

Draft Terms of Reference

South Atlantic Black Sea Bass

Update Assessment Workshop

1. Update the SEDAR-02 assessment of South Atlantic black sea bass with data through 2009 and with reference to the 2005 assessment update.
2. Document any changes or corrections made to input datasets, all additional data added for the update, and any modifications applied to the additional data.
3. Document and include rationale for any changes in assessment methodology incorporated in this update.
4. Estimate and provide complete tables of stock parameters, including but not necessarily limited to the following:
 - Population abundance at age
 - Population biomass reported in pounds
 - Spawning stock biomass reported in pounds
 - Fishery selectivity at age and size
 - Fishing mortality at age
 - Yield
 - Stock–recruitment relationship
5. Update measures of uncertainty and provide representative measures of precision for stock parameter estimates.
6. Update estimates of stock status and SFA parameters and provide declarations of stock status relative to SFA criteria. The following quantities are to be provided as required for Amendment 15A to the snapper-grouper FMP:
 - MSY (pounds, to the pound)
 - MFMT = $FMSY$
 - FOY and OY based on: 75% of $FMSY$; (pounds to the pound)
 - MSST, based on $(1-M)SSBMSY$, (pounds to the pound). (Preferred is 75%.)
 - $B_{current}/MSST$ and $F_{current}/MFMT$
7. Evaluate future stock status and rebuilding progress using the following criteria:
 - Evaluate progress toward stock rebuilding and the target 10 year rebuilding period ending in 2016.
 - Evaluate whether changes in the TAC (currently 847,000 pounds whole weight) are warranted within the constraints of the rebuilding target. Determine the maximum constant landings that will allow the stock to rebuild by 2016 and estimate the associated fishing mortality rate.
 - Estimate the date of stock rebuilding and the resultant exploitation rate, based on maintaining the current TAC.
 - Provide a probability analysis for the status quo and updated rebuilding schedules.

Caveats:

- Any management changes should be assumed to take effect 1/1/2012
 - Exploitation during the period between the terminal year of the assessment (2009) and 1/1/2012 should be assumed equal to the average of the last 3 years estimated in the assessment (2007-2009).
8. Recommend sampling intensity in terms of the number of sampling events and the quantity of individual lengths measured and age structures taken by gear, quarter, state, market category, fishery, and area in order to complete the ACCSP sampling design matrix.
 9. Review the research recommendations from the previous assessment and update, note any which have been completed, and make any necessary additions or clarifications.
 10. Develop a stock assessment workshop report in SEDAR format to fully document the input data, methods, and results of the stock assessment update. The report shall be provided to the SAFMC no later than *November 1, 2010*.

Preliminary Project Schedule

South Atlantic Black Seabass Assessment Update

- Council and SSC approve ToRs December 6-11, 2009
- Council approves participants December 6-11, 2009
- Data scoping webinar March 2, 2010
- Preliminary data through 2008 compiled by April 20, 2010
- Base run model adjustments developed May 1 to June 18, 2010
- Final data through 2009 compiled by June 1, 2010
- Update Webinar 1 – finalize data; preliminary model discussion June 29, 2010
- Update Webinar 2 July 20, 2010
- Update Webinar 3 August 3, 2010
- Draft update report distributed by teams for review August 16, 2010
- Update Workshop August 30 – September 3, 2010
- Update Webinar 4 September 21, 2010
- Update Workshop report sent to staff for SSC November 1, 2010
- Update Review by SSC January 31-February 4, 2011

Draft Terms of Reference
South Atlantic Snowy Grouper
Update Assessment Workshop

1. Update the SEDAR 4 (SAR 1) assessment of South Atlantic snowy grouper with data through 2009.
2. Document any changes or corrections made to input datasets, all additional data added for the update, and any modifications applied to the additional data.
3. Document any changes in assessment methodology incorporated in the update as well as revisions to the SEDAR 4 benchmark assessment.
4. Estimate and provide complete tables of stock parameters, including but not necessarily limited to the following:
 - Population abundance at age
 - Population biomass reported in metric tons
 - Spawning stock biomass reported in metric tons
 - Fishery selectivity at age and size
 - Fishing mortality at age
 - Yield
 - Stock–recruitment relationship
5. Update measures of uncertainty and provide representative measures of precision for stock parameter estimates.
6. Update estimates of stock status and SFA parameters and provide declarations of stock status relative to SFA criteria and the actions implemented through Amendment 15A. Provide the following quantities estimated by the updated statistical catch-at-age model:

