April 2025 review, the SSC determined that this assessment was not consistent with BSIA: *Data are inadequate to support use of the current ASPIC model and provide defensible scientific conclusions; not consistent with BSIA guidance and practices and not suitable for use in making management decisions. The SSC was very skeptical of the surplus production model results because of the large number of years at the end of the time series (>10 years) without any effort data. Landings data are not enough for surplus production models to provide robust results. The lack of effort and index data at the end of the time series led to the SSC's rejection of the blueline operational assessment for management. Additionally, there were no other data sources that supported the large, predicted increase in biomass of blueline tilefish in the most recent years by the model.*

The SSC requested that a data-limited methods (DLM) model be applied to the southern region, similar to the approach used for the DLM model run for the northern region, in order to address the deficiencies in the ASPIC production model to provide scientifically justifiable catch level recommendations for use in management.

The SSC is tasked with recommending whether the assessment adequately met the terms of reference (*or latest requests from the SSC*), are consistent with the Best Scientific Information Available (BSIA), and useful for providing management advice and developing fishing level recommendations for the Council. The SSC should identify and discuss the scientific uncertainties within the assessment and describe the consequences of these uncertainties in regard to setting catch level recommendations.

4.4 Public Comment

Capt. Dewey Hemilright provided written and verbal public comments (see meeting transcript for comments).

4.5 Action

Review assessment

- Does the assessment address the ToRs or other requests to the SSCs satisfaction?
 There were no ToRs, but the SSC's request for the DLM run was addressed to the SSC's satisfaction.
 The SSC appreciated the SEFSC and analyst's work towards addressing the SSC's request, and the efforts by the analyst to explore the issues with the Mean Length methods.
- Does the assessment reliably capture past trends in the fishery and population?
 - Yes, in terms of the fishery, given inherent uncertainty from data limitations (see subgroup report). Catch based DLM models do not reliably capture estimates of the population trends.
- Does the assessment provide a reliable, quantitative estimate of current stock status?
 - The DLM tool does not provide quantitative estimates of biomass, F, or stock status; therefore, an OFL estimate is unknown.
- Does the assessment provide reliable predictions of future conditions to support fishing level recommendations?
 - The DLM tool does not provide projections of future conditions. The management procedures used in SEDAR 92 (and 50) used a historical catch time series for estimating a TAC distribution. Additionally, the DLM tool does not provide

a direct mechanism to incorporate annual CVs for the average catch time series. A bootstrapping approach provides estimates of variability over the catch time series but does not include uncertainty for annual catch estimates.

> Identify, summarize, and discuss assessment uncertainties.

- Review, summarize, and discuss the factors of this assessment that affect the reliability of estimates of stock status and fishing level recommendations.
 - *The DLM tool does not provide quantitative estimates of biomass, F, or stock status.*
 - The ML-based methods for the South region still result in large variance estimates, though somewhat more realistic estimates than the same ML-based methods from the northern region. Given that the types of data available from recent years are similar for both regions, and that blueline tilefish from north and south of Cape Hatteras comprise one stock, the SSC concluded that having a similar assessment approach (catchbased management procedure) for the two regions was justifiable.
 - The SSC recommends using the AvC (1987-2023) management procedure from the DLM as the basis for an ABC recommendation for the southern region model.
 - Distribution of AvC catch MP shows similar shape to handline index from ASPIC, which provides additional support to the validity of the output.
 - The fishery in the southern areas has been established for a longer period north of Cape Hatteras and using a longer time series was considered more appropriate.
 - Setting an ABC using catch-based methods is somewhat concerning because the input (catch) data are constrained by ACLs including catch/trip limits; and therefore, outcomes (TACs) of the catch-based MPs are affected by management constraints. However, the recreational fishery can still have overages under these management approaches and those could allow removals to be higher than ACLs. The fairly consistent catch over a long period (from 1987 to 2023) provides some support that continuing that average catch will not have negative consequences for the stock.
 - Given the concerns expressed during the April 2025 SSC meeting regarding the ASPIC model and determination that it was not suitable for management, the average catch methods based on historical removals represent the best scientific

information currently available for developing ABC recommendations for the southern region.

