

Scientific and Statistical Committees
Scope of Work
May 2 – 4, 2023
Tampa, Florida

Agenda Item IV: Selection of SSC representative for the June 5 – 8, 2023 Gulf Council Meeting, to be held in Mobile, AL

Action: Information

Committee input and next steps: Dr. Sean Powers will provide summaries to Council Committees, answer questions, and provide insight into the SSC deliberations from this SSC meeting.

Agenda Item V: Report from the MRIP Transition Team on Red Snapper and Other Species in Gulf State Supplemental Surveys

Action: Presentation, discussion, and recommendations

Committee input and next steps: Dr. Richard Cody (NOAA Office of Science and Technology) will present information regarding the discussions of the Marine Recreational Information Program's (MRIP) Transition Team, which is working with the Gulf states and federal data managers to identify and assess sources of non-sampling errors across the various recreational data collection programs. This work has been ongoing in various capacities since 2020, and has recently expanded to include additional species managed by the Council. Dr. Cody will focus on the Team's efforts with red snapper, and will briefly review work on other species. The SSC should consider the information presented and make any recommendations as appropriate.

Agenda Item VI: Evaluation of Interim Analysis Process

Action: Presentation, discussion, and recommendations

Committee input and next steps: Dr. Katie Siegfried (Southeast Fisheries Science Center) and Mr. Ryan Rindone (Council staff) will present an evaluation of the interim analysis (IA) process. The presenters will discuss how the process functions, timing of indices processing, catch advice changes with respect to the overfishing limit and acceptable biological catch, time limits on using IAs for catch advice after the terminal year of the stock assessment, conducting a health check versus updating catch advice, and resources needed to conduct health checks using an IA. The SSC should consider the information presented and make any recommendations as appropriate.

Agenda Item VII: Review of Queen Snapper, Silk Snapper, and Blackfin Snapper Landings and Catch Limit Consideration

Action: Presentation, discussion, and recommendations

Committee input and next steps: Mr. Rindone and Dr. John Froeschke (Council staff) will summarize the landings of blackfin snapper, queen snapper, and silk snapper for 1986 – 2021. These data will be presented in the MRIP Fishing Effort Survey (FES) data units, to be commensurate with the National Marine Fisheries Service’s (NMFS) interpretation of the best scientific information available (BSIA) for these data. These three species constitute the remaining species in the mid-water snapper complex; the SSC recommended that the Council remove the fourth species, wenchman, from the complex at previous meetings following evaluations of wenchman landings, life history, and fishery dynamics. The combined landings of the three remaining species will be considered by the SSC for generating an updated catch limit recommendation using Tier 3a of the Council’s ABC Control Rule, which uses a 10-year reference period of catch for informing the overfishing limit (OFL) and the acceptable biological catch (ABC). The SSC should consider the landings data and two reference time periods presented and make catch limit recommendations to the Council as appropriate.

Agenda Item VIII: Review of Black Grouper and Yellowfin Grouper Landings and Catch Limit Consideration

Action: Presentation, discussion, and recommendations

Committee input and next steps: Dr. Froeschke and Mr. Rindone will summarize the landings of black grouper and yellowfin grouper for 1986 – 2021. These data will be presented in the MRIP-FES data units, to be commensurate with NMFS’ interpretation of BSIA for these data. These two species constitute the remaining species in the shallow-water grouper complex; the SSC recommended an OFL and ABC specifically for scamp and yellowmouth grouper after reviewing SEDAR 68 (2020), but did not think it biologically appropriate to include black grouper and yellowfin grouper in those recommendations. The combined landings of the two remaining species will be considered by the SSC for generating an updated catch limit recommendation using Tier 3a of the Council’s ABC Control Rule, which uses a 10-year reference period of catch for informing the OFL and ABC. The SSC should consider the landings data and two reference time periods presented and make catch limit recommendations to the Council as appropriate.

Agenda Item IX: A Gulf of Mexico Ecosystem Model (GoMEM) to Support Fisheries Management

Action: Presentation, discussion, and recommendations

Committee input and next steps: Drs. Holden Harris and Skyler Sagarese (SEFSC) will present their past, present, and future research efforts to support ecosystem-based fishery management (EBFM) with a U.S. Gulf-wide Ecosystem Model (GWEM). Dr. Sagarese will first describe the Ecopath and Ecosim components of the model and its recent applications for assessing ecological reference points. The GWEM Ecopath foodweb model consists of 78 functional groups and 16 fishing fleets, with a diet matrix based on a meta-analysis of nearly 600 studies. The GWEM Ecosim time-dynamic model was fitted to 160 time series from stock assessments (SEDAR and ICCAT) and SEAMAP surveys. The presenters will then review their recent RESTORE-funded project and publication that identified trade-offs and ecological reference points for managing Gulf menhaden. This model demonstrates how the target biomasses of menhaden and menhaden predators could be achieved by modifying fishing pressure for menhaden or its predators ([interactive shiny app](#)). Next, Dr. Harris will present their current efforts to develop a spatially-explicit Ecospace model. He will describe data syntheses for habitat maps, spatial-temporal environmental drivers, functional responses, and initial results/validation. The model is presented at this stage in its development to receive feedback on next steps in model calibration, fitting, and incorporating qualitative scientific and fisher knowledge. Specifically, Drs. Harris and Sagarese seek SSC input on how to best apply the GWEM to address ecological questions and support regional EBFM. Potential research directions could include assessing ecological reference points, spatial-temporal fishery closures, impacts from marine energy structures, and environmental stressors from climate change.