Status Criteria: F_{MSY} , MSY , $F_{OY} = 75\%F_{MSY}$, $MSST = .75(SSB_{MSY})$.

Estimate the amount of improvement in SSB since the last assessment and since the rebuilding plan went into effect.
7. Project future stock conditions (biomass, abundance, and exploitation) and develop an updated rebuilding schedule for use by the SSC in setting ABC. The rebuilding time period is 34 years beginning in 2006 using a fixed landings strategy.

Is the recovery on track, and what is the probability of stock recovery in 2040 at the current fixed TAC (102,960 pounds) ? In which year does the recovery reach 40% ?
Provide a table of recover probabilities in 2040 for a range of fixed TACs.
Update the fixed rebuilding TAC: Are changes in the TAC warranted?

Caveats:

- Any management changes should be assumed to take effect 1/1/2012.
 - Exploitation during the period between the terminal year of the assessment (2009) and the effective date of management action should reflect recent management changes implemented in amendment 15A.
8. Recommend sampling intensity in terms of the number of sampling events and the quantity of individual lengths measured and age structures taken by gear, quarter, state, market category, fishery, and area in order to complete the ACCSP sampling design matrix.
 9. Review the research recommendations from SEDAR 4 (SAR 1) pertaining to snowy grouper, note any which have been completed, and make any necessary additions or clarifications. Focus on those items which will improve future assessment efforts. Provide details regarding sampling design, sampling strata and sampling intensity under current exploitation allowances that will facilitate collection of data that will resolve identified deficiencies and impediments in the 2004 assessment.
 10. Develop a stock assessment update workshop report to fully document the input data, methods, and results of the stock assessment update. The report shall be provided to the SAFMC no later than November 1, 2010.

Preliminary Project Schedule

South Atlantic Snowy Grouper Assessment Update

- Council and SSC approve ToRs December 6-11, 2009
- Council approves participants December 6-11, 2009
- Data scoping webinar March 3, 2010
- Preliminary data through 2008 compiled by April 20, 2010
- Base run model adjustments developed May 1 to June 18, 2010
- Final data through 2009 compiled by June 1, 2010
- Update Webinar 1 – finalize data; preliminary model discussion June 30, 2010
- Update Webinar 2 July 21, 2010
- Update Webinar 3 August 4, 2010
- Draft update report distributed by teams for review August 18, 2010
- Update Workshop August 30 – September 3, 2010
- Update Webinar 4 September 22, 2010
- Update Workshop report sent to staff for SSC November 1, 2010
- Update Review by SSC January 31-February 4, 2011

Draft Terms of Reference

South Atlantic Red Snapper

Update Assessment Workshop

1. Update the SEDAR 15 assessment of South Atlantic red snapper with data through 2009. Prepare a continuity scenario and consider additional sensitivity runs to address assessment concerns raised since the benchmark.
2. Document any changes or corrections made to input datasets, all additional data added for the update, and any modifications applied to the additional data.

Special Considerations:

- Review and evaluate recent (2009) increased otolith collections
 - Comment on trends in recreational harvest and discards during the years 2007 – 2009.
 - Review the justification from the SEDAR 15 AW for deviation from the SEDAR 15 DW recommendations regarding inclusion of pre-MRFSS recreational data. Review these data sources and comment on the appropriateness of their inclusion in the update.
 - Review the discard mortality rates applied in the baseline and consider whether alternative values should be explored through sensitivity analyses.
3. Document any changes in assessment methodology incorporated in the update as well as revisions to the SEDAR 15 benchmark assessment that may have occurred following the SEDAR 15 Review.