- Describe the risks and consequences of the assessment uncertainties with regard to status and fishing level recommendations.
 - Critical to include the SADL survey index in the next assessment based on the uncertainties in the catch level recommendations from S92.
 - Given the available data and the resulting assessment method, the catch level recommendation is highly uncertain. The Council should be cognizant that the ABC recommendation resulting from the next assessment, that is likely to include SADLS data, may differ considerably from the one provided here.
- List (in order of the greatest contribution to risk and overall assessment uncertainty), and comment on the effects of those assessment factors that most contribute to risk and impact status determinations and future yield predictions.
 - Due to data limitations (lack of CPUE information, unreliable size or age compositions, lack of fishery-independent index, and high uncertainty in recreational catch estimates), and use of DLM approach, no estimate of stock status or OFL.
 - *Catch-at-length sample sizes (from Commercial longline size comps) low throughout the time series.*
 - Uncertainty in annual recreational catch estimates (e.g., MRIP) and variances.
 - The variability in size-at-age is high affecting the uncertainty in growth parameter estimates.

> Provide fishing level recommendations.

- Is the assessment consistent with BSIA guidance and principles, and acceptable for use in management?
 - Yes, given the available data, the use of the DLM approach is consistent with BSIA, and acceptable for use in management.
- Apply the South Atlantic ABC Control Rule, if possible, and complete the fishing level recommendations table.
 - The SSC recommends using the AvC (1987-2023) management procedure from the DLM as the basis for an ABC recommendation for the southern region model.
- Comment on any difficulties encountered in applying the Control Rule, including any required information that is not available.

- *OFL is unknown. The ABC-CR for Category 4 stocks was applied to determine a direct ABC through an ad-hoc method (catch-based DLM).*
- As with applying the ABC-CR to the northern part of the populations, the procedure for setting ABCs in Tier 2-4 "assessments" is not fleshed out and there is an urgent need for discussion and developing approaches to avoid possible inconsistent ad hoc decisions.

> Provide advice on monitoring the stock until the next assessment.

- What indicators or metrics should be included in the SAFE Report to monitor and evaluate the stock until the next assessment?
 - Current data that will be included:
 - Total Landings relative to ABC from the previous assessment until values from SEDAR 92 are adopted.
 - Recreational (FES values) and Commercial Landings
 - Recreational and commercial landings relative to their respective ACL developed from SEDAR 92 ABC.
 - Trends in abundance included in SEDAR 92
 - Economic trends
 - Recreational MRIP Directed Trips
 - o Commercial Ex-Vessel Value
 - Social trends
 - Observations of Closures
 - Comments from Fishery Performance Report
 - Recent management actions
 - Other?
 - Monitor new SADL survey data for trends in abundance.
- > Provide research recommendations and guidance on the next assessment.
 - Review the included research recommendations and indicate those most likely to reduce risk and uncertainty in the next assessment.
 - Inclusion of fishery-independent index of abundance from the SADL survey.
 - Age and size composition of landings and discards
 - Provide any additional research recommendations the SSC believes will improve future stock assessments.
 - Investigate mechanisms to increase the number of trips sampled to gather more complete length composition

information. Incorporate length compositions from all fleets to complement the longline length compositions.

- Investigate if age data can reliably be used in the next assessment.
- Provide guidance on the next assessment, addressing its timing and type.
 - Next assessment should be conducted as soon as SADL survey data can reliably be incorporated for a fishery-independent index of abundance (5-yrs worth of data).

SSC RECOMMENDATIONS:

- The SSC recommends an ABC based on the 50% quantile of the AvC management procedure (average catch from 1987-2023) from the DLM as the basis for an ABC recommendation for the southern region model (from Cape Hatteras south). This equates to an ABC recommendation of 133,000 lbs ww. Given the uncertainties accounted for in the AvC method, no additional ABC buffer is recommended for scientific uncertainty no additional ABC buffer is recommended for scientific uncertainty.

