



**Mid-Atlantic Fishery Management Council**

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Richard B. Robins, Jr., Chairman | Lee G. Anderson, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

**MEMORANDUM**

**DATE:** 25 March 2013

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

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

**SUBJECT:** Report of the March 2013 Webinar Meeting of the MAFMC SSC

The SSC met via webinar on 20 March 2013 to address two topics: the ABC recommendation for golden tilefish for the 2014 fishing year, and criteria for setting multi-year ABCs. A total of 11 SSC members attended the meeting, which constituted a quorum, as well as representatives from the MAFMC staff, NMFS Northeast Fisheries Science Center, fishing industry, MAFMC, and NMFS Northeast Regional Office (Attachment 1).

**ABC Recommendation for Golden Tilefish**

The SSC reviewed updated fishery performance and stock assessment information through calendar year 2012 for golden tilefish. In March 2012, the SSC recommended a two-year ABC specification for tilefish with the second year (Fishing Year 2014) subject to a review of updated information. The Committee received a report from staff (Attachment 2) summarizing the AP Information Document<sup>1</sup>, Stock Assessment Update<sup>2</sup>, and the AP Performance Report<sup>3</sup>.

In 2012 the SSC indicated it would evaluate the following in 2013: (1) the length frequency distribution of the commercial catch, especially with regard to signs of strong incoming recruitment; (2) any significant changes in the spatial or temporal distribution of fishery effort (as might be noted in the 2013 report of the Industry Advisory Panel); and (3) any significant changes in the discard pattern or amount. An evaluation of these or other factors may cause the SSC to change its ABC recommendation for the 2014 fishing year.

Tilefish landings have been close to the quota for the last few years. The number of vessels targeting tilefish has remained fairly constant since the assessment in 2005. The length of a targeted tilefish trip had been generally increasing until the mid 1990s. At the time of the 2005 assessment, trip lengths had decreased to about 5 days; trip length increased slightly until 2008, and subsequently declined until 2011. There was a slight increase in the trip length in 2012. More recently, changes in the CPUE can be generally explained by the presence of strong incoming year classes that tracked through the landings size composition over time. Since the SARC 48 assessment there appear to be increases in CPUE due to one or two new strong year classes. In general, strong year classes are appearing to persist longer in the fishery following enactment of the FMP and after the constant quota management came into effect, which is evident in both the CPUE and size composition data. The small decrease in the CPUE in 2012

is consistent with the ageing of the last strong year class.

At the time of the 2005 tilefish assessment, the proportion of large market category had declined compared to the early 1980s. However, more recently, a greater proportion of the landings are coming from the large market category as the last strong year class (1999) has grown. It appears that mediums and larges are persisting longer in the fishery and not disappearing as fast prior to management. It may be too early to draw any strong conclusions, but improvements to the stock and stability in the fishery appear to be continuing under the present constant harvest strategy.

Staff then summarized information from the AP Fishery Performance Report. CPUE continues to improve. In the last few years, the length of a fishing trip has been very stable (ranging from four to five days) and shorter than in previous years (seven to ten days), reflecting higher catch rates. A slight decrease in CPUE was observed in 2012. Observations indicate new incoming multiple-year classes; there is more of a size mix than before (i.e., a healthy mix of ages). Commercial fishermen indicated that they continue to catch a broad size distribution of fish. Although the recreational catch of golden tilefish is believed to be relatively small (insignificant) compared to the commercial harvest, there appears to be a recent increase in the recreational catch of golden tilefish; however, catch from this portion of the fishery is poorly estimated by the MRIP. VTR data for party/charter sector also show recent increases in golden tilefish catch for that sector. The last stock assessment did not include recreational catch in the surplus production model and the SSC incorporated this under scientific uncertainty. Recreational catch estimates should continue to be monitored to determine if and when recreational catch begins to contribute more than an "insignificant" component of the total catch of tilefish and can no longer be ignored in the stock assessment.