Special Considerations:

- Review sensitivity analyses conducted following the SEDAR 15 Review and consider whether changes from baseline assumptions are warranted. Fully document any such changes that may be proposed.
 - Review the selectivity patterns applied in the baseline assessment and the post-review sensitivities of alternative selectivity patterns and determine the most appropriate selectivity patterns for use in the update assessment.
4. Estimate and provide complete tables of stock parameters, including but not necessarily limited to the following:
 - Population abundance at age
 - Population biomass reported in pounds
 - Spawning stock biomass reported in pounds
 - Fishery selectivity at age and size
 - Fishing mortality at age

- Yield
 - Stock–recruitment relationship
5. Update measures of uncertainty and provide representative measures of precision for stock parameter estimates.
 6. Update estimates of stock status and SFA parameters and provide declarations of stock status relative to SFA criteria. Provide the following quantities:
 - $MFMT = (F_{40\%SPR})$
 - $B_{40\%SPR}$ and $SSB_{40\%SPR}$ in pounds and metric tons
 - MSST at $(1-M * F_{40\%SPR})$ in pounds and metric tons
 - MSY in pounds and metric tons
 - Discards at $F_{40\%SPR}$ in thousands of fish, pounds, and metric tons
 - F_{MSY}
 - Status Evaluations: $F_{2009} / F_{40\%}$ and $SSB_{2009} / SSB_{40\%}$

In addition to the preferred MSY-related benchmarks, update SEDAR 15 alternative proxies (F_{max} , $F_{30\%}$, along with their associated yields)

8. Project future stock conditions (biomass, abundance, and exploitation) and update the stock rebuilding schedules in accordance with recent rebuilding options proposed in Snapper-Grouper Amendment 17A. Additional details will be provided as the amendment progresses. Provide rebuilding schedules that report the probability of recovery occurring within the chosen rebuilding period to support the SSC developing ABC recommendations.

Caveats:

- An interim closure of the red snapper fishery is under consideration and should be accounted for in the projections if implemented.
 - Any management changes should be assumed to take effect 1/1/2011.
 - Exploitation during the period between the terminal year of the assessment (2009) and the effective date of management action should be derived after consideration of recent and proposed management actions.
 - Projection criteria during interim years should be based on the suite of alternatives put forth in Amendment 17A. Staff will consult the amendment and develop a list of scenarios for evaluation.
9. Recommend sampling intensity in terms of the number of sampling events and the quantity of individual lengths measured and age structures taken by gear, quarter, state, market category, fishery, and area in order to complete the ACCSP sampling design matrix.
 10. Review the research recommendations from SEDAR 15 SAR 1, note any which have been completed, and make any necessary additions or clarifications. Focus on those items which will improve future assessment efforts. Provide details regarding sampling design, sampling strata and sampling intensity under current exploitation allowances that will facilitate

collection of data that will resolve identified deficiencies and impediments in the 2008 assessment.

11. Develop a stock assessment workshop report in SEDAR format to fully document the input data, methods, and results of the stock assessment update. The report shall be provided to the SAFMC no later than November 1, 2010.

Preliminary Project Schedule

South Atlantic Red Snapper Assessment Update

- Council and SSC approve ToRs December 6-11, 2009
- Council approves participants December 6-11, 2009
- Data scoping webinar March 4, 2010
- Preliminary data through 2008 compiled by April 20, 2010
- Base run model adjustments developed May 1 to June 18, 2010
- Final data through 2009 compiled by June 1, 2010
- Update Webinar 1 – finalize data; preliminary model discussion July 1, 2010
- Update Webinar 2 July 22, 2010
- Update Webinar 3 August 5, 2010
- Draft update report distributed by teams for review August 20, 2010
- Update Workshop August 30 – September 3, 2010
- Update Webinar 4 September 23, 2010
- Update Workshop report sent to staff for SSC November 1, 2010
- Update Review by SSC January 31-February 4, 2011