Table 2. SSC's Atlantic Blueline Tilefish (Southern Model) Catch Level Recommendations (South of Cape Hatteras to FL Keys)

ABC-CR Criteria	Value			
Stock Risk Rating	High			
Relative Stock Biomass L	evel	n/a		
Category		4		
P-Star		n/a		
OFL I	RECOMMENDATIONS			
Year	ww)			
2025 unkno		vn		
2026				
2027				
2028				
ABC RECOMMENDATIONS				
Year Yield (lbs ww)		ww)		
2025	133,000 ll	DS WW		
2026				
2027				
2028				

Table 3. SSC's Atlantic Blueline Tilefish Catch Level Recommendations for **Entire South** Atlantic Council Jurisdiction.

ABC-CR Criteria	Value			
Stock Risk Rating	High			
Relative Stock Biomass L	evel	n/a		
Category		4		
P-Star		n/a		
OFL RECOMMENDATIONS				
Year	ww)			
2025	Unknow	wn		
2026				
2027				
2028				
ABC RECOMMENDATIONS				
Year Yield (lbs ww)		ww)		
2025 326,800 lbs ww		os ww		
2026				
2027				
2028				

*Note: assumes 70/30 proportional split between Mid/SA.

5. SEDAR 76 UPDATE: BLACK SEA BASS STOCK ASSESSMENT UPDATE

5.1 <u>Documents</u>

Attachment 5a. SEDAR 76U: Updated Catch Level Projections Report Attachment 5b. SEDAR 76U: Presentation of Updated Projections

5.2 <u>Presentation</u> Dr. Matt Vincent, SEFSC

5.3 Overview

This SEDAR 76 Update assessment evaluated the stock of black sea bass, Centropristis striata, off the southeastern United States. The primary objectives were to update and improve the 2022 SEDAR 76 assessment of black sea bass and to conduct new stock projections. For this assessment, data compilation and assessment methods were guided by methodology of SEDAR 76, as well as by current SEDAR practices. The assessment period is 1978-2023.

During the April 2025 SSC meeting, the SSC made additional requests for projection runs based on the SEDAR 76 Update assessment. These projection scenarios included:

- Scenario 1: $F = F_{MSY}$ with interim F(2021-2023)
- Scenario 2: $F = P_{20\%}^* F_{MSY}$ with interim F(2021-2023)
- Scenario 3: $F = F_{MSY}$ with interim F(2020-2022)
- Scenario 4: $F = P_{20\%}^* F_{MSY}$ with interim F(2020-2022)

The SSC is tasked with reviewing the new projection scenarios, identifying the scientific uncertainties in the projections, and making catch level recommendations to the Council to consider for management.

5.4 Public Comment

Mr. Cameron Sebastian provided verbal public comments (see meeting transcript for details).

5.5 Action

Review assessment

- Did the projections presented address the requests to the SSCs satisfaction?
 - Yes, the SEFSC provided the requested projections to the SSC's satisfaction.
- Does the assessment provide reliable predictions of future conditions to support fishing level recommendations?

- The SSC had significant discussions relative to concerns with the reliability of the predictions, which are outlined below.
 Some were also discussed in previous SSC meetings (e.g., see April 2025 SSC meeting report and transcript).
 - The assessment indicated the stock was depleted: index estimates are the lowest in the time series and estimated recruitment lowest in the time series. Reduction in fishing effort is necessary to encourage the stock to rebound by protecting the remaining spawning stock biomass. Projections provide information compatible with this assertion.
 - Model assumes stationarity and recruitment based on B-H stock recruit relationship deviates (mean value from 2014-2021) and steepness, which is carried forward in projections.
 - Projections assume landings and discards will both go down with decreases in F. Large proportion of discards occurring in state waters will likely not be reduced with new catch level recommendations and may even increase.
 - Projections assume discard selectivity from base model (mostly age 3-4). Ages 0-1 are mostly not accounted for in the discard selectivity curve. This was discussed earlier as a potentially issue that may have resulted in a model misspecification.

> Identify, summarize, and discuss projection uncertainties.

- Review, summarize, and discuss the factors in the projections that affect the reliability of the projections and fishing level recommendations.
 - See bullets above and April 2025 SSC report for the summary of uncertainties.

> Provide fishing level recommendations.

