

Final report from SEFSC Special Working Group to Develop Best Practice Guidance for Shrimp Catch Estimation

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Abstract

Shrimp landings are used for two primary purposes: (1) yearly catch statistics used for stock assessment, and (2) monthly catch estimates used to inform the public. Catch statistics from the prior year have historically not been available by the spring meeting for each year's assessment and result in a one year lag time for species with a one-year life cycle. SEFSC convened a working group made up of SEFSC staff and Organizational stakeholders in the Gulf region to assess the best source of landings information for use in management. This group met on September 4, 2020 and discussed methods to increase timeliness of landings data and the best source of landings data. Although state trip tickets are deemed the most complete source of landings information, there are some timeliness issues that would need to be addressed. The timeliness needs were presented to the data management TCC at the GSMFC fall meeting on September 10, 2020, with representatives from FL, AL, MS, LA, and TX agreeing that they should be able to have shrimp landings through August available by November of that year. The states also agreed to work with NMFS to decrease lag time between monthly reporting and data availability to 2 months. Given the commitment by states to increase the timeliness of trip ticket data, NMFS decided to use the trip ticket data as the sole source of landings data for assessments, using port agent collected landings for those years where trip ticket data are not available.

Background

As part of the SouthEast Data, Assessment, and Review (SEDAR) process intended to create a shrimp research/assessment plan, the Southeast Fishery Science Center (SEFSC) convened a special working group to develop best practice guidance for shrimp catch estimation. Shrimp landings are essentially used for two primary purposes: (1) yearly catch statistics used for stock assessment, and (2) monthly catch estimates used to inform the public. Yearly catch statistics are used by SEFSC Galveston staff to assess shrimp stocks and this information is presented yearly to the Gulf of Mexico Fishery Management Council during the spring meeting. Catch statistics from the prior year have historically not been available by the spring meeting for each year's assessment and result in a one year lag time for species with a one-year life cycle. Monthly landings estimates have been produced by the 15th day of the month for the previous month by staff from the SEFSC Fisheries Statistics Division and posted for public access on the Market News Website. Reductions in Federal staff in field offices have resulted in an inability to report estimated landings consistently and reliably.

Approach

Convene a working group to explore current and alternate processes that allow for complete shrimp landings to be reported earlier in the calendar year for the prior year, as well as produce monthly landings estimates in a more timely fashion.

Initial processes examined included:

1. Revisit the results of the Value Stream Mapping process for shrimp data, which outlined current data processing of trip ticket and GSS data, and \was completed by the SEFSC in 2017 to ensure recommendations from that process were implemented.
2. Work with NMFS Office of Science and Technology to alter the due date for the Fisheries of the United States publication. This might allow finalized landings to be requested from the States earlier in the year and facilitate those data's integration into the current stock assessment.
3. At the October Commission meeting, update participants about the need for more timely shrimp landings information to facilitate assessment and Market News.
4. Hold a data workshop with Organizational stakeholders in the Gulf region. This would include the Science Center, the Regional Office, GulFIN, and a representative from each Gulf State.

The working group consisted of members from NMFS, GSMFC, GMFMC, and the public.

Group membership

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Results From Workgroup Meeting(s)

The workgroup met by teleconference on September 4th, 2020. Discussion revolved around available data from ongoing data collections and usefulness of that data to suit the needs of both stock assessment and monthly reports. It was noted that port agent collection of monthly landings statistics is no longer supported by the available number of port agents in ports that are primary shrimp industry landing sites. Part of this is due to attrition, part is the assumption by state staff of duties that had been carried out by NMFS staff, which allowed NMFS to reposition staff resources. Given the fact that the agency intends to end support for this data collection, it is

not suitable for landings statistics for use in assessments or monthly shrimp trends reports. However, the current process for compiling landings for assessments includes matching trips for the port agent data collection to the state trip tickets in an attempt to capture any missing trips. After some discussion about the quality of the information from trip tickets, it was noted that port agent collection was duplicative of the state trip tickets now mandatory in each state.

Although state trip tickets are deemed the most complete source of landings information, there are some timeliness and quality issues. Final landings aren't usually available until around August of the following year, although periodic updates of monthly trip ticket data does occur periodically through the year, the data often have a three month lag between the end of the reporting month and availability at GSMFC. Also, there have been quality issues with the vessel identification field and the shrimp size field, which could benefit from a standardized valid list of sizes. Both the timeliness of the reporting and quality issues identified could be corrected by adding Gulf shrimp dealers to the current Gulf and South Atlantic Dealer permit (GSAD), which has a weekly reporting requirement and reports must contain a valid vessel ID, size, and condition, among other federally required variables.

In an effort to increase timeliness, the SEFSC presented the timeliness needs, to support both assessments and in-season landings reports, to the GSMFC TCC Data Management meeting on September 10, 2020. States representatives from FL, AL, MS, LA, and TX agreed that they should be able to have shrimp landings through August available by November of that year. We also asked that states decrease the lag-time between the reporting deadline and availability of trip ticket at GSMFC. The current lag-time is 2.5 months, but most states agreed to work with NMFS to decrease that to 2 months, including methods to estimate incomplete data. LA would want a test case to evaluate and AL would need management approval before agreeing to using any estimation methods. NMFS will have to follow up with LA and AL.

Shrimp effort reporting options were presented to Gulf of Mexico Fisheries Council on September 28, 2020, and included the option to add Gulf shrimp dealers to the GSAD permit, but the reception was lukewarm. Given the agreement by states to decrease lag-time for shrimp trip ticket data availability at GSMFC, NMFS decided that, going forward, assessments will use trip ticket data as the sole source for landings data and will continue to work with states to improve timeliness.

Given that the recommended data workshop with organizational stakeholders in the Gulf region included participants that were already part of the technical work group or were present at the GSMFC fall meeting, it was decided that this workshop was not needed since the timeliness issues were discussed with those participants at the GSMFC fall meeting. Implementation of those decisions will fall on SEFSC staff, in coordination with GSMFC and state partners.