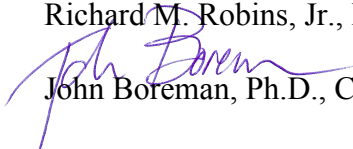


MEMORANDUM

DATE: 19 March 2014

TO: Richard M. Robins, Jr., MAFMC Chairman

FROM:  John Boreman, Ph.D., Chair, MAFMC Scientific and Statistical Committee

SUBJECT: Report of the March 2014 Meeting of the MAFMC SSC

The SSC met in Baltimore, MD, on 12-13 March 2014 for the main purpose of developing ABC recommendations for Golden Tilefish in response to terms of reference provided by the MAFMC (Attachment 1). The SSC also received an update on development of ad hoc ABC specifications for Black Sea Bass, an update on a proposed research track for Black Sea Bass, and an update from the Scientific Uncertainty Subcommittee on criteria for setting multi-year ABCs. The SSC also discussed the outcome of the workshop recently held by the MAFMC on climate change and fisheries, the suggested list of MAFMC research priorities, the method being proposed by NOAA Fisheries to set stock assessment priorities, and the status of the re-authorization of the Magnuson-Stevens Act as it relates to the SSC. The meeting agenda is attached (Attachment 2).

A total of 15 SSC members were in attendance on March 12th and 13 SSC members on March 13th (Attachment 3); a quorum was present for both days. Also in attendance were staff from the NMFS Northeast Fisheries Science Center and Greater Atlantic Regional Fisheries Office, Council members and staff, and representatives from the fishing industry.

All documents cited in this report can be accessed via the MAFMC SSC website (<http://www.mafmc.org/ssc-meetings/2014/march-12-13-2014>).

Golden Tilefish

1) The materials considered in reaching its recommendations:

- MAFMC Staff. 2014. Golden Tilefish Advisory Panel Information Document. 20 pp.
- MAFMC Staff. 2014. 2014 Tilefish Advisory Panel (AP) Fishery Performance Report (FPR). 5 pp.
- Southern Demersal Working Group. 2014. Assessment of Golden Tilefish, *Lopholatilus chamaeleonticeps*, in the Middle Atlantic-Southern New England Region (DRAFT). NOAA Fisheries Northeast Fisheries Science Center. 171 pp.
- Northeast Fisheries Science Center. 2014. Assessment summary Report for Golden Tilefish (PRE-PUBLICATION DRAFT). 58th Northeast Regional Stock Assessment Workshop. 16 pp.

- Montanez, J. 2014. Staff memorandum to Chris Moore, dated 16 February 2014, entitled: “Golden Tilefish Management Measures (2015, 2016, 2017).” 18 pp.

The SSC notes that CIE reviewer comments were not brought to its attention until the March 12 ABC determination meeting. However, the SSC also notes that SSC member Dr. Robert Latour chaired the SAW/SARC and brought concerns to the SSC’s attention.

2) The level (1-4) that the SSC deems most appropriate for the information content of the most recent stock assessment, based on criteria listed in the Omnibus Amendment:

The SSC deemed that the Golden Tilefish assessment should be classified as a level 3 assessment. The SSC reached this recommendation based on consistency between input data and model dynamics, the substantial improvements in available model diagnostics, and the lack of a pathological retrospective pattern.

The SSC has remaining concerns that the assessment relies solely on fishery-dependent data. The SSC recommends efforts to thoroughly explore index standardization to account for factors known to affect catch-per-unit-effort (CPUE).

3) If possible, the level of catch (in weight) and the probability of overfishing associated with the overfishing limit (OFL) based on the maximum fishing mortality rate threshold or, if appropriate, an OFL proxy:

The SSC accepts the recommendation from the peer-reviewed assessment that an F_{MSY} proxy is $F=0.37$. The 2015 OFL based on the F_{MSY} proxy is = 989 mt.

However, the SSC notes extreme concern over the mapping of F_{MSY} proxy ($F=0.37$) to the spawner-per-recruit- (SPR-) based reference point. The SSC notes that its reliance on the recommended OFL assumes that the distribution and prosecution of the fishery will remain unchanged.

4) The level of catch (in weight) and the probability of overfishing associated with the acceptable biological catch (ABC) for the stock, the number of fishing years for which the ABC specification applies and, if possible, interim metrics that can be examined to determine if multi-year specifications need adjustment prior to their expiration:

The SSC recommends setting ABC for three years. Based on the F_{MSY} proxy ($F=0.37$), an assumed lognormal coefficient of variability around OFL of 100%, and applying the Council’s risk policy for a typical life history, the recommended ABCs are:

2015	801 mt
2016	861 mt
2017	884 mt

The SSC recommends that these ABCs be re-examined annually in light of substantial changes in the size distribution in the catch or in the spatial distribution of the fishery, but notes that changes in the reported size distribution of the catch resulting from reconciliation of size category reporting practices should not be a trigger for re-evaluation of the ABCs.