- Apply the ABC control rule and complete the fishing level recommendations (Table 5).
 - *The ABC-CR was applied during the previous meeting and resulted in a P* value of 20% under Category 1.*
 - The SSC recommends using the Fmsy and P*20%Fmsy with interim F(2021-2023) projections for the OFL and ABC, respectively (see Table 5 below).
 - The SSC had extensive discussions about this recommendation, including BSIA, and its implications. The SSC consensus is that

while there were several significant sources of uncertainty in both the assessment model and projections, the assessment and projections represented BSIA.

- Fishing does not seem the only cause of the decline in Black Sea Bass populations off the SE coast. There is are signals, including based on information presented at previous SSC meetings, that suggest that ecological factors may also play a role in the decline of this (and other) species through reductions in productivity, etc. However, no specific ecological mechanisms have been identified. There is an urgent need to further investigate this and should quantitative information on the relationship between ecological forcing and stock productivity become available, these data should be incorporated as soon as possible into future assessments.
- Based on the fishery-independent data, the stock has severely declined. The cause of a depletion seems to be largely low recruitment. To improve our chances of improved recruitment, it is important to protect the spawners that remain in the population. This is a recommendation that the SSC has made previously.

Lowering removals of Black Sea Bass SB will protect the remaining/future BSB spawners to improve chances of a good year class (or several!), but how this can be done in a multispecies fishery is complicated and the SSC did not have specific guidance for the Council as to a specific management approach.

- The projections and other information indicate that rebuilding the Black Sea Bass will be very challenging, irrespective of available management options.
- The SSC noted that it seems that recreational discards remain high, in spite of the fact the recreational effort has declined. This seems counterintuitive. It is important to investigate this issue. E.g., is it data related, or is something else going on. As mentioned elsewhere in this report, this may have significant implications for the model, and thus the assessment.
- Comment on any difficulties encountered in applying the Control Rule, including any required information that is not available.
 - None.

Table 4. SEDAR 76 Update: Black Sea Bass Stock Assessment Output

Table 18. Estimated status indicators, benchmarks, and related quantities from the base run of the BAM, conditional on estimated current selectivities averaged across fleets. Also presented are median values and measures of precision (standard errors, SE) from the Monte Carlo/Bootstrap ensemble analysis. Rate estimates (F) are in units of y^{-1} ; status indicators are dimensionless; biomass estimates are in units of thousands of pounds, as indicated; and recruits are in millions of age-0 fish. Spawning stock biomass (SSB) is measured as mature weight (1000 lbs). L_{current} and D_{current} are the average landings and discards from 2021–2023, respectively. Estimates of yield include landings and discards in weight; D_{MSY} represents discard mortalities expected when fishing at F_{MSY} ; T_{MSY} represents total harvest (landings and discards) expected when fishing at F_{MSY} .

Quantity	Units	Estimate	Median	SE
F _{MSV}	y ⁻¹	0.32	0.33	0.15
$75\%F_{MSY}$	y^{-1}	0.24	0.25	0.11
B _{MSY}	1000 lb	23946.38	31774.95	47522.56
SSB _{MSY}	1E10 eggs	14182.85	14546.38	37762.97
MSST	1E10 eggs	8864.28	7574.79	28417.79
MSY	1000 lb	1956.49	2148.97	3685.48
MSY	1000 dead fish	1154.26	1008.55	2130.65
$L_{75\%MSY}$	1000 lb	1308.81	1047.19	2875.41
L_{current}	1000 lb	508.00	509.39	67.39
D_{MSY}	1000 lb	685.83	1093.68	966.57
D_{MSY}	1000 dead fish	1485.11	2426.36	2078.38
T_{MSY}	1000 lb	2642.32	3249.55	4547.01
T_{MSY}	1000 dead fish	2639.36	3420.59	3896.09
$D_{75\%MSY}$	1000 dead fish	594.71	2127.04	1819.98
D_{current}	1000 dead fish	947.46	1255.76	540.76
R_{MSY}	millions fish	8.67	16.61	14.38
$F_{2021-2023}/F_{MSY}$		4.08	3.11	2.45
$SSB_{2023}/MSST$		0.16	0.27	0.22
SSB ₂₀₂₃ /SSB _{MSY}		0.10	0.15	0.09

