

SEDAR 51 Assessment Workshop Webinar VII
January 17th, 2018 from 1:00 PM to 2:00 PM
Summary Report

This will be the final assessment webinar for Gulf Gray Snapper. The proposed base model was presented, along with preliminary diagnostics.

Maximum age was set at 20 years, and maximum length at 80 cm, with 2 cm length bins. The model was set up as a length-based statistical catch at age model, with fleet-specific length composition data (54k length samples). All fishery-dependent indices of abundance mirror the fleet composition. Two time blocks were used: pre-1990 (using the minimum size of capture: 16 cm) and post-1990 (to account for the implementation of a minimum size limit in 1990: 12" TL in federal waters). Pre-1990 selectivity was also fixed, while selectivity post-1990 was not. No spawner-recruit relationship was detected, resulting it being necessary to fix steepness.

Commercial handline landings in Monroe County were similar to recreational landings in that they all selected for smaller fish, while the charter fleet and other commercial fleets selected for comparatively larger fish. The recreational fleets dominate the landings of gray snapper in the model area, particularly the private vessel recreational anglers. Discard rates are high for several fleets, which was difficult to model due to a low number of observations to validate discard data. One exception to this trend was the for-hire fleet, whose good fits to observed data were not able to be explained. Fits to fishery-dependent indices of abundance are generally poor in early years for all fleets, and improve in more recent years. Fits to fishery-independent indices of abundance were poor to flat. Exceptions here were the NMFS video and Visual Surveys, which demonstrated better fits by comparison with FWRI and other fishery-independent data.

Predicted length composition data fit well to observed values for commercial handline landings in Monroe County. For commercial handline landings outside Monroe County, fits are poor in early years, and improve in more recent years. Commercial longline data fit well in more recent years; however, earlier years did not have many samples, which resulted in poorer fitting to observed data. Low sample sizes were also present for private recreational data in early years, and improved greatly in more recent years, resulting in very good fits. The private recreational fleet does appear to be catching both smaller and larger fish than the model is predicting. Fits to shore landings indicated a great number of fish which should have been discarded were being retained. Fits to for-hire landings were good.

Spawning depletion analyses at a spawning potential ratio (SPR) of 30% are showing that the stock is under its spawning stock biomass target; however, other aspects of the stock suggest that perhaps SPR of 30% may not be appropriate for gray snapper.

Items yet to be completed include profiling of recruitment parameters, retrospective analyses of landings by fleet, a jack-knife analyses for each index, sensitivity analyses for key model parameters (including Lorenzen natural mortality and discard mortality rates), and to finish writing the assessment process report.

A panelist proposed summing dead discards into the landings, due to the lack of available data to discern the dead discards separately. The analytical team did not want to go that route first, due to the large changes which would be necessary to do so. Another option may be to do a sensitivity which sets the discard mortality at 0%; however, typically, the model is not very sensitive to changes in discard mortality. Discard observations were not provided to the analytical team as they normally are, which has further complicated the incorporation of these data.

As with red snapper, gray snapper may not conform to the typical benchmark of 30% SPR for most reef fish. The analytical team plans to look at the global values for SPR for gray snapper to see if a lower SPR level is appropriate. Although gray snapper are long-lived and mature early, the landings have appeared to be sustainable despite continued higher levels of fishing pressure. Further investigation will take place, and will be presented at the review workshop.

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| Draft AW Report review to Panel on February 12, 2018 Comments due back to analysts on February 23, 2018 Report Submission and Distribution on March 5, 2018 The Review Workshop will be in Tampa from March 20-22, 2018 |
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Participants:

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|----------------|-----------------|----------------|-----------------|
| Julie Neer | Linda Lombardi | Mike Larkin | Ryan Rindone |
| Shannon Calay | Yuying Zhang | Joe West | John Quinlan |
| Jim Tolan | Dave Chagaris | Carrie Simmons | Jeff Isely |
| Beth Wrege | Skyler Sagarese | Clay Porch | Michael Drexler |
| Mary Christman | | | |