

South Atlantic Research and Monitoring Prioritization Plan for 2015-2019

This document provides summarized research needs identified by the South Atlantic Council. Additional details on items listed here are available in a separate document: “SAFMC Research and Monitoring Plan Source Document”.

I. Short term, time dependent Research needs for stock assessments to be conducted in 2017-2018

- 2016 Update process assessment for Blueline Tilefish. The following items are needed by July 1, 2016:
 - Age validation, reader comparison and calibration
 - Fecundity evaluation including specimens under 18”
 - Stock identification
 - Discard mortality estimates
- 2017 Benchmark assessments for Scamp and Gray Snapper. The following items are needed by February 1, 2017:
 - Determine stock structure
 - Age validation, reader comparison and calibration
 - Discard mortality estimate
- 2017 Update process assessment of Vermilion Snapper. The following items are needed by July 1, 2017:
 - Update growth models incorporating age-0 fish
- 2017 Update process assessment for Greater Amberjack. The following items are needed by July 1, 2017:
 - Age validation, reader comparison and calibration
 - Discard mortality estimates
- Develop annual abundance indices for all managed stocks adequately sampled by the expanded Southeast Reef Fish Survey (SERFS), including methods to merge indices

including new sampling with those based on pre-SERFS MARMAP efforts, by January 1, 2017 for use in stock assessment and management evaluations

II. Short Term Needs for Spawning Special Management Zones to be addressed in the next 5 years.

- Document spawning of priority species in the snapper and grouper complex within the proposed Spawning SMZs.
- Complete multi-beam surveys of the Spawning SMZs.

III. Short Term Needs for MPA monitoring to be addressed within the next 5 years.

- Maintain annual monitoring to collect data inside and outside the MPAs to characterize MPAs and enable comparison to reference sites. Identify fish population demographics (e.g. size and age structure, sex ratio, species use of habitat by life stage, spawning activities, etc.) within and adjacent to the MPAs.
- Characterize spawning areas for deepwater snapper and grouper species within the MPAs. Other priority species if identified to spawn within the MPA will also be characterized.
- Complete multibeam surveys of the MPAs.
- Evaluate the sampling program of the SAFMC MPAs. The evaluation should review data on compliance, species abundance, and diversity, and determine if current sampling targets are sufficient.
- Evaluate the effectiveness of current closed areas in achieving management objectives.
- Develop methods for incorporating the impacts of MPA on management actions and stock status.

IV. Long Term Needs to be addressed within the next 5 years.

- Conduct stock identification studies for white grunt. Results required by mid-2019 for use in a benchmark stock assessment in 2020.
- Obtain life history traits for all managed species, including von Bertalanffy growth parameters and maturity and reproductive rates.
- Evaluate the cumulative economic and social impacts of existing regulations on the multi-species snapper-grouper fishery in the South Atlantic.
- Develop management strategies to reduce discard mortality in the multi-species snapper-grouper fishery.
- Develop direct age validation techniques for deepwater and shallow water snapper grouper species.

- Provide an evaluation of the independent survey and biological sampling information available for all SAFMC managed stocks that are currently unassessed. This evaluation should document past sampling intensity and current sampling targets and provide guidance on the type of stock assessments feasible given currently available data.
- Conduct tagging studies of snapper-grouper complex species, including the Gulf and SA regions, to evaluate movements between regions.
- Reproductive biology work on red grouper, and other shallow water groupers, to determine latitudinal variation in spawning periodicity and habits.

V. Specific Monitoring Priorities

- Increase funding for fisheries independent monitoring in the South Atlantic. Specific needs include:
 - Restoring MARMAP funding to a minimum of \$850,000 annually.
 - Funding MARMAP sufficiently to support reinitiating long bottom longline sampling that provides the only abundance information for deepwater stocks such as Tilefish.
 - Maintaining funding for SEAMAP at levels sufficient to support long-term fishery independent survey operations.
 - Providing funding for the MPA/SMZ monitoring needs noted above.
- Monitor the mixing rates of Gulf and South Atlantic king mackerel. Mixing rates may change over time and should therefore be regularly evaluated, although annual monitoring may not be necessary.
- Implement a monitoring and research program to address issues relevant to ecosystem management. Topics include trophic interactions, food preferences, predator-prey relationships, and ecosystem connectivity.

VI. SPECIFIC REPORTING REQUESTS

- Annual SAFE reports that provide stock status including OFL and MSY, an evaluation of the management program including whether ACLs were met or AMs triggered and addressing reasons for such, results of independent fisheries monitoring, complete landings and discard losses in weight and numbers of fish, fishery dependent monitoring statistics, and measures of effort and economic value for all managed stocks by June 1 of each year.
- Annual Report on the SEFIS program addressing sampling effort and findings for assessed species, by October 1 of each year.
- Annual progress report, at the June Council meeting, detailing efforts to implement the research recommendations noted in annual Council Research and Monitoring Reports.

- Direct appropriate SEFSC staff to meet with the SSC at its Spring meeting each year when SAFMC research priorities are reviewed, to increase interaction and communication between the SSC and agency scientists.