SEDAR 68OA South Atlantic Scamp

Operational Assessment

Terms of Reference

1. Update the approved SEDAR 68 South Atlantic Scamp model with data through 2021 (provide any partial or preliminary 2021 data available at the time of data provision). Incorporate the latest BAM model configurations and updates to data calculation methodologies, detailing the changes made between the SEDAR 68 South Atlantic Scamp research track assessment model and the proposed SEDAR 68 Operational assessment model.

2. Consider updated information on life history, steepness, discard mortality, commercial and recreational landings and discards. Note any particular concerns or problems with any data collected since the completion of the research track. Document any changes or corrections made and provide updated input data tables. Provide commercial and recreational landings and discards in pounds and numbers.

3. Examine and describe impacts on model performance and estimates of the data limitations in any data collected since the completion of the research track.

4. Update model parameter estimates and their variances, model uncertainties, estimates of stock status and management benchmarks, and provide the probability of overfishing occurring at specified future harvest and exploitation levels.

5. Investigate potential changes to selectivity structure for Chervon trap data, using likelihood values to guide in determining best configuration. Consider sensitivities such as:
    a. Explore time-varying selectivity in the Chevron trap index
    b. Examine change over time in length and age comps
    c. Random walk on A50 selectivity parameter. Examine multispecies/targeting impact on selectivity.

6. Investigate influence of length and age composition data on stock assessment model. Consider the following:
    1. Dropping length comps from model.
    2. Excluding Chevron trap age comps.
    3. Address mismatch between length and age comps.

7. The SR curve overestimates R at low stock sizes and vice versa. Steepness may not be appropriately defined. Examine alternative way to estimate recruitment without SR curve.

8. Develop a stock assessment report to address these TORs and fully document the input data, methods, and results.