Draft Terms of Reference

Gulf of Mexico and South Atlantic Spiny Lobster

Update Assessment Workshop - August 23-25, 2010 (proposed)

1. Update the SEDAR 8 assessment of Southeastern US spiny lobster with data through 2009-2010. Prepare a continuity scenario and consider additional sensitivity runs to address assessment concerns raised since the benchmark.

2. Evaluate any relevant data and parameters to be included into the stock assessment model. This evaluation should be conducted with all relevant scientific input. Include life history, indices of abundance, and fishery data.

3. Evaluate the relative reliability of fishery dependent and independent data sources and adjust model input appropriately.

4. Update the approved SEDAR 8 Southeastern spiny lobster model base configuration with data through 2008-09. Employ the SEDAR 8 SAR 3 statistical catch-at-age model (Integrated Catch-at-Age) as the base and the DeLury model as a check for consistency. The DeLury model used numbers of lobster and effort by fishing year extended back to the 1978-79 fishing year. Both models used fishery-dependent (observer and Biscayne National Park creel survey) and fishery-independent (puerulus and adult monitoring) tuning indices. Sensitivity runs included running the age-structured model with two lipofuscin growth curves and with two alternative natural mortality rates. Retrospective analysis compared patterns in fishing mortality rates, recruitment, and population sizes in terminal years from 1997-98 to 2002-03 to the base run results. Document any changes in assessment methodology incorporated in the update.

5. Document any changes or corrections made to input datasets, all additional data added for the update, and any modifications applied to the additional data. Tabulate complete updated input datasets. Provide tables of commercial and recreational landings and discard in the units used in SEDAR 8, SAR 3. Specify units of measurement in all tables.

6. Estimate and provide complete updated tables of stock parameters.

7. Update measures of uncertainty and provide representative measures of precision for stock parameter estimates.

8. Update estimates of stock status and SFA parameters; provide declarations of stock status relative to current SFA criteria. Provide clear statements of stock status relative to 'overfishing' and 'overfished'.

9. Specify OFL, and may recommend a range of ABC for review by the SSC in compliance with ACL guidelines.

10. Evaluate and project future conditions for eleven years (2009-10 through 2019-20 inclusive) beyond the terminal year of the update (2008-2009). Run these three projection scenarios:

    F = Fcurrent, F = Fmsy, and F = Foy.

11. Review the research recommendations from SEDAR 8 SAR 3 (2005), 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 2005 assessment. Recommend sampling intensity in terms of the number of sampling events and appropriate elements in order to complete the ACCSP sampling design matrix.

12. Develop an update stock assessment workshop report in SEDAR outline to fully document the input data, methods, and results of the stock assessment update. Address these Terms of Reference. Submit the report to SEDAR no later than October 1, 2010. The report shall be provided to the GMFMC and the SAFMC no later than October 18, 2010.