

SEDAR 62 Data Webinar
Gulf of Mexico Gray Triggerfish
February 27, 2019 from 10:00 AM to 11:00 AM
Summary Report

This assessment panel last met in March 2018. The terminal year for the data is 2017.

Commercial landings data show no changes historically, with landings much lower in more recent years (possibly due to harvest constraints, population decline, etc). The addition of new recreational data showed an uptick in CPUE in recent years for the MRFSS East index. Not enough data exist for a MRFSS West index.

Headboat data (east and west) are marginally higher than in the previous assessment; however, this is a function of the scaling of the indices to account for overlapping years. A possible reason for the drops in recent years in recreational CPUE may be due to a circle hook effect decreasing the catchability of gray triggerfish. However, a study in the northern Gulf showed no difference in catchability between circle hooks and j-hooks. Generally, gray triggerfish are sought after in the eastern Gulf, and avoided in the western Gulf. The use of circle hooks in the western Gulf, and the degree to which gray triggerfish are directly targeted, will be investigated by the Panel.

Larval SEAMAP data show gaps from 1997-1999, and 2007-2009, and 2014-2016. Updated indices will be sent at a later date. An increase in larval samples in 2013 may correspond with the increase in gray triggerfish observed by fishermen thereafter. The larval SEAMAP survey is generally modeled as an index of spawning stock biomass.

The SEAMAP Fall Groundfish Trawl survey shows a divergence in the data used between SEDAR 43 and SEDAR 62 in 2008, due largely to a major survey design change. The new design samples the entire eastern Gulf, resulting in more spatial data. The concern is whether the selectivity of these surveys differ and whether they have changed with time. Differences in standard error between the pre- and post-2008 SEAMAP Fall Groundfish Trawl survey designs show improvements in the coefficients of variance post-2008. Fall sampling data off Florida contain gaps, and will require further examination.

The SEDAR 43 video index was from the NMFS Panama City Laboratory only. The new index combines the NMFS, FWC, and SEAMAP video indices.

The discard ratios in the eastern Gulf show a marked increase over SEDAR 43 from 2009 to present. Discard ratios in the western Gulf are generally on par with those from SEDAR 43, then diverge greatly beginning in 2012. The method in use for SEDAR 62 represents an improvement over SEDAR 43.

The growth curve was calculated in SEDAR 43, and will remain unchanged for SEDAR 62. A constant CV-at-age will be used again. Modeling growth for gray triggerfish has been a challenge in the past. Some possible bias was previously identified in the age data, which will be reviewed and presented to the panel at a later date; however, a rebuttal is being prepared to counter the claim of bias. The growth curve may be refit after that review. Presently, the k-

values are lower and the L_{∞} values are higher than those in published papers on the subject. These published papers may serve as sensitivities later in the assessment.

No change in fecundity or natural mortality from SEDAR 43 will be used in SEDAR 62.

Outstanding data needs:

- Shrimp bycatch as an effort series
- Recreational landings including APAIS and FES adjustments
- Recreational discards
- Length composition of discards
- Commercial CPUE

Base case issues:

- Sex-specific growth curves
- Modeling growth within the model, as opposed to a fixed growth curve
- Discard mortality (SEDAR 43 assumed 5%, follow-up will occur)
- Combining like eastern and western fishing sectors
- Separate gears within fishing sectors
- Explore circle hook effect using a time block
- Create a length-based model as opposed to an age-based model

Discussion about sex-specific growth curves questioned the availability of data to discern differences between sexes. Initially, the sex ratio would be assumed to be 50:50 for males:females. Further investigations will be done based on the data available.

The Data/Assessment Workshop will be in Miami, Florida from May 20-22, 2019
Assessment Webinar I will be held the week of June 10, 2019
Assessment Webinar II will be held the week of July 15, 2019
Assessment Webinar III will be held the week of August 12, 2019
Assessment Webinar IV will be held the week of September 2, 2019

Participants:

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