Agenda Item X: Public Comment

Action: Information

Committee input and next steps: Members of the public will be able to address the SSC directly with respect to the topics discussed during this meeting, and other matters, as time allows.

Agenda Item XI: Management Strategy Evaluation Workshop

Action: Presentation, discussion, and recommendations

Committee input and next steps: Drs. Bill Harford (Nature Analytics), Tom Carruthers (Blue Matter Science), Adrian Hordyk (Blue Matter Science), John Walter (SEFSC), Cassidy Peterson (SEFSC), and Nikolai Klibansky (SEFSC) will present a series of talks to the SSC, guided by Dr. Steve Saul (Ecosystem SSC). These talks are intended to serve as a primer to management strategy evaluation (MSE), including techniques and guiding principles. The presenters will showcase real-world examples of MSE that are either in development or in use, and will provide context for the SSC with respect to its place in evaluating MSE on behalf of the Council. The SSC should evaluate the materials presented and provided, ask questions, and make recommendations as appropriate.

Agenda Item XII: Public Comment

Action: Information

Committee input and next steps: Members of the public will be able to address the SSC directly with respect to the topics discussed during this meeting, and other matters, as time allows.

Agenda Item XIII: Discussion: Management Strategy Evaluation Workshop

Action: Discussion and recommendations

Committee input and next steps: Dr. Saul will guide the SSC through follow-up discussions regarding the MSE workshop from the previous day. The SSC should consider the materials, ask questions, and make recommendations as appropriate.

Agenda Item XIV: Review SHELF Fish Egg Monitoring Program

Action: Presentation, discussion, and recommendations

Committee input and next steps: Dr. Chris Stallings (University of South Florida) will present the Spawning Habitat & Early-life Linkages to Fisheries (SHELF) project, which was funded at the start of the Florida RESTORE Act Center of Excellence Program (FLRACEP). This project was selected for funding because it held potential for applying novel approaches to long-term monitoring of living marine resources in the eastern Gulf of Mexico. The project has had two conceptual parts; it started in 2017 as a broad pilot study, which was formally reviewed and simplified by an external review panel in 2020. The monitoring program has been operating over the past several years and consists of annual surveys of planktonic fish eggs that are collected by the Southeast Area Monitoring and Assessment Program (SEAMAP). The eggs are identified using DNA barcoding, which is a novel approach. A specific objective of the monitoring effort, in addition to locating important fish spawning areas, is to produce a time series that will detect changes in the amount or location of spawning by individual fish species, and to detect changes in fish-egg community composition over time, such as that brought about by climate change, fishing, or changes in habitat quality. In his presentation, Dr. Stallings will summarize the work and results completed so far, and outline the planned work for the next few years. The impetus for this talk is to inform the SSC about the SHELF Program and to determine if there are any data products the Committee can use to make recommendations to the Council.

Agenda Item XV: Scope of Work for upcoming Gray Triggerfish Stock Assessment

Action: Discussion and recommendations

Committee input and next steps: Mr. Rindone will review the proposed scope of work for the operational assessment for Gulf of Mexico gray triggerfish. This species was last assessed in full in SEDAR 43 (2015), using data through 2013. That assessment determined that gray triggerfish was overfished. Another stock assessment was attempted in 2019 (SEDAR 62); however, late in that assessment process, an internal review identified inaccuracies in essential data inputs that could not be easily reconciled. The SEFSC determined the best plan of action was to halt work on SEDAR 62 and the Council concurred with that decision.

The SSC should evaluate this proposed scope of work, which represents an operational assessment approach instead of a research track approach as was originally planned. This change is to accommodate other SEFSC assessment scheduling needs while also providing timely management advice to the Council for gray triggerfish. The proposed assessment will explore essential model and data modifications, including consideration of recreational landings and discards, ageing, recruitment, and discard mortality. The SSC should recommend any modifications to the scope of work as appropriate, with special consideration paid to the requisite topical working groups to address specific topics.

Agenda Item XVI: Public Comment

Action: Information

Committee input and next steps: Members of the public will be able to address the SSC directly with respect to the topics discussed during this meeting, and other matters, as time allows.

Agenda Item XVII: Other Business

Action: Discussion

Committee Input and Next Steps: Additional items may be brought up for discussion by SSC members, time permitting. If the SSC wishes to pursue action, it can be scheduled for a future SSC meeting.