Red Drum Technical Committee and Stock Assessment Subcommittee
Meeting Summary

Webinar
11/29/2022

Technical Committee and Stock Assessment Subcommittee Members: Allissa Wilson (NJ), Cara Kowalchyk (NC), Chris Kalinowsky (GA), Ethan Simpson (TC Chair; VA), Joey Ballenger (SAS Chair; SC), Matthew Jargowsky (MD), Sarah Burnsed (FL), Angela Giuliano (MD), Chris Swanson (FL), Jared Flowers (GA), CJ Schlick (NC)

ASMFC Staff: Jeff Kipp, Tracey Bauer, Anna-Mai Christmas-Svajdlenka

Public: Chris Batsavage, Jaclyn Higgins, Tony Friedrich

The Red Drum Technical Committee (TC) and Stock Assessment Subcommittee (SAS) met via webinar on November 29, 2022 to review the draft Terms of Reference (TOR) and timeline for the upcoming 2024 benchmark stock assessment, as well as continue their discussion of the American Saltwater Guide Association’s offer to collect red drum data using an app.

Review Terms of Reference and Preliminary Timeline
The TC and SAS reviewed and provided edits to the draft TORs and timeline for the upcoming 2024 benchmark assessment. A SAS member expressed interest in seeing an analysis of static spawning potential (sSPR) ratios under various bag and size limits, which was previously completed for Amendment 2 to the Red Drum Fishery Management Plan (2002), because that analysis has been helpful to determine what affect different regulations have on the sSPR. Amendment 2 to the Red Drum FMP requires states to implement appropriate bag and size limits which will attain the management goal of 40% sSPR. If a new analysis is conducted, it would most likely occur after the stock assessment is complete, if the Board directs the TC to do so.

It was noted that most items on the timeline are not set in stone, except for the completion date because SEDAR is coordinating the peer review. Everything before that can be shifted around. The spot and Atlantic croaker 2024 benchmark assessment will be on a very similar timeline to red drum, which may need to be taken into consideration by any red drum TC and SAS members who may be involved with either of these other Sciaenid species. It was clarified that the workshops may be in person or virtual; a determination will be made closer to scheduled dates. After some discussion of when finalized data will be available for the states to provide, the data deadline was shifted from May 1st to May 30th, 2023.
Both the TORs and timeline were approved by the TC and SAS with modifications made during the call and will next be presented to the Sciaenids Board for final approval.

American Saltwater Guides Association’s Request
The American Saltwater Guides Association (ASGA) is developing an app for their members to collect discard lengths and related data, and requested information from the red drum TC regarding how ASGA could assist to enhance inputs to the stock assessment.

The TC and SAS started off talking about potential bias in the data collected by an app by the for-hire sector and how to handle it. The presence of bias is a concern; those who opt in to use this app to collect data may be fishing in a manner unrepresentative of the at-large public. However, the lack of discard lengths is a major data limitation for red drum, and data collected from this app could be used to improve parameterization of selectivity. Biases may vary geographically or seasonally. However, there is no other source of discard lengths, so data collected by this app is a potential dataset where the TC needs to determine if the trade-off of biased data offsets the bias of having no data. The TC was in agreement that the collection of discard lengths from the app is important and greatly needed.

It was noted that charter boats may be fishing in the same space as private boats, but this could differ between states. It also isn’t known if shore-based anglers catch very different sizes compared to those in boats. There’s a need to rely on TC knowledge of how for-hire fleets are operating compared to other recreational fisheries, which will help inform how representative the data may be of overall recreational fishing. When shore, private boat and charter boat modes are combined in assessments, there’s the assumption that the data that are being used are representative of the combined modes; this assumption just needs to be made explicit. This is how iAngler app data are handled in Florida in their assessments. After data from the app are available, it will be important to see how this data compare to other proxy datasets that are available, like tagging data and state citation data, as a starting point.

The TC next discussed expectations for how the data will be used. In terms of a timeline, the TC will not be able to use any data collected by this app for the 2024 benchmark stock assessment (2022 terminal year). It would be considered for use in the following benchmark stock assessment, potentially in 2029, with a possible terminal year of 2027, but it is uncertain at this time how the data will be used. The first step will be data mining along with existing proxy discard length data to see how existing data and data collected from this app compare. If there are differences, then the TC and SAS will need to figure out why there are discrepancies among the data sources. Comparing the size distribution of harvested fish in app-collected data to other data streams of harvest size distribution would also help explore potential biases in app-collected data.

The TC and SAS also discussed recommendations for data fields that the app should include if they are not part of the app already. The following fields were agreed upon by the TC and SAS: Total number caught, individual lengths, disposition of each of the fish measured, sex, and
release type/condition. The TC and SAS assumed that if the location is geolocated by the app, then this would also automatically capture date and time.

**Other Business**
A TC member provided an update on a topic previously discussed by the TC and SAS at their September 19, 2022 call about the possibility of aging red drum spines, as a nonlethal aging method, instead of otoliths. The Florida Fish and Wildlife Research Institute Age and Growth Lab manager had offered to conduct a pilot analysis comparing ages from sub-adult and adult spine sections and otoliths because they already had these samples available; however, the TC member reported that these samples were now lost or intentionally discarded. The TC member said that the Age and Growth Lab manager is still willing to do the analyses if they can get paired spines and otoliths from harvested/research-sacrificed red drum, but the entire analysis would be delayed due to the time it would take to collect these samples.

The TC and SAS agreed that although there are several potential sources from which otoliths and spines could be obtained (e.g., opportunistic sampling events from red tides and NC and SC state longline surveys), this project would not work in the short term. Several TC members also raised concerns about potential harm that obtaining a spine sample would cause to the fish, though a TC member who had obtained spine samples from sub-adult drum in the past said at least in that case, it only involved clipping the spine without harming the individual. Several TC members also raised concerns about having untrained individuals collecting spine samples from red drum, and recommended it would be better for anyone who collects these samples to be trained. An individual representing ASGA on the webinar suggested they would be willing to take biologists out on the boat with them to collect spine samples.

As the last order of business, the Red Drum TC elected Cara Kowalchyk as vice-chair.