Following the presentation by staff, Doug Vaughan led the SSC in a discussion of the updated information to determine if any change to the ABC specification is warranted. Based on the stability exhibited in the fishery and the fact that updated data on CPUE and size distribution in the fishery appear to be behaving as anticipated, the SSC concluded that there was no basis to change the ABC recommendation for tilefish for fishing year 2014. A benchmark assessment for golden tilefish is scheduled for the fall of 2013.

Documents considered by the SSC:

<sup>1</sup> MAFMC Staff. Golden tilefish AP information document – January 2013. 30 pp.

<sup>2</sup> Golden Tilefish data update through 2012, *Lopholatilus chamaeleonticeps*, in the Middle Atlantic-Southern New England Region. NMFS, NEFSC, Woods Hole, MA 02543. 31 pp.

<sup>3</sup> 2013 Tilefish Advisory Panel (AP) Fishery Performance Report (FPR) (undated). 5 pp.

### **Setting Multi-year ABCs**

Mike Wilberg gave an update on SUN Subcommittee activities related to development of metrics to be evaluated during interim years of multi-year ABC specifications (Attachment 3). The subcommittee developed the analogy of "rumble" strips - what is needed is the development of a set of readily available metrics which would allow the SSC to determine if reconsideration of a multi-year ABC is warranted.

The subcommittee examined times series of catch data, fishery independent indices of abundance, and

relative exploitation indices currently available for MAFMC managed species. In general, survey indices of abundance exhibit a high degree of inter-annual variability, well beyond the range of plausible changes in biomass expected from year to year. In most cases, the variable nature of the survey indices reflects random error or "noise" rather than true changes in biomass. In some cases, fishery catch also displays high inter-annual variability, which may reflect changes in availability of the stock to the fishery and/or changes in fishing effort. Therefore, the challenge is to develop decision rules that trigger reconsideration of ABC recommendations (i.e., when a change in stock status is suspected) when reconsideration is truly warranted (as opposed to simply "chasing noise").

The subcommittee plans to evaluate the statistical behavior of the survey indices by using time series analyses to identify, where possible, bounds for a particular metric, which would be used to signal when reconsideration of a multi-year ABC specification is warranted. The subcommittee also discussed whether or not a positive signal (i.e., when an ABC reconsideration is triggered) would also warrant a change in tier assignment. Next steps include a refinement of the time series analyses and the examination of metrics describing the spatial distribution of both survey and fishery catch. A key factor in the selection of candidate metrics is the timing and availability of information. The SSC also discussed the idea of front-loading the process by having a subgroup of the SSC perform the rumble strip analysis prior to full SSC consideration to streamline the process.

#### Attachments

c: SSC members, Lee Anderson, Rich Seagraves, Jose Montañez, Chris Moore, Jan Saunders

MAFMC Scientific and Statistical Committee  
20 March 2013 Webinar

SSC Members in Attendance

<u>Name</u>	<u>Affiliation</u>
John Boreman (SSC Chairman)	North Carolina State University
Tom Miller (SSC Vice-Chair)	University of Maryland - CBL
Mike Wilberg	University of Maryland - CBL
Doug Lipton	University of Maryland - College Park
Ed Houde	University of Maryland - CBL
Doug Vaughan	NMFS (retired)
Mike Frisk	SUNY Stony Brook
Yan Jiao	Virginia Tech
Cynthia Jones	Old Dominion University
Dave Secor	University of Maryland – CBL
Wendy Gabriel	NMFS Northeast Fisheries Science Center

Others in attendance

Rich Seagraves	MAFMC staff
Jose Montañez	MAFMC staff
Jason Didden	MAFMC staff
Paul Nitschke	NMFS Northeast Fisheries Science Center
Fred Serchuk	NMFS Northeast Fisheries Science Center
Steve Heins	NY DEC
Laurie Nolan	MAFMC member
Frank Green	Tilefish AP member
James Cicchiti	Tilefish AP member
Doug Potts	NMFS Northeast Regional Office