

Standing SSC

Meeting Summary

December 5, 2024

Webinar

Review: Southeastern U.S. Black Grouper Management Strategy Evaluation

- Last assessment (SEDAR 48) terminated due to data problems
 - Species misidentification in fishery-dependent surveys
- Dr. Bill Harford contracted by FWC
 - Proposed a “traffic approach” to ID strength of data streams
- Suggested a Management Strategy Evaluation (MSE) approach for the future
 - SSC supported continuing MSE approach for black grouper
- SSC next steps:
 - Seek to provide clear management advice
 - Coordination with the South Atlantic Council would be required

Overview of Gulf Red Grouper Assessment

- Conducted under SEDAR 88 framework
- Uses FL State Reef Fish Survey (SRFS) for private vessel fleet
 - Replaces use of MRIP-FES for private vessels
 - Improved precision for SRFS over MRIP-FES for RG
 - No shore fleet for RG



Key Model Changes

- Updated natural mortality estimation (M)
 - Results in:
 - Higher stock productivity
 - Higher spawning stock biomass (SSB)
 - Lower relative fishing mortality (F)
- Freely estimated selectivity parameters, age-based inputs
 - Selectivity: age range of fish that can be captured by a fleet
- Growth parameters (L^∞ , k) estimated with and without platoons
 - Platoons: accounts for how growth rates of fish “platoons” influence their vulnerability to harvest
- Spawning biomass (SSB) recalculated with new methods

Steepness of Stock-Recruit Function

- SEDAR 88 estimating steepness feasible with available data
 - estimated at 0.66
- SSC will evaluate diagnostics before final recommendation on steepness
- Better to estimate steepness when possible, but also consider plausibility
- Estimated steepness value affects:
 - MSY estimation
 - Projections of future recruitment

Selectivity Updates

- Use of age-based selectivity for directed fleets
 - SEDAR 61 underestimated observed weight at age
- Logistic selectivity for longline fleet
 - Suggests consistent vulnerability at age once fully selected by fleet
 - Results in more realistic estimates of SSB and F
 - SEDAR 61 used dome-shaped selectivity
 - Suggested lower proportional vulnerability at older ages
- Corrections made to mean length and weight estimation
- SSC concurred with the above modifications

Summary from SSC

- SSC supported estimating steepness
- Supported growth parameter estimation using the platoon approach for lengths
 - May not ultimately be used; assessment is age-based
- SSC discussed M and suggested using Hamel and Cope (2022)
 - Updated method based on maximum age
 - Results in a higher M (0.1862) than the previous assessment (SEDAR 61, 0.14)
 - Suggests a more productive stock to account for increased M

Red Tide Mortality Considerations

- Age-specific red tide modeling: ongoing work
 - Like gag, higher mortality expected for younger ages
- Interim years (2023–2025): no red tide effects
- Updated models expected early 2025

Next Steps and Timeline for SEDAR 88

- February 26, 2025: base model review in Tampa
- SSC: further evaluation of key parameters
- Review catch limit projections
- Finalize recommendations for Gulf red grouper
- Questions?

