



Atlantic States Marine Fisheries Commission

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Committee on Economics and Social Science Summer Meeting 2025

Meeting Summary

July 14, 2025

Members in Attendance: A. Scheld, J. Walsh, S. Lovell, T. Scott, B. Murphy, J. Hadley, Jose Montanez, M. Shivilani, S. Ebbin, E. Frimpong, G. Parsons

Staff: J. Patel, J. Kipp, T. Bauer, E. Franke, C. Tuohy

Other: J. Evans, S. Meyer, A. Carr-Harris, L. Hammer, R. Feeny, J. Ward, W. Goldsmith, L. Deighan, S. Lewis, T. Williams, J. Hornstein, M. Celestino, J. Hardy, J. Evans, M. Appleman, S. Steinbeck

Risk and Uncertainty Update

CESS member J. Walsh was tasked with assessing four socioeconomic indicators to support a risk and uncertainty tool for red drum. These included the economic value and community dependence of both the commercial and recreational fisheries. Scores were based on NOAA data from 2020–2022, using only reliable estimates. After the initial scoring, based on management recommendations, the scores were separated into the Northern Stock and the southern stock for this species.

In the Northern region (NJ–NC), the commercial red drum fishery showed minimal economic importance and community dependence (scores of 1 each). In contrast, the recreational fishery was highly important (score of 5), with moderate community dependence (score of 2).

In the Southern region (SC–FL), there was no commercial fishery (scores of 0), but the recreational fishery was highly significant, earning a score of 5 for importance and 3 for community dependence.

Projections were not created for the Northern stock of this species and at the time of the scoring, no management action was proposed. For management recommendations for the Southern stock, no action was needed for the nonexistent commercial fishery. Short-term recreational management received a low score (-0.4) due to limited angler response to recent regulations, while long-term management was scored high (1), reflecting potential benefits from stock rebuilding.

Based on these scores, the CESS had several recommendations for both the scores and the structure of the R&U tool:

- The CESS expressed concern over the relative size of the bins for commercial economic importance given that the maximum is a fishery that's over 100 million. The only potential fishery that would fall into this category would be American Lobster. The CESS recommended that these bins be reworked by species for every iteration of the tool. There was also a recommendation to potentially remove the bins all together.
- There was a question of where or not the southern ex vessel value for commercial dependence was as a percentage of total catch in top 10 communities. The source was NOAA data, but it was mentioned that NOAA sources can change based on states missing input values.
- For recreational fishery desirability, it was recommended that the scale mimic the percent of importance since these two are usually linked.
- For the proposed management change scores, it was recommended that the literature be consulted a bit more to increase cautiousness with these largely subjective scores.
- The ISFMP coordinator for this species also mentioned that there may be management change

for the northern stock in the future.

Next steps:

- B. Murphy to touch base with J. Walsh about NOAA data
- J. Patel to send out R&U rationale document for folks to comment on and circle back with J. Walsh to talk about how to implement potential changes to the scoring
- J. Patel to talk to K. Drew and J. Walsh about proposed management changes for the northern stock
- J. Walsh to start “lessons learned” document for next R&U scorer
- J. Patel to leave 30-45 minutes in the next CESS meeting to talk about changes for the CESS portion of the R&U tool

Striped Bass Bioeconomic Model

Carr-Harris and Steinback (2020) explored how to link recreational fishing behavior with biological outcomes. This original study applied non-market valuation methods to estimate the economic value of keeping and releasing striped bass, explored the determinants of angler effort, and simulated the economic and biological impacts of different size and bag limit regulations.

The 2016 angler survey was a central component of that work. It targeted striped bass anglers from ME to VA using a combination of mail and web-based responses. The survey included a discrete choice experiment, a method in non-market valuation, which presented anglers with hypothetical fishing trips varying in attributes such as catch size, number of fish kept or released, trip costs, and regulatory conditions. Econometric analysis of these responses quantified how much anglers valued different trip components, including an estimated willingness to pay for keeping a trophy striped bass and what that equated to in striped bass of varying sizes.

The main research questions addressed by the study included how the different recreational fishing policies affected angler value and participation and what policy options can meet conservation goals while maximizing economic value.

In recent years, the Northeast has advanced bioeconomic tools to support recreational fishery management decisions for species like cod, haddock, summer flounder, black sea bass, and scup. These tools, often referred to as Bioeconomic Length-Age Structured Tools (BLAST), incorporate updated angler preference data, stock assessment outputs, and simulation modeling frameworks. These BLAS models include integration of recent angler survey data (e.g., 2019 cod/haddock and 2022 summer flounder surveys), consideration of sampling uncertainty in inputs like MRIP estimates, and decision support tools using RShiny interfaces, which allow managers to interact with the model, adjust regulatory scenarios, and visualize results autonomously. These advances offer a framework for updating the striped bass bioeconomic model.

To bring the striped bass model in line with modern tools, several major updates are proposed:

1. A new angler survey will be conducted targeting striped bass and bluefish anglers from Maine through Virginia. The goal is to expand the sample size beyond 2016 levels, address demographic shifts in the angler population, and refine estimates of angler values. This includes measuring updated preferences for keeping vs. releasing fish, capturing any changes in participation patterns or values over time, and investigating whether new angler segments have emerged since 2016
2. The new survey will again employ discrete choice experiments to estimate the value of specific fishing trip attributes, helping to quantify tradeoffs in management decisions.
3. The updated model will simulate the outcomes of alternative management measures by estimating harvest and discards (by number and weight), projecting participation (# of trips) by state and fishing mode, measuring angler welfare through consumer surplus changes, and

estimating impacts on total and spawning stock mortality

4. Like other fisheries in the region, the model will be implemented through an RShiny application. This will allow fishery managers to test different regulatory options, evaluate predicted biological and economic outcomes, and make more informed decisions.

The CESS asked if the survey collected income data and looked at the distribution of these data. The original model did collect this information at a population level, but distributions were not examined. The CESS also asked what lessons had been learned from the work on the previous model. This largely involved standardizing the type and amount of information collected and stratifying the fielding of the survey based on demographics. The discussion also touched on license frames, future work being done that could inform non-catch-related motivations, and discrete choice experiments. The group also asked after the timeline of the bluefish component of this tool, but this will likely be developed further in-depth after this first year of work, which will be primarily striped bass-focused.

Moving forward, the new Striped Bass Bioeconomic Working Group (J. Holzer, G. Parsons, A. Scheld) will be a sounding board for survey construction and design to help collect data for this work. They will lend support to S. Steinbeck, A. Carr-Harris, and W. Goldsmith as they move forward with this work.

Next steps: J. Patel to touch base with J. Holzer, G. Parsons, A. Scheld as this project moves forward.