

SEDAR 70 Assessment Webinar II
Gulf of Mexico Greater Amberjack
July 30, 2020 from 1:00 PM to 2:30 PM
Summary Report

Data being included in the model were summarized, noting the addition of the combined video index, which is a change from the SEDAR 33 Update from 2016. The terminal year of data for the base model will be 2018. Generally, for-hire landings tend to be comprised of larger fish than private vessel landings. For-hire landings were over-represented in length composition data, and were down-weighted to more accurately reflect the true composition of the landings in magnitude. Overall, the densities of lengths remained very similar from SEDAR 33 through SEDAR 70. Age composition data have been reweighted to account for non-representative sampling using the proportion of ages from a particular source against the total number of otoliths aged. The combined video index uses data from the Panama City Lab video survey, the Pascagoula SEAMAP Video survey, and the FWRI Video survey. Each annual survey was weighted against the total annual sampling.

Base model progress was summarized, including all updated model inputs and adjustments. Updated data include Von Bertalanffy growth parameters, Lorenzen M at age and L_{50} (now 82.7 cm), stock recruitment bias adjustments, new multinomial weighting procedures, and index variance adjustments. Biology, selectivity, catch., discards, indices, and composition fits were all presented. Landings come mostly from the recreational sector, which includes private and for-hire vessels, excluding headboats. Commercial vessels are not thought to be targeting greater amberjack on a broad scale. Recreational discards make up the majority of all discards. Recreational vessels and headboats show a high discard fraction (greater than 60% of all recreational catch) in recent years. Commercial vessels exhibit a discard fraction of approximately 35%. Management measures have been input into the model using time blocks to adjust catchability and selectivity over time in response to regulatory changes. The combined video survey appears to be capturing fish > 50 cm, while the other surveys are capturing fish closer to the size limit. Recreational and commercial handline gear selectivity are dome shaped, and commercial longline gear selectivity is flat-topped. Length-based selectivity was strongly affected by regulatory changes.

Model fits to observed commercial effort data for handline vessels are good, and are mostly good for longline vessels with some underestimation and large CVs in late-2000s. Headboat effort was fit well, and recreational vessel effort was fit well from 1993 forward. No data point was input for 2010 for the recreational index due to the *Deepwater Horizon* oil spill. The combined video survey effort was fit well, especially from 2004-present. Commercial handline and longline discards were very uncertain, but were fit well by the model except in first few years. Commercial handline landings were very uncertain and questionable from 2011+. The Assessment Panel considered dropping that index or truncating it at 2010 to account for the implementation of the Grouper-Tilefish Individual Fishing Quota program. The Assessment Panel ultimately decided to exclude this index. Length composition data were generally poorly fit; however, age composition data were fit better by the model.

Final checks of base model parameters still need to be completed, along with sensitivities, model diagnostics and projections. The secondary surplus production model will be completed once final data inputs for the SS base model are established.

The next SEDAR 70 Assessment Webinar will be held on August 20th.

Participants:

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