5) *The most significant sources of scientific uncertainty associated with determination of OFL and ABC:*

- Reliance on fishery-dependent data in the assessment.
- Reliability of the F_{MSY} proxy and its relationship to potential SPR-based reference points.
- The method used to adjust assessment-based estimates of recruitment for the last three years.
- The dome-shape selectivity curve that makes a strong assumption about the presence of older fish in the population, for which we lack strong empirical evidence.
- Possibility of localized depletion.
- Lack of knowledge of the stock range and the distribution of fish within that range.
- Potential for changes in the reproductive ecology of tilefish.

6) *Ecosystem considerations accounted for in the stock assessment, and any additional ecosystem considerations that the SSC took into account in selecting the ABC, including the basis for those additional considerations:*

Analyses of the relationship between survey catch and temperature were included in the assessment.

No specific additional ecosystem considerations were taken into account by the SSC in reaching its ABC recommendation.

7) *Prioritized research or monitoring recommendations that would reduce the scientific uncertainty in the ABC recommendation:*

- Explore methods to estimate the abundance and distribution of burrows as a forerunner of a fishery-independent survey.
- Perform exploratory analyses of fish distributions to assess whether the dome-shaped selectivity curve used in the assessment reflects fishery selectivity or availability, or both.
- Expand observer coverage to improve index standardization of fishery-dependent data.
- Leverage large pelagic recreational fishing activity to improve life history information.
- Assess the accuracy and reliability of aging techniques.
- Consider genetic approaches to assess possible stock structure.
- Evaluate the reliability of the report of protogynous hermaphroditism in the S. Atlantic stock.

8) A certification that the recommendations provided by the SSC represent the best scientific information available.

To the best of the SSC's knowledge, these recommendations are based on the best available scientific information.

Other Topics

ABC Specifications for Black Sea Bass

Olaf Jensen gave an update on the progress his special SSC working group is making on developing more robust ABC specifications for Black Sea Bass, for which the latest assessment is considered to be Level 4.

Research Track for Black Sea Bass

Toni Kerns presented a proposed timeline for a research track intended to address outstanding issues raised during the latest assessment review.

Development of Criteria for Setting Multi-year ABCs

Mike Wilberg updated the SSC on progress being made by the Scientific Uncertainty Subcommittee on criteria for setting multi-year ABCs. The most recent work has involved an investigation of the potential impacts of data lags on the vulnerability of stocks to overfishing. Following Dr. Wilberg's presentation, Jason Didden updated the SSC on the MAFMC's progress in developing an omnibus framework action to consider ways to set multi-year ABCs/ACLs and consider changes to the determination criteria for assessment level. The SSC's SUN subcommittee will meet with staff as development progresses.

Climate Change and Fisheries

Rich Seagraves presented a summary of the full-day workshop conducted during the February 2014 meeting of the MAFMC on the potential impacts of climate change on fisheries in the mid-Atlantic region.

MAFMC Research Priorities

Rich Seagraves distributed the most recent list of research priorities for species managed by the MAFMC and asked the SSC species leads to review and verify the priorities for their respective species. Rich will ask the NRCC whether any further work on the list, including setting research priorities across species, would be worth the SSC's effort given the recent budget climate at the Northeast Fisheries Science Center. If so, this topic will be placed on the agenda for an upcoming SSC meeting.

Criteria for Timing of Stock Assessments

NOAA Fisheries is seeking public comment on a proposed set of criteria for timing of stock assessments. Although the NRCC has already developed and is using criteria, the agency has asked the

MAFMC for feedback on the proposed set. SSC members were asked to review the proposal and send any comments to the SSC Chair by April 15th so a consolidated SSC response can be provided to MAFMC leadership before the agency's deadline.

Re-Authorization of the Magnuson-Stevens Act

The SSC discussed the working draft of proposed re-authorization language that was recently circulated by Rep. Hastings, in terms of its implications for SSCs. Proposed language that affects the SSCs includes: (1) up to a three-year delay in initiation of stock rebuilding once an overfished status determination is made to lessen the economic impact on existing fishing operations; (2) more transparency in SSC deliberations, including public access to audio and video of the SSC meetings; (3) additional reasons why the 10-year rebuilding time period may be extended for some stocks; (4) additional exemptions to ACLs for stocks that have relatively short life spans; (5) definition of what constitutes a "data poor" stock; and, most significantly, (6) a change to the requirement for setting ACLs from not exceeding the fishing level recommendation of the SSC (i.e., the ABC) to not exceeding the SSC's overfishing level recommendation (i.e., the OFL). SSC members were reminded that the language proposed by Rep. Hastings is only a working draft and will likely see substantial revisions before it is introduced to Congress.

cc: SSC Members, Lee Anderson, Chris Moore, Rich Seagraves, Jose Montañez, Paul Nitschke, Fred Serchuk, Toni Kerns