Table 5. SSC's Black Sea Bass Catch Level Recommendations

Criteria			Value			
Stock Risk Rating			High			
Relative Stock Biomass Level			Low			
Category			Category 1			
P-Star			20%			
OFL RECOMMENDATIONS						
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)		
2024	132,000	260,000	166,000	610,000		
2025	144,000	226,000	171,000	512,000		
2026	134,000	175,000	155,000	384,000		
2027	38,000	38,000	42,000	82,000		
2028	52,000	36,000	53,000	76,000		
ABC RECOMMENDATIONS						
Year	Landed (lbs ww)	Discard (lbs ww)	Landed (number)	Discard (number)		
2024	132,000	260,000	166,000	610,000		
2025	144,000	226,000	171,000	512,000		
2026	134,000	175,000	155,000	384,000		
2027	24,000	23,000	27,000	51,000		
2028	35,000	23,000	36,000	48,000		

6. SEDAR PROCESS UPDATE – POSTPONED

6.1 <u>Documents</u>

Attachment 6a. SEDAR Process Update Presentation Attachment 6b. (Background) Proposed SEDAR modifications, Oct 2024 SSC presentation Attachment 6c. (Background) SEDAR Steering Committee Report, Feb 2025

6.2 <u>Presentation</u> Dr. Julie Neer, SEDAR Staff

6.3 <u>Overview</u>

During the March Council meeting, Dr. Shannon Cass-Calay (SEFSC) gave a presentation on modifications to the SEDAR Process. The timeline for stock assessments had expanded under the Research Track Process, and the South Atlantic and Gulf Councils wanted more timely assessments, resulting in the need to revise the SEDAR process. More timely assessments would be accomplished by having the SEFSC control scheduling during the assessment phase of the process. During this phase, the analysts could ask questions to a Council approved technical workgroup, if needed. Additionally, the analyst could provide updates on assessment progress to the Scientific and Statistical Committee (SSC) and request input on certain issues identified during assessment development. The Council supported the revised process but wanted to get feedback from the SSC before approving the new process. The SSC should review the proposed changes to the SEDAR process and the reworked role the SSC would have in the assessment phase of the process and provide feedback for the Council to consider when they continue discussion on this topic at their June meeting.

6.4 Public Comment

6.5 <u>Action</u>

- → Receive update on the SEDAR process changes.
- Comment on new proposed role of the SSC in the assessment phase.

7. SEDAR: TERMS OF REFERENCE – GAG GROUPER

7.1 Documents

Attachment 7a. Terms of Reference for 2026 Gag Grouper Stock Assessment Attachment 7b. (Background) Scope of Work for Gag Grouper

7.2 <u>Presentation</u>

Dr. Judd Curtis, SAFMC Staff

7.3 <u>Overview</u>

Terms of Reference for the planned 2026 stock assessment of Gag Grouper will be reviewed and recommended to the Council. The previous SEDAR 71 stock assessment was an operational assessment with a terminal year of 2019. The SSC reviewed a scope of work at a previous meeting that along with information from the research and monitoring plan was used to craft the terms of reference for the next assessment.

7.4 <u>Public Comment</u>

- 7.5 <u>Action</u>
 - > Review the Terms of Reference for the 2026 Gag Grouper stock assessment.
 - The SSC approves the ToRs with additional comments provided in the attached document.

8. OTHER BUSINESS

There was no other business.

9. PUBLIC COMMENT

No public comment was provided.

10. CONSENSUS STATEMENT AND RECOMMENDATIONS

The Committee did not have time to review the notes, final consensus statements, and final recommendations during the meeting. A draft will be provided as soon as possible for SSC member review.

The Final SSC report was provided to the Council staff on June 6, 2025 for inclusion in the briefing book for the June 2025 Council meeting.

11. NEXT MEETINGS

11.1 Scientific and Statistical Committee Meetings

- October 21-23, 2025 in Charleston, SC
- 11.2 South Atlantic Fishery Management Council Meetings
 - > June 9-13, 2024 in Cape Canaveral, FL
 - September 15-19, 2025 in North Charleston, SC
 - December 8-12, 2025 in Kitty Hawk, NC

ADJOURNED AT 5:10pm